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Impact of Artificial Intelligence on University Administration, Academic Staff Job Performance and Students Academic Performance in University Education in Nigeria

Offia Ogochukwu Judith
Science Education Department, Faculty of Education, Federal University Wukari, Taraba State, Nigeria

Victor Olugbenga Ayoko
Department of Educational Foundations, Faculty of Education, Open University of Faculty of Education, National, Nigeria

Bintu Yunisa
Science Education Department, Faculty of Education, Federal University Wukari, Taraba State, Nigeria

A B S T R A C T
This paper looked at the impact of artificial intelligences on universities administration, Academic staff job performance and Students Academic Performance in universities in Nigeria. The paper is a position paper that depends on secondary data. The secondary data were collected from online and print publications. The paper established that AI have impacted the universities administration positively by aiding effective university programme planning and administrative activities. AI has supported academic staff to carry out teaching, research and provided community services to host communities. AI also assisted students to carry out their various academic work such as reading, supervision of assignments, projects and attending lecturers online. Based on this, the paper recommends that since AI is vital to the realization of universities goals, the universities administrators should seek more funding for the development of AI in the universities by seeking more financial assistance from both the government and private institutions.

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Introduction

University education is organized higher learning designed for manpower development and training for national development. The goals of tertiary education which also included university education in Nigeria according to the FGN National Policy on Education (Federal Republic of Nigeria, 2013), shall be to: contribute to national development through high-level manpower training; provide accessible and affordable quality learning opportunities in formal and informal education in response to the needs and interests of all Nigerians; provide high-quality career counselling and lifelong learning program that prepare students with the knowledge and skills for self-reliance and the world of work; reduce skill shortages through the production of skilled manpower relevant to the needs of the labour market; promote and encourage scholarship, entrepreneurship and community service; forge and cement national unity; and promote national and international understanding and interaction.

The realization of universities objectives depends on effective administration. Ogunode (2020) defined university administration as the application of the universities' resources to implement the programme of

the universities with the aims of realizing the objectives of the universities. University administration is the mobilization and arrangement of both human and materials resources for the achievement of the university's goals. University administration is the effective use of the resources of the university to implement the teaching programme, research programme and the community service programme of the universities. University administration is the deployment of the universities' resources to accomplish the universities' programme. The objectives of university administration include: to implement the programme of the universities as defined; to allocate resources for the implementation of the universities programme; to ensure implementation of teaching programme, to ensure implementation of research programme; to ensure delivery of quality community services programme, to ensure effective staff development, to ensure effective student administration, to ensure smooth implementation of academic calendar and to ensure quality education.

The cardinal programme of universities which includes teaching, research and provision of community services are handled by the academic staff. Academic staff are professionals employed in the higher institutions to carry out academic services that include teaching, research and provision of community services. Functions of academic staff according to Ogunode et al (2020c) includes; teaching at undergraduate and graduate level in areas allocated by the Head of Department and reviewed from time to time by the Head of Department; carrying out research and producing publications, or other research outputs, in line with personal objectives agreed in the Staff review process; to obtain research funding support; to engage with the broader scholarly and professional communities; to supervise or assist with supervision of undergraduate, taught graduate (Masters) or research graduate (MPhil/PhD) students; to contribute to the development, planning and implementation of a high-quality curriculum. Ogunode and Adamu (2021) assist in the development of learning materials, preparing schemes of work and maintaining records to monitor student progress, achievement and attendance. The job performance of the academic staff is very vital to the realization of the universities objectives.

Academic staff job performance is the total performance of teaching, researching and community services responsibilities an academic staff has carried out and still carrying out in the institutions where he or she work at a particular time. Academic staff job performance is the general record of tasks carried out by an academic staff to be compare to the assigned responsibilities and functions given to them (Ogunode & Ibrahim 2023). Academic staff job performance can also be seen as the measuring of a specific and general tasks given to faculty in an institutions and they are expected to carry them out within a specific timeline (Ogunode, et al 2023; Ogunode & Eimuhi, 2023). Academic performance from a societal stand point. The author proved this point through his work by examining strong link between academic staff performance and the quality of society. Academic staff performance as a function of excellence leadership on the part of the university management. Achieving both individual and organization excellence is a pathway through which the society and members therein accomplish their goals (Simon 2002). Academic staff job performance constitutes all activities and functions it is expected of an academic to execute within a specific time (Ogunode, ThankGod & Olatunde-Aiyedun 2022).

Students' academic performance improvement is the desires of academic staff in the universities. The student performance is an indicator used to measure the performance of lecturers in the universities. cademic staff performance relates to both practical and theoretical knowledge acquired in key professions and/or industries, including high moral discipline by both staff and students of tertiary institutions (Ofoegbu & Alonge, 2016). Similarly, Foster and Young (2004) conceptualized student academic performance as the parameter for determining the worth and carrying capacities of the students. Academic staff performance is defined by Ogunode and Josiah, (2023) as the total learning outcome of the students in the educational institutions which includes the knowledge, social and communication skills and ideas acquired and retained through their course of study. Academic performance refers to all organized educational program and knowledge a learner or student achieves or acquires in the school environment as a result of academic activities. Academic performance as effective teaching and learning that is anchored on developmental resources with a high impact community service, creativity, and innovativeness. Academic staff performance could be measured by the acquisition of self-independent economic skills by graduates of universities (Ofoegbu & Alonge 2016).

Materials and Methods

There are many technological facilities available for both lecturer and students to support their academic works in the universities. Ogunode (2024) observed that artificial intelligence is one of the technological tools that both students and lecturers used to support their functions in the higher institutions. The integration of artificial integration into the higher education seem to have assisted both the lecturers and students in the various higher institutions. Artificial intelligence (AI)**,** according to Copeland (2023) is the ability of a digital computer or computer controlled robot to perform tasks commonly associated with intelligent beings. The term is frequently applied to the project of developing systems endowed with the intellectual processes characteristic of humans, such as the ability to reason, discover meaning, generalize, or learn from past experience.

AI according to Alagbe (2023) is the ability of a computer or machine to mimic the capabilities of the human mind – learning from examples and experience, recognizing objects, understanding and responding to language, making decisions, solving problems – and combining these and other capabilities to perform functions a human might perform, such as greeting a hotel guest or driving a car. Al is also viewed by Ogunode and Ukozor (2023) as programs designed with human-like intelligence and structured in the forms of computers, robots, or other machines to aid in the provision of any kind of service or tasks to improve the social economic and political development of the society. Artificial Intelligence is an application or program constructed to carry out tasks with human-like intelligence. The deployment of AI for universities administration, academic staff job execution and for student academic works in the various universities seems poor in some universities in Nigeria and there have been low investment on AI development in the universities. It is based on this that this study seeks to discuss the impact of Artificial Intelligence on University administration, Academic staff job performance and Students Academic Performance in Tertiary Education in Nigeria

Impact of Artificial Intelligence on University administration, Academic staff job performance and Students Academic Performance in Tertiary Education in Nigeria

University administration

AI has aided effective universities administration and management in Nigeria. AI has assisted in effective planning of the universities programme. AI has supported universities administrators in policy making and decision taking to improve the performance of the universities. Ogunode & Olowonefa (2023) opined that AI has the capacity to improve data generation, distribution, storage and computation in school for effective decision and planning for effective school management. Ogunode (2021) asserted that one of the major function of education administration is planning of educational programme and projects. Planning is very vital to the realization of the objectives of secondary school education. Educational institutions must be planned to be able to achieve its objectives and education must be planned too to be able to realize its goals. Data is what is needed to plan and take decisions. Data is very important for planning educational programme. Without current educational data, planning is impossible. Ogunode, & Ukozor, (2023) concluded that AI aids school-community relationship communication, academic calendar planning, extra-curriculum programme implementation, school discipline programme data collection, school sport planning, school examination and school security management. AI can aid school administration in areas of decisions making, forecasting, school objectives, programming school activities planning, budgeting, establishing and interpreting policies, examination, sporting activities and prize-giving/ graduation.

AI can give school management insights into their operations they might not have been aware of. The rapidly expanding population of generative AI can play these roles in schools data management: classification of data by obtaining, extracting, and structuring data from documents, photos, handwriting, and other media. Cataloging by helping to locate schools data. Improve quality of data collected by reducing errors in the data management process. Data security in school by keeping data safe from bad actors and making sure it's used in accordance with relevant laws, policies, and customs and ensuring data integration by helping to build "Management databank of schools. Also, Westagilelabs (2022) noted that to eliminate manual administration work in n schools, colleges and universities such as scheduling, rescheduling classes, marking attendance, grading papers, finance, and accounting and record keeping.

This streamlines the regular, mundane tasks that no longer need to be done by the staff. AI tools can perform various functions like ending truancy alerts, report cards and other correspondence to the parents automatically, Plan and schedule meetings, Automate routine, student forms, enrollments, and other paperwork to the correct department, Shorten the time spent on progress reports AI, Streamline any other record-keeping tasks. It can enable teachers and professors to focus primarily on improving educational quality instead of manual paperwork and reducing work pressure.

Bordia (2023) contended that AI tools can automate repetitive tasks essential for the smooth functioning of an institute. AI can be used to aid effective tertiary institution administration. The use of AI in education in India can be to make school management tasks effortless for admins and teachers. By automating activities like fee collection, admission enquiries management, tracking the circulation of books in the library, helping admins plan the entire academic year and more, AI can improve the efficiency of school administration. AI can facilitate the automation of administrative tasks, allowing educators to allocate more time for student interaction and personalized instruction (Al-Sarhani, Atallah bin Fahd 2013; Chan & Tsi, 2023; ;Ogunode, Abdullahi, & Sani.2024).

Academic staff job performance

AI has helped in the implementation of universities curriculum (Oluyemisi, 2023). AI has supported lecturers in delivery of lectures in the classrooms. Okonkwo, (2024) and Thomas, Gambari, Sobowale, & Shehu, (n.d) noted that artificial intelligence can be deployed to solve various problems hindering the effective implementation of teaching programmes in tertiary institutions across the country. The teaching programme is a core programme of tertiary institutions and is very critical to the attainment of tertiary institutions. The teaching programme covers the preparation of lecture notes, presentation of lectures, assessment of students' academic programmes via tests and examinations, marking of students‟ scripts, preparation of students‟ results, integration of resources into lecture presentations and classroom management. These entire things that constitute teaching programmes can be easily done by deployment of Artificial intelligence (Igbokwe, 2023). Ogunode, Edinoh, & Chinedu, (2023) concluded that Lecturers in Nigeria that are able to embrace and utilise Artificial Intelligence technologies to augment their teaching reap the benefits of their learners' engagement and active participation and as such delivery of higher standards of teaching which will assist weak students and provide practical experiences. With the utilisation of Artificial Intelligence in teaching and learning, learners will have access to an unprecedented amount of authentic relevant information to enable them to manage their learning activities as well as explore relevant learning materials and become inquisitive, rather than solely passive recipients of knowledge and information from only the lecturer. Thus, enhancing self-learning and active participation in the learning process (Olusegun, & Honmane, 2024; Okonkwo, & Okonkwo, 2024). AI supported lecturers to carry out research, published their papers ( ). AI aid effective paper writing by aiding writing, gramme check,

Students' Academic Performance

With the help of AI, students can learn from anywhere at their own pace without having to attend physical classes. They can connect with learners from all over the world and participate in similar courses. AI is modifying education models and teaching-learning techniques around the globe. As learners can quickly access information, they can resolve their doubts in a short time. This powerful technology is also promoting the culture of lifelong learning by empowering students with the required information in a span of a few seconds (Bordia, 2023). Anisova (2023) and Ogunode, Idoko & ThankGod (2024) opined that Virtual assistants and chatbots have become valuable assets in the educational sphere. They employ natural language processing and machine learning algorithms to comprehend user queries, provide assistance, and facilitate seamless learning experiences. AI-powered educational assistants and virtual teachers offer numerous benefits. First, they provide personalized support, tailoring their responses and resources to meet the specific needs of individual students. This personalized approach enhances the learning experience, catering to each students' unique requirements. Virtual assistants are available round-the-clock, ensuring 24/7 access to help and resources. Students can seek guidance at their convenience, fostering independence and self-directed learning. AI-powered educational assistants offer scalability and consistency since they handle multiple queries simultaneously, ensuring seamless support for a large number of students. Additionally, they provide consistent responses and feedback, eliminating

discrepancies in instructional delivery and promoting equitable access to information. The immediate feedback and support offered by virtual teachers and assistants are invaluable. Students receive instant feedback on their work, allowing them to identify errors and areas for improvement in real time.

With AI, the education industry can change traditional learning methods to provide an enriched learning experience for students. Now students can learn from any corner of the world thanks to the power of artificial intelligence. Universal access to education is one of the applications of AI in education. Quality education is accessible to students outside their classrooms. They can participate in global courses and learn from anywhere without worrying about their geographical location (Bordia, 2023; Borbajo et al., 2023). AI aided students' academic performance in educational institutions (Ogunode & Gregory, 2023; Zarrouqi, Riyad; Falta, Amira 2020; Ziegler,2005). Artificial intelligence aid implementation of educational administration and planning programme in Nigerian tertiary institution. Artificial intelligence aids effective implementation of teaching and research of educational administration and planning programme in Nigerian tertiary institution and also aid effective students learning of educational administration and planning programme in the tertiary institution ().

Findings

The paper revealed that AI have impacted the universities administration positively by aiding effective university programme planning and administrative activities. AI has supported academic staff to carry out teaching, research and provided community services to host communities. AI also assisted students to carry out their various academic work such as reading, supervision of assignments, projects and attending lecturers online.

Conclusion and Recommendations

This looked at the **i**mpact of artificial intelligences on universities administration, Academic staff job performance and Students Academic Performance in universities education in Nigeria. The paper concluded that AI have impacted the universities administration positively by aiding effective university programme planning and administrative activities. AI has supported academic staff to carry out teaching, research and provided community services to host communities. AI also assisted students to carry out their various academic work such as reading, supervision of assignments, projects and attending lecturers online.

Based on this, the paper recommends that since AI is vital to the realization of universities goals, the universities administrators should seek more funding for the development of AI in the universities by seeking more financial assistance from both the government and private institutions.

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