

Exploring the Sociocultural Dynamics of AI in Arabic Language Education in Islamic Schools: Teachers' Perspectives on Readiness and Challenges

Mubarak Fatahillah

Sekolah Tinggi Agama Islam Kuningan, Indonesia

Email: mubarakfatahillah@gmail.com

Abstract

This study explores the integration of artificial intelligence (AI) into Arabic language education at Islamic higher education institutions, with a particular focus on the sociocultural dynamics, lecturer readiness, and challenges at Sties Khas Al Jaelani. Using a qualitative research design, the study conducted semi-structured interviews with 15 Arabic language lecturers to examine their perceptions of AI adoption, the cultural challenges encountered, and the opportunities AI presents for enhancing language learning. The findings reveal that although AI tools are viewed as potentially beneficial for personalized learning and improving student engagement, lecturers face significant barriers related to insufficient training, inadequate technological infrastructure, and concerns over AI's compatibility with traditional teaching methods and Islamic educational values. Sociocultural factors, particularly fears that AI may undermine the teacher-student relationship and the moral and ethical dimensions of Islamic education, were also found to influence AI adoption. Despite these challenges, lecturers recognized AI's potential to enhance Arabic language learning through personalized feedback and data-driven insights. This study highlights the importance of addressing both technical and cultural barriers to AI integration in Arabic language education within Islamic institutions and suggests that professional development programs and culturally sensitive AI tools are crucial for successful implementation.

Keywords: artificial intelligence; arabic language education; sociocultural dynamics; islamic education; lecturer readiness; ai adoption; pedagogical challenges

Introduction

Artificial Intelligence (AI) has become a transformative force in education, offering substantial potential to enhance teaching and learning experiences across various fields, including language education (Sharma & Yadav, 2023). In Arabic language instruction specifically, AI tools such as speech recognition systems, adaptive learning platforms, and AI-powered feedback mechanisms can significantly improve student engagement and proficiency (Sarker et al., 2023). However, integrating AI into Islamic educational settings requires careful consideration of additional factors, including cultural considerations, pedagogical norms, and religious sensitivities (García & López, 2023).

Arabic language education in Islamic schools presents unique challenges for technology adoption, as language instruction serves not only as a communication tool but is also deeply intertwined with religious practices (Saleh & Zaki, 2024). The introduction of AI in such settings must align with the values and educational goals of Islamic institutions, which emphasize moral development, community, and the preservation of religious tradition (Mohiuddin & Syed, 2022). Thus, while AI offers opportunities for personalized learning and efficient instruction, its application in Arabic language classrooms must be carefully balanced with these cultural and religious factors (Yilmaz & Demir, 2023).

Teachers' readiness to adopt AI is a significant factor influencing its successful integration into classrooms (Zhang et al., 2023). Recent studies have shown that educators' perceptions of AI's utility, ease of implementation, and alignment with their teaching practices play crucial roles in their willingness to integrate AI tools (Fatahillah & Hafidhoh, 2025). This readiness is further complicated in Islamic schools, where educators may be more resistant to technological change due to concerns over its potential to disrupt traditional pedagogical methods (Dawood, 2023).

Cultural attitudes toward technology also play a vital role in shaping how AI is perceived and adopted in Islamic schools. While some educators see AI as an opportunity to modernize education and improve student outcomes, others view it as a threat to the integrity of religious education (Ghanem, 2022). This tension highlights the need for further exploration of how AI can be integrated in a culturally sensitive way that respects the core values of Islamic education (Sharma & Yadav, 2023).

Moreover, AI's impact on Arabic language education extends beyond the classroom, influencing curriculum design, teacher training, and the broader educational policy (Saleh & Zaki, 2024). The ability to personalize learning experiences through AI can provide students with tailored lessons that meet their individual needs, enhancing their language acquisition skills (Arif et al., 2024). However, the integration of such technologies requires significant shifts in how teachers approach language instruction and the pedagogical strategies they employ (Faisal & Mahmood, 2022).

This study, conducted at Sties Khas Al Jaelani, aims to address these gaps in the literature by exploring the perspectives of Arabic language teachers in Islamic schools regarding AI integration. Specifically, this research investigates the challenges teachers face in adopting AI, their readiness to embrace these technologies, and the sociocultural factors influencing AI's acceptance in Islamic educational contexts (Abdulrahman & Gabr, 2023).

Method

Research Design

This study employs a qualitative research design to explore the sociocultural dynamics of Artificial Intelligence (AI) adoption in Arabic language education at Sties Khas Al Jaelani, a higher education institution. Qualitative research is ideal for investigating the complex perceptions, readiness, and cultural challenges faced by Arabic language lecturers when integrating AI tools into their teaching practices. This approach allows for an in-depth understanding of how educators perceive AI within the specific context of Islamic higher education (Creswell, 2020).

The focus on sociocultural factors in AI adoption is critical, as it acknowledges that the successful integration of AI in teaching and learning is not only a matter of technological readiness but also a cultural and pedagogical adaptation (Sadeghi & Ranjbar, 2023). Given that AI tools must align with both educational goals and cultural values in Islamic settings, this research aims to provide insight into how AI can be

implemented in a manner that respects and enhances the educational values of Sties Khas Al Jaelani.

Participants

The participants were selected using a purposive sampling technique, targeting Arabic language lecturers who have experience or familiarity with AI applications in education. A total of 15 lecturers from various departments of Arabic language education at Sties Khas Al Jaelani participated in this study. This group was chosen to represent a range of teaching experiences, technological expertise, and familiarity with AI tools in the classroom. The diversity of the sample was important for capturing a wide array of perspectives on the integration of AI in Arabic language instruction in higher education (Maot et al., 2025).

Data Collection

Data were collected through semi-structured interviews conducted in-person and online. The semi-structured format allowed for flexibility, enabling participants to express their views in-depth while ensuring that key topics were addressed. The interviews were designed to cover the following themes:

1. Teachers' readiness to integrate AI tools in their Arabic language classrooms.
2. Cultural and pedagogical challenges faced by educators in adopting AI, especially in the context of Islamic education.
3. Sociocultural factors influencing the acceptance or resistance to AI integration in teaching.
4. Perceived opportunities and benefits of AI in enhancing the quality of Arabic language education.
5. Personal experiences with AI tools in the classroom, if applicable.

Each interview lasted approximately 45-60 minutes, providing ample time for participants to discuss their thoughts and experiences. The interviews were audio-recorded, transcribed verbatim, and analyzed for emerging themes (Braun & Clarke, 2019).

Data Analysis

The data were analyzed using thematic analysis, a widely used method for analyzing qualitative data by identifying patterns and themes within the data (Braun & Clarke, 2019). The process involved the following steps:

1. Familiarization with the data: The researcher read through the transcripts multiple times to gain a comprehensive understanding of the content.
2. Initial coding: Segments of data were coded to capture important ideas related to teacher readiness, cultural challenges, and AI's educational potential.

3. Theme development: Codes were grouped into themes that aligned with the research objectives. These themes were refined and developed into coherent categories that explained the perceptions and experiences of participants regarding AI adoption.
4. Reviewing and refining themes: The themes were reviewed to ensure they accurately represented the data and were coherent with the research questions.
5. Final analysis: The final themes were discussed in relation to existing literature on AI in education, focusing on the sociocultural challenges and opportunities within the context of Arabic language instruction in Islamic higher education.

Ethical Considerations

Ethical approval for this study was obtained from the Sties Khas Al Jaelani Institutional Review Board. Participants were fully informed about the purpose of the study, their rights to confidentiality and anonymity, and their right to withdraw from the study at any point without consequence. Informed consent was obtained from all participants before conducting the interviews. To maintain confidentiality, pseudonyms were used in place of actual names, and all data were securely stored and only accessible to the research team (Palinkas et al., 2015).

Results and Discussion

Lecturer Readiness for AI Integration

The findings reveal that most lecturers at Sties Khas Al Jaelani exhibit moderate to low readiness for integrating AI tools into their Arabic language classrooms. Out of the 15 lecturers interviewed, only 4 expressed strong enthusiasm and confidence in adopting AI technologies, citing their previous exposure to digital learning environments. These lecturers believed that AI could offer personalized learning experiences, especially for students with varying proficiency levels. However, the majority of lecturers reported that the lack of sufficient training and technical support was a major barrier to AI adoption.

Lecturers who were more hesitant to adopt AI cited technical limitations, lack of resources, and concerns about reliability and compatibility with existing teaching practices. One lecturer stated, "I am willing to try AI tools, but the lack of proper training and infrastructure makes it difficult to implement them effectively." This observation aligns with previous studies, where readiness was closely related to professional development and the availability of technological resources (Zhang et al., 2023).

Sociocultural Challenges in AI Adoption

The study also identified significant sociocultural challenges that lecturers face when considering AI adoption. Lecturers emphasized the importance of maintaining traditional pedagogies such as oral recitation and face-to-face interaction, which are deeply rooted in the Islamic educational framework. Several lecturers expressed concerns that AI tools might undermine the teacher-student relationship, viewed as central to both academic instruction and moral guidance. One lecturer stated, "AI can never replace the personal connection and mentorship that we, as lecturers, provide to our students."

Integrating AI into a religiously and culturally sensitive educational setting such as Islamic schools raises concerns about whether AI can align with moral and ethical teachings. Several lecturers feared that AI tools might prioritize efficiency over nurturing spiritual growth, leading to a conflict between technological progress and traditional educational values (Sharma & Yadav, 2023).

Perceived Opportunities for AI in Arabic Language Education

Despite the challenges, many lecturers also recognized the potential opportunities that AI presents for enhancing Arabic language education. Lecturers highlighted AI's ability to provide personalized learning experiences, particularly for students with differing levels of language proficiency. They saw AI tools, such as speech recognition and automated grammar correction, as valuable for improving students' pronunciation and writing skills. One lecturer commented, "AI could help our students practice pronunciation, especially for non-native speakers, which is often a challenge in Arabic language learning."

AI's potential to collect data and track student progress was also seen as a significant opportunity. Lecturers noted that AI could assist in identifying areas where students struggle, thereby enabling targeted interventions. This reflects findings from García and López (2023), who emphasized that AI's ability to provide detailed feedback is one of its key strengths in language education.

Discussion

Lecturer Readiness and the Need for Professional Development

The moderate to low readiness of lecturers at Sties Khas Al Jaelani for adopting AI in Arabic language teaching mirrors findings in other studies, which identify lecturer training as a key factor for successful AI integration (Fatahillah & Hafidhoh, 2025). Many lecturers in this study expressed a lack of technical training and support as a significant barrier to AI adoption. This knowledge gap is particularly problematic in higher education, where lecturers are often expected to integrate new technologies into their teaching methods without sufficient guidance (Sadeghi & Ranjbar, 2023).

To enhance AI adoption, institutions must provide comprehensive professional development programs that equip lecturers with the necessary skills to effectively integrate AI tools into their classrooms. Previous research has highlighted the importance of combining technical training with pedagogical support to ensure that lecturers not only know how to use AI tools but also understand how to apply them in ways that complement their teaching goals (Johnson & Christensen, 2021).

Sociocultural Dynamics and the Role of Tradition

The sociocultural challenges faced by lecturers in this study reflect a broader tension between innovation and tradition in educational settings. In Islamic schools, where education is rooted in both academic knowledge and moral development, the introduction of AI tools must be handled carefully to avoid disrupting the educational and

cultural values of the institution (Saleh & Zaki, 2024). Lecturers' concerns that AI could replace human interaction and undermine the spiritual and ethical guidance they provide are consistent with findings from other studies on technology integration in religious and culturally rich educational settings (Yilmaz & Demir, 2023).

To address these concerns, AI should be seen as a tool to enhance, not replace, traditional methods. As suggested by Sharma et al. (2023), AI can be used to complement the teacher-student relationship by providing personalized support and immediate feedback, while still maintaining the human elements of teaching that are essential in Islamic education.

Opportunities for AI in Arabic Language Education

The perceived opportunities for AI, particularly in the areas of personalized learning and immediate feedback, reflect the potential benefits of AI in language education. AI's ability to offer personalized learning paths and provide instant feedback can help address the diverse needs of students in Arabic language classrooms. This opportunity is particularly significant in Islamic educational settings, where individual attention to students' learning needs is crucial for their academic and personal growth (Ghanem, 2022).

AI's potential for data collection and student progress monitoring was also identified as a key benefit by lecturers. This reflects findings from Sulaiman & Zainuddin (2024), who argued that AI tools can assist educators in tracking and analyzing students' learning progress, ultimately leading to more effective interventions and better learning outcomes.

However, the successful integration of AI into Arabic language education in Islamic schools must be done in a way that respects both cultural values and pedagogical traditions. As García & López (2023) noted, the successful use of AI tools in language education depends not only on technological infrastructure but also on how well these tools are integrated into the existing educational framework, ensuring that they enhance rather than replace traditional teaching practices.

Conclusion

This study provides valuable insights into the sociocultural dynamics of integrating Artificial Intelligence (AI) into Arabic language education at Sties Khas Al Jaelani, an Islamic higher education institution. The findings indicate that while AI presents significant opportunities for personalized learning, lecturer readiness remains a major barrier due to insufficient training, limited technological infrastructure, and concerns about AI's compatibility with traditional pedagogies. Furthermore, sociocultural factors—particularly fears that AI may disrupt the teacher-student relationship and conflict with the moral and ethical dimensions central to Islamic education—play a critical role in shaping AI adoption.

Despite these challenges, lecturers acknowledged AI's potential to enhance learning through personalized feedback, improved engagement, and better student

progress tracking. To facilitate successful AI integration, this study recommends implementing professional development programs focused on AI literacy and pedagogical training, as well as developing culturally sensitive AI tools that complement rather than replace traditional teaching practices. Future research should explore the perspectives of other stakeholders, such as students and administrators, and examine AI's long-term impact on learning outcomes in Islamic educational settings.

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