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Artificial Intelligence (AI): A Threat to Education in Nigeria

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Abstract
Artificial Intelligence (AI) is rapidly transforming global education systems, and Nigeria is no exception. This seminar paper explores the dual nature of AI in Nigerian education, with a focus on its potential to threaten existing teaching and learning practices. While AI offers tools for personalized learning, administrative automation, and virtual education, it also raises serious concerns about academic integrity, teacher relevance, and access disparities. The paper highlights how students increasingly misuse AI for assignments and assessments, leading to reduced critical thinking and originality. It also considers the challenges teachers face in adapting to AI tools without enough training or institutional support. Moreover, the unequal distribution of digital resources across Nigeria could widen the educational gap between urban and rural students. Despite these risks, the paper does not dismiss AI's value. Instead, it emphasizes the need for balanced integration through government policies, awareness programs, and inclusive infrastructure development. By addressing these concerns proactively, Nigeria can ensure that AI becomes a tool for enhancing education rather than threatening it.

KEYWORDS: Artificial Intelligence, Digital, Literacy, Education, Academic Dishonesty

Introduction

The rapid global integration of Artificial Intelligence (AI) into various sectors, including education, presents a dual-edged sword for Nigeria's already challenged educational system. While AI offers transformative opportunities for personalized learning, enhanced accessibility, and administrative efficiency (Agbo *et al*., 2023; Oni *et al*., 2025). As students increasingly turn to AI-generated content for assignments and exams, educators face challenges in maintaining academic integrity and ensuring genuine learning. These risks highlight the urgent need for a balanced approach to AI in education—one that maximizes its benefits while addressing its potential dangers. its uncritical adoption or inadequate management poses significant threats that could exacerbate existing disparities and undermine educational quality Furthermore, the lack of widespread digital literacy among both educators and students, coupled with insufficient government policies and funding for AI infrastructure, compounds these challenges, making the potential threats of AI in the Nigerian educational context particularly acute (Olawale & Ologunde, 2022; Tribune Online, 2025).

This paper explores the emerging threats posed by AI to the Nigerian education system, examines the challenges associated with its integration, and offers practical recommendations to ensure that AI serves as a complement to, rather than a replacement for, traditional education.

CONCEPTUAL CLARIFICATION

This chapter establishes the conceptual framework that underpins this study, providing a structured approach to understanding artificial intelligence (ai): A threat to education in Nigeria. A conceptual framework is crucial for any rigorous research endeavor, serving as a researcher's mental map or blueprint that articulates the key concepts, variables, and their presumed interrelationships central to the phenomenon being investigated (Paperpal, 2025; Scribbr, 2024).

This paper is guided by a conceptual framework that connects the adoption of Artificial Intelligence (AI) tools in education with both positive and negative educational outcomes. In the Nigerian context, however, digital literacy, infrastructural access, and regulatory oversight also play critical roles (Eze, 2020). This framework helps explore how overdependence on AI can undermine academic integrity and widen educational inequality.

Artificial Intelligence (AI): Artificial Intelligence refers to the ability of computer systems to perform tasks that normally require human intelligence. These tasks include decision-making, problem-solving, learning, and language understanding (Russell & Norvig, 2016). In education, AI is used in tools like virtual tutors, automated grading software, and content generation platforms.

Academic Dishonesty: Academic dishonesty refers to unethical behaviors in

educational settings, such as plagiarism, cheating, and the misuse of AI-generated content. With the rise of AI tools that can write essays or solve problems, students may use these systems to bypass learning processes, undermining educational integrity (Adebayo, 2021).

Automation in Education: Automation in education involves using AI technologies to perform educational tasks traditionally done by humans. These include grading, lesson delivery, and feedback. While automation improves efficiency, it can also reduce teacher-student interaction and compromise the development of critical thinking (Luckin *et al*., 2016).

Digital Literacy: Digital literacy refers to the ability to use digital tools effectively and responsibly. In the context of AI in education, students and educators must understand how to interact with AI technologies ethically and efficiently. A lack of digital literacy can lead to misuse or overdependence on AI tools (Ng, 2012).

REVIEW OF LITERATURES

The Review of Literature (also called Literature Review) is a critical summary and evaluation of existing scholarly research related to this work artificial intelligence: A threat to education in Nigeria.

THE THREAT OF AI TO TEACHERS

Job Displacement and Automation of Teaching Roles: One of the most prominent concerns regarding AI in education is the potential for job displacement. AI systems are increasingly capable of automating various teaching tasks such as grading, content delivery, and even tutoring. As AI-powered platforms and tools such as intelligent tutoring systems, automated essay grading software, and virtual teaching assistants continue to advance, the role of the teacher could be threatened.

Chien and Chen (2020) argue that AI could replace certain administrative and teaching tasks, particularly in large classes or online learning environments. Systems like automated grading software already handle much of the assessment process, while AI-driven platforms like personalized learning systems adjust curriculum delivery to the needs of individual students. In such environments, the role of a traditional teacher—primarily as a content deliverer—could become redundant, potentially leading to a reduction in demand for educators in specific areas.

Supported theory

Dehumanization of Learning: The theory warns that AI could replace the human aspects of teaching—such as mentorship, emotional support, and personalized instruction—leading to a more mechanical and less human-centered educational process (Ellul, 1964).

THE THREAT OF AI TO STUDENTS

Reduced Human Interaction and Emotional Support: Moreover, the absence of a human presence could exacerbate issues such as loneliness, especially for students in online or AI-powered classrooms where human teachers are less available. Ryan (2020) highlights that the decrease in face-to-face interaction could harm students' motivation and engagement, particularly for younger learners who thrive on interpersonal relationships.

The rapid proliferation of Artificial Intelligence (AI) tools, particularly generative AI models like ChatGPT, has introduced a complex set of threats to students' academic development and overall well-being. A primary concern is the potential for academic dishonesty and the erosion of academic integrity (Alwi et al., 2025; Artsmart.ai, 2025). With AI's ability to generate coherent and seemingly original text, students are increasingly tempted to use these tools to complete assignments, essays, and even exams without genuine understanding or effort (HEPI, 2025; TeachingTimes, 2025). This over-reliance can lead to instances of "AI plagiarism," where students submit AI-generated content as their own, challenging traditional methods of plagiarism detection and making it difficult for educators to accurately assess a student's true knowledge and critical thinking abilities (Cardiff University, 2025; Cult of Pedagogy, 2025). This dynamic foster an environment where the pursuit of genuine learning may be supplanted by a focus on obtaining quick, machine-generated answers, undermining the very essence of educational growth.

Beyond academic integrity, the pervasive use of AI poses a significant threat to the development of students' critical thinking skills and cognitive autonomy. When students habitually outsource cognitive tasks to AI, such as summarizing articles, explaining concepts, or suggesting research ideas, they engage in "cognitive offloading," potentially hindering their ability to engage in independent thought, analytical reasoning, and complex problem-solving (Gerlich, 2025; The Business & Financial Times, 2025). This reliance can lead to a decline in the mental workout necessary for developing robust critical thinking, as students may become less adept at evaluating information deeply, questioning assumptions, or generating original ideas when AI readily provides answers (EdTech Digest, 2025; ResearchGate, 2024). Furthermore, unchecked reliance on AI can also impact students' overall well-being, leading to digital fatigue, reduced face-to-face interactions, and potential social isolation, thereby affecting their interpersonal skills and emotional intelligence (Frontiers, 2025).

Fogg and Nass (2018) note that while AI can provide personalized learning experiences, it cannot replace the human touch that is crucial for students' emotional and psychological growth. In environments where AI is heavily integrated, students might miss out on developing social skills, empathy, and emotional resilience, all of which are crucial for holistic development.

Supported theory

The Social Learning Theory

The Social Learning Theory, proposed by Albert Bandura, emphasizes that learning is a social process that occurs through observation, interaction, and collaboration (Bandura, 1977). This theory stresses the importance of social contexts and human relationships in education, which AI-driven systems are likely to reduce. AI systems typically prioritize individualized, automated learning, which could limit opportunities for students to engage in meaningful social learning experiences.

IMPLICATIONS FOR EDUCATION:

Reduced Social Interaction: AI tools that deliver content to students in isolation may hinder the development of social and communication skills, which are critical for success in collaborative environments (Vygotsky, 1978). Students may lose the ability to effectively interact, negotiate, and work in teams, skills that are essential in today's interconnected world.

Lack of Mentorship**:** AI systems cannot replace the mentorship and role modeling provided by human teachers, who not only teach content but also guide students in their personal and social development (Bandura, 1977).

Dependence on Technology and Loss of Critical Thinking:

The pervasive integration of technology into nearly every facet of modern life has undeniably brought about unprecedented convenience and access to information. However, this growing dependence, particularly on digital tools and artificial intelligence (AI), is increasingly raising concerns about its potential to erode critical thinking skills (Gerlich, 2025; Paperpal, 2025). When individuals habitually rely on technology for instant answers, problem-solving, and even decision-making, they may engage in what is termed "cognitive offloading," where the cognitive effort is outsourced to external systems (Gerlich, 2025). This over-reliance can lead to a decline in the practice of independent thought, analytical reasoning, and the ability to evaluate information deeply, as the immediate gratification provided by technology often bypasses the need for sustained mental exertion (ResearchGate, 2024).

The proliferation of AI tools, such as generative AI models, further exacerbates this concern. While these tools can enhance efficiency and provide rapid information retrieval, their use can also lead to a passive acceptance of outputs without critical evaluation, potentially stifling original thought and creativity (Paperpal, 2025; The Business & Financial Times, 2025). Studies indicate a negative correlation between frequent AI tool usage and critical thinking abilities, particularly among younger demographics who exhibit higher dependence on these technologies (Gerlich, 2025). This phenomenon can manifest as a reduced capacity for complex problem-solving, diminished ability to

question norms, and a tendency towards superficial understanding rather than thorough analysis of information (ASJP, 2025; T&F Online, 2023). Consequently, while technology offers immense potential as a learning aid, a judicious and balanced approach is essential to prevent it from becoming a cognitive crutch that hinders, rather than enhances, the development of critical thinking in the digital age.

Supported theory

The Technology Determinism Theory

Technology Determinism is a perspective that argues technology, once introduced, determines the course of social and educational change, often in unintended and uncontrollable ways (Ellul, 1964). This theory highlights the potential for AI to reshape the educational landscape in ways that may not align with human needs, values, or ethical standards. AI systems, designed primarily by large tech companies, often prioritize efficiency, scalability, and profitability over the development of meaningful, human-centered educational experiences.

IMPLICATIONS FOR EDUCATION:

Loss of Teacher Agency: Technology determinism suggests that AI could undermine the role of teachers in the classroom, transforming them from educators into mere facilitators of machine-driven learning (Postman, 1992). Teachers, who traditionally act as mentors and guides, may be relegated to supporting roles, with AI systems dictating the pace and content of lessons.

The Human Capital Theory

The Human Capital Theory posits that education serves as an investment in human skills and knowledge, which in turn enhances economic productivity and societal development (Becker, 1993). However, when AI systems dominate education, the development of human capital may be compromised. While AI can personalize learning and deliver content efficiently, it cannot replicate the nuanced, interpersonal, and creative aspects of teaching that foster the holistic development of students.

Bias and Inequities in AI Algorithms: Another threat to students is the potential for AI algorithms to perpetuate biases. AI systems, particularly those used in educational settings, are only as unbiased as the data upon which they are trained. If these systems are trained on biased datasets, they can inadvertently reinforce societal inequalities and discriminate against marginalized students based on race, gender, socioeconomic status, or disability.

O'Neil (2016) explains how algorithms used in educational tools can be trained on historical data, which may reflect existing societal biases. For example, if AI systems are trained on data that disproportionately reflects the performance of certain groups, students

from underrepresented backgrounds may receive unfair assessments, learning materials, or even career recommendations. This could perpetuate inequalities in the educational system, undermining efforts to create a more equitable learning environment.

Supported theory

The Diminishment of Teacher Autonomy:

The adoption of AI tools in classrooms could also limit teachers' professional autonomy, as they may be forced to conform to rigid AI algorithms that prescribe specific teaching methods, materials, and strategies. Teachers, who traditionally have had the freedom to adapt their teaching styles to meet the needs of their students, may be constrained by AI-driven curriculum that does not allow for enough flexibility.

Deloitte (2021) suggests that the reliance on AI tools in education could undermine teachers' ability to employ creative and dynamic teaching strategies, which are often key to fostering engagement and critical thinking in students. Additionally, Susskind and Susskind (2015) argue that as AI systems become more ingrained in classrooms, teachers may lose their ability to make judgment calls about how to best support students' emotional and social development, as AI systems focus more on academic metrics.

THE THREAT OF AI TO THE EDUCATION SYSTEM

Erosion of Educational Equity:

Moreover, the unequal access to technology and digital literacy across different socioeconomic strata can exacerbate existing educational inequalities. Students in underserved communities may lack the necessary devices, internet connectivity, or training to effectively and ethically utilize AI tools, widening the gap between those who can leverage AI's benefits and those who are left behind, ultimately creating a more inequitable educational landscape (9ine, 2024; AMT Lab @ CMU, 2025).

Selwyn (2016) discusses how the increasing reliance on AI in education could exacerbate the "digital divide," leaving behind students who lack access to the necessary resources for AI-driven education. This divide could deepen educational inequality, particularly in low-income or rural areas where access to technology is limited.

Supported theory

The Digital Divide Theory

The Digital Divide Theory suggests that access to technology is uneven across different social, economic, and geographical groups, resulting in educational inequality (Selwyn, 2016). In the context of AI in education, the theory argues that the introduction of AI-driven educational tools could exacerbate the existing digital divide, particularly in developing countries like Nigeria, where access to technology is limited. AI tools often

require reliable internet access, modern devices, and adequate infrastructure—resources that are not universally available in all regions.

IMPLICATIONS FOR EDUCATION:

Deepening Inequality: The implementation of AI without addressing these inequalities could deepen educational disparities, creating a two-tiered system where wealthier students have access to more advanced learning experiences (Van Dijk, 2020). According to Selwyn (2016), the adoption of AI in education risks widening the gap between rich and poor students, especially in less-developed regions.

Van Dijk (2020) asserts that the digital divide remains one of the most significant challenges in integrating technology, including AI, into educational systems.

Standardization and Loss of Educational Diversity: The use of AI in education may also lead to the standardization of learning experiences, limiting the diversity of educational approaches. As AI systems are designed to optimize learning outcomes, they may adopt a one-size-fits-all approach to education that is based on efficiency and measurable outcomes, potentially sidelining diverse educational practices that cater to different cultural, social, and individual learning styles.

Fitzgerald and Houtman (2019) highlight how AI could inadvertently promote a form of educational homogenization, where curricula are aligned to standardized models driven by algorithms, rather than embracing local and culturally relevant forms of teaching. This process could undermine the richness of diverse pedagogical methods, as AI platforms prioritize uniformity and scalability over educational plurality.

Supported theory

The Posthumanism Theory

Posthumanism critiques the idea of human superiority over machines and suggests that the growing dominance of AI could fundamentally alter human roles, including those in education (Braidotti, 2013). Posthumanism challenges the assumption that human beings should remain central to the educational process and raises concerns about the dehumanization of learning.

Ethical and Privacy Concerns: The widespread use of AI in education raises serious ethical and privacy issues. AI systems collect vast amounts of data on students, from their academic performance to their behavioral patterns and personal preferences. This data, while valuable for optimizing learning experiences, also poses significant risks in terms of student privacy and data security. Zuboff (2019) cautioned that AI systems often collect vast amounts of personal data, raising significant concerns about privacy and the potential for exploitation.

IMPLICATION TO EDUCATION

Ibrahim and Ochoa (2020) argue that AI systems in education often rely on the continuous collection of personal data, which could be exploited or misused by third parties. In countries with weak data protection laws, the risk of data breaches or unauthorized data sharing increases significantly. Moreover, the lack of transparency regarding how AI algorithms make decisions could lead to issues of accountability and fairness in educational settings.

Supported theory

The Ethical Relativism Theory

Ethical Relativism suggests that moral principles and ethical standards are culturally specific and may vary across societies. The theory highlights the potential ethical challenges posed by AI systems, especially those developed in one cultural context (often Western) and implemented in educational systems of diverse cultural settings, such as Nigeria (Nissenbaum, 1996).

Conclusion

Artificial Intelligence (AI) presents both opportunities and significant challenges within Nigeria's education sector. While AI has the potential to enhance teaching methods, personalize learning experiences, and streamline administrative tasks, its unregulated or uninformed use poses a serious threat to academic integrity, teacher relevance, and equitable access to education. The rapid rise of AI tools, particularly those capable of generating essays, answering questions, and automating assessments, risks undermining the traditional educational processes if not carefully managed.

This paper has highlighted the critical areas where AI threatens the quality and credibility of education in Nigeria, especially in an environment already grappling with infrastructural deficits and limited digital literacy. However, these threats are not insurmountable. With the implementation of well-crafted policies, robust teacher training, ethical guidelines, and inclusive access to digital infrastructure, AI can be transformed from a potential threat into a powerful tool for educational reform.

Ultimately, the future of AI in Nigerian education depends on proactive governance, continuous awareness, and a commitment to balancing technological advancement with the preservation of educational values. The time to act is now—before the challenges outpace the solutions.

RECOMMENDATIONS

1. Develop National AI Education Policies

The Nigerian government should develop and implement clear policies that regulate the integration of AI into the education sector. These policies must address ethical usage, data

privacy, and the role of AI tools in teaching, learning, and assessment to prevent misuse and ensure equitable access.

2. Strengthen Digital Literacy Among Educators and Students

To mitigate the threat posed by AI, there must be nationwide programs aimed at enhancing digital literacy for both teachers and students. This includes understanding how AI works, recognizing AI-generated content, and using AI tools responsibly in academic environments.

3. Establish AI Ethics and Integrity Frameworks

Educational institutions in Nigeria should incorporate AI ethics into their curricula and adopt frameworks to guide the use of AI in classrooms. This can help prevent academic dishonesty, such as plagiarism facilitated by AI, and promote responsible AI usage.

4. Invest in Teacher Training and Curriculum Reforms

The education sector should invest in continuous professional development for teachers, equipping them with the skills to adapt to AI-based technologies. Additionally, curricula should be updated to include AI literacy, critical thinking, and problem-solving skills.

6. Ensure Equitable Access to AI Tools and Infrastructure

To prevent further deepening of the digital divide, the government and stakeholders must ensure that AI tools and infrastructure are accessible to both urban and rural schools. Public-private partnerships can be leveraged to provide affordable technology and internet access.

REFERENCES

Adebayo, S. (2021). *The impact of emerging technologies on academic integrity in higher education*. Journal of Educational Research and Practice, 11(2), 45–56.

Agbo, F. O., Sanusi, B. O., & Onyeka, U. E. (2023). Artificial Intelligence and the future of Nigerian university students. Ochendo: An African Journal of Innovative Studies, 6(1), 45

Alwi, S., Mariappan, U., Singh, H. K. B., Singh, H. K. B., Amin, M. R. M., Abbas, M. S., & Heng, H. K. (2025). Artificial Intelligence and Academic Impact on the Integrity of Higher Education Institutions. Cuestiones De Fisioterapia, 54(2), 1834–1840. https://doi.org/10.48047/0yz57b08.

AMT Lab @ CMU. (2025, February 7). AI Integration and Barriers in Education. https://amt-lab.org/blog/2025/2/msilfg56bx7l3pgscl8ia13j86yeed

Artsmart.ai. (2025, February 23). AI Plagiarism Statistics 2025: Transforming Academic Integrity. Retrieved from https://artsmart.ai/blog/ai-plagiarism-statistics/

ASJP. (2025, January 15). *The Impact of AI on Learners' Critical Thinking. A Case Study: The Algerian Academic Landscape*. Retrieved from https://asjp.cerist.dz/en/downArticle/880/6/1/262181

Bandura, A. (1977). Social Learning Theory. Prentice-Hall.

Becker, G. S. (1993). Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education. University of Chicago Press.

Braidotti, R. (2013). The Posthuman. Polity Press.

Cardiff University. (2025, January 9). Generative AI in Higher Education: Balancing Innovation and Integrity. Retrieved from https://orca.cardiff.ac.uk/id/eprint/175351/1/bjbs-81-14048.pdf

Carr, N. (2020). *The Shallows: What the Internet Is Doing to Our Brains*. W.W. Norton & Company.

Chien, S., & Chen, P. (2020). *Artificial Intelligence in Education: Opportunities and Challenges*. International Journal of Educational Technology, 17(3), 45-58.

Cult of Pedagogy. (2025, May 11). Catch them Learning: A Pathway to Academic Integrity in the Age of AI. Retrieved from https://www.cultofpedagogy.com/ai-integrity/

Deloitte. (2021). *AI and the Future of Education: Impact and Implications*. Deloitte Insights. Fitzgerald, J., & Houtman, D. (2019). *

EdTech Digest. (2025, May 27). AI is Killing Critical Thinking—But it Doesn't Have to Be That Way. Retrieved from https://www.edtechdigest.com/2025/05/27/ai-is-killing-critical-thinking-but-it-doesnt-have-to-be-that-way/

Eze, J. U. (2020). *Bridging the digital divide in Nigeria's education system: A policy perspective*. African Journal of Education and Technology, 8(1), 34–49.

Frontiers. (2025, February 2). Exploring the effects of artificial intelligence on student and academic well-being in higher education: a mini-review. Retrieved from https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2025.1498132/ful

Gerlich, A. (2025). AI Tools in Society: Impacts on Cognitive Offloading and the Future of Critical Thinking. *Journal of Sensor and Actuator Networks*, *15*(1), 6.

HEPI. (2025, February 26). Student Generative AI Survey 2025. Retrieved from https://www.hepi.ac.uk/2025/02/26/student-generative-ai-survey-2025/

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

Nissenbaum, H. (1996). Accountability for Privacy Violations: The Role of Culture and Context. IEEE Transactions on Professional Communication, 39(1), 4-11.

Okonkwo, C., & Adegboyega, T. (2022). *Artificial Intelligence and its impact on higher education in Nigeria*. Nigerian Journal of Educational Technology, 14(1), 21–35.

Olawale, F. O., & Ologunde, O. O. (2022). Preserving Academic Integrity in the Age of AI: Navigating Challenges and Exploring Solutions.

Oni, O. Y., Opara, C., & Ngongpah, G. (2025). Bridging the Digital Divide: How the Nigerian Government Can Facilitate Technology Adoption in Education. International Journal of Innovative Science and Research Technology, 10(4), 1184-1191.

Paperpal. (2025, February 23). *What is a Conceptual Framework? How to Make It (with Examples)*. Retrieved from https://paperpal.com/blog/academic-writing-guides/what-is-a-conceptual-framework-how-to-make-it-with-examples/

ResearchGate. (2024, June 15). *The Erosion of Cognitive Skills in the Technological Age: How Reliance on Technology Impacts Critical Thinking, Problem-Solving, and Creativity*. Retrieved from https://www.researchgate.net/publication/381452876_The_Erosion_of_Cognitive_Skills_in_the_Technological_Age_How_Reliance_on_Technology_Impacts_Critical_Thinking_Problem-Solving_and_Creativity

ResearchGate. (2024, June 15). The Erosion of Cognitive Skills in the Technological Age: How Reliance on Technology Impacts Critical Thinking, Problem-Solving, and Creativity. Retrieved from https://www.researchgate.net/publication/381452876_The_Erosion_of_Cognitive_Skills_in_the_Technological_Age_How_Reliance_on_Technology_Impacts_Critical_Thinking_Problem-Solving_and_Creativity

ResearchGate. (2025, April 7). The Risks and Rewards of AI Dependence in Nigerian Education: A Critical Evaluation. https://www.researchgate.net/publication/390533340_The_Risks_and_Rewards_of_AI_Dependence_in_Nigerian_Education_A_Critical_Evaluation

Russell, S., & Norvig, P. (2016). *Artificial Intelligence: A modern approach* (3rd ed.). Pearson Education.

Selwyn, N. (2016). Education and Technology: Key Issues and Debates. Bloomsbury Academic.

T&F Online. (2023, December 10). *Critical thinking in the AI era: An exploration of EFL students' perceptions, benefits, and limitations*. Retrieved from https://www.tandfonline.com/doi/full/10.1080/2331186X.2023.2290342

TeachingTimes. (2025, January 21). How Will Generative AI Change Education In 2025? Retrieved from https://www.teachingtimes.com/how-will-generative-ai-change-education-in-2025/

TechCabal Insights. (2025, May 15). Strengthening Nigeria's AI Literacy Drive through Real Reform. https://insights.techcabal.com/strengthening-nigerias-ai-literacy-drive-through-real-reform/

The Business & Financial Times. (2025, May 5). *Are we shirking our critical thinking abilities? Consequences of overreliance on Artificial Intelligence*. Retrieved from https://thebftonline.com/2025/05/05/are-we-shirking-our-critical-thinking-abilities-consequences-of-overreliance-on-artificial-intelligence/

The Business & Financial Times. (2025, May 5). Are we shirking our critical thinking abilities?: Consequences of overreliance on Artificial Intelligence. Retrieved from https://thebftonline.com/2025/05/05/are-we-shirking-our-critical-thinking-abilities-consequences-of-overreliance-on-artificial-intelligence/

Tribune Online. (2025, May 21). Role of AI in transforming Nigeria's education sector. https://tribuneonlineng.com/role-of-ai-in-transforming-nigerias-education-sector/

Van Dijk, J. (2020). The Digital Divide: The Internet and Social Inequality in International Perspective. Sage Publications.

Vygotsky, L. S. (1978). Mind in Society: The Development of Higher Psychological Processes Harvard University Press.

Zuboff, S. (2019). The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. PublicAffairs.

9ine. (2024, October 10). AI in education: What are the risks and challenges? https://www.9ine.com/newsblog/ai-in-education-what-are-the-risks-and-challenges

9ine. (2024, October 10). AI in education: What are the risks and challenges? https://www.9ine.com/newsblog/ai-in-education-what-are-the-risks-and-challenges