

Development of audio-visual media to enhance student comprehension in Islamic education

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Abstract

This study aims to develop audio-visual media to enhance student understanding in Islamic Education at Madrasah Aliyah Tulungagung. A qualitative approach with a case study design was employed to explore in-depth the processes and experiences associated with the use of this media. The research subjects included Islamic Education teachers, students, the headmaster, and curriculum staff. Data were collected through in-depth interviews, focus group discussions (FGD), participant observations, and documentation. Data analysis involved transcription, coding, categorization, and interpretation. The findings indicate that audio-visual media are effective in assisting students in understanding complex and abstract concepts in Islamic education. This media also boosts student motivation and engagement in learning. However, the use of this media faces challenges such as limited technological facilities and preparation time constraints. The study recommends enhancing support for facilities and providing training for teachers to optimize the use of audio-visual media. With appropriate support, this media has the potential to become an effective tool in improving the quality of Islamic education at Madrasah Aliyah Tulungagung and other madrasahs in Indonesia.

Keywords: educational media, audio-visual, student understanding, Islamic education

INTRODUCTION

Islamic education holds a pivotal role in shaping the character and moral values of Indonesia's younger generation. Within the Madrasah Aliyah context, Islamic education not only provides knowledge about religious teachings but also inculcates ethical values applicable to daily life' (Hasanah et al., 2022). Nevertheless, a major challenge in this educational endeavor lies in making abstract concepts more tangible and understandable for students.

With the advancement of technology educational media has undergone a significant transformation. This shift is particularly marked by the movement from traditional methods, such as textbooks and chalkboards, towards the adoption of more advanced audio-visual media (Amri et al., 2019). Audio visual media including videos, animations, and interactive presentations serve as effective tools for enhancing students' learning experiences by creating an engaging and interactive educational environment. Technological innovations in media allow for the presentation of content that not only conveys information but also actively involves students in the learning process.

Among the various forms of audio-visual media, video stands out as one of the most impactful in education. Through video, information is presented both visually and audibly, enabling students to see and hear the material concurrently (Clark et al., 2003). For instance, a documentary on Islamic history can showcase historical images and narratives, clarifying context and details that may be difficult to grasp through text alone (Sanusi et al., 2024). Videos also enable the demonstration of experiments or processes that cannot be performed directly in the classroom, thereby providing a more comprehensive and immersive learning experience (Yildirim, 2018).

Animation offers a way to visualize abstract concepts that are often challenging to explain with words alone. Complex scientific or mathematical concepts can be illustrated through animations, simplifying explanations and making them easier to understand (Sholeh, 2023). Animations also add an extra dimension to learning with engaging visual styles and vibrant colors, making the subject matter more lively and appealing to students (Betrancourt, 2005).

Interactive presentations, such as slides with narrated audio or web-based learning tools, enable students to interact directly with the material. This can include activities such as interactive quizzes or clickable elements for additional information "" (Ajit et al., 2022). This interactivity enhances student engagement and makes learning more active, allowing students to learn in a more participatory and involved manner.

The use of audio-visual media has been shown to enhance students' interest and understanding. These media present information in a more dynamic and enjoyable way, making the material easier to comprehend and more engaging. With the ability to visualize complex concepts and engage multiple senses, audio-visual media play a vital role in creating more effective learning experiences that align with students' needs in the digital age (Sholeh, 2023).

Previous research indicates that the use of audio-visual media in education can improve students' attention, motivation, and information retention. For instance, Mayer (2014) found that well-designed audio-visual media can enhance understanding of complex scientific concept. In the context of Islamic education, several studies have also highlighted the benefits of using audio-visual media (Sholeh et al., 2024). For example, research by Ainie et al. (2022) demonstrated that educational videos can enhance students' understanding of Islamic education and moral values. Hasan & Hidayati (2023) found that the educational values in the animated film "Nussa and Rara" as a media for Akidah Akhlak material could help students grasp complex theological concepts.

Despite the significant potential of audio-visual media, its implementation in Islamic education at Madrasah Aliyah Tulungagung still faces several obstacles. These challenges include limited technological facilities, a lack of skilled personnel in developing and utilizing such media, and difficulties in aligning media content with the curriculum and students' needs (Kotiash et al., 2022).

Previous studies have generally focused on specific aspects of educational media, such as its impact on student motivation or conceptual understanding. There is limited research that comprehensively explores the development of audio-visual media tailored to the specific characteristics and needs of students at Madrasah Aliyah, particularly in Tulungagung.

Therefore, this study aims to develop audio-visual media that can enhance student understanding in Islamic education at Madrasah Aliyah Tulungagung. The research will involve several stages, including analyzing the needs of students and teachers, developing and producing the media, and evaluating its effectiveness. The results of this study are expected to provide practical guidance for the development of educational media in other madrasahs and contribute to improving the quality of Islamic education in Indonesia.

METHOD

This study employs a qualitative approach with a case study design to delve deeply into the process and experiences of using audio-visual media in Islamic education at Madrasah Aliyah

Tulungagung (Creswell, 2009). The goal is to understand the perceptions of teachers and students regarding this media. The research is conducted at Madrasah Aliyah Tulungagung, an Islamic educational institution located in Tulungagung, with subjects including teachers of Islamic Education involved in the use of audio-visual media, students from various classes, and the school principal and staff involved in curriculum development and the provision of educational facilities (Fink, 2019).

Data collection is carried out through in-depth interviews with teachers, the principal, and relevant staff to understand their experiences, perceptions, and challenges related to the use of audio-visual media (Shull et al., 2008). Focus group discussions (FGDs) are held with groups of students to gather data on their experiences with audio-visual media in learning, as well as its impact on their understanding and engagement. The researcher also conducts participant observation in classrooms where audio-visual media is used, focusing on interactions between teachers and students, the use of media in the learning process, and student responses to the material presented through the media. Additionally, supporting data such as instructional videos, audio-visual teaching materials, evaluation notes, and other relevant documents are collected for further context.

Data analysis involves transcription of interviews and FGDs, followed by coding where data is broken down into smaller units of information and categorized based on emerging themes. The identified categories are then organized into main themes that describe the phenomena under investigation. The findings from the data analysis are interpreted to provide a deeper understanding of the use of audio-visual media in Islamic education at Madrasah Aliyah Tulungagung (Mertens, 2023).

To ensure the validity and reliability of the data, the researcher employs data triangulation using multiple data sources (interviews, FGDs, observations, and documentation) to corroborate findings and ensure data accuracy. Member checking is conducted by verifying the data with participants after transcription to ensure accuracy and appropriateness of data interpretation. Procedural consistency is maintained in data collection and analysis procedures to ensure reliable results (Gliner & Morgan, 2017). This research adheres to ethical research standards, including obtaining informed consent from all participants, explaining the purpose of the research, methods used, and participants' rights. Participants' identities are kept confidential, and the collected data is used solely for the purpose of this research.

RESULT AND DISCUSSION

Utilization of Audio-Visual Media in Teaching

The interview results with teachers, students, the headmaster, and curriculum staff at Madrasah Aliyah Tulungagung indicate that audio-visual media has been effectively utilized in the learning process. Teachers have employed various types of media, such as documentary videos, animations, narrated slide presentations, and audio lectures. Students responded positively to the use of this media, stating that it facilitates their understanding of the material and increases participation and motivation in learning. However, challenges such as limited facilities, technical issues, and the time required to prepare materials persist.

According to Mayer's multimedia theory (2014), the combination of text, narration, and visual images can enhance understanding by leveraging multiple cognitive channels (Mayer, 2014). The use of media such as videos and animations reduces cognitive load by distributing information across verbal and visual channels. The findings from Madrasah Aliyah Tulungagung demonstrate that this approach successfully enhances student engagement and understanding, particularly in abstract subjects like Islamic history.

This research aligns with Mayer's (2014) findings, which suggest that multimedia can improve information retention and student focus'—(Mayer, 2014). This concept is also supported by the cognitive load theory of Sweller et al. (2011), which posits that effective learning can be achieved when information is presented through multiple cognitive channels (Sweller et al., 2011). Moreover, the use of audio-visual media, as described by Maskun et al. (2021), has been shown to clarify abstract concepts in Islamic education (Maskun et al., 2021).

Impact on Student Motivation and Engagement

These findings are consistent with the research of Aini et al. (2022) and Hasan & Hidayati (2023), who also found that audio-visual media enhances student motivation and engagement in the learning process. However, unlike their studies, the technical challenges reported at Madrasah Aliyah Tulungagung, such as limited facilities and preparation time, suggest that stronger institutional support is necessary to optimize the use of this media.

This research reinforces the arguments put forward by Bebell & O'Dwyer (2010) and Wang et al. (2016), who noted that a lack of technical facilities and training can hinder the effectiveness of technology-based learning. This study further emphasizes the importance of

Teacher training in using audio-visual media to improve student understanding, adding a new dimension to the discourse on technological support in Islamic education.

These findings imply that the use of multimedia in Islamic education can be further developed to enhance learning outcomes. Mayer's multimedia theory can be more broadly applied in the context of religious education, particularly in conveying abstract theological and historical concepts. Furthermore, this study highlights the importance of institutional support in providing adequate technological facilities and ongoing teacher training to fully realize the potential of audio-visual media.

The research findings at Madrasah Aliyah Tulungagung show that the use of audio-visual media in teaching has a significant positive impact. This media has proven to help students understand material better and substantially increase their motivation and engagement in learning. These findings support previous research that emphasizes the benefits of audio-visual media in educational contexts. Mayer (2014) highlights that audio-visual media can enhance student attention and information retention through more dynamic presentation. Aini et al. (2022) and Hasan & Hidayati (2023) also show that this media contributes to increased student motivation and engagement, which overall improves learning effectiveness.

The use of documentary videos, animations, and narrated slide presentations has revolutionized the way students engage with lesson materials. For instance, videos and animations offer visual representations that clarify abstract and complex concepts in Islamic education. These visual representations enable students to see and understand concepts that might be difficult to grasp through text alone (Maskun et al., 2021). For example, a student reported that videos and animations make lessons more lively and easier to understand, demonstrating how this media aids in visualizing material that is challenging to comprehend solely through text.

This transformation is significant because, in Islamic education, some theological and historical concepts may be difficult for students to understand merely by reading texts (Douglass & Shaikh, 2004). Videos and animations can depict historical events, rituals, and religious values in a more engaging and comprehensible manner. By presenting material through a combination of visual and auditory elements, students can access information

through different cognitive channels—namely, the verbal channel (text/narration) and the visual channel (images/animations). This approach enhances students' understanding as they can link what they hear to what they see, making learning more effective and engaging (Sweller et al., 2011).

Cognitive Load and Learning Efficiency

This approach aligns with Mayer's multimedia theory, which posits that the combination of text and images can enhance understanding through different cognitive channels (Sorden, 2012). According to Mayer, the use of multimedia in learning can help reduce cognitive load by distributing information across multiple channels, enabling students to better comprehend and retain information. In this context, videos and animations help reduce cognitive load by providing visual representations that support the understanding of abstract concepts, while narration and text offer the necessary additional context for deeper comprehension. The use of audio-visual media such as documentary videos, animations, and narrated slide presentations not only makes lessons more engaging but also facilitates a better and deeper understanding of lesson materials, especially those that are complex and abstract (Wang et al., 2016).

Despite the clear benefits of audio-visual media, several challenges still need to be addressed. One of the main obstacles is the limited availability of technological facilities in the school, such as a lack of projectors and computers (Bebell & ODwyer, 2010). Inadequate equipment can hinder the use of audio-visual media, as devices like projectors are crucial for displaying video and animation content in the classroom. When such equipment is unavailable or malfunctioning, it can degrade the quality of presentations, ultimately affecting the effectiveness of the learning process (Wang & Hannafin, 2005).

In addition to equipment limitations, technical issues frequently pose challenges. Teachers often encounter technical difficulties, such as connectivity problems or malfunctioning devices (Rogers, 2012). These technical issues can cause disruptions during lessons, reduce students' focus, and interfere with the planned flow of instruction.

The time required for material preparation is another significant challenge. Creating and assembling audio-visual content, such as videos and animated presentations, requires considerable time and effort (Ertmer & Ottenbreit-Leftwich, 2010). Teachers must gather and

Edit materials, ensuring that the content is relevant and aligns with the learning objectives. This process can be time-consuming, especially when teachers are also managing other teaching responsibilities.

Recommendations for Institutional Support

These limitations highlight the need for better management and stronger support from the school. Schools need to ensure that adequate technological facilities are available and functioning properly. This includes providing projectors, computers, and the necessary software for creating and displaying audio-visual media. Additionally, schools should offer technical training for teachers to help them troubleshoot issues that may arise and to enhance their skills in using educational technology (Wang et al., 2016).

Support from the school is also crucial in providing teachers with sufficient time to prepare materials. This might involve scheduling work hours that allow teachers to develop and prepare high-quality instructional content (Chartofili & Fokides, 2019). With proper management and strong support, these challenges can be overcome, enabling the more effective and optimal use of audio-visual media in the educational environment.

To address these challenges, increased support from the school is necessary. Procuring adequate facilities, such as projectors and computers, and providing technical training for teachers will greatly help in optimizing the use of audio-visual media. With appropriate support, this media will not only become a more effective tool for enhancing student understanding but also open opportunities for innovation and further development in teaching methods (Xu et al., 2019). Training for teachers on the latest technology and technical problem-solving can improve the implementation of audio-visual media and ensure that its benefits are fully realized by students. Overall, the findings from this research indicate that audio-visual media has great potential to enhance the quality of education at Madrasah Aliyah Tulungagung. With the right support and efforts to address existing constraints, this media can be a highly effective tool in making learning more interactive, engaging, and beneficial for student comprehension.

CONCLUSION

The research findings from Madrasah Aliyah Tulungagung reveal that the utilization of audio-visual media significantly enhances teaching and learning processes. The implementation of

diverse media types—such as documentary videos, animations, and narrated slide presentations—has positively impacted student understanding, motivation, and engagement. Students expressed that these media facilitate their comprehension of complex concepts, particularly in abstract subjects like Islamic history. This aligns with Mayer's multimedia theory, which posits that the combination of text, narration, and visual elements can optimize cognitive processing and reduce cognitive load. However, challenges such as inadequate technological facilities, technical difficulties, and time constraints for material preparation persist. Addressing these issues requires stronger institutional support, including providing the necessary technological resources and training for teachers. With the right support and infrastructure, audio-visual media can further transform educational practices at Madrasah Aliyah Tulungagung, leading to more interactive and effective learning experiences for students.

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