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Artificial Intelligence, Neocolonialism, and the Future of Education in Nigeria

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Abstract

Artificial Intelligence (AI) is often considered as a transformational influence in global education; yet, its implementation in Nigeria prompts significant issues about digital neocolonialism, epistemic justice, and the nature of knowledge dissemination. This paper employs the contextual hermeneutic research method to examine the intersection of AI, neocolonialism, and the future of education in Nigeria, critically analyzing the extent to which AI-driven educational systems function as instruments of cultural imperialism instead of facilitating intellectual emancipation. The study's findings indicated that infrastructural difficulties restrict AI accessibility, bolster the supremacy of foreign AI businesses in Nigeria's education sector, and facilitate the exploitation of student data by external actors. It additionally disclosed that prejudices are ingrained in AI algorithms, which denigrate African intellectual traditions and facilitate the deterioration of cultural identity. In reaction to these neocolonial complexities, the study recommended adecolonial framework for AI in education—one that actively integrates indigenous knowledge systems, cultivates technical autonomy, and opposes the imposition of external intellectual frameworks. This paper argued that the future of education in Nigeria depends not on the complete adoption of AI, but on the intentional development of a hybrid educational model that integrates technological progress with local intellectual traditions, ensuring that AI acts as a means of epistemic liberation rather than digital oppression.

Keywords:

Artificial Intelligence, Neocolonialism, Education and AI Education.

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Introduction

Education has long been recognized as the cornerstone of national development, equipping individuals with the skills necessary for personal growth and societal transformation. In Nigeria, it serves multiple functions: it promotes personal development, strengthens national identity, and contributes to economic growth. In fact, the history of education in Nigeria is closely connected to the overall progress of the country. In recognition of this fact, over time, the Nigerian government has undertaken deliberate endeavours to improve education at different levels. However, despite these endeavours, obstacles persist as the education system faces structural challenges, including outdated curricula, unequal access, teacher shortages, and poor infrastructure.

Nigeria, a nation blessed with diversity of cultures, languages and socio-economic conditions faces unique educational challenges.Issues such as uneven access to educational resources, varying linguistic landscapes and disparities in learning outcomes which artificial intelligence (AI) offers the potential to address. In recent years, AI has emerged as a transformative tool in education, revolutionizing how knowledge is delivered, assessed, and managed. AI aids in the rethinking of our whole educational system, resulting in a whole new better experience for students and instructors by giving more personalized and diverse learning opportunities. From automated grading systems to personalized learning platforms, AI promises greater efficiency and inclusiveness. Many major educational institutions are seeking to implement AI by providing customizable software-driven tutors, developing smart content, learning analytics, chatbots or virtual assistants, personalized learning programs, and customizable self-assessment tests in their platforms.

AI is rapidly shaping the landscape of education globally, ushering in a transformative era with both unprecedented opportunities and complex challenges for enhancing learning experiences in the 21st century. The incorporation of AI in Nigeria's education sector is not without challenges, particularly concerning autonomy, control, and the risk of digital neocolonialism. Though, AI offers unprecedented opportunities for improving educational systems through personalized learning, automated administration, and adaptive assessments. However, alongside these promises, there are growing fears that Nigeria, may fall prey to new forms of neocolonialism, where the dominance of foreign technology firms and dependence on imported knowledge systems undermine local autonomy. Neocolonialism, in its digital form, manifests through the reliance on foreign technologies and frameworks that do not align with the cultural and developmental priorities of Nigeria. The adoption of AI in education risks further entrenching dependency on technologies developed in the Global North, perpetuating intellectual dominance and marginalizing indigenous knowledge systems. This paper critically examines the intersection between AI, neocolonialism, and the future of education in Nigeria. It also provides recommendations to promote ethical and inclusive AI policies that foster local innovation and ensure equitable access to technology.This investigation will begin with an effort to clarify or elucidate the diverse subjects relevant to the discourse.

Artificial Intelligence (AI)

AI according to McCarthy et al in Adiguzel et al (2023) refers to making a machine behave in ways that would be described as intelligent if a human was so behaving. AI simply refers to utilizing computer machines to think and act humanly and rationally (Allam et al 2023). AI also refers to systems and algorithms capable of performing tasks that traditionally require human intelligence, such as language processing, problem-solving, and data analysis (UNESCO, 2019). In education, AI applications include automated tutoring, adaptive learning platforms, and student performance tracking systems, allowing for personalized educational experiences. AI in education is the application of sophisticated technology, namely machine learning algorithms and conceptual models, to enhance the learning process, boost educational results and customize instruction to meet the unique requirements of each student (Okunade, 2024)

Neocolonialism

Neocolonialism coined by Kwame Nkrumah, describes the indirect domination of former colonies through economic, cultural, or technological means (Nkrumah, 1965). It describes the indirect control exerted by former colonial powers over developing nations, often through economic, technological, and cultural means. In the educational context, neocolonialism manifests when educational tools, curricula, and digital platforms are imported from the Global North, reinforcing dependence on foreign technology and epistemologies. Put differently, in education, neocolonialism manifests when developing countries rely heavily on foreign software, tools, and knowledge systems. This dependency limits innovation, local content development, and cultural representation in education.

Education

Education according Oji (1982), refers not only to the process by which we acquire knowledge, skills, habits, values or attitudes to be able to become useful and justly related members of society; but also the results of that process, and involves both learning and teaching. Okolo (2009) on his part sees education as a vehicle for social change and unavoidable means of physical, social, economic, political, religious, moral development for lifelong learning and survival. From the above, it can be deduced that education is not merely the transmission of information but also a means of shaping values, identity, and societal development. In Nigeria, education involves holistic development, addressing the moral, intellectual, and spiritual dimensions of individuals. A critical challenge for Nigeria however, is ensuring that education, in the age of AI, remains rooted in values and philosophies relevant to local cultures

Artificial Intelligence (AI) in Education: Strengths and Weaknesses

The 21st century has witnessed the rapid evolution of technology in various fields, including education. AI is increasingly being adopted globally to enhance teaching, learning, and administration, offering personalized learning experiences, automated assessments, and data-

driven decision-making. However, Nigeria's adoption of AI in education is still in its infancy, with several challenges impeding widespread implementation.

Assets of AI in Education

Some of the benefits of AI in Education include:

i. **Personalized Learning and Adaptive Systems:** Holmes et al. (2019) argue that personalized learning technologies (AI) enhance student engagement and improve performance by addressing unique learning challenges. AI-powered platforms can adapt to the unique needs and learning pace of individual students, offering tailored content and assessments. This is particularly important in Nigeria, where overcrowded classrooms often limit teachers' ability to provide personalized attention to every student.

ii. **Automation of Administrative Tasks:**Teachers in Nigeria often spend a significant amount of time on administrative tasks, such as grading and record-keeping, which reduces the time available for instruction. AI-powered tools can automate routine administrative tasks, such as grading, attendance tracking, and scheduling. By reducing the administrative burden on teachers, AI enables them to focus more on instruction and student mentorship. Automated grading systems can also provide immediate feedback, facilitating continuous learning and assessment.

iii. **Enhanced Teacher Training and Professional Development:**UNESCO (2022) highlights that AI-based training programs improve teacher competence by offering customized learning pathways. AI offers opportunities for virtual teacher training through interactive modules and simulations. Virtual training modules powered by AI can simulate classroom scenarios, allowing teachers to practice and improve their skills in a safe environment. Teachers can access on-demand resources and engage in online professional development programs tailored to their needs. AI-powered platforms can also provide analytics on teacher performance, enabling targeted interventions for improvement. This approach addresses the challenge of limited access to professional development programs, particularly for teachers in remote areas.

iv. **Expanding Access through Distance Learning:**AI can address the issue of access by supporting distance learning initiatives. During the COVID-19 pandemic, e-learning emerged as a viable alternative to traditional classroom instruction. Adesina (2021) notes that AI-based distance learning solutions played a critical role in sustaining education during the COVID-19 pandemic in Nigeria. This is especially relevant for rural and underserved communities, where physical infrastructure is limited. AI-enabled platforms can offer offline learning options, such as content delivered via SMS or interactive voice response systems, ensuring that students without reliable internet access are not excluded.

v. **Data-Driven Decision-Making and Predictive Analytics:** AI facilitates data-driven decision-making by analyzing large datasets to identify trends and predict student outcomes. Predictive analytics can help policymakers allocate resources more effectively, forecast dropout rates, and design interventions to improve academic

performance. Schools can also use AI-generated insights to optimize teaching strategies and improve student engagement.

Trials of AI in Education

Some of the challenges with the use of AI in education include:

i. **Infrastructure Deficits:** UNICEF (2020) reports that more than half of public schools in Nigeria lack access to electricity and internet facilities, hindering the adoption of digital tools. A critical challenge to AI adoption in Nigerian education is the lack of adequate infrastructure, including reliable internet access, electricity, and digital devices. Many schools, particularly in rural areas, lack basic amenities, making it difficult to implement AI-powered systems effectively. These deficits create a significant barrier to the effective use of AI tools and platforms.

ii. **Digital Divide and Inequality:**The digital divide remains a significant barrier to AI adoption. The integration of AI in education raises concerns about the digital divide, as not all students have equal access to digital devices and reliable internet. Students in urban areas have better access to technology compared to their rural counterparts, creating inequalities in learning opportunities. A study by Adesina (2021) highlights that the lack of access to digital devices and internet connectivity excludes many Nigerian students from participating in e-learning and AI-powered education programs. Without targeted interventions, the introduction of AI in education risks deepening these existing disparities.This inequality can deepen existing disparities in education, leaving marginalized students behind.

iii. **Limited Digital Literacy:**Both students and teachers in Nigeria have limited digital literacy, which poses a challenge to the effective use of AI tools. Educators, in particular, are often unfamiliar with emerging technologies and are not adequately trained to integrate AI into teaching practices. Adegbite (2022) highlights that inadequate digital skills among teachers and students is a major obstacle to technology adoption in Nigerian schools. Without proper training and capacity building, teachers struggle to leverage AI tools for lesson planning, student assessments, and personalized instruction.

iv. **High Costs of AI Implementation:**The deployment of AI technologies requires significant financial investment in infrastructure, software, and training. Holmes et al. (2019) argue that the financial demands of implementing AI in education are a key barrier to adoption, particularly in low-income countries like Nigeria. Many schools, Schools need to acquire digital devices, software, and maintain internet infrastructure, which places a significant financial burden on institutions, especially public schools with limited budgets. Additionally, the costs associated with software licensing, maintenance, and training programs can be prohibitive.

v. **Ethical and Privacy Concerns:**AI systems rely on large datasets to function effectively, raising concerns about data privacy and security. It collects large amounts of student data, raising concerns about privacy and data security. There is a need for comprehensive policies to protect student data from misuse or exploitation. In the absence of robust data protection frameworks, there is a risk that student data could be

misused or exposed to cyber threats. Additionally, biases embedded in AI algorithms can lead to unfair outcomes, such as discriminatory assessments or exclusion from learning opportunities.

vi. **Resistance to Change and Lack of Awareness:**Resistance to change is another challenge impeding the adoption of AI in education. Some teachers, administrators, and policymakers are skeptical about the effectiveness of AI technologies, fearing that they may replace human educators or disrupt traditional teaching practices. This resistance is often fueled by a lack of awareness about how AI can complement rather than replace the role of teachers.

Education in Nigeria: An Overview

Education is fundamental to national development, serving as a catalyst for economic growth, social inclusion, and individual empowerment. However, the Nigerian education sector has been plagued by systemic challenges that have undermined its capacity to deliver quality learning experiences. Despite various reforms and policy interventions, issues such as:

i. **Poor Infrastructure:** The inadequate state of educational infrastructure is one of the most pressing challenges in Nigeria. Many public schools lack basic amenities, such as functional classrooms, libraries, laboratories, and reliable electricity. The current situation, as noted by Mgbomo (2023), is marked by a deficient road network, insufficient transportation options, unreliable electricity supply, limited access to water, deteriorating infrastructure, a shortage of lecture rooms and seating, inadequate provision of chemicals and laboratory equipment, and a lack of up-to-date textbooks, journals, and periodicals in the libraries. Indeed, within certain educational institutions, it is observed that lecturers lack designated office spaces. The absence of adequate infrastructure not only impairs academic achievement but also constrains students' opportunities to participate in activities that promote ethical growth, including group discussions, debates, and extracurricular initiatives centered on leadership and moral reasoning (Adeyemi, 2014). These infrastructural deficits limit the ability of students to learn in conducive environments. For instance, many rural schools operate in overcrowded classrooms or under makeshift structures, impeding effective teaching and learning.

ii. **Teacher Shortages and Inefficiency:** Nigeria faces an acute shortage of qualified teachers, especially in rural and underserved areas. The low teacher-to-student ratio affects the quality of instruction, leading to poor learning outcomes. Additionally, the limited availability of professional development programs hampers teachers' ability to adapt to modern pedagogical practices. The inefficiency of teacher deployment further compounds the problem, with some schools being overstaffed while others are severely understaffed (Adegbite, 2022).

iii. **Overcrowded Classrooms:** Classroom overcrowding is a significant issue in public schools, particularly in urban centers. With student populations far exceeding the capacity of available infrastructure, teachers struggle to manage large classes effectively. This reduces the amount of individual attention students receive, negatively impacting their academic performance and engagement. The result of this

situation is a decline in educational quality, leading to students being less equipped to cultivate the critical thinking and ethical reasoning abilities essential for responsible citizenship (Ofoha, 2019).

iv. **Regional Disparities and Access Gaps:** Nigeria experiences significant regional disparities in access to education, with students in northern states facing more barriers to education than those in the south. Factors such as poverty, insecurity, and cultural practices contribute to high dropout rates, particularly among girls in rural areas. Insecurity caused by Boko Haram insurgency and banditry in the north has led to the closure of many schools, further worsening the education crisis.The inequity in access to education exacerbates the chasm in societal worth, as students from disadvantaged backgrounds are less likely to undergo the holistic education that fosters overall development (Ofoha, 2019). Supporting this notion, Adeyemi (2014) contends that the inequality in access intensifies the educational divide, as students from disadvantaged backgrounds frequently lack the thorough education necessary for their ethical and overall development.

v. **Outdated Curricula and Assessment Methods:** The curricula used in Nigerian schools are often outdated and do not align with the demands of the modern economy. Many subjects are taught in a theoretical manner, with little emphasis on practical or digital skills. Furthermore, assessment methods rely heavily on rote memorization rather than critical thinking and problem-solving skills. This misalignment leaves students ill-prepared for the workforce and limits their ability to contribute meaningfully to national development

Artificial Intelligence (AI) in Education: A Mechanism for Advancing Neocolonialism in Nigeria

Artificial Intelligence (AI) is progressively influencing global education systems, with its incorporation into learning processes offering improved efficiency, accessibility, and creativity. The implementation of AI-driven educational technology in Nigeria prompts apprehensions regarding digital neocolonialism, specifically the persistent supremacy of Western interests in the nation's educational and intellectual advancement. Artificial intelligence, as a sophisticated technological system, reflects the ideas and biases of its developers, who are primarily from Western nations. The unthinking integration of AI in Nigerian education may reinforce Western epistemologies, undermine indigenous knowledge systems, and perpetuate educational reliance. This section will examine the manifestation of neocolonialism in the application of AI technologies within Nigeria's educational system.

i. **Technological Dependence and the Erosion of Sovereignty:** Educational sovereignty necessitates that Nigeria possesses the ability to influence its educational frameworks and curricula. Nonetheless, doing this is challenging when AI technologies are imported in their entirety, with minimal adaption to local situations. The majority of AI platforms and digital technologies utilized in Nigerian education are created by businesses based in the Global North, including Google, Microsoft, and IBM. Western governments and technology businesses predominantly create AI platforms, necessitating Nigeria’s adoption of systems that embody external assumptions and priorities. These instruments, although enhancing productivity,

render Nigeria susceptible to technological dependency, with essential elements of education dependent on foreign platforms. This dependence on external technologies reflects patterns of technological imperialism, undermining local autonomy due to the supremacy of foreign interests. This reliance constrains Nigeria's capacity to cultivate domestic alternatives and sustains a variant of digital colonialism. This dependency also prompts inquiries regarding sovereignty: Can Nigeria govern its educational future while depending on foreign technologies? This also prompts inquiries regarding autonomy: whether Nigeria's educational system can maintain independent development while depending on imported technologies. In the absence of regulation over AI technologies and their underlying data, Nigeria faces the peril of becoming into a passive consumer instead of an active developer. Technological dependency and the erosion of sovereignty reflect a colonial paradigm of resource exploitation and external reliance, wherein the intellectual labor and personal data of Nigerian students benefit foreign firms. This dependency, akin to previous kinds of colonialism, constrains the nation's ability to formulate its own educational agenda. Nkrumah (1965) cautioned that the enduring presence of colonial systems, manifested as economic and technological dependency, could impede the advancement of formerly colonized states.

ii. **Epistemic Injustice and the Subordination of Indigenous Knowledge:** AI technologies implemented in education frequently incorporate the epistemologies and cultural viewpoints of their developers. Many educational platforms are predominantly constructed within Western epistemological frameworks, favoring specific types of knowledge while disregarding others. AI-driven educational systems predominantly provide Western curricula and methodologies, offering minimal inclusion of indigenous knowledge, Nigerian history, or African philosophical traditions. This is a risk of epistemic injustice, wherein indigenous ideas, histories, and cultural knowledge are rendered invisible or insignificant. The risk is that Nigerian students may become estranged from their cultural heritage, engaging in an educational system that emphasizes foreign knowledge at the expense of local significance. AI-driven courses may prioritize Western history, literature, and scientific paradigms, neglecting African histories, languages, and philosophies. Nigerian students who are predominantly exposed to foreign content risk becoming intellectually alienated from their cultural heritage and perspective. This absence not only undermines the significance of education for Nigerian students but also perpetuates cultural alienation and intellectual dependency. An analytical perspective on AI in education must incorporate Nigerian epistemologies and cultural values into AI systems, fostering intellectual independence and pertinence. Education ought to cultivate a sense of identity and continuity with local traditions; nevertheless, AI systems predominantly featuring Western content may undermine this sense of belonging. Eze (1998) contends that education in Africa should be rooted in indigenous epistemologies to promote intellectual autonomy and cultural continuity.

iii. **Cultural Alienation and the Deterioration of African Identity:** The notion of self-determination in education necessitates that students see themselves, their history, and their values reflected in their learning experiences. Regrettably, AI-driven education

platforms are typically built to represent Western educational principles, such as individualism and competitiveness, which may not mesh with traditional African educational models that emphasize community, cooperation, and moral teaching. In education, AI brings content and instructional approaches that may not mesh with African means of learning, such as oral traditions and communal knowledge sharing. The adoption of these foreign models causes cultural alienation, as students grow estranged from their local identity and values. When students engage with AI-powered platforms that promote Western patterns of learning, they may face a crisis of identity, feeling detached from their cultural roots. This estrangement offers a challenge: How can Nigeria incorporate AI into education while preserving its cultural identity? In the absence of intentional efforts to include African values, AI jeopardizes the formation of a generation of pupils who may experience cultural dislocation. This is a challenge, as it weakens and contradicts African educational concepts like Ubuntu (I am because we are), which underscores the notion that personhood is actualized via community, collaboration, and collective responsibility. The unexamined utilization of these instruments jeopardizes the emergence of a generation of pupils who are estranged from their cultural background and grapple with an identity problem. According to Gyekye (1997), education in African communities should embody the values and traditions of the society to cultivate a robust feeling of identity and belonging.

iv. **The Digital Divide and Disparity:** Artificial intelligence has the potential to enhance access to quality education, although it also poses a risk of intensifying existing inequalities in Nigeria. Educational inequality, a considerable issue in Nigeria, may exacerbate if access to AI technologies is not democratized (Okoye & Bello, 2022). Artificial intelligence in education may intensify pre-existing disparities between urban and rural regions in Nigeria. Although students in urban areas may gain advantages from AI-driven tools, numerous rural populations are deprived of consistent electricity and internet connection, thus exacerbating the digital gap. This is due to pupils in urban regions having greater access to dependable energy, internet, and digital devices compared to their rural counterparts. This engenders novel types of inequality, wherein only pupils from affluent families can avail themselves of the benefits of AI, while others are marginalized. This digital divide exacerbates regional inequalities, restricting opportunities for underprivileged areas to capitalize on technological advancements. It additionally prompts inquiries regarding justice and equity: Who gains from AI in education, and who is marginalized? What measures can Nigeria do to guarantee that all pupils, irrespective of their socio-economic status or geographical location, gain access to AI technologies? In the absence of intentional measures to guarantee equitable access, AI may exacerbate social exclusion and intensify educational disparities in Nigeria. UNESCO (2023) asserts that equitable access to digital infrastructure is crucial for all students to benefit from AI in education; conversely, without such access to technology, the potential of AI in education will remain unfulfilled for numerous marginalized communities.

v. **The Commercialization of Data and Ethical Considerations in Surveillance:** Artificial intelligence systems are significantly dependent on data, prompting ethical

issues around data privacy and spying. In a scenario where international corporations frequently dominate educational AI platforms, the data of Nigerian students transforms into a commodity, prompting concerns over digital sovereignty and privacy rights. In this context, one must inquire: Is it ethical for foreign firms to get profit from the data of Nigerian students? In what ways can educational systems safeguard students from becoming targets of surveillance capitalism?

Recommendations

i. Educators must receive training to critically engage with AI tools to ensure their ethical and effective usage in classrooms, as knowledge of AI programs can empower students to comprehend and influence the future of technology.
ii. AI systems must be engineered to embody Nigeria's multifaceted cultural milieu. This entails incorporating local languages and indigenous knowledge into educational platforms, ensuring that AI enhances rather than undermines cultural heritage. This will guarantee that education continues to serve as a mechanism for the building of national identity. Consequently, Nigerian technology companies ought to be incentivized to develop artificial intelligence solutions customized for local requirements.
iii. Nigeria must invest in digital infrastructure, encompassing electricity, broadband connectivity, and research and development, to establish indigenous AI systems that align with local realities and requirements. This would provide equitable access to AI-enhanced education in both urban and rural regions while diminishing reliance on foreign platforms.
iv. Policies must be established to guarantee that Nigerian educational data is gathered, saved, and handled domestically. This will avert data misuse by foreign firms and safeguard the privacy and interests of Nigerian students.

Conclusion

This study argues that AI has significant potential to transform education in Nigeria by providing personalized learning, enhancing administrative efficiency, and facilitating distant education. It possesses the capacity to transform education in Nigeria by tackling issues with accessibility, quality, and individualization. Nonetheless, although technology presents considerable opportunities, if unregulated, AI-driven educational systems would sustain cultural reliance, economic exploitation, and epistemic injustice. It also poses a risk of exacerbating existing inequalities, dependency, and neocolonialism if not meticulously handled. Nigeria must embrace a value-centric approach to AI, grounded in local realities and intellectual traditions, to circumvent the dangers of neocolonialism and secure a future-oriented education. Consequently, there is a necessity for a localized and ethical approach to AI that enables Nigeria to leverage its advantages while safeguarding cultural identity and educational autonomy. By implementing a value-based approach to AI, Nigeria may establish an educational framework that aligns with its developmental objectives while safeguarding its cultural identity and intellectual independence. Therefore, policy makers, educators, and developers must unite to create an AI-driven educational system that embodies Nigeria's

values and addresses the requirements of future generations. Through smart policymaking, local innovation, and international cooperation, Nigeria may leverage AI to develop an inclusive and future-oriented education system. In this manner, AI can function as an instrument of empowerment rather than domination, cultivating a generation of Nigerian students prepared to excel in a swiftly changing environment.

References

Adegbite, T. (2022). The State of Education in Nigeria: Challenges and Opportunities. Lagos: African Education Review.

Adesina, A. (2021). Digital Learning in Africa: Lessons from the COVID-19 Pandemic. Journal of African Educational Development, 15(3), 102-118.

Adiguzel, T., Kaya, M.H., & Cansu, F.K. (2023). Revolutionizing education with AI: Exploring the transformative potential of ChatGPT. Contemporary Educational Technology, 15(3), ep429.

Allam, H., Dempere, J., Akre, V., & Flores, P. (2023). Artificial intelligence in education (AIED): Implications and challenges. In A. Johnston (Ed.), Proceedings of the HCT International General Education Conference (HCT-IGEC 2023) (pp. 125–140). Atlantis Press.

Eze, E. C. (1998). African Philosophy: An Anthology. Wiley-Blackwell.

Gyekye, K. (1997). Tradition and Modernity: Philosophical Reflections on the African Experience. Oxford University Press.

Holmes, W., Bialik, M., & Fadel, C. (2019). Artificial Intelligence in Education: Promises and Implications for Teaching and Learning. Boston: Center for Curriculum Redesign.

Mgbomo, E. (2023). Realigning teacher education for sustainable development in Nigeria. Gombe Journal of Education (GOMJE) 6(2), 111-124

Nkrumah, K. (1965). Neo-Colonialism: The Last Stage of Imperialism. London: Thomas Nelson & Sons.

Oji, M.K. (1982). *The Nigerian ethical revolution 1981-2000 AD*. Selected Source Documents

Okolo, A.N. (2009). Social change as a panacea for embracing women participation in politics and governance: Implication for societal development. *DELSU Journal of Educational Research and Development, 5*(1), 88-97.

Okoye, T., & Bello, R. (2022). AI, Education, and the Future of Work in Nigeria. Lagos: Institute for Policy Studies.

Okunade, A. I. (2024). The role of artificial intelligence in teaching of science education in secondary schools in Nigeria. European Journal of Computer Science and Information Technology, 12(1), 57–67.Oji (1982),

UNESCO. (2019). Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000366994

UNESCO. (2022). The Future of AI in Education: Global Trends and Policy Implications. Paris: UNESCO Press.

UNESCO. (2023). Artificial Intelligence in Education: A Global Perspective. Paris: UNESCO Press.

UNICEF. (2020). Education in Nigeria: The State of Public Schools. Abuja: UNICEF Nigeria.