ENHANCING ISLAMIC STUDIES EDUCATION THROUGH AI INTEGRATION: EVIDENCE FROM A NIGERIAN COLLEGE OF EDUCATION

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Article Info

Abstract

This study explores the impact of integrating Artificial Intelligence (AI) in teaching and learning Islamic Studies. 25 volunteer students from a Nigerian College of Education were taught basic AI skills and engaged in AI-assisted learning, while a control group of 33 students learned without AI integration. Results showed that students using AI scored significantly higher (900.25 ± 9.3) compared to those without AI integration (375.15 ± 1.81). The findings suggest that AI integration can enhance student learning outcomes in Islamic Studies, promoting personalized and efficient learning experiences. The study highlights the potential benefits of AI in Islamic education, including improved student engagement, access to resources, and enhanced understanding of complex concepts.

Introduction

Islam is historically rich for it's vast nature of educational principles stressing the importance of acquisition and utilization of knowledge regards to complete metamorphosis of a person and society from uneducated to educated form (Momen, 2024; Bashar, 2025). The methods in Islamic education are multidimensional with emphasis on spiritual, ethical, intellectual and practical domains. Islamic education makes important emphasis on human development, societal progressiveness, and living on core values of Islam. Islamic education develops people to have social education, high moral upbringing, ethics, values, capacity, unity, health, wellbeing, humility, harmony, progressiveness, and among other things (Lemu, 2005; Momen, 2024). Islamic Studies teaches the humankind ways to submit to Allah SWT. It teaches Islam, the religion of all the messengers ever sent, to guide the humankind the right path (Sadiq, 2019).

However, nowadays advancements in science and technology had spur changes in almost entire aspects of human life. Science and technology had been reshaping aspects of human life, including culture, religion, and education (the manner of learning and teaching). Islamic Studies have been taught in the olden days through the utilization of conventional or traditional approaches, but with present and upcoming changes and advancements things are more altered and advanced (Aliero & Allami, 2017). Development provide opportunities, such as availability of resources, accessibility to leaning, promotion of Quran learning, promotion of Hadith and other Islamic sciences, dissemination of knowledge and Daàwah activities, encouraging skill acquisition, and harboring learning in all aspects, capacity building, workshops, etc; all through the use of technological devices, techniques, and approaches (Aliero & Allami, 2017)

In today's changing world, uptake of technology is becoming universal by the day (Popova, 2020). Artificial intelligence (AI) is a part of the emerging development from science and technology. It is a science or technique relying on computer methods to program an application and intelligent machines by imitating human intelligence (Khoironnisa et al., 2023). AI has tool that make personalized learning, research, and teaching easier. The students and teachers have several opportunities to succeed in using AI. AI is a branch of computer science designing and making systems that are of growth potential to carryout tasks like the way human intelligence does. AI understand human language (questions) and supply answers appropriately (Altanmmami, 2023). The objective of this study is to explore the impact of integrating Artificial Intelligence (AI) in teaching and learning Islamic Studies.

Literature Review

What is Islamic Studies?

Islamic studies is an academic field that explores the history, culture, theology, and practices of Islam. It encompasses various disciplines, including:

- Qur'anic studies: Study of the Quran, its interpretation, and application.
- Hadith studies: Study of the sayings, actions, and approvals of the Prophet Muhammad.
- Islamic theology: Study of Islamic doctrine, creed, and philosophy.
- Islamic law: Study of Sharia, fiqh, and Islamic jurisprudence.

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- Islamic history: Study of the history of Muslim civilizations, empires, and cultures.
- Islamic philosophy: Study of Islamic philosophical thought and its intersection with other philosophical traditions (Lemu, 2005; Sudan, 2017; Altanmmami, 2023).

Objectives of Islamic studies aims to:

- Understand Islamic texts: Interpret and analyze Islamic scriptures and sources.
- Explore Islamic thought: Examine Islamic theology, philosophy, and intellectual traditions.
- Analyze Islamic practices: Study Islamic rituals, customs, and practices.
- Contextualize Islam: Understand Islam's interaction with other cultures, societies, and religions (Lemu, 2005).

Islamic studies is essential for:

- Promoting understanding: Fostering greater understanding of Islam and Muslims.
- Informing dialogue: Providing a foundation for interfaith dialogue and cooperation.
- Supporting critical thinking: Encouraging critical analysis and nuanced understanding of Islamic texts and traditions (Lemu, 2005).

By exploring Islamic studies, individuals can gain a deeper understanding of Islam and its diverse traditions, cultures, and practices (Altanmmami, 2023). Enhancing Islamic Studies Education through AI Integration can be achieved in several ways, with evidence from research suggesting numerous benefits. Here's a breakdown of the opportunities and challenges associated with AI integration in Islamic Studies:

Benefits of AI Integration:

- Personalized Learning: AI can create tailored learning experiences for students, analyzing their learning styles, pace, and preferences to provide customized content and resources.
- Automated Administrative Tasks: AI can simplify tasks such as grading, scheduling, and record-keeping, allowing educators to focus on teaching and student interactions.
- Improved Student Engagement: AI-powered tools can increase student motivation and engagement by providing interactive and adaptive learning experiences.
- Enhanced Teaching Practices: AI can assist teachers in developing more effective teaching strategies, identifying areas for improvement, and making data-driven decisions (Shuharu et al., 2020; Altanmmami, 2023; Madhu et al., 2024; Vorobyewa et al., 2024).

Studies have shown that AI can accelerate student development, making teaching more satisfying. AI-powered tools, such as chatbots and adaptive learning technology, can provide valuable support for students and educators. However, further research is needed to explore the potential of AI in Islamic Studies education fully. Potential Applications in Nigerian Colleges of Education include:

- Developing AI-powered learning platforms: Creating platforms that integrate AI-powered tools, such as chatbots and adaptive learning technology, to support Islamic Studies education.
- Enhancing teacher training: Providing educators with training on AI-powered tools and their effective integration into teaching practices.

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- Promoting personalized learning: Using AI to create tailored learning experiences for students, improving engagement and outcomes (OECD, 2020; Altanmmami, 2023).

Benefits of AI in Teaching Islamic Studies:

The integration of Artificial Intelligence (AI) in teaching Islamic Studies offers several benefits, including:

1. Personalized Learning- AI can create tailored learning experiences for students, analyzing their learning styles, pace, and preferences to provide customized content and resources.
2. Enhanced Engagement- AI-powered tools can increase student motivation and engagement by providing interactive and adaptive learning experiences.
3. Efficient Grading and Feedback- AI can automate grading and provide instant feedback, freeing up instructors to focus on teaching and student interactions.
4. Access to Resources- AI can help students access a vast array of Islamic resources, including texts, videos, and scholarly articles.
5. Improved Understanding- AI-powered tools can help students better understand complex Islamic concepts and terminology.
6. Streamlined Administrative Tasks- AI can simplify administrative tasks, such as record-keeping and scheduling, allowing instructors to focus on teaching (Hakim & Anggraini, 2023; Dumbuya, 2024; Katiyar et al., 2024).

Benefits of AI in Learning Islamic Studies:

The integration of Artificial Intelligence (AI) in learning Islamic Studies offers several benefits, including:

1. Personalized Learning- AI-powered adaptive learning systems can tailor the learning experience to individual students' needs, abilities, and learning styles.
2. Access to Resources- AI can provide students with access to a vast array of Islamic resources, including texts, videos, and scholarly articles.
3. Improved Understanding- AI-powered tools can help students better understand complex Islamic concepts and terminology through interactive explanations and examples.
4. Enhanced Engagement- AI-powered interactive tools, such as chatbots and virtual learning environments, can increase student motivation and engagement.
5. Efficient Learning- AI can help students learn more efficiently by providing them with relevant resources, practice exercises, and quizzes tailored to their needs.
6. Language Support- AI-powered translation tools can help students understand Islamic texts and resources in their native language.

By capitalizing on AI in learning Islamic Studies, students can benefit from a more personalized, efficient, and engaging learning experience (Hakim & Anggraini, 2023; Dumbuya, 2024; Katiyar et al., 2024).

Materials and Methods

The study was conducted at Jigawa State College of Education and Legal Studies Ringim, among students of Islamic studies that were engaged through random sampling and volunteer basis. This studies is an

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interventional study design, whereby 30 volunteer students who are studying Islamic Studies at the College were recruited and taught on some basic skills of using AI by engaging them through lecture and demonstration methods of instructions on how to carryout assignments, make research by creating lecture notes through the use of course contents, and a lecture notes, seeking more clarification and demonstration or discussion through AI, and solving past questions papers. The intervention was carried out by engaging in three consecutive meetings with the students (at 2hrs per meeting). At the end an assessment was conducted using 50 multiple choice questions. The mean for the marks of all the students, standard deviation, and chisquare were calculated. Only 25 student made it to the end, 5 opted-out voluntarily. Likewise, control students learning Islamic Studies without integrating AI (AI utilization) were involved by using random selection. 33 of them were selected and made it to the end, they were subjected to the same assessment similar to the test group.

Results and Discussion

Results for this study are shown in Tables 1 and 2.

Table 1: Characteristics of the participants of the students

Characteristics	Frequency	Percentage
Sex		
Male	32	60.4
Female	21	39.6
Age		
18-20 years	10	18.9
21-22 years	12	22.6
23 and above years	31	58.5
Religion		
Islam	53	100.0
Level		
100	5	9.4
200	13	24.5
30p	35	66.1

According to the results in Table 1, the 60.4% of the participants are male, and 39.6% are females. In terms of age, 18.9% are 18-20yrs old, 22.6% are 21-22years old, and 55.5% are 23years old and above. 9.4% of them are in 100 level, 24.5% are in 200 level, and 66.1% are in 300 level.

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Table 2: Impact of integrating AI in learning Islamic studies among College students

	N	Mean marks earned by students	Standard deviation	Chi square	Remarks
Students integrating AI in learning Islamic Studies (Test)	25	900.25	9.3	215.6	Significant
Students not integrating AI in learning Islamic Studies (Control group)	28	375.15	1.81	111.81	Significant

According to the results of the Table 2, the students integrating AI in learning Islamic Studies scored 900.25 ± 9.3 (statistically significant, with a chisquare value of 215.6) compares to the students who are not interesting AI in learning that scored 375.15 ± 1.81).

Impliedly, the finding refers to the fact that, the use of AI technology or otherwise integration of AI has helped the students to earn more scores than the contrary. This finding is in agreement with many findings reported earlier. Parable, Wasehudin et al. (2024) disclosed that, the use of AI in public high school in (Cilegon, Indonesia) had proven to be helpful and beneficial. Ayeni et al. (2024) stress that, AI utilization in education has been on the rise as a revolutionary tradition that revolutionize the olden method of learning and teaching, which are already more teacher-centred and authoritative in nature, in contrast to the AI based teaching and learning that is more of students centred and more democratic (Ayeni et al., 2024). Khoironnisa et al. (2023) stressed that, Islam is a religion that embraces beneficial innovative ideas. Artificial intelligence had various uses in solving human problems intellectually. However, AI is an emerging technique in human endevours that was developed through the knowledge of computer science (Hakim & Anggraini, 2023). AI has several benefits to the students and teachers. Then, the overall learning or education system has some benefits to tap in AI. AI use by students will enable them learn comfortably in the comfort zones with a consideration for their differences such as economic, physical, and cognitive (Katiyar et al., 2024).

Conclusion

The findings of this study indicate that AI integration can enhance student learning outcomes in Islamic Studies, promoting personalized and efficient learning experiences. The study also highlights the potential benefits of AI in Islamic education, including improved student engagement, access to resources, and enhanced understanding of complex concepts.

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