



The Use of Audio Qur'an Media via Smart Boards to Improve the Fluency of Memorization Among Fourth-Grade Students at SDIT Ibnu Rajab, Turikale Subdistrict, Maros Regency

Sumarni¹, Muhammad Warif², Mumtahanah³, Muh. Ilham⁴, Nurul Auliah⁵

Institut Agama Islam Darud Dakwah Wal-Irsyad Maros, Indonesia¹⁻⁵

Email Korespondensi: 2231040sumarni@gmail.com, warif73@gmail.com,
mumhana299@gmail.com, langberkah92@gmail.com, nurulauliah@staiddimaros.ac.id

Article received: 05 Mei 2026, Review process: 12 Mei 2026

Article Accepted : 29 Mei 2026, Article published: 26 Juni 2026

ABSTRACT

This study aims to determine the use of Qur'an audio media through Smart Board in the tahfidz learning process, its effectiveness in improving students' memorization fluency, as well as obstacles and challenges in its implementation. The selection of SDIT Ibnu Rajab, Turikale District, Maros Regency is based on the use of Qur'an audio media through Smart Board in improving students' memorization fluency. In addition to having a superior Qur'an tahfidz program, this school has also integrated learning technology to support improving the quality of memorization, accuracy of makhraj, and tajwid of students. This research is a qualitative research with a field research design using a case study approach. The data sources in this study consist of two types. First, primary data which is the result of interviews with the principal, tahfidz teachers and fourth grade students of SDIT Ibnu Rajab who are directly involved in tahfidz learning using Smart Board. Second, secondary data in this study were obtained from various relevant sources such as books, journals, and previous research related to Qur'an audio media, smart boards, and Qur'an memorization fluency. In qualitative research, the researcher acts as the primary instrument, planning, collecting, analyzing, and reporting the research results directly in the field through interactions with informants. Data collection techniques include observation, interviews, and documentation. Data analysis involves data collection, data reduction, data presentation, and conclusion drawing. Data validity is tested through source triangulation, technical triangulation, and time triangulation. The results of the study indicate that: (1) the use of audio Quran media via Smart Boards can increase student motivation, attention, and engagement in memorization; (2) audio Quran media via Smart Boards is effective in improving student memorization fluency because it helps students listen to and imitate Quran recitations more accurately, thus improving accuracy in pronunciation, tajweed, and memorization fluency; and (3) obstacles identified include limited learning time, suboptimal utilization of Smart Board features, and the need for consistent teacher support to ensure effective and sustainable use of the media.

Keywords: Audio Qur'an Media, Smart Board, Tahfidz, Memorization Fluency.

ABSTRAK

Penelitian ini bertujuan untuk mengetahui penggunaan media audio Qur'an melalui Smart Board dalam proses pembelajaran tahfidz, efektivitasnya dalam meningkatkan kelancaran hafalan siswa, serta hambatan dan tantangan dalam penerapannya. Pemilihan SDIT Ibnu Rajab Kec. Turikale Kab. Maros didasarkan pada penggunaan media audio Qur'an melalui

Smart Board dalam meningkatkan kelancaran hafalaan siswa. Selain memiliki program unggulan tahfidz Al-Qur'an, sekolah ini juga telah mengintegrasikan teknologi pembelajaran untuk mendukung peningkatan kualitas hafalan, ketepatan makhraj, dan tajwid siswa. Penelitian ini merupakan penelitian kualitatif dengan desain penelitian lapangan menggunakan pendekatan studi kasus. Sumber data dalam penelitian ini terdiri dari dua jenis. Pertama data primer yang hasil wawancara penelitian ini terdiri atas kepala sekolah, guru tahfidz dan siswa kelas IV SDIT Ibnu Rajab yang terlibat langsung dalam pembelajaran tahfidz menggunakan Smart Board. Kedua data sekunder dalam penelitian ini diperoleh dari berbagai sumber yang relevan seperti buku, jurnal, dan penelitian terdahulu yang berkaitan dengan media audio qur'an, smart board, serta kelancaran hafalan Al-Qur'an. Dalam penelitian kualitatif, peneliti sendiri berperan sebagai instrumen utama karena peneliti yang merencanakan, mengumpulkan data, menganalisis, dan melaporkan hasil penelitian secara langsung di lapangan melalui interaksi dengan informan. Teknik pengumpulan data dilakukan melalui observasi, wawancara, dan dokumentasi. Analisis data dilakukan melalui pengumpulan data, reduksi data, penyajian data, dan penarikan kesimpulan, sedangkan keabsahan data diuji melalui triangulasi sumber, triangulasi teknik, dan triangulasi waktu. Hasil penelitian menunjukkan bahwa: (1) penggunaan media audio Qur'an melalui Smart Board mampu meningkatkan motivasi belajar, perhatian, dan keterlibatan siswa dalam pembelajaran tahfidz; (2) media audio Qur'an melalui Smart Board efektif dalam meningkatkan kelancaran hafalan siswa karena membantu siswa mendengarkan dan menirukan bacaan Al-Qur'an dengan lebih tepat sehingga ketepatan makhraj, tajwid, dan kelancaran hafalan mengalami peningkatan; dan (3) hambatan yang ditemukan meliputi keterbatasan waktu pembelajaran, belum optimalnya pemanfaatan fitur Smart Board, serta perlunya pendampingan guru secara konsisten agar penggunaan media dapat berjalan secara efektif dan berkelanjutan.

Kata Kunci: *Media Audio Qur'an, Smart Board, Tahfidz, Kelancaran Hafalan.*

INTRODUCTION

Qur'an memorization (tahfidz) is one of the key programs in Islamic education, aimed at nurturing a generation capable of reading, memorizing, understanding, and applying the Qur'an in daily life. At the elementary school level, success in Quran memorization is determined not only by the ability to memorize verses but also by the accuracy of pronunciation (makhraj), recitation rules (tajwid), and fluency in reading. Therefore, learning strategies and media are needed that can effectively support the memorization process in accordance with the characteristics of the students.

Advances in information and communication technology have brought about changes in the world of education, including in Islamic Religious Education. The use of technology as a learning medium can help teachers create a more interactive, engaging, and meaningful learning environment. One technology that can be used in Quran memorization instruction is the Smart Board, which allows for the integration of audio and visual elements into a single learning process. Through this medium, students can listen to the recitation of the Quran while simultaneously viewing the text of the verse being studied, making the memorization process easier and more focused.

From the perspective of multimedia learning theory, Mayer, (2009) explains that students find it easier to understand and remember information when the material is presented through a combination of audio and visual channels simultaneously. The integration of audio media from the Qur'an with the Smart Board allows students to receive auditory and visual stimuli simultaneously, which can help improve their attention, comprehension, and retention of the material being studied.

The phenomenon of students' poor ability to read and memorize the Qur'an remains a concern for various parties. In 2024, the Ministry of Religious Affairs of the Republic of Indonesia launched the "Ayo Mengaji" Movement as an effort to strengthen Qur'anic literacy in educational settings, as there are still students who are unable to read the Qur'an properly in accordance with the rules of tajwid. On the other hand, the development of digital technology has led some children to use electronic devices more for entertainment than for learning activities. This situation highlights the need for educational innovations that can utilize technology in an educational manner to improve the quality of Qur'an instruction, particularly in the areas of memorization, makhraj, and tajwid (Kementerian RI, 2024).

Based on the results of preliminary observations conducted at SDIT Ibnu Rajab in Turikale Subdistrict, Maros Regency, Quran memorization instruction has utilized audio recordings of the Quran via the Smart Board. However, some students still face difficulties in maintaining the fluency of their recitation, the accuracy of their pronunciation (makhraj), and proper recitation rules (tajwid). Additionally, the use of the Smart Board in Quran memorization instruction has not been fully optimized, as it is more often used as an audio player rather than as an interactive learning tool. SDIT Ibnu Rajab in Turikale Subdistrict, Maros Regency, was selected based on its implementation of audio Qur'an media via Smart Boards in tahfidz instruction. In addition to having a flagship Qur'an memorization program, this school has also integrated learning technology to support improvements in students' memorization quality, accuracy of articulation points, and tajwid.

Previous research has shown that the use of audio media has a positive impact on students' ability to memorize the Qur'an. A study conducted by Madeyana, (2020) shows that the use of audio media can improve elementary school students' ability to memorize the Qur'an. Rusli, (2023) found that MP3-based audio recordings of the Qur'an have an effect on students' ability to memorize the Qur'an. In addition, Zahrotul, dkk., (2025) concluded that technopedagogy-based audio media can improve students' motivation to learn and their ability to memorize in tahfidz instruction.

Nevertheless, most previous studies have focused on the use of simple audio media such as MP3s, murottal audio, and Android-based applications. Furthermore, these studies were primarily conducted in Islamic boarding schools and madrasahs. To date, research specifically examining the use of Qur'an audio media integrated with Smart Boards in tahfidz instruction at Islamic elementary schools remains limited. Consequently, there is a research gap regarding the use of Smart Boards as audiovisual media to improve the fluency of memorization, the accuracy of makhraj, and tajwid among elementary school students.

The novelty of this study lies in its examination of the use of audio media featuring the Qur'an, integrated with a Smart Board, as an audiovisual learning tool in the Qur'an memorization instruction of elementary school students. This study not only examines the use of audio media as a means of listening to Qur'anic recitations but also investigates how the integration of audio and visual elements via the Smart Board contributes to improving the fluency of memorization, the accuracy of makhraj and tajwid, as well as student engagement in the Qur'an memorization learning process.

Based on the above description, this study aims to examine the use of audio Qur'an media via Smart Board in the Qur'an memorization (tahfidz) instruction of fourth-grade students at SDIT Ibnu Rajab in Turikale Subdistrict, Maros Regency; to analyze the effectiveness of its use in improving students' fluency in memorization; and to identify the obstacles and challenges encountered in its implementation. This study is expected to contribute to the development of technology-based Qur'an memorization instruction and serve as a reference for teachers and educational institutions in optimizing the use of instructional media to improve the quality of students' Qur'an memorization.

METHOD

This study employs a qualitative research design using a case study approach. Qualitative research was chosen because it aims to deeply understand and describe the use of audio Qur'an media via Smart Board in improving the fluency of fourth-grade students' memorization at SDIT Ibnu Rajab in Turikale Subdistrict, Maros Regency, based on their experiences, perceptions, and conditions observed in the field. The research design used is a case study. The case study design was chosen because the research focuses on a specific case, namely the use of audio Qur'an media via Smart Boards in tahfidz instruction for fourth-grade students at SDIT Ibnu Rajab. Through this design, the researcher can obtain a comprehensive picture of the process of using the media, its effectiveness in improving students' memorization fluency, as well as the obstacles and challenges encountered during its implementation. The study was conducted at SDIT Ibnu Rajab in Turikale Subdistrict, Maros Regency. The research subjects consisted of the principal, tahfidz teachers, and fourth-grade students who were directly involved in the use of audio Qur'an media via the Smart Board. Informants were selected using purposive sampling, which involves selecting informants who are considered knowledgeable and directly involved in the implementation of tahfidz instruction using this medium.

The data sources in this study consist of two types. First, primary data from interviews conducted for this study, involving the principal, tahfidz teachers, and fourth-grade students at SDIT Ibnu Rajab who are directly involved in tahfidz learning using a Smart Board. Second, secondary data in this study was obtained from various relevant sources, such as books, journals, and previous studies related to audio Qur'an media, Smart Boards, and the fluency of Qur'an memorization. Data collection techniques included observation, interviews, and documentation. Observation was used to directly observe the tahfidz learning process using audio

Qur'an media via a Smart Board. Interviews were conducted with the school principal, tahfidz teachers, and students to obtain more in-depth information regarding the use, effectiveness, and barriers to using this media. Meanwhile, documentation was used to supplement the data with photographs of activities, learning materials, and other supporting documents. The data analysis technique employed the Miles and Huberman model, which includes data collection, data reduction, data presentation, and drawing conclusions Miles, dkk., (2014). Data validity was tested using source triangulation, methodological triangulation, and temporal triangulation to ensure that the data obtained were more valid and reliable.

RESULTS AND DISCUSSION

The results of the study show that the use of audio recordings of the Qur'an via a Smart Board in the tahfidz instruction of fourth-grade students at SDIT Ibnu Rajab in Turikale Subdistrict, Maros Regency, has a positive impact on students' learning motivation, attention, and engagement in the learning process. Based on the observation results, students appeared more focused and enthusiastic when listening to the recitation of the Qur'an via the Smart Board. Audio repetition helped students improve the accuracy of their makhraj and tajwid, as well as enhance the fluency of their memorization. In addition, students were more active in following and repeating the recitation demonstrated by the teacher, making the memorization process more effective.

The Use of Audio Qur'an Media via Smart Boards in the Qur'an Memorization Instruction for Fourth-Grade Students at SDIT Ibnu Rajab

The use of audio media of the Qur'an via the Smart Board in tahfidz instruction at SDIT Ibnu Rajab is carried out by combining murottal audio with the display of Qur'anic verses on the Smart Board screen. This medium is used as a tool to help students listen to, pay attention to, and repeat the verses they are currently studying. In practice, teachers apply the talaqqi, tiktirar, and muroja'ah methods so that students can follow the recitation in a gradual and structured manner.

The principal of SDIT Ibnu Rajab (KS) explained that the use of Smart Boards is one of the school's efforts to support technology-based tahfidz learning, namely "Smart Board digunakan untuk membantu siswa dalam pembelajaran tahfidz karena siswa dapat mendengarkan bacaan Al-Qur'an sekaligus melihat ayat yang ditampilkan pada layar sehingga proses pembelajaran lebih mudah diikuti." (From an interview with KS, 2026).

The Tahfidz teacher, GT, also explained that the use of audio recordings of the Qur'an via the Smart Board involves playing a murottal recording, after which the students listen and repeat the recitation they hear, namely "Saat pembelajaran berlangsung, audio murottal diputar melalui Smart Board kemudian siswa mengikuti bacaan tersebut sambil memperhatikan ayat yang ditampilkan pada layar. Setelah itu siswa mengulang bacaan secara bersama-sama maupun secara individu." (From an interview with GT, 2026).

This was also corroborated by the results of interviews with students. GBR stated: "Saya lebih mudah mengikuti hafalan karena bisa mendengar bacaan dan melihat ayatnya langsung di layar." (From an interview with GBR, 2026).

In line with that, AQL stated: "Kalau menggunakan Smart Board, bacaan lebih jelas didengar dan ayat yang dihafal lebih mudah diikuti." (From an interview with AQL, 2026).

Based on the above discussion, it can be concluded that the use of Qur'an audio media via the Smart Board in tahfidz instruction at SDIT Ibnu Rajab is carried out by combining murottal audio with the display of Qur'anic verses on the Smart Board screen, supported by the talaqqi, tikkar, and muroja'ah methods. The use of this media helps students listen to, view, and repeat the recitation of the Qur'an simultaneously during the learning process.

The findings indicate that the use of audio media featuring the Qur'an via the Smart Board can create a more interactive and engaging learning experience compared to the use of conventional media. This aligns with Mayer's Multimedia Theory, which explains that learning is more effective when information is presented through a simultaneous combination of audio and visual elements. Through the integration of audio recitations and the display of verses on the Smart Board, students receive simultaneous auditory and visual stimuli, thereby optimizing their attention, understanding, and engagement in the Qur'an memorization process (Mayer, 2009). These findings also support the research Qader, (2021) which states that the use of Smart Boards can increase student participation and focus because they provide a more interactive and meaningful learning experience. Thus, the use of audio Qur'an media via Smart Boards has become an effective teaching innovation in supporting the process of memorizing the Qur'an in elementary schools (Qader, 2021).

The high level of student enthusiasm for tahfidz learning using the Smart Board indicates that learning media that combine audio and visual elements can create a more engaging and meaningful learning experience. This finding is consistent with Mayer's Multimedia Theory, which states that learners find it easier to understand and remember information when the material is presented through a combination of auditory and visual channels simultaneously (Mayer, 2009). In this study, the audio recitation helped students learn how to read the verses correctly, while the display of the verses on the Smart Board helped them follow and understand the order of the verses they were memorizing. The results of this study also support the findings Qader, (2021) which states that the use of Smart Boards can increase student motivation and participation because they enable a more interactive learning experience. Thus, the use of audio recordings of the Qur'an via Smart Boards not only increases students' interest in learning but also supports a more effective process of memorizing the Qur'an. (Qader, 2021)

These findings indicate that the integration of audio and visual elements in the Smart Board provides a more effective learning experience than learning that relies on only one medium. This is consistent with Mayer's Multimedia Theory, which explains that learning is most effective when information is presented through both auditory and visual channels simultaneously. Through the combination of

audio and visual displays of the verses, students receive a more comprehensive learning stimulus, thereby increasing their attention and engagement in the learning process (Mayer, 2009).

The results of this study also support the findings of Zahrotul Inayah, dkk., (2025) which states that the use of technology-based audio media can increase students' motivation and participation in tahfidz learning. However, this study differs in that the audio media used is integrated with a Smart Board, so students not only listen to the recitation of the Qur'an but also see the text of the verses directly. Thus, the use of Qur'anic audio media via a Smart Board can serve as an effective alternative learning medium to support the tahfidz learning process in elementary schools (Zahrotul Inayah, 2025).



Figure 1: Use of Audio Qur'an Media via a Smart Board

The Effectiveness of Using Audio Qur'an Media via Smart Boards in Improving the Fluency of Memorization Among Students at SDIT Ibnu Rajab

Based on interviews with Quran memorization teachers, the use of audio recordings of the Quran via the Smart Board has had a positive impact on students' memorization progress. The teachers explained that students find it easier to memorize verses because they can listen to the recitation repeatedly throughout the learning process. In addition, students find it easier to follow the sequence of verses and correct their recitation errors because they are provided with examples of correct recitation through the murottal audio.

The Qur'an Memorization Teacher (GT) explained that using audio recordings of the Qur'an via the Smart Board helps students more easily memorize and review what they have memorized, namely "Siswa lebih mudah menghafal ketika mendengarkan audio murottal melalui Smart Board karena mereka bisa mengikuti bacaan yang benar dan mengulanginya beberapa kali selama pembelajaran berlangsung." (Excerpt from an interview with GT, 2026).

In addition, GT also explained that after using this medium, most students showed improvement in the fluency of their recitation and the accuracy of their reading, namely "Beberapa siswa yang sebelumnya masih sering terhenti saat menyeter hafalan mulai lebih lancar dan lebih percaya diri ketika membaca hafalannya." (Excerpt from an interview with GT, 2026).

Meanwhile, PTR stated: "Saya lebih mudah mengikuti urutan ayat dan lebih lancar saat menyeter hafalan karena sering mendengarkan audio yang diputar di kelas." (Interview with PTR, 2026).

Based on the above discussion, it can be concluded that the use of audio media for the Qur'an via the Smart Board is effective in improving the fluency of fourth-grade students at SDIT Ibnu Rajab in their Qur'an memorization. This effectiveness is evident in the students' improved ability to recall verses, follow the memorization sequence, and enhance the fluency and accuracy of their Qur'an recitation.

The improvement in students' memorization fluency occurred because the audio Quran media via the Smart Board provided students with the opportunity to practice recitation consistently and in a focused manner. This finding is consistent with Information Processing Theory, which explains that information that is received and repeated continuously is more easily stored in long-term memory. Through the audio recitation played repeatedly, students receive auditory stimuli that help strengthen their memory of the verses they are memorizing. The results of this study also support research Madeyana, (2020) and Rusli, (2023) which states that audio media plays an important role in improving the ability to memorize the Qur'an because it helps students listen to, imitate, and repeat the recitation more effectively. Thus, the use of Qur'an audio media via the Smart Board not only helps students memorize verses but also improves the quality of their memorization in terms of fluency, accuracy of recitation, and retention of the memorized material (Madeyana, 2020).

The results of the observation showed that after using the Quran audio media via the Smart Board, most students were able to recite their memorized verses more fluently, reduced pauses while reciting, and demonstrated improvement in the accuracy of letter articulation points and tajwid. Students also reported that they found it easier to remember verses when listening to audio recitations compared to simply reading from the Quran on their own. This improvement in recitation fluency resulted from the continuous repetition of the text facilitated by the audio Quran. This repetition helped students reinforce their memorization and made it easier to recall the verses they had learned. These findings align with Atkinson and Shiffrin's Information Processing Theory, which explains that information that receives attention and is repeatedly reinforced is stored in long-term memory, making it easier to recall when needed (Budi, dkk., 2022).

In terms of indicators of fluency in reciting the Qur'an from memory, the improvements identified in this study were evident in the accuracy of verse sequencing, fluency in recitation without frequent pauses, accuracy in the articulation points of letters and tajwid, and a reduction in recitation errors. These findings indicate that the use of Qur'anic audio media via the Smart Board not only helps students memorize verses but also improves the quality of their memorization.

The results of this study are consistent with the findings of Madeyana, (2020) which found that audio media can improve students' ability to memorize the Qur'an. This study also supports the findings of Rusli, (2023) which states that audio recordings of the Qur'an (murottal) help improve memorization skills through structured repetition of recitation. The difference is that this study used a Smart

Board as an interactive audiovisual medium, so the learning process engaged more senses and provided a more engaging learning experience for students. Thus, audio recordings of the Qur'an delivered via the Smart Board proved effective in improving the fluency of memorization among fourth-grade students at SDIT Ibnu Rajab in Turikale Subdistrict, Maros Regency (Rusli, 2023).

Obstacles and Challenges in Using Audio Qur'an Media via Smart Boards in Tahfidz Instruction at SDIT Ibnu Rajab

Based on interviews with Quran memorization teachers, the challenges encountered in using audio Quran media via the Smart Board include limited class time, differences in students' memorization abilities, and technical issues with the learning devices. The teachers explained that limited class time prevents them from maximizing the memorization review process for all students. In addition, students' varying abilities require teachers to provide additional support to those who are still struggling with memorization.

The Tahfidz Teacher (GT) explained that the available class time is often insufficient to provide all students with optimal memorization practice, namely "Waktu pembelajaran yang terbatas membuat proses pengulangan hafalan belum bisa dilakukan secara maksimal kepada semua siswa dalam satu pertemuan." (From an interview with GT, 2026).

In addition, GT also explained that students' varying abilities pose a unique challenge in the tahfidz learning process, namely "Kemampuan hafalan siswa berbeda-beda. Ada yang cepat mengikuti hafalan, tetapi ada juga yang memerlukan bimbingan dan pengulangan lebih banyak." (From an interview with GT, 2026).

The principal also noted that the use of Smart Boards requires adequate facilities and proper maintenance to ensure they can be used optimally in the classroom, namely "Penggunaan Smart Board membutuhkan perawatan dan kesiapan perangkat agar dapat digunakan dengan baik selama proses pembelajaran berlangsung." (From an interview with KS, 2026).

Interviews with students revealed that some students still have difficulty maintaining their concentration during class. GBR stated that "Kadang-kadang saya masih sulit fokus ketika menghafal jika suasana kelas ramai." (From an interview with GBR, 2026).

Meanwhile, AQL and PTR said they still need guidance from their teachers when they come across verses that are difficult to memorize.

Based on the above discussion, it can be concluded that the obstacles and challenges in using audio Qur'an media via Smart Boards in tahfidz instruction include limited instructional time, variations in students' memorization abilities, the need for ongoing teacher guidance, and technical issues with the instructional devices. Nevertheless, the use of audio Qur'an media via Smart Boards can still support the Qur'an memorization learning process if backed by effective learning management and optimal teacher guidance.

The findings indicate that the success of using audio media of the Qur'an via the Smart Board is influenced not only by the quality of the media used but also by factors such as learning time, student characteristics, and the availability of

supporting resources. Time constraints have prevented the processes of *tikrar* and *muroja'ah* from being carried out to their fullest potential, even though repetition is a key factor in maintaining the quality of Qur'an memorization. Furthermore, differences in student abilities indicate that the use of technology-based learning media still requires intensive guidance and supervision from teachers to ensure that learning objectives are optimally achieved. These findings are consistent with the opinion of Amna, dkk., (2024) which states that success in memorizing the Qur'an is influenced by students' internal factors, teacher support, and a conducive learning environment. Thus, the use of Qur'anic audio media via the Smart Board must be supported by effective time management and learning strategies capable of accommodating differences in students' abilities (Amna Rahanyamtel, 2024).

The results of the observations also showed that not all students were able to maintain their focus throughout the lesson. Some students still needed guidance and motivation from the teacher to stay focused while listening to the audio recitation and following along with the text displayed on the Smart Board. According to the researcher, these obstacles indicate that the success of using learning media is influenced not only by the technology employed but also by students' internal and external factors. Factors such as concentration, motivation to learn, the intensity of review (*muroja'ah*), and teacher support play a crucial role in determining the success of students' memorization.

Furthermore, the technical difficulties that arose demonstrate that the Smart Board serves as a supplementary learning tool rather than a replacement for the teacher's role. Therefore, teachers remain the primary factor in guiding the *tahfidz* learning process so that learning objectives can be optimally achieved. Although there were several obstacles, the research results show that the benefits of using Qur'an audio media via the Smart Board outweigh the challenges faced. Therefore, this medium is suitable for use as an innovation in *tahfidz* learning that can improve the fluency of elementary school students' Qur'an memorization.

CONCLUSION

(1) The use of audio media of the Qur'an via a Smart Board in the *tahfidz* instruction for fourth-grade students at SDIT Ibnu Rajab is implemented by combining audio recitations (*murottal*) with the display of Qur'anic verses on the Smart Board screen, supported by the *talaqqi*, *tikrar*, and *muroja'ah* methods. The use of this media helps students listen, view, and repeat the recitation simultaneously, making the learning process more interactive and engaging, and helping to improve students' focus during the *tahfidz* learning process. (2) The use of audio Qur'an media via the Smart Board has proven effective in improving the fluency of students' memorization. This effectiveness is evident in the students' improved ability to recall the sequence of verses, the fluency of their recitation, and the accuracy of their pronunciation (*makharijul huruf*) and *tajwid*. Repeating the recitation through audio *murottal* helps students reinforce their memorization and facilitates the process of recalling verses they have already learned. (3) The use of Quran audio media via the Smart Board still faces several obstacles, including limited learning time, differences in students' memorization abilities, and technical

issues with the learning devices. Nevertheless, these obstacles do not diminish the benefits of using audio Qur'an media via the Smart Board in tahfidz instruction. Therefore, more effective time management, ongoing teacher guidance, and the optimization of learning resources are necessary so that the use of audio Qur'an media via the Smart Board can yield maximum results in improving the quality of students' Qur'an memorization.

ACKNOWLEDGMENTS

The author would like to express gratitude to the principal of SDIT Ibnu Rajab in Turikale Subdistrict, Maros Regency, as well as all the teachers and students who granted permission and assisted with the research process. The author would also like to thank the academic advisor, family, and everyone who provided support during the preparation of this research.

LIST OF REFERENCES

- Amna Rahanyamtel, B. S. (2024). *Peran Guru Tahfidz dan Orang Tua Dalam Meningkatkan Motivasi Muraja'ah Hafalan Al-Qur'an Pada Siswa Kelas IX SMP Islam Terpadu (IT) As-Salam Fakfak*. <https://ejournal.iainsorong.ac.id/index.php/Transformasi/article/view/1639>
- Budi, I. S. (2022). *Teori Pemrosesan Informasi dalam Model Pembelajaran di SD/ MI*. <https://jurnalalkhairat.org/ojs/index.php/fikrotuna/article/view/457>
- Inayah, Zahrotul, M. I. (2025). *Media Audio dalam Pembelajaran Tahfidz: Inovasi Technopedagogy di Lembaga Pendidikan Islam*. <https://ejournal.yayasanpendidikandzurriyatulquran.id/index.php/ihsan/article/view/1686>
- Madeyana. (2020). *Penggunaan Media Audio Terhadap Peningkatan Kemampuan Menghafal Al-Qur'an Peserta Didik Sekolah Dasar Islam Terpadu (Sdit) Bina Insan Parepare. Penggunaan Media Audio Terhadap Peningkatan Kemampuan Menghafal Al-Qur'an Peserta Didik Sekolah Dasar Islam Terpadu (Sdit) Bina Insan Parepare*, 53(9), 1689–1699. <https://repository.iainpare.ac.id/id/eprint/1253/1/17.0211.027.pdf>
- Matthew B. Miles, A. Michael Huberman, & J. S. (2014). *Data Analysis A Methods Sourcebook*. https://books.google.co.id/books?id=p0wXBAAQBAJ&pg=PR5&hl=id&source=gbs_selected_pages&cad=1#v=onepage&q&f=false
- Mayer, R. E. (2009). *Multimedia Learning*. <https://www.cambridge.org/core/books/multimedia-learning/7A62F072A71289E1E262980CB026A3F9>
- Qader, M. A. (2021). *The Role of Interactive Whiteboards for Enhancing Teaching and Learning in Higher Education*. <https://www.semanticscholar.org/reader/6c593c111b887403e91591c36f0994f83ccfb6e6>
- RI, K. A. (2024). *Perkuat Literasi Al-Qur'an, Kemenag Galakkan Gerakan Ayo Mengaji di Sekolah*. <https://kemenag.go.id/en/nasional/perkuat-literasi-al-qur-an-kemenag-galakkan-gerakan-ayo-mengaji-di-sekolah-3XjR>

- Rusli, D. M. (2023). *Pengaruh Media Audiu Murattal Berbasis MP3 Terhadap Kemampuan Menghafal Al-Qur'an Santri Kelas VII MTs Pondok Pesantren Yasrib Lapajung Watansoppeng*.
<https://repository.iainpare.ac.id/id/eprint/5428/1/19.1100.032.pdf.1100.032.pdf>
- Zahrotul Inayah, M. I. (2025). *Media Audio dalam Pembelajaran Tahfidz: Inovasi Technopedagogy di Lembaga Pendidikan Islam*.
<https://ejournal.yayasanpendidikandzurriyatulquran.id/index.php/ihsan/article/view/1686>