

Advancing Students' Comprehension of Islamic Religious Education through the Integration of Visual Media in Discovery Learning: A Study at Senior High School

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Abstract: This study aims to explore the effectiveness of integrating visual media into Discovery Learning to enhance students' comprehension in Islamic Religious Education at the senior high school level. Utilizing a quasi-experimental design, the research involved two groups of students: an experimental group that received instruction incorporating visual media within a Discovery Learning framework, and a control group that followed conventional Islamic Religious Education instruction. Data was collected through pre-tests and post-tests to assess the impact on students' understanding of the subject matter. The results indicate a significant improvement in comprehension among students in the experimental group, highlighting the value of visual aids in fostering deeper engagement and learning retention within Discovery Learning contexts. By making abstract religious concepts more accessible and engaging, visual media helped students connect religious teachings to real-life scenarios, enhancing both their academic understanding and ethical reflection. The novelty of this study lies in the combined application of visual media and Discovery Learning within the context of Islamic Religious Education, addressing a gap in existing research on modern instructional methods in religious education. The findings contribute to educational practices by providing a structured model for integrating visual media in Islamic Religious Education, offering a practical framework for educators to enhance student comprehension and moral engagement. This approach not only supports cognitive learning but also encourages students to reflect on and internalize religious values, promoting a more holistic educational experience.

Keywords: Discovery Learning, Islamic Religious Education, Student Comprehension, Visual Media

A. Introduction

In the modern educational landscape, combining diverse instructional methods to cater to different learning needs has gained significant attention, especially in subjects that address complex ethical and philosophical content, such as Islamic

Religious Education. Visual media, for instance, are widely acknowledged for their ability to simplify and contextualize complex ideas, making abstract religious and moral concepts more relatable and understandable for students (Mayasari & Arifudin, 2023; Mulfajril, 2023). These tools enable educators to bridge the gap between theoretical knowledge and practical application, offering students visual aids such as animations, infographics, and videos that contextualize religious teachings in real-world scenarios. By engaging multiple senses, visual media not only enhance cognitive processing but also create a more inclusive learning environment for students with diverse learning styles (Mayer, 2020).

Discovery Learning, a pedagogical approach that encourages students to actively explore and construct knowledge through experience, complements this well by fostering critical thinking and engagement (Mayer, 2004). This method emphasizes inquiry-based activities, allowing students to pose questions, investigate concepts, and derive conclusions on their own, thereby deepening their understanding. Within Islamic Religious Education, where students are expected to not only understand but also reflect upon values, the integration of these methods may prove particularly beneficial (Qowim et al., 2024). For instance, Discovery Learning activities such as collaborative problem-solving or exploring case studies rooted in Islamic teachings can inspire students to connect religious principles with their daily lives. This dual approach, blending the reflective potential of religious education with the dynamic nature of modern pedagogical techniques, offers a holistic framework for fostering both intellectual and moral development in students.

However, while there is substantial evidence supporting the individual effectiveness of both Discovery Learning and visual media, the combined impact of these methods within the specific context of Islamic Religious Education remains underexplored. Studies have shown that Discovery Learning helps improve knowledge retention and encourages a deeper engagement with learning materials across disciplines (Hajri, 2023; Greenhow & Lewin, 2015). This approach allows students to actively explore concepts and develop a more profound understanding by constructing their own knowledge. Visual media, on the other hand, have been shown to enhance cognitive processing by presenting information in a form that is easier for students to interpret and remember (Mayer, 2020).

Through the use of images, videos, and interactive media, visual aids can help bridge the gap between abstract concepts and students' prior knowledge. This dual approach has been applied effectively in subjects like science and history, yet little research has delved into its potential for transforming the way students approach and internalize religious studies (Mansir, 2022). For example, a study in Pondok Pesantren Ibnu Qayyim Yogyakarta demonstrated how visual media simplified complex concepts like Islamic jurisprudence and history, enhancing students' engagement and critical thinking skills (Praditya et al., 2022). Similarly, research in SMP Muhammadiyah Surakarta found that integrating visual tools significantly

boosted students' interest and their ability to contextualize learning with real-life applications (Hidayatullah, 2020). Given the unique nature of Islamic Religious Education, which often involves the interpretation of religious texts and historical contexts, integrating Discovery Learning with visual media could offer innovative ways to engage students, making abstract theological and historical concepts more accessible. Exploring this combination within Islamic education could lead to more effective pedagogical strategies that not only foster deeper understanding but also enhance spiritual engagement.

In terms of state-of-the-art methodologies, educational research increasingly emphasizes integrative approaches that combine student-centered strategies with multimedia resources, especially in digitally influenced classroom settings (Muflihin, 2020). These methodologies recognize the changing nature of student learning preferences and the growing importance of digital tools in education. As classrooms evolve with technological advancements, educators are adopting strategies that blend traditional teaching methods with innovative resources to enhance learning outcomes. This study aims to contribute to this body of research by examining how visual media within a Discovery Learning framework can create a conducive learning environment for Islamic Religious Education. Specifically, we explore how these tools can support students in bridging abstract concepts with everyday experiences, enhancing their understanding and fostering a stronger connection to the material (Olympiou et al., 2013; Amri, 2018).

By incorporating visual media, such as videos, infographics, and interactive elements, educators can make complex religious texts and teachings more accessible, engaging, and relatable. This approach not only supports cognitive engagement but also aligns with Islamic Religious Education's objective of fostering moral and ethical reflection. Integrating visual media with Discovery Learning encourages students to actively participate in their learning, prompting critical thinking and self-reflection. Moreover, it can aid in the internalization of values and principles that are central to Islamic teachings. By utilizing these innovative methods, educators can create a learning environment that resonates with students on both intellectual and emotional levels, facilitating a deeper understanding of religious concepts while nurturing their spiritual and moral growth.

The novelty of this study lies in applying both Discovery Learning and visual media specifically within the context of Islamic Religious Education, an area where the benefits of such integration remain largely theoretical. While both Discovery Learning and visual media have been studied separately, their combined impact in religious education is underexplored. This dual approach provides new insights into how educators can use multimedia resources within a Discovery Learning framework to support the holistic development of students' comprehension and values. By integrating these methods, this study seeks to bridge the gap between abstract religious concepts and students' lived experiences, making learning more

meaningful and engaging. For instance, research by Permana et al., (2024) demonstrated that using multimedia tools in Islamic education improved students' understanding of complex concepts by 35%. Similarly, a study by Jannah et al., (2023) highlighted that combining visual media with active learning strategies increased students' engagement and recall rates in religious education classes. Furthermore, Hasmiza & Humaidi (2023) found that integrating Discovery Learning with visual aids helped students internalize Islamic values more effectively, fostering a stronger moral and emotional connection. As research in this area grows, there is potential for Islamic Religious Education educators to implement multimedia resources that enhance students' understanding and personal engagement with the subject. Moreover, such integration has the potential to foster a deeper emotional and moral connection to religious teachings, encouraging students not only to learn but to internalize and reflect on Islamic values in their daily lives.

In addition to its theoretical contribution, this study offers a practical model for educators who wish to enhance the effectiveness of Islamic Religious Education through multimedia resources and student-centered learning approaches. By targeting senior high school students, it addresses a critical stage in moral and ethical development, aiming to support both academic and personal growth. This stage of education is particularly important as students are at a formative age, where they begin to critically engage with concepts related to faith, ethics, and spirituality. By incorporating Discovery Learning and visual media, educators can help students make connections between religious teachings and their own experiences, fostering a more meaningful understanding of the material. The research question in this study is: how does the integration of visual media within a Discovery Learning approach enhance students' comprehension of Islamic Religious Education at the senior high school level? This question is crucial because it seeks to explore not only how multimedia can improve cognitive understanding but also how it can engage students emotionally and spiritually. The study aims to provide evidence-based strategies that educators can adopt, ultimately improving the quality of teaching and learning in Islamic Religious Education. By examining the impact of this integration, the research hopes to contribute to more effective, engaging, and holistic approaches to religious education in schools.

B. Methods

This study employs a qualitative approach to investigate the impact of visual media integration within a Discovery Learning framework on students' comprehension of Islamic Religious Education at SMA Negeri 1 Kepahiang. The research aims to explore how combining these two methodologies can enhance student engagement and understanding of religious concepts, which is crucial in shaping their moral and ethical perspectives. The sample consists of 30 eleventh-grade students selected through purposive sampling, ensuring that the participants are familiar with digital learning tools, thereby maximizing their engagement with the visual media used in

the study. The students were chosen specifically for their experience with digital platforms, ensuring they could effectively navigate and utilize the visual tools provided during the intervention. The intervention itself lasted for six weeks, during which students participated in learning activities designed to incorporate both Discovery Learning principles and multimedia resources in a blended format. This period was sufficient to observe meaningful changes in students' comprehension and engagement.

The six-week intervention was designed to align with recent advancements in Discovery Learning, which emphasize guided exploration as a key strategy to enhance student comprehension and engagement. According to De Jong and Lazonder (2014), Discovery Learning is most effective when students receive instructional support that helps them navigate complex material, fostering both engagement and comprehension. This perspective highlights the importance of teacher guidance in scaffolding students' learning experiences as they explore new content independently or collaboratively. The role of the teacher, therefore, is not to provide direct answers but to facilitate the learning process, ensuring students can engage with the material in a meaningful way. The integration of visual media within this framework aims to further enrich the learning experience, offering an additional layer of support that can clarify and reinforce key concepts, making them more accessible and relatable.

Furthermore, Mayer's (2020) research underscores the importance of managing cognitive load when integrating visual media into learning environments. According to Mayer's Cognitive Theory of Multimedia Learning, structured visual supports, such as diagrams, images, and videos, can help students process and understand complex information by presenting it in a clear and engaging way. When well-designed, visual media can reduce extraneous cognitive load, allowing students to focus on the most important aspects of the content. This approach ensures that students are not overwhelmed by too much information at once, facilitating better comprehension and retention of material. In this study, the integration of visual media was aimed at presenting key Islamic Religious Education concepts through multiple formats, making the material easier for students to interpret and retain. By doing so, the study sought to determine whether this method could enhance students' ability to understand abstract religious concepts and engage more deeply with the material.

Data collection for the study involved a combination of observational methods, semi-structured interviews, and pre- and post-tests to assess both qualitative and quantitative changes in student learning. Observations focused on student engagement and interaction within the Discovery Learning setting, providing insights into how students approached the learning tasks, collaborated with peers, and utilized visual media. These observations were designed to capture students' levels of participation and their ability to make connections between the multimedia

resources and the religious concepts being studied. The semi-structured interviews with both students and teachers provided in-depth qualitative data regarding their experiences with the visual media and the Discovery Learning approach. The interviews allowed participants to reflect on how the multimedia tools influenced their understanding and engagement with the subject matter. These insights were crucial for understanding the perceived benefits and challenges of combining these teaching methods in Islamic Religious Education.

In addition to the qualitative data, pre- and post-tests were administered to measure students' comprehension of Islamic Religious Education concepts before and after the intervention. The tests provided a quantitative perspective on how students' knowledge and understanding had changed as a result of the intervention. The pre-test assessed students' baseline knowledge, while the post-test measured the extent to which their comprehension had improved over the course of the six-week period. This approach allowed for an objective evaluation of learning outcomes and provided valuable data on the effectiveness of the visual media and Discovery Learning integration in improving students' grasp of the material.

Thematic analysis of the observational and interview data was conducted using Braun and Clarke's (2006) framework, which involved identifying recurring themes related to engagement, problem-solving, and comprehension. This analysis helped to highlight the key factors that contributed to student success and the areas where further improvement was needed. Test scores were analyzed descriptively to assess changes in comprehension, providing a clear picture of the academic impact of the intervention. Ethical approval for the study was obtained from the relevant educational authorities, and participants were assured of confidentiality throughout the research process. Students were also given the right to withdraw from the study at any point, ensuring that their participation was voluntary and based on informed consent.

This methodology, informed by recent Discovery Learning research, offers a comprehensive evaluation of how guided exploration and visual media can enhance student engagement and understanding in Islamic Religious Education. By combining qualitative and quantitative methods, the study aims to provide a holistic understanding of the impact of these teaching strategies on students' learning experiences. The findings of this research could inform future pedagogical practices, offering educators valuable insights into how to effectively integrate multimedia resources and Discovery Learning techniques in religious education to promote deeper engagement, comprehension, and moral development among students.

C. Results and Discussion

The results of this study, based on integrating visual media in Discovery Learning to enhance students' comprehension of Islamic Religious Education (IRE), are

presented through quantitative data analysis, classroom observations, and theoretical support from relevant studies. The quantitative data, derived from pre- and post-tests, offer a clear picture of the improvement in students' comprehension levels. Classroom observations provide qualitative insights into student engagement and the effectiveness of the multimedia tools, while the theoretical support from existing research strengthens the validity of the findings.

Quantitative Analysis of Pre-Test and Post-Test Scores

A core component of this study involved analyzing the comprehension improvement between pre- and post-test scores. Table 1 below highlights the average scores before and after the intervention.

Table 1. Pre-Test and Post-Test Score Comparison

Test Type	Average Score (%)	Standard Deviation	Score Improvement (%)
Pre-Test	58	10.3	-
Post-Test	87	8.7	+29

Pre-Test Average Score, students scored an average of 58%, with a standard deviation of 10.3, indicating variability in baseline comprehension. Post-Test Average Score, the average score rose to 87%, with a standard deviation of 8.7, showing improved comprehension with slightly reduced variability. Overall Improvement 29% in comprehension was observed, suggesting the integration of visual media significantly benefited students' understanding. These findings align with research indicating that visual aids can enhance learning outcomes by providing concrete representations of abstract concepts (Mayasari & Arifudin, 2023). Visual learning helps students bridge the gap between theoretical ideas and practical understanding, especially in subjects involving complex or abstract content. Furthermore, the results highlight the importance of adopting diverse instructional methods to accommodate different learning styles, as the use of visual media appears to cater effectively to visual learners while reinforcing the material for others.

Visual Representation of Improvement

To further illustrate the improvement, Figure 1 compares the pre-test and post-test scores:



Pre-Test:  58%
Post-Test:  87%

Figure 1. Comprehension Improvement (Pre-Test vs. Post-Test)

This clear improvement in scores is consistent with the benefits of Discovery Learning, which encourages active engagement and self-discovery, allowing students to process and internalize information more deeply. By fostering curiosity and problem-solving skills, Discovery Learning empowers students to take ownership of their educational journey. This method also promotes critical thinking and adaptability, skills essential for academic and real-world success. Additionally, it aligns with constructivist learning theories, which emphasize the importance of learners actively constructing knowledge rather than passively receiving it. The approach not only enhances comprehension but also helps build confidence and motivation in tackling complex subjects.

Qualitative Insights from Classroom Observations

The qualitative aspect of the study involved direct classroom observations, where the integration of visual media positively impacted students' engagement. Teachers reported that students: Demonstrated a 35% increase in participation, engaging more in discussions and asking questions. Showed enhanced recall of Islamic Religious Education principles, especially when abstract concepts were explained through images or videos. Studies indicate that using visuals, especially in subjects like Islamic Religious Education, supports memory retention by making learning multisensory (Greenhow & Lewin, 2021). This method enhances students' ability to encode information, making it easier for them to retrieve later. Furthermore, the use of visuals also helped bridge cultural and contextual gaps, allowing students to better relate abstract religious principles to real-world applications, ultimately deepening their understanding and appreciation.

Student Feedback on Learning Experience

Student interviews provided further insights into the impact of visual media in Discovery Learning: 87% of students felt that visuals enhanced their understanding, particularly of abstract or symbolic religious teachings. 82% agreed that visual media made learning more enjoyable and helped maintain their focus during lessons. 75% noted that visual media helped clarify complex concepts, making them feel more confident in class discussions. The positive feedback aligns with Mansir, F. (2022) findings, which suggest that visual tools in education increase student motivation and improve comprehension by offering a clear, relatable context for learning. Additionally, students expressed that visual media stimulated curiosity, prompting them to explore topics further on their own. This demonstrates that the integration of visual elements not only aids in comprehension but also fosters a proactive learning attitude.

Teacher Insights on Instructional Effectiveness

Educators involved in the study observed notable improvements in students'

comprehension and engagement, with one teacher stating, "The use of visual media allows students to relate the material to real-world scenarios, making complex concepts more tangible." This observation is supported by research from Bitu et al. (2024), who emphasize that visuals in instructional content led to a more effective learning environment, especially when dealing with morally and ethically rich subjects like Islamic Religious Education. By contextualizing abstract religious teachings through visual representations, students were able to connect theoretical concepts with practical, everyday experiences. This method not only enhanced cognitive understanding but also helped students develop a deeper moral and ethical awareness, fostering empathy, critical thinking, and a stronger sense of responsibility in applying these teachings to real-life situations.

The findings indicate a significant improvement in students' comprehension of Islamic Religious Education after the application of visual media within a Discovery Learning approach. This aligns with research by Qowim et al. (2024), who emphasized that visual aids significantly enhance students' engagement and understanding, particularly in abstract subjects like religious education. Visual media, such as videos, infographics, and diagrams, helped students better grasp complex religious concepts by providing clear and relatable representations of abstract ideas. The increase in test scores from the pre-test to the post-test supports the effectiveness of integrating visual elements, as described by Greenhow et al. (2015), who found that visual media help bridge the gap between theoretical knowledge and practical understanding.

In the context of Islamic Religious Education, where many concepts are philosophical or abstract, visual media proved instrumental in translating these ideas into concrete forms, making them easier for students to understand and internalize. Classroom observations highlighted increased student engagement and motivation during lessons incorporating visual elements, with students actively participating in discussions and collaborating with peers. Teachers noted that visual aids helped bridge the gap between abstract concepts and practical understanding, enabling students to grasp complex ideas more effectively. These findings suggest that integrating visual media into the learning process not only enhances academic performance but also fosters a deeper intellectual and emotional connection to the material. This approach encourages students to engage more meaningfully, promoting long-term retention and holistic development.

The use of Discovery Learning methods allowed students to explore and interpret the content actively, aligning with Mayasari & Arifudin (2023) research, which highlighted that active learning strategies, including discovery-based methods, promote deeper learning and retention. This hands-on approach encourages students to engage with the material more thoroughly, as they are not merely passive recipients of information but active participants in the learning process. This approach proved particularly effective in Islamic Religious Education, as it enabled

students to draw connections between religious principles and real-life scenarios, a key aspect of character education emphasized by Hajri (2023). By actively exploring religious teachings and reflecting on their relevance in everyday life, students were able to internalize values such as empathy, honesty, and responsibility, which are central to Islamic ethics. Furthermore, this method helped students develop critical thinking skills, as they analyzed religious concepts in the context of contemporary issues, reinforcing the moral lessons of Islamic teachings and fostering a more profound understanding of their personal and societal roles.

Moreover, the enhancement in student scores demonstrates the benefit of combining visual media with a structured yet flexible Discovery Learning framework. According to Salsabila et al. (2024), visual media serve not only as tools for engagement but also as scaffolding devices that guide students through complex content. This supports the theory of scaffolding in education, where visual media act as intermediary tools aiding in the comprehension of intricate ideas. By presenting abstract or difficult concepts visually, students are provided with a clearer understanding, which helps reduce cognitive overload. The use of visual media in Discovery Learning also allows for individualized learning, where students can explore content at their own pace, revisiting visual aids as needed for reinforcement. This method encourages self-directed learning, enabling students to take ownership of their learning process. The flexibility of the Discovery Learning approach, combined with the targeted support of visual media, creates an optimal environment for students to actively engage with, comprehend, and retain Islamic Religious Education content, further fostering their academic and moral development.

Interestingly, the results differed from previous studies, such as Shodiqoh's (2024) research on the use of purely text-based methods in Islamic education, which did not yield substantial comprehension improvements. The discrepancy may be attributed to the passive nature of text-based learning compared to the active engagement provided by Discovery Learning with visual media. Text-based methods often require students to passively absorb information without the opportunity for interactive exploration, which can hinder deeper comprehension, especially in subjects requiring personal reflection and moral engagement, like Islamic Religious Education. On the other hand, the active learning environment created by Discovery Learning, supported by visual media, encourages students to engage with content in a more dynamic and meaningful way. Munji (2023) also found that students benefit more when educational media aligns closely with their daily digital interactions, making visual media a relevant addition to Islamic education. In today's technology-driven world, students are accustomed to interacting with multimedia content regularly, making it an effective tool for engaging them in the learning process. Visual media not only cater to their digital fluency but also help bridge the gap between abstract religious concepts and real-life experiences. This relevance likely played a key role in the significant improvement in students' comprehension observed in this study, as it enabled them to connect classroom learning with their

everyday lives.

In conclusion, the application of visual media in Discovery Learning significantly enhances students' understanding of Islamic Religious Education, validating findings by Abdullah & Noo (2024) and Amri (2018), who also noted that technology integration plays a crucial role in modern education. By incorporating visual media, this study demonstrated that students are better able to connect abstract religious concepts with practical, real-world applications, leading to improved comprehension and engagement. Visual media not only cater to students' diverse learning styles but also foster active participation, making the learning process more interactive and meaningful. As highlighted in previous research, the integration of technology in education helps create an environment that supports both cognitive and emotional engagement, which is particularly important in subjects like Islamic Religious Education, where moral and ethical reflection is key. This study further supports the notion that a well-designed blend of Discovery Learning and visual media can foster a more engaging and effective educational experience, preparing students to better internalize and apply the values and teachings of Islam in their daily lives.

D. Conclusions

The use of visual media within the Discovery Learning model significantly enhances students' understanding of Islamic Religious Education by making abstract concepts more accessible and engaging. This study found that students demonstrated improved comprehension and retention of key religious principles, as indicated by their higher post-test scores compared to pre-test results. Visual media, such as videos, diagrams, and infographics, helped clarify complex religious concepts by providing visual representations that made the material easier to understand and remember. These visual aids were particularly effective in bridging the gap between theoretical content and real-life applications, allowing students to connect religious teachings to their daily lives.

By making abstract concepts more tangible, visual media helped students better grasp the relevance of Islamic teachings in their everyday experiences. For example, visual representations of Islamic values like compassion, justice, and honesty allowed students to see how these principles could be applied in real-world situations, fostering a deeper personal connection to the material. This method of teaching not only improved academic understanding but also promoted moral and ethical development. As Islamic Religious Education is deeply rooted in character education, the integration of visual media within the Discovery Learning model supports the dual objective of enhancing both intellectual comprehension and personal growth.

Furthermore, this approach aligns with the holistic educational goals of Islamic

Religious Education, which aim to nurture well-rounded individuals with strong moral foundations. By engaging students in active learning through visual media, Discovery Learning encourages students to reflect on religious teachings, fostering critical thinking and ethical decision-making. This method empowers students to internalize religious values and apply them meaningfully in their lives, promoting a balanced development of their intellectual, emotional, and spiritual capacities.

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