OPEN ACCES

Analysis of the Role of Learning Facilities in Improving Regular Students' Understanding of Tahsin at SMA Muhammadiyah 2 Medan

Zulpirandi Nainggolan[1]✉, Zuliana[2]

[1,2]Universitas Muhammadiyah Sumatera Utara, Medan, Indonesia

Emaiil: zulpirandi@gmail.com[1], zuliana@umsu.ac.id[2]

ABSTRACT

This study aims to analyze the role of learning facilities in improving the understanding of tahsin among regular students at SMA Muhammadiyah 2 Medan. The research employed a descriptive qualitative method with a field study approach. Data collection techniques included observation, interviews, and document analysis. Observations were conducted directly to assess the condition of facilities supporting tahsin, such as classrooms, standardized Qur'anic manuscripts, and learning media. In-depth interviews were carried out with students, tahsin teachers, and school administrators to obtain a comprehensive overview of the effectiveness of the available facilities. Document analysis examined school policies and supporting data related to Qur'anic learning. The findings reveal that SMA Muhammadiyah 2 Medan has provided relatively adequate facilities, including conducive classrooms, the availability of Qur'anic manuscripts, and the use of digital devices in the learning process. These facilities have been proven to support students' improvement in tajwīd application and correct articulation of letters. Both students and teachers generally expressed positive perceptions of the existing facilities, as students felt it was easier to understand tahsin with the available support. Nevertheless, the study also identified areas for further development, such as the addition of diverse audio-visual media and the enhancement of digital facility utilization to strengthen the effectiveness of the learning process.

Corresponding Author:

✉zulpirandi@gmail.com

Introduction

Learning facilities are one of the essential resources that support the success of the educational process in schools. The success of an educational program is not only determined by the quality of teachers and curriculum but is also significantly influenced by the condition of available facilities and how these facilities are managed and utilized optimally (NF Martin, 2016). In the context of Qur'anic learning, particularly tahsin, the role of facilities becomes even more crucial because this learning requires accuracy in makhraj, tajwid, and full concentration from students.

Adequate infrastructure can create a conducive learning atmosphere. Conversely, learning will not be effective if facilities such as classrooms,

standardized mushaf, or learning media are unavailable or unfit for use (Hasanuddin et al., 2024). In this case, tahsin education, as part of Islamic Religious Education (PAI), requires the support of specific facilities, including the Qur'an (mushaf), audio-visual aids, and comfortable learning spaces so that students can focus on improving their recitation.

The tahsin learning process requires facilities that match students' needs. Once available, these facilities must be managed professionally to provide maximum benefit (Febrina et al., 2024). This management includes planning, procurement, use, and maintenance so that facilities can be effectively utilized to support Qur'anic reading skills. The proper use of facilities has been proven to increase students' motivation, self-confidence, and understanding of tajwid rules (Kartika et al., 2019).

In Law No. 20 of 2003 on the National Education System (SISDIKNAS), Article 1 Paragraph 23 emphasizes that "educational resources are everything used in the implementation of education, including educators, society, funds, facilities, and infrastructure." This indicates that facilities and infrastructure are not merely complements but are essential components in achieving educational goals. From an Islamic perspective, the Qur'an itself highlights the importance of media in learning. Allah SWT states in Surah An-Nahl verse 68 about bees as a means of learning for humans, showing that Allah's creations can serve as media to strengthen faith and piety. Prophet Muhammad SAW also exemplified the use of teaching media, both tangible and intangible, in imparting knowledge to his companions.

However, field findings show that not all schools have adequate facilities to support tahsin learning. Some schools face challenges such as a lack of standardized mushaf, insufficient relevant digital media, or suboptimal facility maintenance. This is also the case for schools under Muhammadiyah, including Muhammadiyah 2 Senior High School Medan, which is the location of this study. These challenges affect the effectiveness of tahsin learning, which in turn may impact students' understanding of Qur'anic recitation.

Therefore, this research focuses on analyzing the role of learning facilities in improving the tahsin understanding of regular students at Muhammadiyah 2 Senior High School Medan. The research objectives are to identify the types of tahsin learning facilities available at the school, analyze how these facilities are utilized in the learning process, and evaluate the extent to which these facilities contribute to improving students' tahsin comprehension. The results of this study are expected to provide academic contributions by enriching the literature on the importance of facilities in Islamic Religious Education, as well as practical benefits for schools in enhancing the quality of Qur'anic education services.

Literature Review

The theoretical framework of this study begins with an understanding of the nature of tahsin al-Qur'an, the urgency of tahsin learning in schools, and the

support of facilities and learning media used to reinforce the process. Etymologically, the word tahsin derives from the root ḥassana–yuḥassinu–taḥsīnan, which means to improve or to beautify. In the context of Qur'anic recitation, tahsin is understood as the effort to improve one's recitation so that it aligns with the rules of tajwid, makhraj, and the characteristics of the letters, thereby producing a correct (ṣaḥīḥ), beautiful recitation free from mistakes (laḥn). This is in line with Allah's command in Surah al-Muzzammil [73]: 4, "Wa rattilil qur'āna tartīlā", which instructs Muslims to recite the Qur'an with tartil—that is, with accuracy, clarity, and careful attention to the rules of tajwid. Thus, tahsin is not merely a technical skill in recitation but also part of the divine command for Muslims to preserve the purity of Qur'anic recitation.

The urgency of tahsin becomes more evident when related to the condition of high school students. Many of them are accustomed to reading the Qur'an from an early age but have not fully understood or applied tajwid rules correctly. Therefore, tahsin learning in schools plays a crucial role not only in equipping students with proper recitation skills but also in preventing mistakes that could alter the meaning of verses, cultivating love for the Qur'an, and shaping religious character through proper interaction with the sacred text. According to Arsyad (2019), Qur'anic learning in formal education institutions should not merely emphasize the cognitive aspect but also the affective and psychomotor dimensions. This means that learning is not only about transferring knowledge of tajwid but also about instilling love for the Qur'an and training good recitation skills through habituation.

Tahsin learning in Islamic tradition has distinctive principles. One of them is talaqqi and musyafahah, namely direct learning with a teacher through oral interaction that enables students to listen, imitate, and correct recitations accurately. This process is reinforced by tikrār (repetition or frequent practice), since recitation skills can only be mastered through intensive repetition. Furthermore, tahsin is conducted gradually (tadarruj), starting from mastery of letters, then words, progressing to verses, until students can recite entire surahs correctly. Another equally important principle is the cultivation of adab (proper manners), because tahsin is not only about the technical articulation of letters but also about instilling respect for the Qur'an as the word of Allah. These principles are in harmony with behaviorist theory, which emphasizes repetitive practice as a means of habit formation, and humanistic theory, which stresses that learning should also engage attitudes and values within students.

From the facilities perspective, infrastructure is an important factor in supporting the success of tahsin learning. Learning facilities are everything that can be used to facilitate the achievement of learning objectives (Hasan et al., 2025). In the context of tahsin, relevant facilities include a mushalla as the center for religious activities, digital media such as projectors, speakers, audio murattal, and tajwid instructional videos, as well as supporting literature in the library. The presence of a mushalla is not merely for worship but also serves as a conducive

space for holding halaqah tahsin, which enables students to directly engage with Qur'anic recitation. Digital media assist teachers in presenting examples of recitation, visualizing makhārij al-ḥurūf, and correcting students' errors interactively. Learning media serve as intermediaries that facilitate comprehension, as the combination of audio and visual aids enhances students' absorption of information (Sukmadewi & Suniasih, 2022; Suryani & Samodra, 2025).

From the above discussion, a conceptual framework can be formulated: the success of tahsin learning cannot be separated from the availability of adequate facilities and media. The mushalla, classrooms equipped with projectors and audio devices, and libraries with tajwid literature are facilities that enable more effective learning. On the other hand, the teacher's role in creatively utilizing media serves as reinforcement to ensure that learning is interactive and enjoyable. Parental support in the form of providing reading media or digital applications at home also acts as an external factor that promotes successful learning. Thus, tahsin learning is the result of a synergy between internal factors (teachers, methods, and students) and external factors (facilities, media, and environmental support).

Methods

This study employed a descriptive qualitative method because its primary objective was to deeply understand and describe the phenomenon of tahsin learning within a specific context (Abdussamad, 2021). The descriptive qualitative method was chosen because it allowed the researcher to explore the condition of the learning facilities available at SMA Muhammadiyah 2 Medan and how these facilities contribute to improving students' comprehension of the Quran. This approach also enabled the researcher to obtain detailed and holistic information through various data sources, thus presenting a comprehensive picture of the facilities' effectiveness in supporting tahsin learning.

Descriptive qualitative methods focus on describing social phenomena from the perspective of research participants (Sugiyono, 2017). In the context of this study, these methods were implemented through data collection through direct observation, in-depth interviews, and document review. The research stages included: (1) preparing research instruments in the form of observation guidelines, interview guides, and documentation formats; (2) conducting observations of the tahsin learning process in regular classes; (3) interviews with the principal, tahsin teachers, students, and parents to obtain diverse perspectives; and (4) collecting relevant documents such as curricula, activity reports, and school administrative records. Data obtained from these various sources were then systematically analyzed to identify patterns, themes, and relationships relevant to the use of learning facilities to support students' understanding of tahsin (Sutopo, 2016).

The selection of research subjects was based on clear inclusion and exclusion criteria (Latipah, 2016). Inclusion criteria included: the principal, tahsin teachers, and regular students at SMA Muhammadiyah 2 Medan who were directly

involved in the tahsin learning process. Furthermore, parents were also included in the research because they could provide insights into the impact of facilities on children's motivation and reading development. Exclusion criteria included parties not directly involved in the tahsin learning process or lacking relevant knowledge about the facilities used. This subject selection aimed to obtain comprehensive information from various perspectives.

The type of interview used was semi-structured, allowing researchers to explore topics in greater depth with flexible question guides. Semi-structured interviews gave researchers the flexibility to follow the flow of the conversation and explore additional information as needed. Data analysis was conducted inductively, that is, researchers identified themes, patterns, and relationships based on empirical data without relying on initial hypotheses (Sugiyono, 2017). The stages of analysis included: (1) collecting data from observations, interviews, and documents; (2) categorizing data into groups based on the emergence of patterns; (3) identifying main themes related to the effectiveness of tahsin learning facilities; and (4) compiling a description of findings that explain the contribution of facilities to improving student understanding.

Results and Discussion

Based on observations and interviews, SMA Muhammadiyah 2 Medan has provided adequate facilities for learning Quranic recitation. These facilities include a prayer room (mushalla), regular classrooms equipped with digital media, and a library stocked with a collection of tajweed and concise tafsir books. These facilities are crucial for the success of the tahsin learning program, as learning to recite the Quran requires not only teacher skills but also a supportive environment and conducive learning facilities.

The school's prayer room (mushalla) is the main center of religious activities. It is used not only for congregational prayer but also for Quranic recitation circles (halaqah). Design-wise, the prayer room is equipped with prayer mats, Qurans, and a loudspeaker. The presence of microphones and speakers helps teachers and students deliver readings more clearly, especially during large gatherings. The comfort of the space also influences student concentration. As one student stated, "With the prayer room and tajweed books, it's easier for us to understand the correct recitation." This demonstrates that the prayer room (mushalla) serves not only as a place of worship but also as a representative learning facility.

In addition to the prayer room, the regular classrooms used for tahsin lessons are also equipped with modern facilities, such as whiteboards, projectors, and digital media. Tahsin teachers utilize this technology to display reading examples, listen to murattal (recitations), and show tajweed instructional videos. This makes the learning process more interactive, engaging, and contextual. This aligns with modern learning theory, which emphasizes the importance of using audio-visual media to enhance student retention.

Tahsin teachers stated that the use of technology is very helpful in clarifying the pronunciation of letters and the properties of letters. For example, when teachers want to demonstrate the difference between the letters "ṣād" and

"sīn," the use of audio murattal by renowned qari' (reciters) makes it easier for students to imitate the correct recitation. A teacher's statement, "The use of projectors and audio murattal (recitation guides) really makes it easier for students to imitate correct recitation, especially for difficult letters," demonstrates that technology is not merely a supplement, but truly plays a key role in the tahsin learning process.

The school library also serves as a supporting resource. It offers a collection of tajweed books, tahsin guidebooks, and concise tafsir (interpretations) for students to use. However, the limited number and variety of books remains a challenge. Some students must take turns using books, resulting in limited access that can hinder independent learning. Nevertheless, these books still make a significant contribution, especially for students who are interested in deepening their tajweed knowledge outside of class.

Overall, the learning facilities at SMA Muhammadiyah 2 Medan can be considered quite supportive, although some limitations remain. The availability of a comfortable prayer room, technological support in the classrooms, and the availability of books in the library are good starting points for improving the quality of tahsin learning at the school.

Student Perceptions of Learning Facilities

Interviews with students indicate that they greatly benefit from the tahsin learning facilities provided by the school. These positive perceptions include the comfort of the learning environment, the availability of supporting facilities, and the teaching methods used by teachers.

For students, the prayer room (mushalla) provides a religious and reverent atmosphere. They feel more motivated to learn to read the Quran in the mushalla than in a regular classroom, as the atmosphere is more conducive to devotion. Furthermore, the use of loudspeakers makes the teacher's recitation clearer, allowing students to imitate accurately. This aligns with the principles of tajweed learning, which emphasize the importance of talaqqi (listening directly to the teacher) to ensure Quranic recitation adheres to correct qira'ah standards.

Students also appreciate the use of digital media. Using a projector, the teacher can display the Quranic text along with its tajweed markings, making it easier for students to understand the rules being studied. Audio murattal helps them distinguish between correct and incorrect recitations. This type of learning process is more appealing to the current generation, accustomed to digital technology.

However, students also expressed limitations in using tajweed books in the library. Due to the limited number, they cannot always borrow books when needed. This forces some students to seek additional references outside of school. Nevertheless, they still feel the existing collection is helpful.

These student perceptions indicate that the existing facilities are quite effective in supporting learning, although additional resources are needed, particularly in terms of the literature collection. From a motivational perspective, the presence of these facilities has been shown to increase student interest in learning tahsin.

Parental Perceptions of Learning Facilities

Parents also provided generally positive responses. They felt that the school had made efforts to provide adequate facilities to support tahsin activities. Several parents stated that their children had shown improvement in their Quran reading skills after participating in the school's learning program.

However, parents also expressed their hope that the school could add learning media that could be accessed from home. For example, recordings of teacher recitations, audio murattals specifically for practice, or digital tahsin applications that students could download. This was considered important because Quran learning cannot be solely focused on school time but must be continued with independent practice at home.

One parent stated, "We hope the school can provide more tajweed books so that children can learn not only at school but also at home." This statement emphasized the need to expand learning resources beyond the school setting. This way, students can continue practicing at home with parental guidance.

This parental perspective aligns with the concept of Islamic education, which emphasizes the integration of school, family, and community in supporting Quran learning. Schools can be the primary center, but family support remains crucial to successful learning.

Teacher Perceptions of Learning Facilities

Teachers of tahsin (recitation) at SMA Muhammadiyah 2 Medan assessed that the available facilities significantly contribute to effective learning. The use of digital media, such as projectors and audio recitation, is very beneficial for clarifying the pronunciation of letters and helping students correct their reading errors. With these facilities, teachers can teach with more variety and not rely solely on lectures or traditional talaqqi (recitation) methods.

However, teachers also emphasized the importance of a more representative dedicated tahsin space. Currently, tahsin activities are often held in prayer rooms (mushalla) or regular classrooms. Although adequate, these spaces are sometimes used for other activities, resulting in less focused tahsin learning. A dedicated tahsin space would provide a more conducive atmosphere, especially for practicing pronunciation of difficult letters that require high concentration.

Furthermore, teachers highlighted the limited number of tajweed books in the library. They believe there is a need to expand the collection to include more diverse books, including modern books that combine tajweed theory with interactive learning methods. This way, students have more resources to deepen their knowledge.

This teacher's perspective demonstrates an awareness of the importance of representative learning resources. Although existing facilities are adequate, improvements are still needed to achieve optimal results.

School Perceptions of Learning Facilities

The school, through the principal, expressed its commitment to continuously improving the tahsin learning facilities. The principal emphasized that SMA Muhammadiyah 2 Medan strives to provide the best facilities for students so they can read the Quran correctly according to the rules of tajweed.

This commitment is reflected in the school's efforts to equip learning facilities, such as the provision of projectors, microphones, and prayer rugs in the prayer room. Furthermore, the school continues to collaborate with competent tahsin teachers to improve the quality of learning.

However, the school also acknowledges limitations, particularly in terms of budget. Therefore, facility improvements are being implemented in stages according to prioritized needs. For example, plans to provide a dedicated tahsin room will be considered in the future once other basic facilities are in place.

This commitment is noteworthy, as it demonstrates the school's commitment to fostering a culture of Quran reading among students. With the support of school management, the tahsin program has a significant opportunity for further development. B. Analysis of Observation and Interview Results

From the observations and interviews conducted, it can be concluded that tahsin learning at SMA Muhammadiyah 2 Medan is running well, although several limitations remain. The main factors supporting successful learning include:

1. The availability of a comfortable prayer room as a center for religious and tahsin activities.
2. The use of digital technology, which makes learning more interactive and effective.
3. Support from parents and the school, which appreciates the existing facilities.
4. High student motivation in learning tahsin, as evidenced by their enthusiasm for the available facilities.
   The inhibiting factors that were still identified were:
1. The limited number of tajweed books in the library, so student access to literature is still less than optimal.
2. The lack of a dedicated tahsin room, which sometimes disrupts other activities.
3. Limited resources for learning at home, such as recordings of readings or digital applications that students can access independently.

This analysis indicates that SMA Muhammadiyah 2 Medan is on the right track in providing tahsin learning facilities. However, improvements in facilities and strategies are still needed to maximize learning.

Educational Implications

The discussion regarding tahsin learning facilities at SMA Muhammadiyah 2 Medan has several important implications for the development of Islamic education, particularly in the area of Quranic recitation.

First, the availability of adequate facilities has been shown to increase student motivation in learning to read the Quran. This demonstrates that investment in educational facilities and infrastructure has a significant impact on the quality of learning.

Second, the use of digital technology in tahsin learning exemplifies the application of educational innovation relevant to the needs of the modern generation. Teachers can utilize audio-visual media to clarify material, making it easier for students to understand and master Quranic recitation.

Third, parental involvement and school support demonstrate that tahsin learning requires synergy between various parties. The success of the program depends not only on teachers but also on the active participation of families and the commitment of school management.

Fourth, existing limitations, such as the lack of tajwid textbooks and the absence of a dedicated tahsin room, provide a lesson that facility improvements must be made gradually. This aligns with the principle of continuously improving the quality of education.

Therefore, tahsin learning at SMA Muhammadiyah 2 Medan can serve as a model for other schools developing similar programs, with the caveat that adjustments must be made to the conditions and needs of each school.

Challenges in Improving Tahsin Learning Facilities

Although SMA Muhammadiyah 2 Medan has made maximum efforts to provide tahsin learning facilities, several challenges remain that need to be addressed to improve the quality of learning. These challenges are not only technical but also managerial and cultural.

First, the school's limited budget is a major factor. Procuring facilities such as a dedicated tahsin room, expanding the book collection, and purchasing more modern audio-visual equipment requires significant costs. Given that schools also have other needs to meet, funding allocations often have to be done in stages. This requires careful strategic planning to ensure that priority needs in tahsin learning can still be met.

Second, the use of digital technology, while very helpful, also faces obstacles. Not all teachers have the same skills in operating technological devices. Some teachers who are more accustomed to traditional methods may require additional training to optimally integrate technology into their lessons. Furthermore, the availability of electricity and a stable internet connection are also important supporting factors for the smooth use of technology.

Third, time and learning schedules also pose challenges. High school students have busy schedules, so the time allocated for tahsin is sometimes felt inadequate. However, learning tahsin requires repeated and consistent practice. If available time is limited, achieving learning targets can be hampered.

Fourth, parental involvement in supporting tahsin practice at home varies. Some parents are very concerned and accompany their children in their practice, while others leave it entirely to the school. This difference in level of concern affects the consistency of students' practice outside of school hours.

Therefore, the challenges faced by schools cannot be viewed solely as weaknesses, but rather as opportunities for innovation. For example, limited books can be overcome by providing digital reading materials, time constraints can be addressed through the use of online applications, and the lack of teacher training can be addressed through internal workshops.

Strategy for Developing Tahsin Learning Facilities

Referring to the challenges above, several development strategies can be formulated to improve the quality of tahsin learning at SMA Muhammadiyah 2 Medan.

First, the school can diversify its funding sources. In addition to relying on BOS funds or the school budget, management can collaborate with zakat institutions, community organizations, or alumni to support the procurement of tahsin facilities. With external support, facility development can be accelerated without waiting for the availability of regular budgets.

Second, strengthening the capacity of tahsin teachers needs to be a priority. Teachers need to be provided with training in the use of digital media, interactive teaching techniques, and pedagogical approaches that suit the characteristics of high school students. This way, existing facilities can be utilized optimally and not simply become decorations.

Third, the provision of a dedicated tahsin room can be designed simply yet effectively. This space does not need to be luxurious, but should be representative enough with adequate lighting, ventilation, and audio equipment. The presence of a dedicated room will give the tahsin program its own identity and increase student motivation to study more seriously.

Fourth, the development of digital-based learning media such as tajwid applications, audio recordings of teacher recitations, and short learning videos that can be accessed from home will significantly assist students in practicing independently. This media also addresses the needs of parents who hope their children can continue learning tahsin outside of school hours.

Fifth, collaboration with parents needs to be strengthened. Schools can hold seminars or special meetings to promote the importance of the family's role in supporting tahsin. Through effective communication, parents can better understand how to guide their children in practicing at home, even though not all parents possess excellent Quran reading skills.

By implementing these strategies, it is hoped that SMA Muhammadiyah 2 Medan will not only be able to maintain the quality of its existing tahsin learning but also improve it toward a more professional, innovative, and sustainable approach.

Conclusion

SMA Muhammadiyah 2 Medan has provided adequate learning facilities to support students' improvement in tahsin comprehension, including classrooms equipped with standard Qur'ans, whiteboards, and audio-visual tools that enhance both theoretical and practical understanding of Qur'anic recitation. These facilities not only serve as learning aids but also function as a center for tahsin activities that encourage students to actively refine their recitation. Feedback from students, parents, the school, and tahsin teachers indicates that the facilities contribute positively to the learning process, making lessons more effective and accessible while fostering students' mastery of makhraj, tajwid, and other recitation rules. Although the current facilities are sufficient, the study highlights the need for additional resources such as interactive digital media, recordings of expert reciters, and specialized literature on tajwid to enrich students' learning experiences and increase their motivation. Overall, the school demonstrates a strong commitment to providing effective tahsin facilities, yet continued development is essential to optimize and sustain the learning process.

References

Abdussamad, Z. (2021). *Metode Penelitian Kualitatif.* CV Syakir Media Press.

Febrina, R., Yani, N., Hutabarat, R., & Amra, A. (2024). Manajemen Efektif Program Tahfidz Al-Quran dalam Mewujudkan Generasi Islami di SD Islam Al Muttaqin. *Jurnal Pendidikan Dan Pembelajaran Indonesia (JPPI)*, *4*(4), 1394–1404. https://doi.org/10.53299/jppi.v4i4.780

Hasan, F. A., Panigoro, M., Maruwae, A., Mahmud, M., & Toralawe, Y. (2025). Pengaruh Kelengkapan Fasilitas Sekolah Terhadap Kesiapan Belajar Siswa di Madrasah Aliyah Salafiyah Syafi'iyah. *Jurnal Kependidikan*, *13*(1), 119–132. https://doi.org/10.24090/jk.v13i1.13562

Hasanuddin, H. J., Ruhaya, B., Latuconsina, N. K., Salahuddin, & Munawwir, A. (2024). Pengaruh Fasilitas Perpustakaan terhadap Minat Membaca Peserta Didik Kelas IX Pesantren Modern Tarbiyah Takalar. *Al Asma : Journal of Islamic Education*, *6*(1), 57–65. https://doi.org/10.24252/asma.v6i1.45415

Kartika, S., Husni, H., & Millah, S. (2019). Pengaruh kualitas sarana dan prasarana terhadap minat belajar siswa dalam pembelajaran Pendidikan Agama Islam. *Jurnal Penelitian Pendidikan Islam*, 7(1), 113–124. https://doi.org/10.36667/jppi.v7i1.360

Latipah, E. (2016). *Metode Penelitian Psikologi Pendidikan*. Deepublish.

Martin, N. F. (2016). *Manajemen Sarana dan Prasarana: Konsep dan Implikasinya. PT Raja Grafindo Persada.*

Sugiyono. (2017). *Metode Penelitian Pendidikan: Pendekatan Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

Sukmadewi, L. P. M., & Suniasih, N. W. (2022). Media Audio Visual Berbasis Kontekstual pada Muatan IPA Meningkatkan Hasil Belajar Siswa. *Jurnal Pedagogi Dan Pembelajaran*, *5*(1), 138–149. https://doi.org/10.23887/jp2.v5i1.45898

Suryani, S., & Samodra, Y. T. J. (2025). Penggunaan Media Audio-Visual untuk Meningkatkan Hasil Belajar Siswa Sekolah Dasar. *Jurnal Pendidikan Dan Pembelajaran Indonesia (JPPI)*, *5*(4), 1713–1720. https://doi.org/10.53299/jppi.v5i4.1681

Sutopo. (2016). Analisis data kualitatif dengan model interaktif. *Jurnal Generasi Kampus*, 9(1), 87–102.