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The Utilization of Artificial Intelligence in Arabic Language Learning: between Linguistic Competence and Islamic Spirituality

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Abstract
This study discusses the revolution of Arabic language learning in the digital era, focusing on the role of Artificial Intelligence (AI) in enhancing language competence while fostering spiritual intelligence. Using a library research method, this study reviews recent literature (2020–2023) on the application of AI in language learning and Islamic education. The findings reveal that AI provides adaptive, interactive, and data-driven learning that strengthens the four core Arabic language skills (listening, speaking, reading, and writing), including specific aspects such as nahwu, sharaf, and phonetics. Furthermore, AI has the potential to support the integration of Islamic values through features such as prayer reminders, Qur'anic verses, and the internalization of learning ethics. This research highlights that AI should not be regarded merely as a technical tool but as a medium of technological spiritualization that combines intellectual competence with the cultivation of Islamic character and morality. The contribution of this article is to provide an integrative perspective on how AI can be utilized not only to strengthen Arabic linguistic competence but also as a medium for fostering Islamic spirituality within the context of education.
Keywords: Artificial Intelligence, Arabic Language, Digital Era, Language Competence, Spirituality.

Introduction

The development of digital technology has brought about major changes in the global education landscape. This transformation is evident not only in the delivery of learning materials but also in the ways learners interact with educational resources. Whereas in the past learning was conducted predominantly through face-to-face and linear methods, modern education is now characterized by adaptive and flexible systems that utilize data to tailor learning processes to individual needs (Timotheou et al., 2023). The shift from conventional methods to technology-based models has also enabled the creation of a more inclusive learning ecosystem, in which learners from diverse backgrounds can access educational resources more easily (Frei-Landau & Avidov-Ungar, 2022). In the field of language learning in particular, the presence of Artificial Intelligence (AI) has become a crucial pillar, introducing significant innovations. AI facilitates data-driven learning strategies, automatic error analysis, and interactions through natural language processing (NLP) that resemble communication with native speakers. Thus, AI presents revolutionary potential in supporting the process of language acquisition in the digital era (Dizon, 2020).

In the context of the Arabic language, this development becomes increasingly significant given its unique and complex characteristics. Arabic possesses a rich morphological system with intricate patterns of word formation (*ṣarf*), as well as a highly diverse syntax (*naḥw*), both

of which demand a high degree of precision from learners (Ameur et al., 2020). These challenges often cause non-native students to experience difficulties in understanding and mastering the language. Moreover, learning Arabic is not only intended as a means of daily communication, but also serves as the primary medium for accessing Islamic texts, including the Qur'an, ḥadīth, and classical literature (Malhas & Elsayed, 2022). Therefore, the integration of AI technology in Arabic language learning is expected not only to focus on linguistic competence but also to contribute to the development of spiritual intelligence (Agustina et al., 2022). This is crucial because Arabic is the language of revelation, and its mastery inherently carries a spiritual dimension within the learning process.

Along with technological advancements, global education is entering a new era, often referred to as the Industrial Revolution 4.0 and Society 5.0, where digitalization serves as the backbone of human life, including the field of education (Sá & Serpa, 2022). In this context, language learning is required to adapt to the needs of the digital-native generation, who are accustomed to using gadgets, applications, and virtual interactions. The presence of AI responds to these demands, as it is capable of deliver a personalized, dynamic, and integrated learning experience in line with other technological developments such as big data, cloud computing, and even the Internet of Things (IoT) (Chakraborty et al., 2023). However, the use of AI in language learning should not be understood merely as a technical solution to accelerate the process of language acquisition. Beyond that, AI holds the potential to influence the psychological, social, and cultural aspects of education (Ouyang & Jiao, 2021). By providing instant feedback, AI can foster learning motivation; through contextual conversations, AI can enhance speaking confidence; and by offering unlimited access, AI can reduce educational disparities across regions. Ultimately, these benefits help create a more inclusive and sustainable language learning ecosystem (Nazari et al., 2021).

When linked to Arabic language learning, the benefits of AI become more evident when combined with the vision of Islamic education, which emphasizes a balance between mastery of knowledge and the cultivation of character (Ng et al., 2021). I, for instance, can help students correct grammatical or phonetic errors, but it can also be designed to deliver ethical messages and spiritual values that remind learners of the importance of proper manners in learning (Shao et al., 2022). Thus, technology is not merely a technical tool but also a medium for internalizing Islamic values.

Furthermore, the integration of AI into Arabic language learning can support the spiritualization of technology, directing technology to align with the values of *maqāṣid al-sharī'ah* (Elmahjub, 2023). For example, a language learning application may include features such as reminders to recite a prayer before studying, Qur'anic verses relevant to the pursuit of knowledge, or reminders about the etiquette of speaking in Islam (Nigar et al., 2023). Such innovations demonstrate that AI does not simply function mechanically but also serves as a means of nurturing students' character and spirituality. Nevertheless, implementing AI in Arabic language learning is not without significant challenges. Among them are the limitations of technological infrastructure in certain regions, the lack of digital competence among teachers, and the relatively high cost of implementation. Additionally, there remain concerns that excessive reliance on technology may diminish the role of teachers as educators who not only impart knowledge but also serve as role models in manners and spirituality (Muzaal et al.,

2020). Therefore, the integration of AI must be carried out wisely so that it does not replace the teacher's role as a *murabbi*, but rather strengthens it.

It is important to realize that AI is merely a means, not an end (Seters, 2020). From the perspective of Islamic education, the ultimate goal of learning Arabic is to nurture a generation capable of understanding religious teachings comprehensively while grounding Islamic values in daily life. Accordingly, the presence of AI in Arabic language learning should be viewed as an instrument to support a holistic educational process that encompasses cognitive, affective, and spiritual dimensions (Seters, 2020). Therefore, the revolution in Arabic language learning in the digital era must be understood as a collaborative effort a collaboration between teachers and technology, between human intelligence and artificial intelligence, and between linguistic competence and spiritual intelligence (Al-abdullatif, 2022). Only in this way can Arabic language learning truly deliver a sustainable impact, both for the mastery of knowledge and for the formation of students' Islamic character. Building on this framework, the following section reviews recent studies to map achievements, limitations, and research gaps that connect the enhancement of linguistic competence with the strengthening of Islamic spirituality in the context of the digital era.

As a foundation, Huang, Hew, and Fryer (2022), "Chatbots for language learning Are they really useful? A systematic review of chatbot-supported language learning," affirm the positive effects of AI-powered chatbots on learners' motivation, interaction, and aspects of language performance; in contrast to this article, their focus remains linguistically instrumental within CALL/ELT and does not design an integration of Islamic values in Arabic language learning (W. Huang et al., 2021). Furthermore, Barrot (2023), "ChatGPT as a language learning tool: An emerging technology report," maps out the emerging trends, pedagogical uses, and ethical issues of ChatGPT in language education; unlike this article, his study is cross-linguistic and does not yet propose a conceptual model that intertwines Arabic linguistic competence with the cultivation of Islamic spirituality (Barrot, 2023). Rodríguez-Triana, Prieto, and colleagues (2021), "ADA for IBL: Lessons learned in aligning learning design and analytics to support orchestration of inquiry-based learning," demonstrate the importance of teacher orchestration in aligning pedagogy and technology through learning design tools and analytics; unlike this article, their context is general (not specific to Arabic or generative AI) and does not formulate the integration of Islamic values (Rodrıguez et al., 2021). In the Arabic context, finally, Chaudhary (2020), "Initial considerations for Islamic digital ethics," outlines key Islamic ethical principles and maps themes and actors in the digital Islam ecosystem; in contrast to this article, the scope is macro-level and philosophical and does not design AI-supported Arabic language pedagogy as a medium for internalizing adab and Islamic values in the classroom (Chaudhary, 2020).

The purpose of this article is to present an integrative perspective on how AI can be utilized not only to strengthen the linguistic competence of the Arabic language but also as a medium for fostering Islamic spirituality within the context of modern education. Drawing on recent literature (2020–2023), this article maps key practices and findings ranging from adaptive learning, NLP/chatbots, and ASR/TTS to AR/VR, while formulating implementation strategies aligned with the values of learning etiquette (*adab al-taʿallum*) and the objectives of Islamic law (*maqāṣid al-sharīʿah*). Practically, the article provides operational

recommendations for educators and curriculum developers to ensure that AI integration remains linguistically accurate, culturally relevant, and spiritually meaningful.

Literature review

The Theory of Digital Revolution in Education

The digital revolution marks a major shift in the global education system, where information technology has become the main foundation for learning transformation. Knowledge in the digital era is no longer centralized, but distributed across networks accessible to learners through technology. Consequently, modern education requires adaptive, flexible, and digitally driven learning models.

The Theory of Artificial Intelligence in Education

Artificial Intelligence in education emerges as an intelligent system capable of functioning like a digital tutor. Through machine learning and natural language processing (NLP), AI can analyze language errors, provide feedback, and adjust learning materials to meet students' needs. AI is not merely a technical tool but also a learning mediator that enables new forms of interaction between learners, teachers, and educational content (Haleem et al., 2022).

The Theory of Language Competence

Language competence refers to communicative competence, which encompasses linguistic, sociolinguistic, strategic, and discourse abilities (Kimura, 2023). In the context of Arabic, this theory is expanded to include phonetics (tajwīd), morphology (ṣarf), syntax (naḥwu), as well as comprehension of Islamic texts. AI has the potential to strengthen all these dimensions, whether by detecting grammatical errors or offering conversational simulations within the framework of Arab culture.

The Theory of Spirituality in Islamic Education

From an Islamic perspective, education does not only emphasize cognitive aspects but also the cultivation of spirituality and morality. Education is seen as a process of *ta'dīb* the formation of a civilized human being. Spirituality in Arabic language learning is crucial since it is the language of the Qur'an and ḥadīth (Edidarmo & Fudhaili, 2023). Therefore, the application of AI must align with *maqāṣid al-sharī'ah* so that technology does not merely enhance intellectual capacity but also contributes to shaping the religious character of learners.

Research method

This research uses a library research method by examining various literature sources in the form of scientific journals, books, proceedings, and research reports that are relevant to the themes of Arabic language learning, Artificial Intelligence (AI), and spirituality in education. (Cahyono et al., 2019). The primary data sources are articles published between 2020 and 2023 that discuss the application of AI in language learning, Arabic language competence, and the integration of Islamic values into educational technology. Data collection was carried out through the identification, selection, and classification of literature using academic databases such as Scopus, Google Scholar, ScienceDirect, and Springer, and subsequently analyzed using a descriptive-analytical method. The analysis focuses on three main aspects: (1) the role of AI in language learning, (2) the development of Arabic language competence, and (3) the contribution of AI to fostering students' spirituality. The validity of the findings is maintained

through source triangulation, namely by comparing various literature sources to ensure the consistency and credibility of the results.

Result and Discussion

The Role of AI in Language Learning

The results of the literature review indicate that AI plays a crucial role in transforming the paradigm of language learning globally. AI systems have been proven capable of providing adaptive learning experiences, tailoring materials to students' proficiency levels, and offering intelligent tutoring systems that deliver instant feedback on grammar, pronunciation, and vocabulary errors (Sun, 2023). Natural Language Processing (NLP) technology enables students to interact with chatbots or intelligent applications that can understand and respond to the target language more naturally, including Arabic (Ahmed et al., 2022).

Recent studies show that the application of AI in Arabic language learning has significantly improved learning outcomes. Developed an agent-based intelligent tutoring system for Arabic grammar that delivers tailored exercises and feedback according to learners' skill levels, helping to overcome the limitations of traditional classroom instruction. This shows that AI-driven intelligent tutoring systems can function not merely as auxiliary tools, but as interactive learning partners that support and personalize the process of Arabiclanguage acquisition (Muzaal et al., 2020). In addition, the use of NLP-based chatbots has become an innovation that strengthens students' interaction with learning materials. Emphasized that generative chatbots outperform retrieval-based chatbots because they are capable of generating new responses that fit the conversational context. In this way, students can practice Arabic conversations more naturally while also receiving relevant corrections, making the learning process more engaging and contextual (Alruqi & Alzahrani, 2023).

Recent research on adaptive learning systems indicates that AI is capable of addressing the complexities of Arabic language structures, particularly in the areas of *nahwu* (syntax) and *sharaf* (morphology). A study on Adaptive Learning Systems for Classical Arabic (2022) revealed that AI can guide students through personalized, step-by-step learning pathways, thereby reducing difficulties in understanding morphological and syntactic patterns. These findings suggest that AI can serve as a bridge between abstract grammatical theory and its practical application (Mannaa et al., 2022a). Nevertheless, several challenges continue to arise in the implementation of AI for Arabic language learning. Garba & Hassan (2024) highlight limitations in pronunciation accuracy, the lack of cultural content, and insufficient sensitivity to local contexts (Mahmud Abubakar Garba, 2023). This underscores the fact that although AI has brought significant transformation to language learning, its development must take cultural and ethical dimensions into account in order to align with learners' needs. Thus, AI can truly function as a learning medium that is not only technically efficient but also culturally relevant and spiritually meaningful.

Educational chatbots have become one of the most compelling implementations of AI in Arabic language learning due to their increasingly natural and responsive interactions, moving beyond retrieval-based systems that rely solely on fixed sets of answers. The study *Arabic Educational Neural Network Chatbot* notes that while most Arabic educational chatbots still employ retrieval approaches, some have already adopted generative models that enable new responses tailored to the learner's context, thereby making the learning experience more adaptive and engaging (Alazzam et al., 2023).

Earlier work, such as Nabiha, a Saudi-dialect chatbot for IT students at King Saud University, also demonstrates how Arabic chatbots can act as academic companions, offering guidance about courses and study progress across multiple platforms (web, Android, and Twitter). In parallel, systematic reviews of English and Arabic chatbots and a scoping review of Arabic chatbot technologies report that many systems are developed for education and student support and typically combine components such as intent classification and entity recognition within retrieval-based or hybrid architectures, while newer models adopt deep learning and transformer-based approaches for more accurate, context-sensitive responses (Alsheddi & Alhenaki, 2022).

Adaptive learning technology shows real promise in helping students overcome the linguistic complexities of the Arabic language, particularly in the areas of morphology and syntax. The study Computer-assisted i'raab of Arabic sentences for teaching grammar to students demonstrates that technology-supported grammar systems are capable of structuring learning pathways that gradually introduce *nahwu* and *sharaf* structures, ensuring that learners are not overwhelmed at the early stages of instruction. Similarly, recent research on AI-based adaptive and intelligent tutoring systems for Arabic grammar reports that adaptive systems can enhance student learning outcomes because the material is tailored to each individual's initial proficiency level, especially in terms of understanding the complex grammatical rules of the Arabic language (Mannaa et al., 2022b).

A study conducted in Nigeria on non-native students demonstrated that adaptive AI applications featuring exercises in classical Arabic grammar, combined with automated feedback, helped improve their understanding of morphological patterns and sentence structures (Mahmud Abubakar Garba, 2023). A study by Khalati and Al-Romany (2020), Artificial Intelligence Development and Challenges (Arabic Language as a Model), highlights that advances in artificial intelligence for Arabic language processing open up opportunities to design adaptive learning systems that can adjust materials and feedback to learners' linguistic competence, thereby potentially enhancing their motivation and understanding of Arabic grammar compared with traditional, non-adaptive approaches (Muzaal et al., 2020). Nevertheless, several studies have noted challenges in implementing adaptive learning technologies for classical Arabic. For example, such systems often struggle to handle dialectal variations and the orthographic conventions of classical Arabic (including diacritical marks and *i'rab* case endings), as well as the demand for highly detailed grammatical content resources. The study *Adaptive Learning Systems for Classical Arabic* highlights that the highly complex nature of *nahwu-sharf* materials requires careful system design to prevent the learning process from becoming confusing for beginners (Shao et al., 2022).

Adaptive learning technology is increasingly being used to address difficulties in learning languages with complex structures, including Arabic. This language is known for its intricate morphological system (*sharf*) as well as its highly detailed syntactic rules (*nahwu*). Through an adaptive approach, AI can adjust the level of material difficulty according to students' initial abilities, so that they are not immediately confronted with complex structures but are instead guided through simpler stages first. Adila (2023) found that the application of adaptive technology in Arabic language classes helps improve the gradual understanding of grammatical rules while also preventing learning shock among beginner learners (Umbar et al., 2023).

Similar findings were also reported in the study by Garba & Hassan (2023), which emphasized the role of AI-based adaptive systems for non-native students. This system is capable of providing step-by-step training in classical Arabic grammar and is equipped with automated feedback that accelerates the understanding of morphological patterns and sentence structures. In this way, learners can overcome difficulties that usually pose major obstacles, such as verb conjugation patterns and the differences between nominal and verbal sentence structures (Mahmud Abubakar Garba, 2023).

Adaptive learning technology has been proven to help Arabic language learners overcome the complexities of morphology (*sharf*) and syntax (*nahwu*), which often pose major challenges for non-native speakers. With adaptive AI systems, learning materials can be organized step by step according to students' initial abilities, so that grammatical rules are introduced progressively without causing learning shock.

The following section summarizes the main findings of the literature review on the role of AI in Arabic language learning. The table is structured to present the core conclusions, key evidence (studies), and practical implications that can be directly adopted in instructional design. This summary maps AI's contributions to improving learning outcomes, facilitating interaction through generative chatbots, personalizing learning paths (adaptive), accelerating feedback on grammar and pronunciation, while also highlighting design challenges such as pronunciation accuracy, dialect variation, and cultural sensitivity.

Table 1. Summary of AI Findings in Arabic Learning

Main Conclusion	**Key Evidence (Studies)**	**Practical Implications**
AI-based adaptive learning and intelligent tutoring systems (ITS) improve Arabic learning outcomes compared with traditional instruction.	Sun (2023); Muzaal et al. (2020); Mannaa, Azmi, & Aboalsamh (2022b); Adila (2023); Garba & Hassan (2023)	Develop tiered materials (from simple to complex), use diagnostic tests to detect learners' initial level, and provide personalized exercise sequences instead of one-size-fits-all instruction.
Generative AI chatbots are more effective for Arabic conversation practice than purely retrieval-based chatbots.	Alruqi & Alzahrani (2023); Alazzam, Alkhatib, & Shaalan (2023); Ahmed et al. (2022)	Use themed conversation tasks with generative chatbots that can produce new, context-appropriate responses and give real-time corrections to learners' utterances.
Adaptive learning systems help students gradually master nahwu–sharf (syntax–morphology) without learning shock.	Adaptive Learning Systems for Classical Arabic (Mannaa, Azmi, & Aboalsamh, 2022a; Shao et al., 2022); Computer-assisted i'rāb of Arabic sentences; AI-based adaptive tutoring systems for Arabic	Structure grammar content (nahwu–sharf) step by step, introduce rules progressively with real-life examples, and adapt task difficulty to learners' current competence so beginners are not overwhelmed.

Main Conclusion	Key Evidence (Studies)	Practical Implications
	grammar (Mannaa et al., 2022b); adaptive AI applications for classical Arabic in Nigeria (Mahmud Abubakar Garba, 2023)	
Automated feedback on grammar, vocabulary, and pronunciation increases learners' motivation and accelerates mastery of Arabic structures.	Sun (2023); Muzaal et al. (2020); Garba & Hassan (2023); Mahmud Abubakar Garba (2023)	Integrate immediate automated feedback (error highlighting, suggestions, and corrective drills) into learning platforms to support continuous improvement in morphology, syntax, and vocabulary.
Significant challenges remain in pronunciation accuracy, dialectal variation, orthographic conventions, and cultural relevance.	Garba & Hassan (2024); Mahmud Abubakar Garba (2023); Khalati & Al-Romany (2020)	Adapt AI models and learning materials to local dialects and cultures, handle diacritics and i'rāb case endings carefully, and embed culturally and spiritually relevant texts so that AI tools fit learners' real context.
AI tools for intent recognition and keyword/entity detection are mature enough to support structured Arabic learning scenarios.	Arabic Educational Neural Network Chatbot (Alazzam et al., 2023); systematic/scoping reviews of Arabic chatbots (Alsheddi & Alhenaki, 2022); NLP applications for Arabic learning (Ahmed et al., 2022)	Use existing chatbot frameworks (e.g., intent–entity pipelines) to build Arabic educational bots that support text/menu modes, handle academic queries, and can be expanded to classroom and campus use.

Source: Processed Data, 2023

Development of Arabic Language Competence

The literature review also shows that AI is highly effective in supporting the development of complex Arabic language skills. In the aspects of *nahwu* and *sharf*, several AI-based applications can identify grammatical errors and provide contextual correction examples (Solyman et al., 2022). For phonetic aspects, AI-driven speech recognition systems are used to train the accurate pronunciation of hijaiyah letters, thereby supporting proper Qur'anic reading skills (Dhouib et al., 2022). In addition, the use of AI-based gamification in vocabulary and conversation exercises has been proven to increase student motivation while accelerating the retention of new vocabulary (Panmei & Waluyo, 2022). Thus, AI plays a role in strengthening

the four main skills: listening, speaking, reading, and writing, along with the specific competencies of the Arabic language related to Islamic texts.

In the article *"Investing Artificial Intelligence For Arabic Learning"* published in 2022, Abou Adel (2022) examines two AI-based smartphone applications (Buss and Arabits) and shows that artificial intelligence can improve Arabic learning by integrating all fundamental language skills, offering flexible and asynchronous learning, and increasing learners' focus and attention through attractive audio-visual features. The study highlights that these AI applications provide interactive, enjoyable, and systematic practice, such as enabling learners to communicate with native speakers and supporting step-by-step mastery of the Arabic alphabet and pronunciation, while also noting persisting challenges related to technical limitations, the need for teacher and learner training, and resistance from some traditional instructors toward this digital shift (Abou Adel Mohammed, 2022).

Another study on AI-based Text-to-Speech (TTS) technology noted that the integration of TTS systems in Arabic language learning has a positive impact, particularly on listening and pronunciation skills. In a 2023 study on students' perceptions of text-to-speech-based applications in Arabic language learning, Mubarak and Santoso (2023) examined the use of the online TTS tool *narakeet.com* in an Arabic learning technology course. Their findings indicate that the integration of text-to-speech technology is perceived positively in terms of design, functionality, and ease of use, and that it supports the development of students' reading and listening skills (qirā'ah and istimā') by providing clear pronunciation models that can be accessed and replayed flexibly in a digital learning environment (Mubarak & Santoso, 2023).

Table 2. Development of Arabic Language Competence

Short Conclusion	Evidence (Studies)	Practical Implications
AI grammar tools improve nahwu–sharf accuracy through automatic error correction.	Solyman et al. (2022)	Integrate AI-based nahwu–sharf checkers into grammar exercises and ask students to revise based on feedback.
AI speech recognition helps train accurate hijaiyah pronunciation and Qur'anic recitation.	Dhouib et al. (2022)	Use AI speech-recognition tools for tajwīd practice with listen–repeat–record tasks and individual feedback.
AI-based gamification boosts motivation and speeds up vocabulary retention.	Panmei & Waluyo (2022)	Design gamified quizzes and role-plays (points, badges, leaderboards) with repeated practice sessions.
AI mobile apps integrate the four skills and make Arabic learning more flexible and engaging.	Abou Adel (2022)	Employ AI-based apps (e.g., Buss, Arabits) for guided independent practice combined with teacher supervision.
AI-based TTS strengthens listening, reading, and pronunciation via clear audio models.	Mubarak & Santoso (2023)	Use TTS tools (e.g., narakeet.com) for qirā'ah and istimā' tasks with staged listen-and-repeat activities.

Source: Processed Data, 2023

The Contribution of AI to the Development of Students' Spirituality

The results of the literature review also indicate that AI not only supports the cognitive aspect but can also be directed to strengthen the affective and spiritual dimension (Tan, 2020). Several Arabic language learning applications developed with an Islamic approach include features such as prayer reminders before studying, Qur'anic verse quotations, and messages on learning etiquette to cultivate students' religious awareness (Alsharbi et al., 2021). AI can also be configured so that its learning content aligns with Islamic values, for instance, by avoiding materials that contradict the sharia or by incorporating ethical values into every learning activity (Shamdi et al., 2022). Thus, AI can be positioned not merely as a technical instrument but also as a medium for the spiritualization of technology, making Arabic language learning more meaningful and aligned with the objectives of Islamic education.

Research shows that an AI approach that integrates adaptive self-learning, Islamic chatbots, and AR/VR technology has a positive impact on the internalization of moral values and Islamic character. For example, a literature study highlights that AI-based religious learning strategies, such as Islamic chatbots and adaptive self-directed learning experiences, help strengthen religious understanding and foster moral character development among students. In these cases, AI not only provides spiritual content but also offers space for reflection and reinforcement of proper conduct when learners encounter difficulties, since the feedback sometimes includes moral motivation or Islamic advice (Deng & Yu, 2023).

Other studies indicate that although AI is highly effective in technical and moral aspects, there is a perception among students that AI remains limited in conveying the depth of historical spiritual values and Islamic cultural traditions (Raquib et al., 2022). Students believe that human interaction with teachers, as spiritual role models and mentors, is still crucial for transferring complex values such as sincerity, pure intention, and profound spiritual interpretation (Chanifah et al., 2021). Therefore, in the realm of spirituality, AI is best positioned as a complement rather than a replacement for human teachers, especially in the context of the Arabic language, which is closely tied to classical Islamic texts and revelation (X. Huang et al., 2023).

Table 3. Contributions of AI to Students' Spirituality

Main Conclusion	Evidence/Example (Studies/Features)	Practical Implications
AI can support affective and spiritual dimensions, not only cognition	Literature shows AI can be directed to strengthen affective and spiritual aspects (Tan, 2020)	Design AI-based learning with spiritual and character goals, not only academic ones
Islamic-themed Arabic apps can foster religious awareness	Apps include prayer reminders, Qur'anic verses, and etiquette messages before/while studying (Alsharbi et al., 2021)	Enable prayer reminders and short verses/hadith; show etiquette tips before or during lessons
AI content can be kept aligned with Islamic values	AI is configured to avoid non-sharia materials and embed ethical values in each activity (Shamdi et al., 2022)	Use content filters/whitelists; create sharia-compliance rules; add ethics indicators to tasks

Adaptive self-learning, Islamic chatbots, and AR/VR can strengthen moral character.	Studies report that AI-based religious learning (adaptive self-learning, chatbots, AR/VR) improves religious understanding and character (Ruzakki et al., 2024).	Combine adaptive modules with moral messages; use AR/VR to simulate worship and ethical scenarios safely.
Islamic chatbots and AI feedback offer moral support and reflection.	Chatbots give Islamic advice, moral motivation, and reflective prompts when students struggle (Ruzakki et al., 2024).	Provide short advice templates with dalil; add reflection questions; forward complex issues to human teachers.
AI is limited in conveying deep spiritual and cultural traditions.	Students feel AI cannot fully transmit sincerity, pure intention, and deep spiritual interpretation (Raquib et al., 2022; Chanifah et al., 2021).	Use AI only for technical and initial moral support; keep rich value transmission in human-led sessions
AI is complementary; teachers remain spiritual role models.	Students see teachers as main spiritual mentors; AI is a support tool, especially for Arabic, tied to revelation (X. Huang et al., 2023).	Combine AI tools with direct teacher guidance; teachers reinforce intention, sincerity, etiquette, and reading of classical texts.

Source: Processed Data, 2023

Conclusion

Provide the conclusion to your study, and final words on the value of your analysis, research, or paper. Limitations of your study should be addressed. Recommendations for future research related to your topic should also be mentioned.

Based on the results of the literature review, it can be concluded that the implementation of Artificial Intelligence (AI) in Arabic language learning in the digital era makes a significant contribution to improving the quality of education, both in terms of linguistic competence and the development of spiritual intelligence. AI has proven capable of facilitating adaptive, interactive, and contextual learning, while also creating opportunities for integrating Islamic values through features that support learning etiquette and the reinforcement of religiosity. However, the use of AI should not be regarded merely as a technical instrument; rather, it must be directed in alignment with *maqāṣid al-sharī'ah* and the objectives of Islamic education, which emphasize a balance between knowledge and morality.

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