

Enhancing Learning Achievement through Effective Use of Teaching Aids in Islamic Education

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ABSTRACT

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This study examined the impact of teaching aids on learning achievement in Islamic education. A questionnaire was used to collect data from fourth-grade students in Kupang, Indonesia. The questionnaire consisted of 20 items, and students rated their agreement on a 5-point Likert scale. Descriptive analysis showed that students' responses to teaching aids were categorized as moderate, with 42.1% falling into this category. The findings revealed a significant positive correlation between teaching aids and learning achievement. The coefficient of determination analysis indicated that teaching aids accounted for 88% of the variance in learning achievement. Furthermore, the t-test and simple linear regression analysis confirmed the significant influence of teaching aids on learning achievement. The study suggests that incorporating teaching aids and innovative learning strategies in Islamic education can enhance learning outcomes. Educators should use various teaching aids and media to create engaging learning environments. Policymakers should support effective teaching practices and provide necessary resources for integrating teaching aids in classrooms. These results offer valuable insights into the importance of teaching aids in improving learning achievement, not only in Islamic education but also in other subjects.

Keywords

Elementary School

Islamic Education

Learning Achievement

Teaching Aids

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Introduction

In the pursuit of educational success, fostering students' satisfaction in learning plays a pivotal role. However, this satisfaction is not experienced by passive or less enthusiastic students, which often leads to a lack of comprehension and understanding of the material being taught. This deficiency can be attributed to educators' limited innovation in choosing suitable learning models and their ineffective use of visual aids, thereby diminishing students' interest in the subjects being taught.

The ultimate goal of every lesson is to empower students to grasp the material and apply it in their daily lives [1]. Several factors can influence learning outcomes, including the utilization of teaching aids by educators throughout the teaching and learning process. In elementary schools, the incorporation of visual aids has proven to be highly beneficial in enhancing students' understanding of concepts and skills within the learning materials. Teaching aids encompass various instructional media that convey the concepts being taught [2]. Visual aids, specifically, serve as tools employed by teachers to elucidate subject matter and prevent reliance solely on verbal communication, thereby promoting active engagement among students [3]. Consequently, teaching aids represent essential tools or media utilized to support students throughout the learning process.

In particular, the subject matter of fardhu prayer practice within the Islamic Education curriculum necessitates the use of teaching aids to facilitate students' comprehension of the correct rules and pillars of prayer. This approach helps to prevent monotony resulting from a lecture-based method. By incorporating props, students can directly observe and interact with the objects or elements under study [4]. The current teaching process for the Islamic Education curriculum adheres to the lesson plan, encompassing initial activities, core activities, final activities, learning methods and strategies, and assessment. In the specific context of fourth-grade Islamic education, the teacher primarily employs the lecture method to explain the rules of prayer, subsequently transcribing them onto the blackboard.

Based on preliminary research conducted by the researchers at an elementary school in Kupang City, concerning the Islamic Education curriculum's fardhu prayer practice subtopic, it was observed that visual aids were underutilized, leading to a lack of effectiveness. The prevailing teaching method merely involved theoretical explanations, followed by practical exercises toward the end of the subject. Furthermore, the practice of fardhu prayer often entailed students reading the order of the prayers, with subsequent questioning by the educator or written exercises pertaining to prayer practice. Consequently, many students encountered difficulties in comprehending and memorizing the proper sequence of fardhu prayers. Recognizing this phenomenon, the researchers believe that the incorporation of props

is crucial in facilitating fardhu prayer practice. Students generally gravitate towards teaching materials that are simple in form and color, and such props tend to be more visually appealing. Additionally, these aids stimulate students' imagination and enhance their learning experience. By employing visual aids, such as pictures and hands-on practice with prepared materials, the learning process can be made more enjoyable and engaging [5]-[7]. Media and teaching aids that captivate students' interest and enthusiasm have the potential to foster a conducive atmosphere, motivating students to improve their learning outcomes [8], particularly in fardhu prayer practice. By investigating the impact of teaching aids on students' learning outcomes, this research endeavors to contribute to the advancement of effective teaching practices in Islamic Education education. This study recognizes the significance of incorporating engaging and interactive teaching materials to enhance students' motivation and understanding. It aims to bridge the gap in the existing teaching methods by exploring the potential benefits of visual aids in the practice of fardhu prayers. The researchers believe that by employing appropriate teaching aids, students will not only develop a deeper understanding of the subject matter but also retain the knowledge more effectively.

The anticipated outcomes of this study hold promise for both educators and students alike. Educators can gain valuable insights into innovative teaching practices that effectively integrate visual aids into the Islamic Education curriculum [9]. Understanding the influence of teaching aids on learning achievement can guide educators in selecting the most suitable materials and strategies to engage their students actively. Moreover, students stand to benefit significantly from this research. By utilizing visual aids in the learning process, they can experience a more enjoyable and immersive educational environment. Engaging with props and visual representations not only enhances their comprehension but also stimulates their creativity and imagination [10]. Ultimately, it is anticipated that this will lead to improved learning outcomes in fardhu prayer practice and, potentially, other subjects as well.

This research aims to investigate the impact of teaching aids on the learning achievement of fourth-grade students in the context of fardhu prayer practice. By addressing the current limitations in the teaching methods and emphasizing the importance of incorporating visual aids, this study seeks to contribute to the advancement of Islamic Education education. The findings have the potential to provide valuable insights for educators, empowering them to create engaging and effective learning environments, while benefiting students through enhanced understanding and motivation.

Method

This study adopts a quantitative approach to investigate the influence of teaching aids on the learning achievement of fourth-grade students. The research procedure consists of data collection techniques, data processing, and several data analysis techniques.

A. Research Procedure

The research was conducted during the even semester of the 2021/2022 academic year, focusing on fourth-grade students at a public elementary school in Kupang. The study employs a quantitative research design, utilizing secondary data obtained from written sources such as books, journals, and relevant articles to support and complement the research data. The research population consists of students, teachers, and the school principal. The sample for this study comprises 19 fourth-grade students. There were 12 females, accounting for 63.2% of the total, while 7 males represented 36.8% of the total number of respondents. This distribution allows for a balanced representation of both genders, ensuring a comprehensive analysis of the impact of teaching aids on learning achievement

B. Data Collection and Processing Techniques

To assess the application of teaching aids and its impact on learning achievement, a questionnaire was utilized as a data collection instrument. The questionnaire was distributed to the respondents to gather information about their perception and acceptance of the implemented teaching aids media. The questionnaire consisted of 20 items, and respondents were asked to rate each item on a Likert scale with the following options: Strongly Agree (scored as 5), Agree (scored as 4), Not Sure (scored as 3), Disagree (scored as 2), and Strongly Disagree (scored as 1). The maximum possible total score on the questionnaire was 100, while the minimum score was 20. The questionnaire aimed to gauge the extent to which students found the application of teaching aids beneficial and effective in their learning process, providing insights into their perceptions and experiences with the utilized teaching aids media.

To analyze the participants' responses to the teaching aids, the questionnaire data can be categorized into five categories: very high, high, medium, low, and very low (See Table 1).

Table 1. Questionnaire Score

No	Interval Score	Frequency	Percentage	Criteria
1	50-56	3	15.8%	Very low
2	57-63	1	5.2%	Low
3	64-70	8	42.1%	Currently
4	71-77	2	10.6%	Tall
5	78-84	5	26.3%	Very high
Total		19	100%	

Data processing involves using Microsoft Excel and SPSS software, along with various data analysis techniques to present and analyze the collected data. The following techniques are employed:

- Statistical Data Analysis: Various statistical analyses will be conducted to present the data for each variable under study, perform calculations to address research questions, and test the proposed hypotheses.

- **Validity Test:** The validity test determines whether the measurement instrument effectively fulfills its intended purpose. Validity reflects the accuracy and effectiveness of the measuring instrument. The validity test criteria are determined based on the comparison between the calculated correlation coefficient (r_{count}) and the critical value (r_{table}). If $r_{\text{count}} > r_{\text{table}}$, the questionnaire is considered valid; otherwise, it is deemed invalid.
- **Reliability Test:** Reliability refers to the consistency of a questionnaire or measuring instrument in measuring a variable or construct. The reliability test assesses whether the measurement results remain consistent across repeated measurements using the same instrument. A variable is considered reliable if it yields a Cronbach's alpha value greater than 0.60.
- **Analysis of the Effect of Using Teaching Aids:** This analysis aims to examine the influence of visual aids on student achievement. The analysis includes Bivariate Normality Test, Statistical Test and Decision Criteria, and Regression Analysis.

Overall, these data collection and analysis techniques aim to provide a comprehensive understanding of the influence of teaching aids on the learning achievement of fourth-grade students. By analyzing the validity, reliability, and impact of teaching aids through statistical analyses, this study aims to uncover valuable insights regarding the relationship between teaching aids and learning outcomes.

Results and Discussion

A. Statistical Results

1. Validity

The validity test was conducted to determine whether the measuring instrument (questionnaire) effectively measures what it is intended to measure. The criteria for validity testing were $r_{\text{count}} > r_{\text{table}}$ for validity and $r_{\text{count}} < r_{\text{table}}$ for invalidity. The r_{table} value used as the criterion for validity is 0.312. Based on this, all 20 items related to the influencing factors of the use of visual aids are declared valid. This conclusion is drawn because the item-total correlation values (item correlation with the total score) are higher than the criterion value of r_{table} (0.312) for all items. Therefore, all 20 questions can be considered valid for measuring the intended constructs.

2. Reliability

The reliability test was conducted to assess the consistency of the measurement results if the measurement is repeated using the same instrument. The criterion used for reliability testing is the Cronbach's alpha value, with a predetermined threshold of 0.60. Based on the table, all 20 items related to the influence of the use of visual aids are considered reliable. This conclusion is drawn because all item's Cronbach's alpha values are higher than the

threshold of 0.60. Therefore, all 20 items demonstrate good internal consistency and can be considered reliable for measuring the intended constructs. The results of the validity and reliability tests provide evidence that the instrument used in the study is valid and reliable for measuring the influencing factors of the use of visual aids. These tests ensure that the questionnaire is an appropriate and accurate tool for collecting data on the effect of visual aids on learning achievement.

3. Coefficient of determination

In this study, a coefficient of determination test was conducted to assess the extent to which the independent variable (the use of visual aids) explains the variations in the dependent variable (learning achievement). The results, as shown in Table 6, indicate a strong correlation ($R=0.944$) between the influence of teaching aids and learning achievement. The coefficient of determination (R-Square) is calculated to be 0.884, which means that 88% of the variance in learning achievement can be explained by the effect of the use of visual aids. The remaining 12% is attributed to other factors not accounted for in the model.

These findings suggest that integrating visual aids into Islamic education learning, specifically in the prayer sub-chapter, can significantly improve students' learning abilities. It emphasizes the importance of utilizing various learning media to enhance student engagement and comprehension. Previous research also highlights the significance of teacher support and effective education management policies in promoting learning achievement.

Additionally, Ref. [11] found that self-regulated learning abilities, including the utilization of media for learning, can be further developed among elementary students in Nusa Tenggara Timur (NTT). The results of the present study align with these findings and further emphasize the positive impact of visual aids on learning outcomes. It is worth noting that other factors beyond the scope of this study may also contribute to learning achievement. Factors such as teacher quality and educational policies play a crucial role in shaping students' academic success, as highlighted by Ref. [12].

Overall, the findings support the notion that incorporating visual aids in elementary education classes is an effective strategy for improving students' learning achievement, with the potential to enhance student engagement, comprehension, and self-regulated learning abilities.

4. Pre Test and Post Test

In summary, the pretest data showed an average score of 65.0000 with a moderate amount of variability, while the posttest data indicated an improvement with an average

score of 78.9474. The scores ranged from 50.00 to 90.00 in the pretest and from 60.00 to 100.00 in the posttest. The data suggests that the intervention, which likely involved the use of teaching aids, had a positive impact on the students' learning outcomes. However, further statistical analysis would be required to determine the significance of the observed improvement.

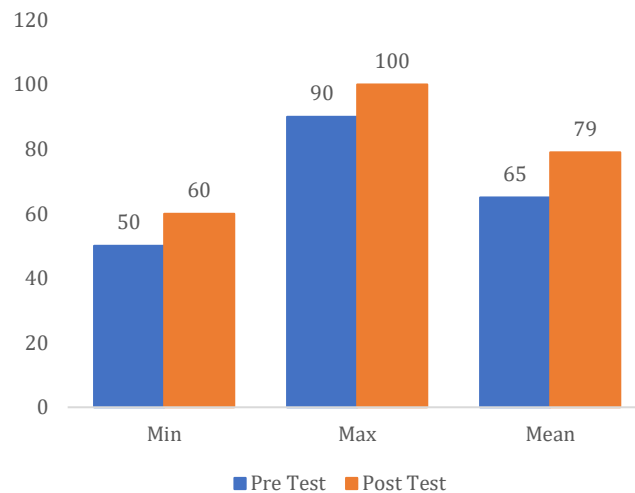


Fig. 1. Pre Test and Post Test result

Based on the information provided, the students' responses to the teaching aids are categorized as moderate, with a percentage of 42.1%. This suggests that a significant portion of the students had a moderate level of agreement or acceptance of the teaching aids.

Furthermore, the t-test was conducted to assess the significance of the relationship. The calculated t-value of 11.751 exceeds the critical t-value, indicating that the relationship between visual aids and learning achievement is statistically significant. The significance value (sig) of 0.006 is less than the predetermined significance level of 0.05, supporting the acceptance of the alternative hypothesis (H1) that there is an influence of visual aids on learning achievement.

5. Regression Analysis

The results of the research demonstrate that the use of visual aids (x) has a positive and significant influence on learning achievement (y). The simple linear regression analysis confirms this relationship, with the coefficient for the effect of props estimated at 0.794. This indicates that for every unit increase in the use of teaching aids, there is an expected increase of 0.794 units in learning achievement. See Table 2.

Table 2. Linear Regression result

Coefficients^a					
Model	Unstandardized Coefficients		Standardized Coefficients		
	B	std. Error	Betas	Q	Sig.
1 (Constant)	6,184	5,390		1.147	.002
The Effect of Props	.794	.068	.944	11,751	.006

a. Dependent Variable: Learning Achievement

B. Findings

Based on these findings, it can be concluded that the use of visual aids in Islamic education classes for fourth-grade students, particularly in the prayer sub-material, has a significant impact on their learning achievement. The results suggest that incorporating visual aids effectively enhances students' understanding and academic performance in Islamic education.

The results of this study provide valuable insights into the significance of incorporating learning innovations in the teaching of divine messages, particularly in the context of Islamic education. The prayer, being a fundamental pillar of religion and a symbol of servitude to the Creator, holds immense importance in the lives of believers. Therefore, it is crucial to effectively teach and instill the understanding of prayer in students at an early age.

In the Indonesian education system, Islamic education is recognized as an essential component of the integrated curriculum in formal learning. The chapter on prayer is specifically designated as a learning material to be taught at the elementary school level. The successful acceptance of this learning process by students significantly influences their learning outcomes and achievements. It is through innovative and engaging teaching methods that teachers can foster a deep understanding and appreciation of prayer among their students.

The success of curriculum implementation is largely dependent on the role of the teacher [13]-[15]. Teachers play a pivotal role in conveying knowledge and shaping students' perspectives. The ability of teachers to effectively utilize various learning media is vital in facilitating successful teaching practices. Therefore, teachers should strive to deliver learning materials in a comprehensive and engaging manner, employing appropriate methods, and incorporating relevant props and tools that align with the subject matter of prayer.

However, the findings of this study highlight that the use of media and teaching aids was still not effectively utilized. This presents an opportunity for improvement and underscores the importance of incorporating learning innovations to enhance student achievement. The study's recommendations to the education community emphasize the need for continuous innovation and improvement in the learning process at the classroom level, as it ultimately contributes to the overall quality of education on a broader scale.

In conclusion, this study underscores the significance of incorporating learning innovations, particularly in the teaching of Islamic education. By utilizing appropriate teaching aids and media, teachers can effectively convey the message of prayer, motivate student engagement, and enhance academic achievement. The findings underscore the vital role of teachers in creating a conducive learning environment and employing innovative approaches to improve the quality of education. It is through the collaborative efforts of teachers, policymakers, and education stakeholders that significant strides can be made in enhancing the teaching and learning experience for students in the field of Islamic education.

Conclusion

In conclusion, this study has provided valuable insights into the application of teaching aids in the context of Islamic education. The results indicate that incorporating visual aids and learning innovations, specifically in teaching the chapter on prayer, have a positive impact on students' learning outcomes and achievements. The findings support previous research that highlights the effectiveness of using teaching aids in enhancing student engagement and motivation. The implications of this study are important for both educators and policymakers. It emphasizes the need for teachers to utilize a variety of teaching aids and media to create engaging and interactive learning environments. Moreover, it underscores the importance of continuous innovation and improvement in the field of education to enhance student achievement. Policymakers should support and encourage the implementation of effective teaching practices and provide necessary resources to facilitate the use of teaching aids in classrooms. While this study focused specifically on the application of teaching aids in the context of Islamic education, the findings also be relevant and applicable to other subject areas and educational settings. Future research could explore the impact of teaching aids on learning outcomes in different subjects and investigate the effectiveness of various teaching strategies and media.

Conflict of Interest

The authors declare that there is no conflict of interest.

References

- [1] Shor, I. (2012). *Empowering education: Critical teaching for social change*. University of Chicago Press.
- [2] Naqvi, S. H., Mobasher, F., Afzal, M. A., Umair, M., Kohli, A. N., & Bukhari, M. H. (2013). Effectiveness of teaching methods in a medical institute: perceptions of medical students to teaching aids. *J Pak Med Assoc*, 63(7), 859-64.
- [3] Trowler, V. (2010). Student engagement literature review. *The Higher Education Academy*, 11(1), 1-15.
- [4] Johnson, W. L., Rickel, J. W., & Lester, J. C. (2000). Animated pedagogical agents: Face-to-face interaction in interactive learning environments. *International Journal of Artificial intelligence in education*, 11(1), 47-78.

- [5] Abell, S. K., Bryan, L. A., & Anderson, M. A. (1998). Investigating preservice elementary science teacher reflective thinking using integrated media case-based instruction in elementary science teacher preparation. *Science education*, 82(4), 491-509.
- [6] Kim, J. (2020). Learning and teaching online during Covid-19: Experiences of student teachers in an early childhood education practicum. *International Journal of Early Childhood*, 52(2), 145-158.
- [7] Allison, B. N., & Rehm, M. L. (2007). Effective teaching strategies for middle school learners in multicultural, multilingual classrooms. *Middle School Journal*, 39(2), 12-18.
- [8] Rahmawati, L., & Sholeh, M. (2021). Classroom Management in Creating Effective Learning in MIS Al-Ashriyah Banjarmasin. *Al-Adzka: Jurnal Ilmiah Pendidikan Guru Madrasah Ibtidaiyah*, 11(2), 76-85.
- [9] Niyozov, S., & Pluim, G. (2009). Teachers' perspectives on the education of Muslim students: A missing voice in Muslim education research. *Curriculum inquiry*, 39(5), 637-677.
- [10] McGregor, D. (2012). Dramatising science learning: Findings from a pilot study to re-invigorate elementary science pedagogy for five-to seven-year olds. *International Journal of Science Education*, 34(8), 1145-1165.
- [11] Bala, R., Sulisworo, D., & Maryani, I. (2020). The analysis of self-regulation learning on elementary schools at the rural area in Indonesia. *Universal Journal of Educational Research*, 8(2), 395-401.
- [12] Sulisworo, D., Kusumaningtyas, D. A., Nursulistiyono, E., & Handayani, T. (2019, January). Mobile learning infusion through enhancing teachers' perception: Case study in eastern of Indonesia. In *International Conference on Science, Technology, Education, Arts, Culture and Humanity- Interdisciplinary Challenges for Humanity Education in Digital Era (STEACH 2018)* (pp. 85-88). Atlantis Press.
- [13] Alsubaie, M. A. (2016). Curriculum development: Teacher involvement in curriculum development. *Journal of Education and Practice*, 7(9), 106-107.
- [14] Bantwini, B. D. (2010). How teachers perceive the new curriculum reform: Lessons from a school district in the Eastern Cape Province, South Africa. *International Journal of Educational Development*, 30(1), 83-90.
- [15] Mundy, M. A., Kupczynski, L., & Kee, R. (2012). Teacher's perceptions of technology use in the schools. *Sage Open*, 2(1), 2158244012440813.

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