

## Enhancing Islamic Studies Pedagogy through Technology Integration in Tertiary Institutions

By

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### Abstract

As the global educational landscape shifts toward digital-first methodologies, the field of Islamic Studies faces the unique challenge of reconciling traditional instructional methods with modern technological advancements. This article examines the transformative potential of integrating Educational Technology (EdTech) into Islamic pedagogy to enhance student engagement, accessibility, and comprehension. By analyzing various digital tools ranging from AI-driven language processing for Qur'anic Arabic to Virtual Reality (VR) for immersive historical explorations this study argues that technology serves as a bridge between classical scholarship and contemporary learning styles. The research highlights how Learning Management Systems (LMS) and gamified platforms can facilitate personalized learning in subjects like *Fiqh* (jurisprudence) and *Seerah* (Prophetic biography) without compromising the ethical and spiritual integrity of the curriculum. Furthermore, the paper addresses the critical concept of *Adab* (etiquette) in digital spaces, proposing a framework for "Digital *Islah*" (improvement) that maintains the sanctity of the teacher-student relationship. The findings suggest that a blended learning approach rooted in traditional values but executed via modern delivery is essential for the future of Islamic education.

**KEYWORDS:** Technology Integration, *Adab*, Virtual Reality, LMS, *Islah*. Artificial Intelligence.

### Introduction

The pursuits of knowledge ('Ilm) holds a central position in the Islamic tradition, historically characterized by the *Talaqqi* system a deeply personal, face-to-face transmission of wisdom from teacher to student. However, as the mid-2020s redefine the boundaries of the classroom, Islamic Studies pedagogy finds itself at a critical juncture. The rapid proliferation of digital

tools is no longer a peripheral luxury but a foundational necessity. While some traditionalists fear that technology may dilute the spiritual sanctity of religious instruction, contemporary scholarship increasingly views technology integration as a vital vehicle for *Tarbiyah* (holistic nurturing) in a globalized world (Memon & Alhashmi, 2018).

The "pedagogical turn" in Islamic education necessitates a shift from rote memorization models toward more critical, reflective, and engaging methodologies (Sahin, 2018). The digital native student requires a learning environment that mirrors their interconnected reality. This paper explores the synthesis of traditional Islamic values with modern educational technology, arguing that a blended learning approach provides the most robust framework for modernizing the field.

Central to modernizing Islamic Studies is the Technological Pedagogical Content Knowledge (TPACK) framework. As noted by (Hidayati and Choiriyah, 2024), many educators struggle to bridge the gap between their deep subject matter expertise and the technical skills required for digital delivery. In the context of *Akidah Akhlak* (faith and morals), the integration of technology must be more than just "pixels replacing paper"; it must involve a strategic alignment of content, pedagogy, and digital tools.

Saili and Suhaimi Taat, (2023) argue that TPACK enhances creativity within Islamic education, allowing teachers to use Higher Order Thinking Skills (HOTS). Instead of merely reciting historical facts, students can use digital archives to analyze the socio-political contexts of early Islamic civilizations. This shift moves the curriculum from a static "what to think" model to a dynamic "how to understand" model, with the guidance of the teacher who guides the students to move from one level to the other using the TPACK and HOTS frame work

## CLARIFICATION OF SOME CONCEPTS

### Concept of Technology

Technology refers to the practical application of scientific knowledge for solving problems and improving human activities. Educational technology includes digital devices, software applications, communication systems, multimedia resources and internet-based platforms used to facilitate teaching and learning (UNESCO, 2023, p. 71).

Modern educational technologies include:

- Computers and laptops
- Smart phones and tablets
- Interactive whiteboards
- Learning Management Systems (LMS)
- Artificial Intelligence (AI)
- Digital language laboratories
- Audio-visual instructional materials
- Internet-based learning platforms
- Electronic dictionaries
- Digital libraries

These technologies improve learners' participation, motivation, collaboration and academic achievement.

### Digital Technology in Education

Digital technology refers to electronic tools and systems used to create, store, process, and share information. In education, digital technologies include: Learning Management Systems (LMS), mobile

applications, interactive whiteboards, video conferencing tools, multimedia presentations, Artificial Intelligence systems and digital libraries. According to Bates (2019), digital technology in education is the integration of digital media and communication technologies into teaching and learning to improve educational effectiveness and learner engagement. Selwyn, (2016) describes digital technology in education as the application of digital tools and networked technologies that reshape how education is delivered, accessed, and experienced. TPACK enhances creativity within Islamic education, allowing teachers to use Higher Order Thinking Skills (HOTS). Instead of merely reciting historical facts, students can use digital archives to analyze the socio-political contexts of early Islamic civilizations. This shift moves the curriculum from a static "what to think" model to a dynamic "how to understand" model. (Saili and Suhaimi Taat, 2023)

## **2. Islamic Pedagogy:**

Islamic pedagogy refers to the philosophy, principles and methods of teaching and learning derived from the *Qur'an*, the *Sunnah* of Prophet Muhammad (peace be upon him), and the rich intellectual heritage of Muslim scholars. Unlike secular educational philosophies that frequently emphasize cognitive achievement alone, Islamic pedagogy aims at the holistic development of the human personality by integrating intellectual growth, spiritual purification, moral refinement and social responsibility.

The Qur'an presents the educational mission of the Prophet Muhammad (peace be upon him) in the following words: "*Certainly Allah conferred a great favour upon the believers when He raised among them a Messenger from themselves, reciting to them His verses, purifying them and teaching them the Book and wisdom...*" (Qur'an 3:164)

This verse identifies the four interconnected dimensions of Islamic education:

- Recitation of Divine Revelation (*Tilāwah*);

- Spiritual purification (*Tazkiyah*);
- Teaching of revealed knowledge (*Ta'lim al-Kitāb*);
- Teaching wisdom (*Ta'lim al-Hikmah*).

Within the context of this study, AI should enhance these educational objectives without replacing the indispensable role of qualified teachers, whose mentorship remains essential for transmitting values, cultivating character and ensuring doctrinal authenticity.

### **Theoretical Framework**

This paper is anchored on the Technology Acceptance Model (TAM) developed by Davis (1989). The model explains that individuals are more likely to adopt technological innovations when they perceive them as useful and easy to use.

Applied to the teaching of Islamic Studies, the model suggests that teachers and learners will embrace educational technologies when they believe such technologies improve lesson delivery, enhance learning outcomes, simplify classroom activities and increase instructional effectiveness. The model further emphasizes that institutional support, adequate training, infrastructure and positive attitudes significantly influence technology adoption in educational settings.

### **Technological Interventions in Pedagogy: Artificial Intelligence (AI) and Personalized Learning**

The emergence of Generative AI and Natural Language Processing (NLP) has revolutionized subjects like *Tajweed* (Qur'anic phonetics) and *Tafsir* (exegesis). Recent studies indicate that AI-based chat bots now provide 24/7 personalized linguistic assistance, helping students master complex Arabic grammar through automated feedback (Salim & Aditya, 2025). Furthermore, AI algorithms can curate personalized learning paths, identifying specific gaps in a student's understanding of *Fiqh* and offering targeted resources (Syahrizal et al., 2024). However, these tools must be authenticated by the Islamic

studies teachers so as to keep the students on track and to have a seamless use of the tools without contradicting the moral teachings of Islam.

### **Virtual and Augmented Reality (VR/AR)**

For the study of *Islamic History* and *Hajj*, Virtual Reality has proven to be a groundbreaking tool. (Ruzakki et al. 2024) demonstrates that VR simulations of historical sites (e.g., the Battle of Badr or the expansion of the Umayyad Caliphate) significantly increase student empathy and retention. By virtually "walking" through the streets of ancient Medina, students gain a spatial understanding of the *Seerah* that textbooks alone cannot provide. That notwithstanding the VR simulation must be corroborated from books of *Seerah*, under the tutelage of a teacher.

### **Learning Management Systems (LMS)**

The use of platforms like Google Classroom or specialized Islamic LMS enables a more structured approach to Blended Learning. These systems facilitate "flipped classrooms," where students engage with lectures online at home and use classroom time for deep dive discussions on ethical dilemmas or contemporary jurisprudence (Suraijiah et al., 2023) The Qur'anic principle of *Tabayyun* (verification) remains especially relevant in contemporary digital environments characterized by rapid information exchange and frequent misinformation. Therefore all LMSs platforms must be operated in a manner that enables the learners to verify information in order to avoid misinformation on religious matters. Likewise, international human rights frameworks emphasize access to education, dignity, equality and responsible participation in society, values that resonate with Islam's commitment to justice while remaining rooted in divine revelation (United Nations, 1948).

### **Ethical and Spiritual Considerations: "Digital Adab"**

A unique aspect of Islamic pedagogy is the emphasis on *Adab* (spiritual etiquette). (Daud, 2020) emphasizes that technology must not erode the reverence typically afforded to sacred knowledge. The concept of Digital *Islah* (improvement) proposes that digital tools should be used to foster a sense of

*Amanah* (trust) and *Ihsan* (excellence) in students. "The challenge is not whether to use technology, but how to ensure that the screen does not become a barrier to the soul's connection with the Divine." (Arifin, 2025)

Consequently, digital learning environments should promote respectful communication, intellectual humility, academic honesty and constructive engagement with differing opinions. Students should learn to verify online information before sharing it, avoid defamatory or inflammatory content, acknowledge intellectual sources appropriately, and use digital technologies responsibly. The integration must follow ethical guidelines that prevent the use of unauthenticated sources and guard against "automated *fatwas*" that lack human juristic nuance (Zenodo, 2025)

### **Challenges and Barriers**

Despite the potential, several obstacles remain:

- The Digital Divide: *Madrassah* in rural or underfunded areas often lack the stable internet and hardware necessary for high-tech integration (Shoreamanis, 2025).
- Teacher Resistance: Many senior scholars view technology as a distraction or a threat to the traditional teacher-student bond.
- Curriculum Rigidity: Many national curricula for Islamic studies are still heavily focused on textual memorization, leaving little room for technological exploration (Muis et al., 2025).

### **Position Statement**

This paper strongly maintains that science and technology should be fully integrated into the teaching of Islamic Studies in Nigeria tertiary institutions because they improve instructional quality, learner

participation, language proficiency and access to educational opportunities. Technology should not replace teachers but rather serve as a complementary tool that enhances teaching effectiveness and enriches the learning experience. Furthermore, integration of technology in teaching and learning of Islamic Studies at this digital age requires deliberate investment in technological innovations. The traditional pedagogy of teaching and learning Islamic Studies can be enhanced if they are supported by the use of modern technological innovations like; digital resources, online platforms, electronic publishing and artificial intelligence applications.

This paper holds that the training of the Islamic studies teacher in the use of the digital tools can be achieved if teachers at all levels of education are given the opportunity and support to pursue and acquire the required technological skills that will move the Nigerian educational sector forward. Thereby enhancing the teaching and learning of Islamic Studies and making it easier for both teachers and learners to cover a lot within a limited time frame. Therefore, governments, educational institutions, teachers, communities, and development partners should collaborate to ensure that science and technology become central components of Islamic Studies at all levels of Nigeria's tertiary educational system.

## **Conclusion**

Enhancing Islamic Studies through technology is not about abandoning the past, but about using the tools of the present to preserve the wisdom of the past for the generations of the future. The integration of AI, VR, and LMS within a TPACK informed framework offers a pathway to a more engaging, personalized, and globally accessible Islamic education. However, this transition must be guided by the principles of *Adab* and Authenticity, ensuring that technology serves as an assistant to rather than a replacement for human led spiritual guidance. The future of the field lies in a Blended *Tarbiyah*, where the precision of technology meets the depth of tradition.

### Recommendations:

Looking at the pros and cons of the integration of AI, VR and LMS; this paper proffers the following recommendations to move the teaching and learning of Islamic sciences, history and *Adab* to meet up with current digital realities in our tertiary institutions of learning.

- Those who have the knowledge of the use of AI, within our communities should endeavour to give a helping hand in tutoring the *Mu'allims* and the pupils in various *Madaris* within their environment.
- Since the use of hand sets and tablets is now very popular even among *Mu'allims* in *Madaris*, they should be taught how to use it to enhance the teaching and learning of some aspects of the religion studies.
- As part of the LMS students who are memorizing the Glorious Qur'an can be assigned to a certain *Qari'* (reciters) of the Qur'an online so as to master his method and style of recitation, while being monitored by the *Mu'allim*.

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