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EXPLORING THE ROLE OF ARTIFICIAL INTELLIGENCE (AI) IN CHRISTIAN RELIGIOUS EDUCATION (CRE) FOR CREATIVITY, SOCIO- ECONOMIC AND NATIONAL DEVELOPMENT IN NIGERIA

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Abstract

The integration of Artificial Intelligence (AI) into educational systems has the potential to transform teaching and learning, socio-economic and national development, particularly in specialized areas such as Christian Religious Education (CRE). This paper explores how AI can enhance creativity, learners' engagement, and the development of 21st-century skills among CRE Nigerian students while contributing to broader socio-economic outcomes. It further highlights the potentials of AI to improve educational access, support skill acquisition, stimulate creativity, and cultivate ethical leadership, linking CRE pedagogy with practical socio-economic benefits and national development. AI not only improves instructional quality but also prepares CRE students for active participation in Nigeria's digital economy and creative industries. The paper concludes that integrating AI into CRE represents a strategic approach to enhancing both educational outcomes, socio-economic and national development, suggests that ethical considerations, teacher preparedness, acquisition of digital skills, and lack of infrastructural resources should be adequately addressed.

Keywords: Artificial Intelligence, Christian Religious Education, creativity, socio-economic, national development.

Introduction

In today's rapidly evolving digital era, artificial intelligence (AI) has emerged as a transformative technology with the potential to reshape how organizations and educational institutions operate and contribute to societal development. AI refers to computer systems capable of performing tasks that typically require human intelligence, such as decision-making, predictive analysis, and pattern recognition (Aldousari, 2025). Its application is increasingly extending into Christian Religious Education (CRE), where data-driven insights adaptive learning systems, and automation can enhance teaching effectiveness, learners' engagement, and educational outcomes. (Aldousari, 2025), further notes that AI integration into CRE can support better instructional design, personalized learning, and real-time assessment, aligning teaching methods with students' learning needs and creative development.

In Nigeria, a developing economy characterized by both significant creative potential and socio-economic challenges, the application of AI in CRE presents both opportunities and imperatives. The country's growing digital infrastructure and expanding access to internet and mobile technologies provide fertile ground for AI-enabled innovations in education, particularly in enhancing students' creativity and critical thinking

(Ogunbodede & Atchrim, 2024). However, realizing this potential depends on addressing constraints such as limited digital literacy among teachers, infrastructural gaps, and the ethical use of AI in faith-based educational settings.

Christian Religious Education in Nigeria has historically evolved from traditional didactic instruction to approaches emphasizing learner engagement, moral development, and creative expression. As highlighted by (Hassan, Abdullah, and Mansor, 2024), discrepancies often exist between educational intentions and learning outcomes, emphasizing the need for innovative methods that enhance teaching effectiveness. In this context, AI-driven approaches in CRE can deepen learner engagement, improve instructional quality, and foster socio-economic development by equipping students with skills relevant to digital and creative industries. Similarly, (Ughulu, Edheku, Akpojevwa, Otuedon, Efanimjor, Elugom, Kaizar, and Uwhejevwe-Togbolo, 2025) note that AI can enhance educational communication, provide interactive learning experiences, and strengthen learner motivation, which are critical for nurturing creativity and socio-economic participation among Nigerian youth. Furthermore, integrating AI into CRE provides opportunities to expand creative and socio-economic development. AI tools can support personalized learning pathways, digital content creation, and data-driven curriculum design, thereby enhancing students' creativity and employability in knowledge-based and creative sectors (Hassan, Abdullah, & Mansor, 2024). However, these ambitions must be balanced with ethical considerations such as equitable access, privacy, and maintaining the spiritual and moral dimensions of Christian education (Ughulu et al., 2025).

Therefore, exploring the role of AI within CRE in Nigeria offers a promising lens to examine how advanced technologies can optimize educational outcomes, stimulate creativity, and contribute to socio-economic development in an increasingly digital global economy.

Conceptual clarification of terms

Christian Religious Education (CRE): Christian Religious Education (CRE) is an academic discipline aimed at nurturing students' moral, spiritual, and intellectual development through the systematic study of Christian doctrines, ethical values, and biblical teachings. CRE not only fosters personal faith and character formation but also equips learners with ethical reasoning and decisionmaking skills applicable in daily life and societal interactions (Okeke, 2022). In Nigeria, CRE is an essential component of the school curriculum, providing a framework through which students can understand their spiritual responsibilities while developing values such as integrity, compassion, and social responsibility (Olajide, Omolehin, Zuwelatu, & Ojo, 2023).

Creativity: Creativity is the ability to generate original ideas, think critically, and develop innovative solutions to problems. In educational contexts, fostering creativity equips learners to approach challenges with flexible thinking, develop entrepreneurial skills, and apply knowledge in novel ways (Adebayo & Atowoju, 2024). In CRE, creativity can be enhanced through the use of AI technologies such as virtual simulations, intelligent tutoring systems, and interactive learning platforms, which encourage students to engage with religious content imaginatively, analyze ethical dilemmas, and apply biblical principles to real-world scenarios (Odunayo & Olabode, 2023). By integrating creativity into CRE, learners develop both spiritual insight and practical skills that contribute to personal growth and socio-economic development.

Socio-economic development: Socio-economic development refers to the improvement of social and economic conditions within a community or nation, including better education, employment opportunities, healthcare, and standard of living. Education plays a critical role in driving socioeconomic development by preparing individuals to participate productively in the workforce, engage in entrepreneurship, and contribute to community advancement (Agu & Agu, 2025). When integrated with AI-enhanced CRE, education can simultaneously cultivate ethical leadership, digital literacy, and problem-solving skills among students, thereby

linking moral formation with practical socio-economic empowerment (Imafidor et al., 2025).

National development: According to the Longman Dictionary of Contemporary English (2026), the term "national" refers to a phenomenon that embraces a whole nation. National development, therefore, can be described as the overall development or the collective socio-economic, political, and religious advancement of a country or nation. (Inyanda and Adama, 2003), also believe that, national development is the ability of the nation to provide a conducive atmosphere for the realisation of individual potentials, the existence of buoyant economy and availability of social infrastructural facilities for the populace.

Artificial Intelligence (AI) and Christian Religious Education

Artificial Intelligence (AI) refers to the branch of computer science that enables machines to perform tasks that normally require human intelligence, including learning, reasoning, problemsolving, and decision-making (Russell & Norvig, 2021). Also, (Kaplan and Haenlein, 2019) defines artificial intelligence (AI) as the creation of computer systems that are capable of learning, solving problems, and making decisions tasks that normally require human intellect. Machine vision (MV), robotics, deep learning (DL), natural language processing (NLP), expert systems (ES), and machine learning are examples of artificial intelligence (AI) technology. AI is a collection of technologies that mimic human senses, comprehensions, and actions and allow robots to behave more intelligently.

Educationally, artificial intelligence (AI) encompasses tools and systems capable of analyzing large volumes of data, personalizing learning experiences, providing real-time feedback, and simulating interactive teaching environments. As highlighted by (Anyebe, 2025), AI can adapt instructional content to match individual learners' abilities, learning styles, and pace, making education more effective and learner-centered.

Within the domain of Christian Religious Education (CRE), artificial intelligence (AI) offers unique opportunities to enhance teaching, learning, and creativity. CRE, which aims to nurture moral, spiritual, and intellectual development in students, traditionally relies on didactic instruction, memorization, and classroom engagement. However, artificial intelligence (AI) technologies such as intelligent tutoring systems, chatbots, and virtual simulations can complement these methods by creating interactive, immersive learning experiences that promote deeper understanding of biblical texts, ethical reasoning, and critical thinking (Odunayo & Olabode, 2023). In line with the above, (Ogunbodede and Atchrim, 2024) note that, AI-driven educational tools enable educators to provide personalized support, track students' learning progress, and identify areas needing intervention, thus enhancing both teaching efficiency and learning outcomes.

Moreover, artificial intelligence (AI) can foster creativity and engagement in CRE. For instance, virtual reality simulations and AI-powered discussion platforms can allow students to explore historical biblical contexts, engage in problem-solving activities, and participate in collaborative projects, thereby linking spiritual learning with practical application. As emphasized by (Hassan, Abdullah, and Mansor, 2024), integrating artificial intelligence (AI) into CRE encourages innovative pedagogical approaches that make learning more relevant, engaging, and aligned with contemporary digital literacy requirements.

In essence, conceptualizing artificial intelligence (AI) in the context of Christian Religious Education positions technology as a tool to enhance creativity, personalize learning, and improve educational outcomes, while maintaining the spiritual and moral objectives of CRE. Properly implemented, it is therefore worthy of note that, artificial intelligence (AI) has the potential to transform CRE in Nigeria, equipping students with knowledge, skills, and ethical values that contribute to individual development and socio-economic growth.

The Role of AI in Enhancing Creativity and Learner Engagement in Christian Religious Education

Artificial Intelligence (AI) has increasingly been recognized as a transformative tool in education, capable of enhancing creativity and engagement among learners. In the context of Christian Religious Education (CRE), Artificial Intelligence offers innovative opportunities to move beyond traditional lecture-based instruction, fostering interactive, personalized, and creative learning experiences. (Anyebe, 2025) says, AI can support adaptive learning systems that respond to individual students' abilities, providing tailored resources, instant feedback, and challenges that stimulate critical thinking and problem-solving skills.

AI applications such as; intelligent tutoring systems, virtual simulations, and AI-powered discussion platforms in Christian Religious Education (CRE), allow learners to explore biblical narratives, ethical dilemmas, and historical contexts in immersive and engaging ways. (Ogunbodede and Atchrim, 2024), note these AI tools can facilitate experiential learning, encouraging students to interact with content creatively rather than merely memorizing facts. For instance, virtual reality simulations can recreate historical biblical events, enabling students to analyze moral and spiritual lessons in context, thereby deepening understanding and retention.

Additionally, AI-driven educational tools can enhance collaboration among students. Platforms with AI capabilities can monitor group interactions, suggest collaborative tasks, and provide real-time guidance, fostering teamwork, communication skills, and collective problemsolving. Hassan, Abdullah, and Mansor (2024) emphasize that integrating AI into CRE encourages active participation, allowing learners to engage with the material dynamically, express ideas creatively, and relate religious teachings to contemporary societal issues.

Moreover, AI can support teachers in designing creative lesson plans and tracking student engagement. By analyzing learning patterns and outcomes, AI systems provide actionable insights into student interests, strengths, and areas for improvement. This allows educators to adjust instructional strategies, introduce innovative teaching methods, and maintain high levels of learner motivation. This is supported by the view of (Odunayo and Olabode, 2023), who note that, AI thus serves as a catalyst for promoting both creativity and engagement, which are essential for fostering meaningful learning experiences in CRE.

Therefore, it is worthy of note that, AI enhances creativity and learner engagement in Christian Religious Education by providing personalized learning, immersive experiences, collaborative opportunities, and data-driven insights. Its integration supports innovative pedagogical strategies that prepare students not only to understand religious teachings deeply but also to apply ethical reasoning, critical thinking, and creative problem-solving in real-life contexts.

The integration of Artificial Intelligence (AI) into educational systems can extend beyond classroom outcomes to influence broader socio-economic development goals in Nigeria. AI technologies can support inclusive learning, improve accessibility, and empower the students of CRE students with 21st-century skills essential for participation in the digital economy. Research indicates that AI-based learning systems have the potential to enhance educational outcomes, increase digital inclusion, and contribute to national development priorities by preparing learners with relevant competencies (Agu & Agu, 2025).

One key point is that AI can promote sustainable digital inclusion in education, which is essential for socio-economic progress. Personalized and adaptive AI systems can help address disparities in access and quality, particularly in underserved regions. Agu and Agu (2025) found that AI-supported learning improves accessibility and supports diverse learners, which aligns with national inclusive development goals by expanding educational opportunities and strengthening learning outcomes in CRE.

AI-Driven Christian Religious Education and Socio-Economic Development in Nigeria

The integration of Artificial Intelligence (AI) into CRE can extend beyond classroom outcomes to influence broader socio-economic development goals in Nigeria. AI technologies can support inclusive learning, improve

accessibility, and empower students in CRE with 21stcentury skills essential for participation in the digital economy. As indicated by (Agu and Agu, 2025) AI-based learning systems have the potential to enhance educational outcomes, increase digital inclusion, and contribute to national development priorities by preparing learners with relevant competencies. Various ways in which AI can achieve these outcomes are discussed subsequently;

AI has been shown to enhance educational creativity and learner engagement, which are precursors to developing innovative and productive learners. (Adebayo & Atowoju, 2024) suggest that AI tools such as adaptive learning systems, simulation environments, and intelligent interactive platforms can foster creative problem-solving, encourage exploration, and support dynamic learning experiences, especially in post-COVID-19 learning environments. These creative engagements can help students of CRE develop skills such as critical thinking, innovation, and digital literacy, which are essential for socio-economic participation in Nigeria's evolving economy.

Again, AI positively impacts overall educational development, which in turn supports socioeconomic advancement. AI adoption in instructional processes correlates positively with improved learning outcomes, enhanced quality of CRE, and increased students engagement (Imafidor et al., 2025). These improvements in quality of CRE can feed into broader socio-economic indicators, as better-educated individuals are more likely to contribute to workforce productivity, entrepreneurship, and community development.

Also, ethical and cultural considerations play a role in how AI should be integrated into educational and developmental strategies. (Kalu, 2025) notes that, the cultural implications of AI in Nigerian education highlight concerns about preserving local knowledge systems and ensuring that AI tools are inclusive of ethical values and cultural contexts in CRE. Addressing these concerns is vital for ensuring AI-driven educational innovations such as AI in CRE support socio-economic development without eroding cultural identity or creating new disparities.

In a nutshell, AI-driven Christian Religious Education has the potential to contribute to Nigeria's socio-economic development by promoting digital inclusion, fostering creativity and engagement, enhancing broader educational outcomes, and aligning technological adoption with cultural values. These elements therefore, collectively help prepare learners to participate meaningfully in the digital era, supporting personal growth and national development.

The challenges of Integrating AI in Christian Religion Education

The integration of Artificial intelligence in Christian Religious Education brings numerous opportunities for enhancing teaching and learning experience, despite its potential and laudability in CRE, there abound some challenges. (Bower, Dalgarno, Kennedy, Lee and Kenney, 2019) maintain that there are evidence that AI technology can improve students learning and development that there are also challenges in its integration.

However, AI presents several challenges that need to be addressed such challenges are not limited to the following such as; teachers digital children, lack of equitable access to infrastructure, interest, cost and sustainability, present attitude, ethical consideration.

Lack of access to infrastructure: One of the challenges of AI technology is lack of equitable access to the required infrastructure such as high speed internet connectivity or compatible devices to support the implementation of these technologies for effective teaching and learning of CRS. (Bower, et al., 2019) maintain that many educational institutions lack the necessary infrastructure such as high speed internet connection or compatible devices to support the implementation of these technologies effectively.

Teachers' lack of digital skills and training: Many teachers lack the necessary skills, knowledge and experience to utilize AI in CRS class rooms. Some have not developed new skills and pedagogical approaches

to leverage these technologies effectively (Koehler& Mishra, 2009).

Ethical Consideration: The use of AI tools in teaching and learning raises ethical concerns that need to be addressed for instance, AI-powered systems may collect and analyse large amount of student and teachers data thereby raising question about data privacy and security (Brower et al., 2019).

Conclusion

The integration of Artificial Intelligence (AI) into Christian Religious Education (CRE) offers transformative potential for enhancing educational outcomes, fostering creativity, and promoting socio-economic development in Nigeria. By leveraging AI-powered tools such as intelligent tutoring systems, virtual simulations, and adaptive learning platforms, CRE can move beyond traditional didactic instruction to provide personalized, interactive, and engaging learning experiences. This integration not only supports spiritual and moral development but also equips students with 21st-century skills, including digital literacy, critical thinking, and problem-solving abilities, which are essential for participation in the knowledge economy. Furthermore, AIenhanced CRE has the capacity to bridge educational inequities, increase accessibility for students in underserved regions, and foster ethical and socially responsible behaviour. Therefore, the evidence suggests that AI-driven CRE can serve as a strategic mechanism for nurturing creative, digitally competent, and socio-economically empowered youth, contributing meaningfully to Nigeria's national development goals.

Suggestions

Teacher Training and Capacity Building: Teachers should receive professional development in AI applications, digital pedagogy, and classroom management to effectively incorporate AI tools into CRE teaching, thereby enhancing creativity and engagement.

Infrastructure Development: Schools and educational institutions should invest in reliable technological infrastructure, including internet connectivity, AI-enabled devices, and software, to ensure equitable access to AI-driven learning for all students.

Research and Monitoring: Continuous research should be encouraged to evaluate the impact of AI integration on learning outcomes, creativity, and socio-economic skills, while monitoring ethical considerations and cultural relevance.

Policy and Curriculum Integration: Educational policymakers and curriculum planners should develop frameworks that integrate AI technologies into CRE curricula, ensuring that digital tools are aligned with pedagogical objectives and ethical teachings.

Ethical and Cultural Considerations: AI integration in CRE should prioritize cultural sensitivity and moral integrity, ensuring that technological adoption does not compromise the spiritual and ethical goals of religious education.

References

Adebayo, A., & Atowoju, A. A. (2024). The nexus between artificial intelligence and educational creativity in the post-COVID-19 era in Nigeria. Lead City Journal of Religions and Intercultural Communication, 2(1).

Agu, A. N., & Agu, V. U. (2025). Sustainable digital inclusion through AI-based learning systems in education: A Southeast Nigeria perspective. UNIZIK Journal of Educational Management and Policy, 7(1), 235-246. Retrieved from https://journals.unizik.edu.ng/index.php/ujoemp/article/view/7448

Aldousari, F. (2025). Exploring artificial intelligence in enhancing educational outcomes: AI applications in teaching and learning. Journal of AI-Driven Communication Engineering, 3(1), 20-38. Retrieved from https://zealpress.com/index.php/jaicde/article/view/686

Anyebe, A. (2025). An advocacy for the integration of artificial intelligence (AI) in teaching and learning of Christian Religious Education in Ahmadu Bello University Zaria, Nigeria. Zaria Journal of Educational Studies (ZAJES), 25(1), 42-49. Retrieved from https://zarjes.com/ZAJES/article/view/1534

Bower, M. Dalgarno, B., Kenned, G. E., Lee, M. J., & Kenney, J. (2019). Design and implementation factors in blended synchronous learning environments: Outcomes from a systematic literature review. Computers & Education, 138, 85-107.

Hassan, A. I., Abdullah, N., & Mansor, N. (2024). Christian Religious Education in Nigeria: Investigating gaps between teaching intentions and student outcomes. International

Journal of Educational Research, Advance online publication. Retrieved from https://ijbssrnet.com/index.php/ijbssr/article/view/201

Imafidor, H. I., Ogar, A. O., Muhammad, A. S., Wallen, J. P., Nuhu, R. A., & Marafa, M. Y. (2025). Impact of artificial intelligenPce on educational development in Nigeria. Jewel Journal of Scientific Research, 10(1), 101-117.

Inyanda, S and Adama, E. M. A. (2003). Language and literature for national development. In M. A.Attah (Eds.). The Challenges of 21" Century Language and Literature in Education for

Better Society. 47-51. Nsukka: Great AP Express Publisher. Integrated Social Studies: A Handbook of Social Studies for Teachers. Oxford: Oxford University Press

Kalu, N. E. (2025). An investigation into the cultural implications of the utilization of artificial intelligence tools in higher education in Nigeria. GPH-International Journal of Educational Research, 8(9), 63-73. https://doi.org/10.5281/zenodo.17414581

Kaplan, A., & Haenlein, M. (2019). Siri, Siri, in the middle: How Apple's virtual assistant can help you navigate the AI landscape. Business Horizons, 62(2), 157-166. https://doi.org/10.1016/j.bushor.2018.11.008

Koehler, M. J., & Mishra P., (2009). What is technological pedagogical content knowledge? Contemporary Issues in Technology and Teacher Education, 9(1), 60-70.

Longman Dictionary of Contemporary English. (2026). National. In Longman Dictionary of Contemporary English (6th ed.). Pearson.

Odunayo, O., & Olabode, O. (2023). Artificial intelligence in education: Enhancing teaching and learning through intelligent systems. Journal of Trends in Computer Science and Smart Technology, 5(4), 401-418. https://doi.org/10.36548/jtcsst.2023.4.003

Ogunbodede, K. F., & Atchrim, I. A. (2024). Artificial intelligence in Nigeria: A catalyst for educational innovation and socio-economic development. Faculty of Natural and Applied Sciences Journal of Computing and Applications, 2(2), 111-116. Retrieved from https://www.fnasjournals.com/index.php/FNAS-JCA/article/view/677

Okeke, C. O. (2022). Christian Religious Education and moral development of Nigerian students: Implications for ethical leadership. Journal of Educational and Religious Studies, 15(3), 102-114. https://doi.org/10.3390/rel15091027

Olajide, O., Omolehin, R. J., Zuwelatu, A. O., & Ojo, F. A. (2023). Awareness, perceptions and challenges of e-learning among Faculty of Science undergraduates of Federal University Oye-Ekiti, Nigeria. Communicate: Journal of Library and Information Science, 25(1), 74-88.

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

Ughulu E, S., Edheku, J. O., Akpojevwa, O. A., Otuedon, A. M., Efanimjor, P., Elugom Ubogu, F., Kaizar, V. O., & Uwhejevwe-Togbolo, S. E. (2025). AI applications in educational communication: Enhancing creativity and engagement in Nigerian Christian Religious Education. EthAIca, 1(1), 45-62. Retrieved from https://ai.ageditor.ar/index.php/ai/article/view/165