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ARTIFICIAL INTELLIGENCE FOR ACADEMIC ADMINISTRATION: ISSUES TOWARDS TEACHING, TRAINING AND RESEARCH

ASOYA, Nkem Patricia Ph.D
Department of Public Administration
DELTA STATE POLYTECHNIC, OGWASHI-UKU
NIGERIA

ABSTRACT

Artificial Intelligence (AI) is transforming the landscape of tertiary education universally as it has been identified as possessing great potentials for changing and enhancing work processes. Its role in transcending academic functions from traditional processes to more modern and automated operations is assured to enrich teaching efficiency, training and research activities. It is against this backdrop that this study explored the significance of integrating Artificial Intelligence (AI) in teaching, training and research for improved efficiency and performance. The paper anchored on the Technology Acceptance Model (TAM) with special focus on how humans perceive and adopt new technologies. The descriptive survey research design was adopted with data generated from secondary sources. Findings from the study revealed that AI-driven technologies have significant impact on teaching methodologies, academic staff development and research revolutionization in tertiary institutions. However, key challenges such as limited infrastructural availability and ethical concerns amongst others were identified as factors limiting AI integration in academic administration. Drawing from the findings of the research, the study concluded by proffering strategic recommendations such as curriculum redesign and infrastructural investment for enhanced adoption of AI in academic settings towards attaining holistic educational advancement.

KEYWORDS: Artificial Intelligence, Technology, Research

1. INTRODUCTION

Artificial Intelligence has been described as the use of machines in executing tasks and functions which hitherto are being carried out by human thinking (Dorfler, 2022). Artificial Intelligence refers to innovative technology that has the capacity to process substantial volume of records, provide insights that can inform decision making and make necessary forecasts. According to Wirtz, Weyerer and Geyer (2019), AI-driven technologies such as automated decision systems, chatbots and predictive analytics aid public institutions (which includes academic establishments) with greater ability to provide more personalized and timely services for citizens. Academic institutions worldwide are increasingly adopting Artificial Intelligence (AI) tools to streamline administrative functions, personalize learning, and enhance research productivity. AI applications in academic administration include enrollment management, predictive analytics, grading automation, plagiarism detection, and resource allocation. Academic administration is therefore paramount in modelling effective teaching and learning in school environments for the purpose of developing requisite skills for personal and societal development. However, the deployment of AI in education also presents a spectrum of challenges concerning equity, privacy, curriculum adaptation, and staff readiness.

Notwithstanding the introduction of AI to administration in academic institutions, its application no doubt is faced with a lot of challenges as some of these institutions are not technologically driven in their operations. Institutions lack basic infrastructure such as power and energy, internet facilities, poor training and lack of skills required for utilization of basic AI tools. Agba et al (2023) in support, identified that the adoption of AI comes with its own challenges such as ethical concerns, information confidentiality, bias and high costs. This paper focuses on the role of Artificial Intelligence (AI) in teaching, training and research while examining the multifaceted issues hindering the implementation of AI for optimum performance in academic administration.

2. ARTIFICIAL INTELLIGENCE

Artificial Intelligence was first introduced by John McCarthy in 1956 during the Dartmouth Conference and has witnessed noteworthy development especially in the area of machine learning and deep learning technology at the turn of the 21st century (McCarthy et al., 2006). Artificial Intelligence (AI) can be referred to as an innovative technology that has the ability to process huge volume of data, make predictions and also responsible for providing perceptions that can inform decision making processes (Agba et al, 2023). It is the simulation of human intelligence in machines that are designed to think and act like human beings and imitate their actions. AI refers to computer systems designed to mimic human intelligence processes such as learning, reasoning, and problem-solving (Russell & Norvig, 2021). AI can also be termed as a field of study and technology that positions machines to replicate human cognitive abilities like learning, reasoning, problem-solving, perception and decision making. This is affirmed by Nwosu et al, (2024) who identified AI procedures to include acquisition of information and rules of applications, utilization of rules to reach definite conclusions and also arriving at self-corrections. It therefore demonstrates qualities that includes learning, perception, problem solving, reasoning, planning, control and predictions. With increased economic and political activities globally, more professional and swift processing of information is considered very essential as world economies relate with one another in their developmental strides. Arya and Yadav in Jamal (2023) rightly identified that knowing and unknowingly, AI has become an integral part of our lives. This is evident with the adoption of internet banking, online sales and marketing, google map for directions, online admission processes, student registration in academic institutions and so many diverse applications in various fields. The application of AI in academic administration is growing rapidly providing momentous prospects to personalize learning, support automated assessment and assist with administrative and pedagogical tasks (Luckin et al., 2016). Organisations and academic institutions seek ways for enhanced efficiency and productivity through technological advancement. Key characteristics of AI systems includes:

- Ability to operate with minimal human intervention.
- Adaptability features which entails learning from experience and improving performance.
- They have the capacity of analyzing huge volume of data
- Ability to make informed choices which stem from logic and probability.
- Natural interaction involving communication with humans using natural language, speech or vision.

Artificial Intelligence (AI) has begun to play a major role in academic administration for better performance. AI technologies have been identified to be very instrumental in automating routine tasks, streamlining administrative processes and improving decision making processes in public institutions (Sun & Medaglia, 2019).

3. EMPIRICAL REVIEW

Jamal, A. (2023) in his research titled "The role of Artificial Intelligence in Teacher Education: Opportunities and Challenges", explored how AI improves the quality of teacher education while identifying its potential benefits, drawbacks and challenges. The study adopted a descriptive research design and obtained data through secondary sources. Findings revealed that AI is specifically needed for enhancing teachers' skills, facilitating personalized learning, identifying knowledge gaps as well as identifying learning styles of students.

Duque R.S. et al. (2024) in their study on role AI and Teaching Practice with special focus on concepts, applications and educational challenges, identified AI as a powerful ally in education. The research adopted a qualitative, descriptive and exploratory approach and noted that AI is not only modernizing but revolutionizing the teaching practice. Findings further revealed that although technologies are rapidly advancing, educational institutions and teachers are struggling to keep up the momentum revealing the need for more infrastructure investments and robust policy developments.

In analyzing the risks and benefits of AI for government, Mellouli, Janssen and Ojo (2024) identified not only benefits but also risks associated with the utilization of AI in the public sector. The study adopted a qualitative research design through collection of relevant articles and the authors identified the social, ethical and legal challenges associated with the application of AI in the public sector. Benefits identified includes growth of productivity, enhancing creativity, reduction in human error, inclusive decision making amongst others. Risks associated with the use of AI includes unemployment, high costs of operations, replication of human errors and consumption of more energy due to required computing capacities. The study concluded that technical and institutional mechanisms are essential for tackling challenges to AI applications.

A study on the impact of AI on students' academic development was carried out by Vieriu A.M. and Petrea, G. (2025). The study adopted a descriptive approach with data obtained through a structured questionnaire distributed to the second-year students of National University of Science and Technology, Bucharest. Key findings of the study showed that AI offers relevant benefits such as personalized learning, improved academic outcomes and enhanced student engagement. The study further identified challenges associated with over reliance on AI to include diminished critical thinking skills, data privacy risks and academic dishonesty. The study concluded that a balanced approach is necessary to ensure equitable, effective and responsible learning experiences in AI-enhanced educational environments.

Ananyi and Nwosu (2023) embarked on a research titled "Artificial Intelligence and Economic aspects of Public Universities in Nigeria". The study adopted a descriptive design with the population comprising federal and state universities in Nigeria. Findings from the study revealed that AI contributes to the economic advancement of Nigerian public universities and also identified that introducing AI tech ensures public universities can deliver quality education and support services to their stakeholders.

In a study on teaching and training of English through AI, Ahmad, S.A (2024) engaged on a research conducted at colleges and PAAET Institutes in Kuwait. While adopting a descriptive research design, the author identified key advantages of AI to include availability, ability to generate instant feedback, reduction in error and increase in accuracy. However, key disadvantage of AI identified in the study is that AI cannot fully understand the cultural and social environment of humans, it lacks ability to understand human feelings and also the high costs involved in application.

Kumari et al. (2025) in a research on the role of Artificial Intelligence in teacher training, the study investigated the transformative potential of AI in enhancing pedagogical effectiveness among pre-service and in-service teachers. The study reviewed current empirical studies of which findings revealed that AI has the ability to enhance teacher agency, scaffold instruction design and support continuous improvement in teaching practice. It was however noted that these benefits can only be achieved when AI is implemented thoughtfully.

Theoretical Framework

This study is based on the Technology Acceptance Model (TAM) which examines human perception and adoption of new technology. It is assumed that the perceived ease of use and the usefulness of technology determines the degree of its acceptance. In his research, Davies (1989) noted that Information Technology (IT) offers the potential for substantially improving white collar performance. However, a major challenge identified is attributed to the unwillingness of users to accept and use these available systems. The research model is based on:

- Perceived Usefulness (PU): This is defined as the degree to which a user believes that using a specific system would enhance the job performance.
- Perceived Ease-of-Use (PEOU): This is defined as the degree to which a user believes that using a particular system would be effort-free.

A relationship therefore exists between the beliefs of users about a technology's usefulness and the attitude as well as intention to use the technology. The fundamental principle bothers on the fact that the better users perceive that a specific application will enhance their performance through the use of less effort, the higher the adoption rate will be. The Technology Acceptance Model provides a robust framework for analyzing the role of AI in teaching, training and research. Adoption depends heavily on perceived usefulness and perceived ease of use. In teaching, AI tools such as adaptive learning platforms, automated grading systems and learning analytics reshape pedagogical practices. It is therefore believed that if AI tools are user friendly and have the ability to integrate seamlessly with existing Learning Management Systems (LMS), adoption is likely to increase. When lecturers perceive AI has the ability to enhance teaching effectiveness, they are more likely to adopt it. In the area of training, AI technologies such as simulations, virtual reality (VR) and personalized learning assistants support experiential and lifelong learning e.g. when the training platforms are simplified and easy to use, it promotes higher acceptance. AI plays a transformative role in academic research in areas of predictive analytics, data analysis, automated literature reviews etc. Researchers therefore adopt AI when they perceive it has faster data processing structure and enhances accuracy of findings. Minimal complexity of AI tools as well as transparency and fairness of AI operations also attract greater use.

AI clearly shows significant benefits in transforming academic administration, however its acceptance is dependent on enhancing perceived usefulness and ease of use through training, infrastructure and culturally responsive solutions.

4. METHODOLOGY

This study adopted the qualitative research design to explore the application of Artificial Intelligence (AI) in academic administration for enhanced performance in teaching, training and research. Data were collected from secondary sources of which a through literature review of books, journal articles, conference papers, internet sources, government publications and reports were done. The study anchored on the content analysis approach for analyzing these instruments.

Artificial Intelligence (AI) Application in Teaching

Artificial Intelligence (AI) supports teaching by enhancing both the delivery and personalization of learning content. Key applications include:

Personalized Learning

The introduction of AI tools provides relevant means that enrich teaching and creates dynamic learning environment. AIs ability to personalize teaching represents one of its greatest contributions to education (Duque, et al., 2024). Personalized learning is beneficial as it gives consideration for individual students' learning patterns and this is facilitated by AI through the provision of range of tools and resources that aid teachers create personalized learning practices for their students. Instructional contents are tailored according to individual student needs which benefits students and teachers. Students are able to progress at their own pace and engage in activities that conform with their learning styles as AI systems analyze student performance data to adapt content, pace, and difficulty. Students with special needs enjoy inclusive environments through AI tools like automatic transcriptions. Adaptive platforms like Knewton, Squirrel AI, or Smart Sparrow customize learning paths for individual students.

Automated Assessment and Feedback

Adoption of AI in school grading system encourages objectivity and removal of biases during student evaluation thereby creating a structure that enables fair and true assessment of student performance. Scholar have discovered that AI's capacity for immediate feedback promotes student autonomy and critical skill development (Hattie & Timpery, 2007). AI tools have revolutionized the traditional approach of student evaluation and enhanced grading efficiency, fairness and reduction of grading time thereby allowing teachers focus on other integral assignments. AI tools also have the ability to grade multiple-choice, short-answer, and even essay questions. Through AI tools that generate immediate and personalized feedback, error is greatly reduced while self-regulated learning is enhanced. Systems like Gradescope and Turnitin provide instant feedback and detect plagiarism.

Smart Tutoring Systems

AI tools include providing tutoring systems which provides adaptive, accessible learning experiences that offer immediate feedback and corrective guidance based on student performance. They perform functions such as closing learning gaps, improve conceptual understanding and provide information on the students' learning process. AI chatbots or assistants for instance answer routine student questions and support classroom management. AI can help generate quiz questions, summaries, or even full lessons using large language models like ChatGPT.

Administrative Automation

Teachers and school administrators are using AI for administrative tasks to streamline processes for better efficiency. AI tools are used for student admission processes, course registration, lesson planning and generation of research materials within short time frames. AI chatbox helps in drafting emails, organize schedules etc. enabling school administrators to focus more on strategic initiatives and human relations. AI contributes to academic administration majorly through reduction in human error, data-driven decision making and accelerated processing of information (Rashmi-Mandayam, 2025). Through the application of AI tools, administrative work load is reduced especially in resource constrained institutions while more focus is placed on student development.

Educational Technology Platforms

Technology has brought about real change in processes and mode of operations in various fields of study which includes technology. AI tools create an opportunity for technology to be infused in academic operations and teaching activities. Platforms such as virtual mentor, voice assistant e.g. Google assistant, Smart content, presentation translator, automatic assessment etc. are key technology tools that support education efficiency (Nur Fitria, 2021).

Artificial Intelligence (AI) Application in Training
AI enhances professional and skill development for both educators and students. Key utilization of AI in training and development includes:

Skill Development for Educators
Teachers can become better educators through the utilization of technological tools and resources provided by AI. Personalized training modules and simulations help teachers learn to use digital tools effectively. Through adequate feedback on students' performance, teachers are able to adjust their teaching strategies for better impact. AI analyzes teaching patterns and offers improvement suggestions in classroom management or delivery styles. For instance, Humanoid robots are currently providing assistance to teachers in the classrooms at Indus International School, Hyderabad in India (Nataraj, 2022).

Access to Current and Relevant Educational Materials
The application of AI in education provides tools that augment teaching and create dynamic learning environments (Duque et. al., 2024). Excellent performance in teaching can be attained when teachers have a comprehensive understanding of courses and subjects being taught and also are abreast with current developments in their various disciplines. AI provides the opportunity for educators to have access to a wide range of educational materials such as on-line lectures, e-books and educational videos (Jamal, 2023). AI-based simulations also allow learners to practice complex skills in medicine, engineering, or aviation through virtual labs and simulations e.g. Labster (virtual science labs), Body Interact (clinical simulations).

Improvement in Quality of Teacher Education
Through the utilization of AI tools and enhanced access to high quality educational resources and learning materials, quality of teacher education is greatly increased as AI tools are usually tailored to individual needs. Teachers are well equipped to identify knowledge gaps and provide necessary feedback on areas of improvement. Knowledge on right teaching skills is provided for greater performance, efficiency and impact on the teaching profession. For instance AI platforms such as Coursera, edX, LinkedIn Learning recommend training based on user behavior and career goals.

Language and Communication Training
Ahmad (2024), while investigating the importance of AI to learning of English language at colleges and PAAET institutions in Kuwait, revealed that learning English language through AI is free of charge such that students can learn at no cost and within a short period of time. AI provides fun and effective language methods for all ages and tools such as audio-to-text conversion and translation programmes accelerate language learning opportunities for all. AI-driven tools like Duolingo or Speech Ace provide interactive and adaptive language learning experiences. These tools use NLP (Natural Language Processing) to assess pronunciation and comprehension.

Artificial Intelligence (AI) Application in Research
Research is fundamental for knowledge development, promoting innovation and vital for problem solving within communities. AI revolutionizes research by improving data handling, computerizing repetitive tasks, and enabling comprehensions in areas such as:

5. LITERATURE REVIEW

Recent research advocates for AI-based literature review which involves the use of AI tools to support literature search and issue formulation. AI tools assist researchers in summarizing vast amounts of academic literature and this approach has been identified to save lots of time and effort giving room for more comprehensive reviews (Mitra & Hamed, 2025). Tools like Semantic Scholar, Elicit, and Scite.ai help researchers find and summarize relevant studies.

Analysis of Big Data
Data analysis has been identified as a paramount area where AI is transforming academic research. AI has the capacity to process large data sets and provide insights for deeper understanding of complex phenomena. Studies prove that AI data analysis tools enhance efficiency and objectivity in data analysis (Akinola, 2024). AI alogrithms are utilized by researchers for quick and efficient analysis of large amount of data and this automated process saves time and ensures cost-effectiveness. Machine Learning algorithms for instance help in forecasting, pattern detection, and hypothesis generation.

Research Presentation and Data Management Assistance

AI tools are utilized in various aspects of research such as writing, editing, citing research works and contributing to the improvement of the overall research process. AI-based writing tools such as Grammarly, Writefull, or ChatGPT assist with grammar, coherence, and style. These applications are also used to draft proposals, reports, and summaries which improves the quality of research. AI automates the collection, storage, and analysis of large datasets making data and information available and giving room for easy retrieval when needed.

Streamlining Peer Review and Promoting Academic Integrity

Peer review process involves reviewing research articles and manuscripts to ensure original and quality papers are presented for publications. Aranguena (2024), noted that accelerating the peer review process guarantees that leading-edge research makes a timely entrance into public discourse and policy debate. AI tools also aid publishers in identifying potential reviewers and combat plagiarism. Tools such as Turnitin and iThenticate use AI to discover content replication and ensure novelty.

Factors Militating against AI Application in Academic Institutions

Application of AI in teaching, training and research brings a lot of opportunities but also encounters key challenges in application. This study looks into these significant issues impeding effective AI adoption in these institutions.

- Limited Infrastructure: A major problem facing the integration of AI systems in public institutions is lack of adequate infrastructure (Igbokwe, 2024). Unstable electricity supply, insufficient bandwidth and obsolete IT infrastructure are significant barriers to AI adoption in Higher education institutions (Akinboade, 2023). AI systems require basic infrastructure such as electricity supply, internet connectivity, storage systems, and computers which are usually in short supply in these institutions. This inadequate supply of key facilities affects the effectiveness of AI in improving service delivery or enhancing work performance.
- Poor capacity building and inadequate manpower: The lack of technical expertise and skills among administrators and teachers have been a major factor militating against the application of AI systems in academic institutions which is due to lack of training and capacity building problems. Many teachers are not sufficiently trained on the use of AI tools and this leads to inadequate incorporation of AI to school curriculum. Owolabi and Adeyemi (2024), observed that inadequate technical expertise reduces AI adoption readiness which is further compounded by professional training which remains underfunded.
- Inadequate financial resources: AI technologies are capital intensive and entails huge expenditure for acquisition and maintenance. Academic institutions lack sufficient resources required for investment in manpower software development of AI. Developing nations face these challenges of high costs in implementing and maintaining AI systems.
- Reduced Human Reasoning: Excessive reliance on AI applications leads to overdependence, reduced human judgment and poor creativity. Academic stakeholders like administrators, teachers and students have the tendency to lose critical thinking skills and innovation due to excessive reliance on AI generated contents.
- Policy Inconsistencies: There are institutions and counties that lack clear cut policies on AI application and integration in the educational sector. NUC (2021), expressed the importance of these policies by identifying that absence of harmonized guidelines expose universities to uncertainty in procurement and compliance. These policies are expedient to avoid unregulated use of AI platforms and to promote equitable access to AI technologies thereby preventing the widening of inequalities (Duque et al., 2024).
- Ethical Issues: AI application has been received with ethical concerns especially in areas pertaining to data privacy, impact on employment etc. This is in agreement with Agba et al (2023) who noted that ethical considerations such as potential of AI to cause harm, perpetuate biases and infringe on privacy rights are issues militating against AI application in public institutions. While AI has many advantages, issues bordering on methodological rigor and academic integrity are considered as fundamental issues (Ekundayo & Nuzhat, 2024). The use of AI in research makes it difficult to verify authorship and originality which undermines scholarly values. Generative AI raises fears of plagiarism and academic dishonesty with some institutions reporting increased misuse of AI in student assignments (Owolabi & Adeyemi, 2024).

6. CONCLUSION

Artificial Intelligence presents opportunities and challenges for academic administration. Academic institutions stand to gain significantly as AI enhances efficiency in the art of teaching, training and research which is paramount for educational development. However, key issues bordering on limited infrastructure, poor skilled manpower, inadequate capacity building, ethical concerns and policy gaps are challenges that must be addressed to ensure optimum adoption and integration of AI in our academic institutions. It is based on this premise that this study recommends the following strategies for effective application of AI tools in academic administration.

Recommendation

Capacity building and training programmes for administrators, educators and students on the responsible use of AI should be a priority in academic institutions. Training of all stakeholders should be participatory, practical and continuous to meet up with the changing trends in AI innovations.

Government and educational institutions should increase budgetary allocations for AI expansion in their respective institutions. Adequate financial allocations should be utilized for the expansion of ICT facilities, digital infrastructure and support systems for robust AI applications in schools.

Clear AI policies, guidelines and regulatory frameworks should be instituted by the government to encourage growth and enhance maximum utilization of AI applications in academic institutions. These policies must promote open-access AI tools for wide coverage and increased access to potential users while maintaining proper ethics during applications to promote responsible AI usage.

There is an urgent need for curriculum redesign in institutions of learning. AI and digital literacy should be fully incorporated into undergraduate and postgraduate programs so as to facilitate the acquisition of full in-depth knowledge on AI applications by students in academic institutions.

REFERENCES

1. Agba, M.S; Agba, G.E.M & Obeten, A.W. (2023). Artificial Intelligence and Public Management and Governance in developed and developing market economies. Journal of Public Administration, Policy and Governance Research. 1(2) 1-14
2. Ahmad, S.A. (2024). Artificial Intelligence in Teaching and Training. International Journal of Social Science and Humanities Research. 12(4) pp: 45-48.
3. Akinboade, A. (2023). ICT infrastructure challenges in Nigerian higher education. Journal of African Higher Education Studies. 12(2), 55-72.
4. Akinola, S. (2024). How Artificial Intelligence is Improving Research. Punch Newspapers. 2nd February, 2024.
5. Ananyi, S.O & Nwosu, L.K. (2023). Artificial Intelligence and Economic aspects of Nigerian Public Universities. International Journal of Scientific Research in Education. 16(2) 136-152.
6. Aranguena, I. (2024). AI in Research: Its Uses and Limitations. Research to Action. 1(1).
7. Davis, F.D. (1989). Perceived Usefulness, Perceived Ease of Use and User Acceptance of Information Technology. MIS Quarterly, 13(3) 319-340
8. Dorfler, V. (2022) Artificial Intelligence. https://doi.org/10.4135/9781071872383.n15. Pp. 37-41.
9. Duque, R.E et al. (2024). Artificial Intelligence and Teaching Practice: Concepts, Applications and Educational Challenges. IOSR Journal of Business and Management. 26(10). Pp. 24-30
10. Ekundayo, T., Khan Z, & Nuzhat, S. (2024). Evaluating the Influence of AI on scholarly research: A study focused on Academics. Human behavior Emerge Tech. 2024 (1) Article 8713718.
11. Hattie, J. & Timperly, H. (2007). The Power of Feedback. Review of Educational Research, 77 (1) 81-112
12. Igbokwe, C.P (2024). Exploring the Role of Artificial Intelligence (AI) in Public Service Delivery in Anambra State, Nigeria. Advance Journal of Business and Entrepreneurship Development. 8(5) 27-35.
13. Jamal, A. (2023). The Role of Artificial Intelligence (AI) in Teacher Education: Opportunities and Challenges. International Journal of Research and Analytical Reviews (IJRAR). 10(1) 139-146.
14. Kulal, A., Rahiman, H.U., Survarna, H., Abhishek, N., and Dinesh, S. (2024). Enhancing Public Service Delivery Efficiency: Exploring the Impact of AI. Journal of Open Innovation: Technology Market and Complexity. 10(3).
15. Kumari et al. (2025). The Role of AI in Teacher Training: Enhancing Pedagogical Effectiveness. Journal of Marketing and Social Research. 2(5) pp 116-122.
16. Luckin, R., Holmes, W., Griffiths, M.J & Forcier, L.B (2016). Intelligence Unleashed: An Argument for AI in Education. Pearson Education.
17. McCarthy, J., Minsky, M. Rochester, N.J & Shannon, C. (2006). A Proposal for the Dartmouth Summer Research Project on Artificial Intelligence, AI Magazine. 27(4), 12-14.
18. Mellouli, S., Janssen, M. & Ojo, A. (2024). Introduction to the issue on Artificial Intelligence in the Public Sector: Risks and Benefits of AI for Governments. Digital Government: Research and Practice. 5 (1). Pp 1-6.
19. Mitra, M. & Hamed, J. (2025). The Impact of AI on Research Efficiency: Results in Engineering. Vol. 26. https://doi.org/10.1016/j.rmeng.2025.104743.
20. Nataraj, P. (2022). How Schools in India are Integrating AI in the Curriculum. Analytics India Magazine. https://analyticsindiamag.com.

21. National Universities Commission (NUC) (2021). Guidelines for Open and Distance Learning in Nigerian Universities.
22. Nur Fitria, T. (2021). Artificial Intelligence (AI) in Education: Using AI Tools for Teaching and Learning Process. Proceeding Seminar Nasional Call for Papers. ISSN Online: 2654-6590, December 2021.
23. Nwosu, C.C; Obalum, D.C & Ananti, M.O (2024). Artificial Intelligence in Public Service and Governance in Nigeria. Journal of Governance and Accountability Studies (JGAS). 4(2) 109-120.
24. Owolabi, T. & Adeyemi, K. (2024). Academic Integrity in the era of generative AI: Evidence from Nigerian Universities. African Journal of Educational Technology. 9(1), 44-61.
25. Rashi-Mandayam, M.S (2025). Leveraging AI for Business Efficiency and Innovation. IJIRMPS, 13 (2) 1-3.
26. Russell, S. J., & Norvig, P. (2021). Artificial Intelligence: A Modern Approach (4th ed.). Pearson
27. Sun, T.Q., & Medaglia, R. (2019). Mapping the Challenges of Artificial Intelligence in the Public Sector: Evidence from Public Health Care. Government Information Quarterly, 36(2) 368-383.
28. Vieriu, A.M & Petrea, G. (2025). The Impact of AI on Students' Academic Development. Education Sciences. 15(3), p. 343.
29. Wirtz, B.W, Weyerer, J.C & Geyer, C. (2019). Artificial Intelligence and the Public Sector- Applications and Challenges. International Journal of Public Administration. 42(7), 596-615.