

## The Utilization of Digital Applications (Ngaji.AI) In Improving Students' Ability to Read and Memorize the Qur'an at MTs As'adiyah Gilireng

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**Abstract:** This study aims to examine the use of the Ngaji.AI application to improve students' Qur'anic reading and memorization abilities at Junior High School (MTs) As'adiyah Gilireng. This research is motivated by challenges in Qur'anic learning, including limited learning time, low reading accuracy, and minimal use of digital media in rural madrasahs. The study employs a descriptive qualitative approach, with data collected through observation, interviews, and documentation involving teachers and students. The findings indicate that the use of the Ngaji.AI application has a positive impact on improving reading fluency, accuracy of makhraj and tajwid, and consistency of students' memorization. Artificial intelligence-based features such as automatic correction, real-time feedback, and audio repetition support independent learning while enhancing students' motivation and self-confidence. This study contributes to the growing body of research on AI-based Qur'anic learning.

**Abstrak:** Penelitian ini bertujuan untuk mengkaji pemanfaatan aplikasi Ngaji.AI dalam menstimulasi kemampuan membaca dan menghafal Al-Qur'an peserta didik di Madrasah Tsanawiyah (MTs) As'adiyah Gilireng. Penelitian ini dilatarbelakangi oleh berbagai tantangan dalam pembelajaran Al-Qur'an, antara lain keterbatasan waktu belajar, rendahnya ketepatan bacaan, serta minimnya pemanfaatan media digital di madrasah pedesaan. Penelitian ini menggunakan pendekatan kualitatif deskriptif dengan teknik pengumpulan data berupa observasi, wawancara, dan dokumentasi yang melibatkan guru dan peserta didik. Hasil penelitian menunjukkan bahwa penggunaan aplikasi Ngaji.AI memberikan dampak positif terhadap peningkatan kelancaran membaca, ketepatan makhraj dan tajwid, serta konsistensi hafalan peserta didik. Fitur berbasis kecerdasan buatan, seperti koreksi otomatis, umpan balik real-time, dan pengulangan audio, mendukung pembelajaran mandiri serta meningkatkan motivasi dan kepercayaan diri peserta didik. Penelitian ini memberikan kontribusi terhadap pengembangan kajian pembelajaran Al-Qur'an berbasis kecerdasan buatan.



## **INTRODUCTION**

The Qur'an is the word of Allah SWT, revealed to the Prophet Muhammad SAW through the Angel Jibril as a guide for human life. Reading it is an act of worship, and practicing its teachings leads to happiness in this world and the hereafter. In Q.S. Al-Baqarah/2:121, it is emphasized that those who read the Qur'an as it should be are those who truly believe in it, while those who turn away from it are among the losers. The digital Qur'an is a product of technological advancement that goes hand in hand with the development of human knowledge (Fahmi & Layyinnati, 2025). Its existence has influenced the culture and lifestyle of modern society and opened new spaces for Islamic propagation in cyberspace. Through digital media, the dissemination of Qur'anic knowledge can now transcend geographical boundaries. However, behind these opportunities, challenges, and issues, challenges also arise related to the existence of the Qur'an in digital form (Abdussalam et al., 2021).

Qur'anic learning is fundamentally closely related to human life. Its purpose is to equip individuals to achieve a good life both in this world and the hereafter, because those who study the Qur'an, read it, and practice its contents will be granted ease, smoothness, prosperity, and happiness by Allah SWT. Reading is the activity of understanding texts in order to gain comprehension of the object being read. In the book *Mozaik Ilmu Pengetahuan Melalui Pembelajaran Berbasis Al-Qur'an* (Raya Mangsi & Juniati, 2023). The Qur'an explains the essence of reading, which consists of six elements: reading correctly, reading slowly, reading what is given, starting with the easiest material, reading repeatedly, and listening to others' recitations and following them.

Qur'anic learning at the basic level includes two elements: memorization and reading. Memorizing the Qur'an is a process of remembering in which the memorized material must be perfect, because this knowledge is learned to be memorized, not merely understood. There are two memorization methods: the *talaqqi* method, which involves presenting or reciting newly memorized passages directly before a teacher face-to-face, and the *tikrar* method, which involves repeating phrases or verses of the Qur'an two or more times, either in pronunciation or meaning, for certain purposes (Agoi et al., 2026).

Reading ability is the capacity to see and understand the content of written text (either aloud or silently). The ability to read the Qur'an is an individual's skill in reading the Qur'an properly and correctly according to established rules. To understand meaning, a person must first read; the same applies to the Qur'an. To comprehend the meanings and objectives contained in the Qur'an as a guide for human life, one must first read it (Fitriyah Mahdali, 2020).

The challenges students face in improving their reading and memorization of the Qur'an include limited facilities, which sometimes reduce their motivation to read and memorize it. Based on initial observations at MTs As'adiyah Gilireng, most students were not yet able to read the Qur'an in tartil, in accordance with *tajwid* rules. On the other hand, the minimal use of digital media and the low level of technological literacy among both students and teachers also pose obstacles in the learning process.

In response to these challenges, the use of the Ngaji application is highly relevant to study, especially for comprehensively improving Qur'anic reading and memorization skills. With an interactive and application-based approach, it has the potential not only to improve technical skills such as *makharijul huruf* and *tajwid*, but also to foster motivation and discipline in continuous learning. Initial observations at MTs As'adiyah Gilireng indicate that students' ability to read the Qur'an remains relatively low. Some students are not yet able to pronounce letters correctly according to *tajwid* rules and *makhraj*, while their ability to memorize short verses is also limited (Fitriani Djollong et al., 2024). In addition, the low level of digital literacy among both teachers and students becomes an obstacle in implementing technology-based learning media. These conditions indicate the need for an innovative approach that can effectively and contextually integrate Qur'anic learning with digital technology.

Previous studies have demonstrated that Qur'anic literacy learning significantly influences students' interest in reading the Qur'an (Salihah & Laswi, 2025). Research on the effect of Qur'anic literacy instruction on students' reading interest at SMA Muhammadiyah Parepare found that structured literacy programs positively increase students' motivation and engagement in Qur'anic reading activities. These findings indicate that literacy-based approaches play an important role in strengthening both technical reading skills and intrinsic motivation. However, most previous studies have focused on conventional literacy strategies and have not yet examined the integration of Artificial Intelligence (AI)-based digital applications into Qur'anic learning contexts, particularly in rural madrasahs (Djollong & Sudirman, 2022).

One relevant innovation is the Ngaji.AI application, an Artificial Intelligence (AI)-based platform designed to assist users in reading and memorizing the Qur'an. This application features automatic *tajwid* correction, *tartil* pronunciation, reading evaluation, and an interactive learning system that can be used independently. These features allow students to receive immediate feedback, thereby increasing motivation and reading quality. Field realities indicate that the use of digital applications in Qur'anic learning, especially in rural madrasahs, remains suboptimal. This study confirms that integrating digital technology into Qur'anic learning effectively increases student engagement, motivation, and literacy skills, although challenges such as limited access and teacher preparedness persist (Sani & Khairunnisa, 2025).

This study is designed to examine the use of the Ngaji.AI application to improve students' Qur'anic reading and memorization abilities at MTs As'adiyah Gilireng. Through an interactive, technology-based approach, this application is expected to help students learn to read and memorize the Qur'an in a more enjoyable, flexible manner, in accordance with proper *tajwid* rules. Although various studies on digital-based Qur'anic learning have been conducted, most focus on general applications such as Muslim Pro, Ayat, or conventional audio-visual learning media. Research on AI-based applications such as Ngaji.AI remains very limited, particularly in the context of Islamic educational institutions in rural areas. Most previous studies were conducted in urban schools with adequate technological access and therefore do not yet illustrate how AI-based applications function in madrasahs with limited facilities.

## **The Utilization of Digital Applications (Ngaji.AI) In Improving Students' Ability to Read and Memorize the Qur'an at MTs As'adiyah Gilireng**

The main objective of this study is to describe and analyze in depth how the utilization of the Ngaji.AI digital application can improve students' Qur'anic reading and memorization abilities at MTs As'adiyah Gilireng. This study seeks to explain the form of application implementation in learning activities, including the use of *tajwid* correction features, *makharijul huruf* reading, verse repetition, and automatic evaluation systems provided by artificial intelligence within the application. In addition, this study aims to describe how the Ngaji.AI application functions as a learning medium that supports students' independent practice, helps correct reading errors, improves reading fluency, and strengthens memorization through real-time feedback mechanisms. This study also examines the outcomes of application usage by observing the level of improvement in students' reading and memorization abilities after regularly using the application, both during madrasah learning activities and outside class hours. By examining the real impact of the application, this study is expected to provide a comprehensive picture of Ngaji.AI's effectiveness as a supporting medium for Qur'anic learning and to identify supporting factors and obstacles affecting its success. Furthermore, this study is expected to offer practical recommendations for teachers, madrasahs, and other Islamic educational institutions in developing digital learning strategies aligned with students' needs while remaining grounded in spiritual values and proper etiquette in learning the Qur'an.

### **METHOD**

This research employs a descriptive qualitative approach to systematically understand and describe the implementation of the Ngaji.AI digital application to improve students' Qur'anic reading and memorization abilities (Salmiati et al., 2023). A qualitative descriptive method is used because this study does not seek to measure learning outcomes statistically or compare numerical scores, but rather to explore processes, experiences, meanings, and responses arising from the use of digital technology in Qur'anic learning activities. This approach allows the researcher to gain an in-depth understanding of how Ngaji.AI is integrated into classroom practice, how students interact with the application, and how teachers perceive its role in supporting learning. The focus of this study is not on testing hypotheses or quantitatively determining cause-effect relationships, but on describing the learning phenomena as they naturally occur in the field.

The research was conducted at MTs As'adiyah Gilireng, located in Abbatireng Village, Gilireng District, Wajo Regency, South Sulawesi. The location was selected because the madrasah has begun integrating digital media, particularly the Ngaji.AI application, into Qur'anic learning. This context provides a relevant setting for examining the implementation of AI-based digital learning in Islamic education. The presence of Qur'an teachers and students with diverse reading abilities enables a rich, contextually grounded exploration of the learning process.

The informants in this study consist of one subject teacher, Novia Satriani, S.Pd., and three students: Nur Aisyiah, Farel, and Aditiya. The selection of informants was purposive, based on their direct involvement in using the Ngaji.AI application. The

research was conducted over one month during the even semester of the 2025/2026 academic year.

Documentation in this study was collected directly from documents related to the implementation of the learning process, namely, students' attendance lists, photographs of classroom learning activities, and several students' memorization sheets. The attendance lists were used to identify students' participation in learning activities via the Ngaji.AI application. Photographic documentation served as visual evidence of the classroom learning process. Meanwhile, the students' memorization sheets served as supporting data to observe the development of their Qur'anic reading and memorization practices throughout the learning process. These documents functioned as complementary data to strengthen the findings obtained from observations and interviews (Abd.Muis et al., 2023).

## **RESULT AND DISCUSSION**

### **Result**

#### **The Utilization of the Ngaji.AI Application in Improving Students' Qur'anic Reading and Memorization Ability**

Based on observations, interviews, and documentation conducted at MTs As'adiyah Gilireng, the use of the Ngaji.AI application has a positive impact on students' ability to read and memorize the Qur'an. The learning process integrates the Ngaji.AI digital application as a supporting medium for Qur'anic learning activities, both in class and out of class hours. Initial observations indicate that students' Qur'anic reading ability was still relatively low. Several students had difficulty pronouncing hijaiyah letters accurately according to makharijul huruf and tajwid rules. In addition, students' memorization ability was also limited because most of them depended entirely on teacher guidance and lacked opportunities for independent practice.

Based on classroom observation data, the use of the Ngaji.AI application increased students' enthusiasm and participation in learning. Students showed strong interest in practicing Qur'anic recitation through digital devices because the application provides interactive features such as automatic tajwid correction, audio repetition, and real-time feedback. Interview results with the Qur'an teacher, Novia Satriani (2025), reveal that the Ngaji.AI application significantly assists students in correcting pronunciation errors. Through voice recognition technology, the application automatically analyzes students' recitation and provides direct feedback. As a result, students can immediately recognize and correct mistakes in makhraj and tajwid without waiting for teacher evaluation.

Students also expressed positive responses to the application. Nur Aisyiah explained that the application made learning the Qur'an more interesting and easier to understand because the system directly detected errors in recitation. Similarly, Farel and Aditya reported that the application helped them practice memorization independently at home by repeating verses through the audio feature. The results of the learning evaluation show a clear improvement in students' Qur'anic reading and memorization skills after implementing Ngaji.AI. Before using the application, most students were categorized as having low reading ability. After several weeks of use, the number of

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students in the high-ability category increased significantly, while those in the low-ability category decreased.

The improvement in students' abilities can also be observed across several aspects, including reading fluency, accuracy of makhraj pronunciation, and consistency in memorization. The application's automatic feedback system and audio repetition features enable students to practice independently and repeatedly, thereby strengthening both recitation accuracy and memorization stability.

### **Discussion**

The findings of this study indicate that using the Ngaji.AI application improves students' Qur'anic reading and memorization abilities. These findings can be analyzed through several theoretical perspectives, including constructivist learning theory, digital learning theory, and artificial intelligence-based learning theory. From a constructivist learning theory perspective, learning occurs when students actively construct knowledge through direct experience and interaction with learning resources. The Ngaji.AI application allows students to actively practice Qur'anic recitation, identify errors, and correct their pronunciation independently. This process strengthens meaningful learning because students are directly involved in evaluating their own learning progress.

In the context of digital learning theory, technology serves as a facilitator, expanding access to learning resources and increasing flexibility in the learning process. Digital learning environments provide interactive learning experiences that enable students to receive immediate feedback and engage in self-paced learning. The real-time feedback feature in the Ngaji.AI application aligns with the principles of interactive digital learning, enabling students to recognize mistakes and improve their recitation accuracy instantly. Furthermore, the implementation of Ngaji.AI can also be understood within the framework of Artificial Intelligence (AI) learning theory. Artificial intelligence in education enables adaptive learning systems that respond to individual learners' needs and performance. The voice recognition technology embedded in Ngaji.AI analyzes students' recitation patterns and provides personalized feedback. This adaptive mechanism supports personalized learning, allowing each student to develop reading and memorization skills at their own pace and learning capacity.

These findings are consistent with previous studies that highlight the potential of artificial intelligence to support Qur'anic learning. AI-based learning systems can enhance the effectiveness of tajwid and tahsin learning by automatically detecting errors and providing continuous feedback. Such technological support not only improves technical reading skills but also strengthens students' motivation and engagement in Qur'anic learning. In addition, the findings demonstrate that integrating digital technology into Islamic education can increase students' motivation and learning independence. Students who previously relied entirely on teacher guidance become more confident in practicing independently through digital media. It indicates that technology-based learning environments can complement traditional teacher-centered approaches, creating a more interactive and adaptive learning process.

Therefore, the utilization of the Ngaji.AI application can be considered an innovative learning medium that integrates digital technology and Islamic education. By combining teacher guidance with AI-based digital tools, the learning process becomes more effective, flexible, and responsive to students' individual learning needs.

### **Utilization of the Ngaji.AI Application in Improving Qur'anic Reading and Memorization Abilities of Students**

Ability refers to a person's capacity or competence to act, whether physical or mental. In the *Great Dictionary of the Indonesian Language* (KBBI), ability is defined as capability, proficiency, and strength. Based on this definition, the ability to read the Qur'an can be understood as an individual's skill in reading the Qur'an correctly and properly according to established rules, including accurate pronunciation (makharijul huruf) and compliance with tajwīd principles (Ubaidilah & Rifaldi Z, 2025).

Memorization derives from the Arabic term *al-hifdz*, which means "to preserve" or "to remember." Memorizing the Qur'an involves a structured, repetitive process of internalizing verses so they become firmly embedded in memory. In the learning context, reading accuracy and memorization are interrelated skills, as correct recitation strengthens the quality and stability of memorization. Initial observations at MTs As'adiyah Gilireng revealed that students' Qur'anic reading and memorization abilities were relatively low. Some students were not yet fluent in reading, and several had not fully mastered hijaiyah letters. Errors in pronunciation and inconsistencies with tajwīd rules were still frequently observed. This condition indicates the need for innovative learning strategies that provide continuous guidance and structured practice.

As an Islamic educational institution, MTs As'adiyah Gilireng continuously strives to develop innovative Qur'anic learning models aligned with technological advancement. One such innovation is the utilization of the Ngaji.AI digital application. According to the Qur'an teacher, Novia Satriani (2025), *the application is highly helpful because it provides immediate correction through automatic voice analysis, allowing tajwīd errors to be identified and corrected quickly. It suggests that artificial intelligence can function as an effective learning companion in supporting classroom instruction.*

The utilization of Ngaji.AI can be analyzed through the lens of constructivist learning theory, which emphasizes that learners actively construct knowledge through experience and interaction. The application allows students to practice independently, make mistakes, receive instant feedback, and correct themselves. This active engagement strengthens meaningful learning, as students are directly involved in evaluating and improving their recitation. From the perspective of digital learning theory, technology serves as a facilitator that expands access to learning, increases flexibility in time and place, and provides immediate feedback. One of the core principles of digital learning is *interactive feedback*, which enhances skill acquisition and retention. The real-time correction feature in Ngaji.AI aligns with this principle, as students do not have to wait for teacher evaluation to identify errors.

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Furthermore, within the framework of AI learning theory, artificial intelligence in education functions as an adaptive system that responds to individual learner input. Voice recognition technology embedded in Ngaji.AI enables the system to detect specific pronunciation errors and provide personalized responses. This finding is consistent with previous research on AI-based Qur'anic instruction, which indicates that artificial intelligence tools can enhance the effectiveness of tahsin and tajwid learning through adaptive feedback systems (Ritonga et al., 2026). This supports the concept of *personalized learning*, where instruction adapts to the needs and performance of each learner. Thus, the use of Ngaji.AI is not merely a technical innovation but is theoretically grounded in digital pedagogy and artificial intelligence-based learning principles.

### **Results of Using the Ngaji.AI Application in Improving Students' Ability to Read and Memorize the Qur'an**

Based on the students' attendance data, the number of students in grade VII is 20. During the initial observation, only 17 students were recorded as present. Although not all students attended every session, each meeting showed that students demonstrated high enthusiasm for digital-based learning. This enthusiasm was evident from their readiness to use digital devices, quick responses to teachers' instructions, and eagerness to try and practice the learning features available in the Ngaji.AI application. This condition illustrates that the implementation of digital learning was not only well-received by students but also increased their motivation and active involvement in the learning process.

Initial observation results indicated that the ability to read and memorize the Qur'an among students of MTs As'adiyah Gilireng was still relatively low. Before using Ngaji.AI, students' reading and memorization abilities were categorized as high (5 students), moderate (4 students), and low (11 students). This condition suggests that students' basic Qur'anic reading skills and memorization fluency still require intervention and additional learning support.

The implementation of the Ngaji.AI application in reading and memorization activities for the Qur'an led to a significant improvement in students' abilities. Final evaluation data indicate that the number of students classified in the high-ability category increased to 10 students. In this category, learning activities were focused on Juz 29. Furthermore, the number of students in the moderate-ability category increased to 6, with learning materials focused on surahs in Juz 30. Meanwhile, the number of students in the low-ability category decreased substantially, from 11 students to only 4 students. For this category, educators prioritized strengthening students' mastery of Hijaiyah letters before proceeding to Juz Amma.

This improvement cannot be separated from the features of the Ngaji.AI application, which allow students to practice independently, receive automatic feedback, and repeat recitations whenever necessary. Students reported that the application was particularly helpful in correcting mistakes in makharijul huruf and tajwid, as it provides direct, easily understood corrections. The level of positive student response to the

application was also very high; most students felt more confident, more motivated, and better able to memorize because they could repeat verses flexibly.

Challenges encountered included limitations on certain features available only in the "Pro" version, as well as difficulties some students in the low category had in understanding digital instructions. However, these challenges did not diminish the application's effectiveness in providing additional learning motivation. Teachers also noted that improvements were observed more quickly among students who consistently used the application at home.

Interview results with teachers and students indicate that the use of Ngaji.AI has had a very significant impact on improving students' Qur'anic reading and memorization abilities at MTs As'adiyah Gilireng. Teachers explained that the application began to be used on September 29, 2025, and immediately demonstrated positive contributions to the learning process. According to the teacher, the use of this application was motivated by the desire to direct students' technology usage toward more beneficial purposes. Previously, most students were accustomed to using smartphones primarily for entertainment. Therefore, the utilization of Ngaji.AI represents an effort to optimize technology as a constructive learning medium.

The teacher explained that the application provides automatic evaluation of tajwīd and makhraj recitation, making it easier for students to correct mistakes immediately without waiting for teacher assessment. In addition, students became more motivated to practice independently outside lesson hours because the application provides instant, consistent guidance. The teacher stated that after several weeks of use, students demonstrated much better reading fluency and increasingly accurate letter pronunciation. In terms of memorization, students were able to repeatedly review verses using the application's audio features, resulting in stronger, more structured memorization. Moreover, their confidence increased when submitting memorization in front of the teacher.

Students' responses to the application were also very positive and became a key factor in the success of Ngaji.AI's use. Nur Aisyiah, a seventh-grade student, stated that the application made her more enthusiastic about learning because of its attractive and easy-to-understand interface. She felt helped because tajwīd errors were immediately detected, allowing her to correct her recitation independently. She admitted that she could memorize two to four verses per day thanks to the convenience provided by the application.

Another student, Farel, revealed that the application helped him study even when there was no teacher at home. He experienced significant improvement, especially because the application directly assessed tajwīd errors. He mentioned that his memorization became more organized and stable because he could repeat verses at any time. Similarly, Aditya stated that the Ngaji.AI application made him more diligent in reading the Qur'an. He felt that the application functioned like a teacher who continuously guided him. The voice repetition feature greatly facilitated his memorization of new verses, enabling him to add approximately two to four verses each day.

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Ngaji.AI not only had a positive impact on the technical aspects of reading ability but also helped build learning discipline, increase motivation, and encourage students to interact more frequently with the Qur'an. Teachers found it easier to monitor students' progress, while students felt more comfortable with independent learning. Technology and teacher guidance complemented each other, making the learning process more effective and meaningful. Thus, the use of the Ngaji.AI application has proven to be an innovative medium that accelerates the improvement of students' Qur'anic reading and memorization abilities at MTs As'adiyah Gilireng.

Based on these interviews, it can be understood that Ngaji.AI not only positively impacts technical reading skills, but also helps build learning discipline, increase motivation, and encourage students to interact more frequently with the Qur'an. Teachers benefit from easier monitoring of students' progress through the application's digital data, while students feel more comfortable with independent learning. Technology and teacher guidance complement each other, making the learning process more effective and meaningful. Thus, the use of the Ngaji.AI application has proven to be an innovative tool that accelerates improvements in students' Qur'anic reading and memorization abilities at MTs As'adiyah Gilireng.

Table 1.  
Comparison of Students' Abilities Before and After Using Ngaji.AI

<b>Ability</b>	<b>Before Using Ngaji.AI</b>	<b>After Using Ngaji.AI</b>
Reading fluency	Some students were not yet fluent, several had difficulty distinguishing hijaiyah letters and frequently made tajwīd errors	Reading became more fluent; tajwīd errors were less frequent and students showed greater confidence in recitation
Accuracy of makhraj	Frequent mispronunciation of letters and inconsistency in articulation	Automatic voice feedback supported gradual improvement in articulation accuracy and pronunciation awareness Students were able to memorize 1–4 verses per day depending on verse difficulty, with more independent repetition through the application
Memorization	Students generally memorized 1–2 verses per week and often depended fully on teacher supervision	

The table shows a notable improvement across all aspects of Qur'anic reading and memorization abilities. This improvement is influenced by Ngaji.AI's automatic correction features, audio guidance, and independent practice patterns.

## CONCLUSION

This study concludes that the use of the Ngaji.AI digital application is effective in improving students' Qur'anic reading and memorization abilities at MTs As'adiyah Gilireng. The presence of automatic recitation correction features, AI-based makhraj and tajwid analysis, and real-time feedback makes the learning process more adaptive, accurate, and responsive to individual student needs. The application successfully bridges the limitations of conventional learning that relies solely on direct teacher correction, thereby providing students with a more flexible, independent, and sustainable learning environment.

Through the application, students demonstrated significant improvements in hijaiyah letter pronunciation accuracy, reading fluency, and the application of tajwid rules. In terms of memorization, audio repetition features, voice recording, and automatic evaluation systems strengthened the muraja'ah process, resulting in more stable and structured memorization. Students also experienced increased motivation to learn, confidence, and a greater frequency of interaction with the Qur'an, both at school and outside instructional hours. Teachers benefited from easier monitoring of student progress through the application's digital data, enabling more focused guidance.

This study emphasizes that the integration of artificial intelligence technology in Qur'anic learning can accelerate improvements in recitation and memorization quality, provided that its use is accompanied by teacher supervision and supported by adequate digital literacy and infrastructure readiness. Therefore, Ngaji.AI can serve as a relevant, innovative, and practical learning platform for Islamic educational institutions, particularly in addressing challenges in Qur'anic learning in the digital era.

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