Enhancing Fiqih Learning Outcomes Through Renderforest Animated Video

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Article Info

ABSTRACT

Purpose of the study: This study aims to examine the effect of Renderforest-based animated video on students' Fiqh learning outcomes by comparing post-test results between an experimental group taught using animated video media and a control group taught using conventional instructional methods.

Methodology: This study employed a quantitative quasi-experimental approach with a posttest-only control group design. Renderforest software was used to develop animated video learning media. Data were collected through a post-test instrument. Statistical analysis was conducted using SPSS software, including normality testing, homogeneity testing, and the Mann–Whitney U test.

Main Findings: The results showed a significant difference in students' Fiqh learning outcomes between the experimental and control groups. Students who were taught using Renderforest-based animated videos achieved higher post-test scores than those taught using conventional methods. The Mann–Whitney U test indicated a statistically significant difference between the two groups ($p < 0.001$).

Novelty/Originality of this study: This study offers novelty by specifically examining the effectiveness of Renderforest-based animated video media in Fiqh instruction through a quantitative quasi-experimental approach. Unlike previous studies that discuss animated videos in general, this research focuses on the Renderforest platform to present abstract Fiqh concepts contextually, thereby strengthening empirical evidence on digital instructional innovation in Islamic education.

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1. INTRODUCTION

The development of Islamic education in the modern era has driven transformative changes in instructional systems, particularly in the use of technology as a means to support the learning process [1], [2]. Islamic education is no longer oriented solely toward the oral transmission of information; rather, it requires instructional approaches that enable students to develop conceptual understanding, critical thinking skills, and the ability to relate Islamic values to real-life contexts. Studies indicate that integrating technology in Islamic education can enhance instructional effectiveness and increase student engagement in the learning process [3]-[5]. One subject that requires a contextual and innovative instructional approach is Fiqh.

Fiqh is a core subject in Islamic education that aims to equip students with an understanding of Islamic law and the ability to apply it in daily life [6], [7]. Fiqh instruction not only demands mastery of theoretical concepts but also requires a deep and contextual understanding of the subject matter [8]-[10]. Such an

understanding is essential to enable students to analyze and respond appropriately to the various religious issues encountered in everyday life. Therefore, Fiqih learning is expected not only to provide normative knowledge of Islamic law but also to help students internalize and apply its values consciously, consistently, and responsibly in their daily lives.

In many madrasahs, the implementation of Fiqh learning continues to rely heavily on traditional, teacher-centered instructional practices. Limited variation in teaching strategies often results in minimal student involvement during the learning process, thereby restricting the development of students' analytical abilities and their capacity to respond to religious problems encountered in daily life [11], [12]. This situation is often associated with reduced student motivation and suboptimal learning outcomes. As a consequence, From students' perspectives, Fiqh learning emphasizes the recall of legal rules, while meaningful understanding and contextual application receive less attention. A lack of instructional variation also leads to passive student participation, hindering the optimal development of analytical thinking skills and the ability to address everyday religious issues [13]-[15]. Therefore, instructional innovation in Fiqh learning is necessary to bridge abstract Islamic legal concepts with students' real-life contexts [16], [17]. Renderforest-based animated video media offers a relevant alternative, as it presents Fiqh materials in a visual and contextualized manner, thereby supporting clearer understanding and increasing student engagement [18]-[20]. By integrating visual and auditory elements, this media has the potential to overcome the limitations of conventional instruction and improve students' Fiqh learning outcomes.

Several previous studies have shown that the use of animated video media in instruction has a positive impact on students' conceptual understanding and learning outcomes. Mayer emphasized that integrating visual and auditory elements into instructional materials optimizes students' cognitive processing compared to text-based instruction alone [21]-[23]. In the context of Islamic education, animated video media has also been proven to enhance learning motivation and help students connect religious content with real-life situations [24], [25]. Furthermore, a study conducted by Chudrin et al demonstrated that the use of animated video in Fiqh instruction significantly improves students' learning outcomes and engagement, particularly in abstract subject matter [26]-[28]. The findings suggest that animated video media have considerable potential as an innovative and contextual instructional medium for learning Fiqh. Accordingly, the utilization of Renderforest-based animated video media is relevant to be examined as an alternative approach in Fiqh instruction.

This study addresses the limitations of previous research on the use of animated video in Islamic education. Earlier studies have generally examined animated videos in a broad context and have not specifically focused on the use of the Renderforest platform in Fiqh instruction, particularly through a quantitative experimental approach. In addition, empirical evidence regarding the effectiveness of animated video media in improving Fiqh learning outcomes at the junior high school level remains limited. This gap highlights the urgency of conducting research that provides measurable and context-specific findings to support the integration of digital media in Fiqh learning.

Therefore, this study aims to examine the effect of Renderforest-based animated video media on students' Fiqh learning outcomes. Specifically, it seeks to identify whether there is a significant difference in learning outcomes between students taught using Renderforest-based animated video and those taught using conventional instructional methods.

2. RESEARCH METHOD

2.1. Type of Research

The research was conducted through a quantitative approach with a quasi-experimental design, specifically the post-test only control group design approach conducted among eighth-grade students at an Islamic Junior High School 10 in Ngawi, East Java, Indonesia. The research emphasized numerical data, statistical analysis, and quantitative procedures to examine educational research problems [29], [30]. Quantitative studies operate under predefined assumptions and aim to examine relationships among variables through systematic and valid research processes. The use of the post-test only control group design allowed the effectiveness of the instructional treatment to be evaluated by comparing post-intervention learning outcomes between the experimental group and the control group. In this research, the independent variable was the use of Renderforest-based animated video as instructional media, while students' Fiqh learning outcomes served as the dependent variable [31], [32]. Below is a summary of the instructional design for the experimental and control groups.

Table 1. Treatment Design for Experimental and Control Groups

Group	Teaching Method	Instructional Media	Test
Experimental Group	Experimental Method	Renderforest Best Animated Video	Post Test
Control Group	Conventional Method	Textbook and teacher	Post Test

2.2. Population and Sample

The population of this study consisted of eighth-grade students at an Islamic junior high school in Ngawi, East Java, Indonesia. The sample included 52 students who were divided into two groups: an experimental group and a control group. Purposive sampling was employed to select the sample based on specific considerations, such as the similarity of students' academic characteristics and the suitability of the classes for implementing the experimental treatment.

2.3. Research Instruments

The main instrument used in this study was an achievement test in the form of a post-test designed to measure students' Fiqh learning outcomes after the instructional treatment. The test items were developed based on the learning objectives of the Fiqh material being taught.

2.4. Data Collection Techniques

Data were collected through post-test administration and documentation. The post-test was given to both the experimental and control groups to measure students' Fiqh learning outcomes after the instructional treatment. Documentation was used to collect supporting data such as students' scores and classroom records.

2.5. Data Analysis Techniques

The collected data were processed using statistical software and analyzed using descriptive statistical methods to describe students' learning outcomes. Prior to hypothesis testing, normality and homogeneity tests were conducted to examine data assumptions. Since the data were not normally distributed, hypothesis testing was carried out using the Mann–Whitney U test to determine whether there was a significant difference in learning outcomes between the experimental and control groups [33], [34].

2.6. Research Procedures

The research procedure was conducted in three stages: preparation, implementation, and evaluation. In the preparation stage, the researcher determined the research subjects, selected the experimental and control classes, and prepared instructional materials, lesson plans, and the research instrument in the form of a post-test. In the implementation stage, the experimental group was taught using Renderforest-based animated video, while the control group received conventional instruction. Both groups were given the same learning objectives and duration. In the evaluation stage, a post-test was administered to both groups to measure students' learning outcomes, and the results were then analyzed statistically to determine the effect of the instructional treatment.

3.   RESULTS AND DISCUSSION
3.1. Results

Learning in the fiqh subject was conducted, and the average post-test scores were calculated for each group. The results of the study indicate a difference in the average post-test scores of eighth-grade students at Islamic Junior High School 10 Ngawi in fiqh learning between the control group and the experimental group. The average post-test score of the control group, which received instruction using conventional teaching methods, was 53.07 and categorized as fair. Meanwhile, the experimental group, which was taught using Renderforest-based animated video media, obtained an average post-test score of 85.76, categorized as very good.

Table 2. Post-Test Result of the Experimental and Control Groups

Performance Detail	Experimental Group	Control Group
Maximum Score	100	70
Minimum Score	50	20
Score	150	90
Mean	75	45

Based on Table 2, the post-test results indicate a difference in learning achievement between the experimental and control groups. The experimental group achieved a maximum score of 100 and a minimum score of 50, while the control group recorded a maximum score of 70 and a minimum score of 20. The experimental group achieved a total score of 150, compared to 90 in the control group. Furthermore, the mean score of the experimental group (75) was higher than that of the control group (45). Before conducting the inferential statistical analysis, a normality test was applied to examine whether the post-test data met the assumption of a normal distribution. The result of the normality test is presented in Table 3.

Table 3. Normality Test Result

Tests of Normality		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelas	Statistic	df	Sig.	Statistic	df	Sig.
Students Learning Outcomes	Post-Test Eksperimen (Renderforest)	.273	26	.000	.849	26	.001
	Post-Test Kontrol	.224	26	.002	.872	26	.004
	Lilliefors Significance Correction						

Before conducting inferential statistical analysis, a normality test was applied to examine whether the post-test data met the assumption of normal distribution. As shown in Table 3, the results of the Shapiro–Wilk test indicated that the post-test scores of both the experimental group (Sig. = 0.001) and the control group (Sig. = 0.004) were not normally distributed, as the significance values were less than 0.05 ($p < 0.05$). After conducting the normality test, a homogeneity test was performed to determine whether the variances of the post-test scores between the experimental and control groups were equal. Table 4 presents the results of the homogeneity test using Levene's Test.

Table 4. Homogeneity Test Result

Test of Homogeneity of Variance		Levene Statistic	df1	df2	Sig.
Students Learning Outcomes	Based on Mean	2.407	1	50	.127
	Based on Median	1.549	1	50	.219
	Based on Median and with adjusted df	1.549	1	47.511	.219
	Based on the trimmed mean	2.562	1	50	.116

Based on Table 4, the results of the homogeneity of variance test using Levene's Test show that the significance value based on the mean is 0.127, which is greater than 0.05 ($p > 0.05$). This indicates that the variances of the post-test scores between the experimental group and the control group are homogeneous. Therefore, the assumption of homogeneity of variance is fulfilled. Based on the results of the normality and homogeneity tests, the Mann–Whitney U test was subsequently conducted to test the research hypothesis. Below are the results of the hypothesis testing using the Mann–Whitney U test.

Table 5. Hypothesis Testing Results Using Mann–Whitney U Test

Ranks				
	Kelas	N	Mean Rank	Sum of Ranks
Students Learning Outcomes	Post-Test Experimental Group	26	37.54	976.00
	Post-Test Control Group	26	15.46	402.00
	Total	52		

Test Statistics[a]	
	Learning Outcomes
Mann-Whitney U	51.000
Wilcoxon W	402.000
Z	-5.311
Asymp. Sig. (2-tailed)	.000
a. Grouping Variable: Class	

Based on Table 5, the results of the Mann–Whitney U test indicate a statistically significant difference in post-test learning outcomes between the experimental and control groups. The experimental group achieved a higher mean rank (37.54) than the control group (15.46), indicating superior learning performance among students who were taught using Renderforest-based animated video. The statistical analysis yielded a Mann–Whitney U value of 51.000, a Z value of −5.311, and an Asymp. Sig. (2-tailed) value of less than 0.001 ($p < 0.001$), which is lower than the significance level of 0.05 ($p < 0.05$). These results demonstrate that the difference in learning outcomes between the two groups is statistically significant. Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted, confirming that the use of Renderforest-based animated video has a significant effect on students' Fiqih learning outcomes.

3.2. Discussion

The findings of this study indicate that the use of Renderforest-based animated video has a significant positive effect on students' learning outcomes in fiqh. The experimental group obtained a higher mean score 75 compared to the control group 45, and the statistical analysis using the Mann–Whitney U test showed a significance value of 0.000 ($p < 0.05$). These results demonstrate that the integration of animated video media contributes meaningfully to improving students' academic achievement in Fiqh learning.

The improvement in learning outcomes can be explained through the multimedia learning theory, which emphasizes that students process information more effectively when visual and verbal elements are combined [35]-[37]. Renderforest-based animated videos present abstract Fiqh concepts through structured visual narratives, illustrations, and audio explanations, enabling students to understand legal concepts more concretely and contextually. This supports previous studies reporting that animated video media enhance students' comprehension, engagement, and motivation in learning [38]-[40].

In contrast, the control group, which relied on conventional instructional methods such as lectures and textbooks, demonstrated lower learning outcomes. This suggests that traditional teacher-centered approaches may be less effective in facilitating conceptual clarity, particularly in subjects like Fiqh that require contextual understanding and application of Islamic legal principles in daily life.

Overall, the findings of this study may be generalized to similar Islamic junior high school contexts where Fiqh instruction still predominantly employs conventional methods. The integration of animated video media can serve as an effective instructional innovation to improve students' engagement, conceptual understanding, and learning outcomes, especially for abstract religious content.

The results of this study have several pedagogical implications. First, Fiqh teachers are encouraged to integrate animated video media into their instructional practices to create more interactive and student-centered learning environments. Second, educational institutions may consider supporting the development and utilization of digital instructional media as part of curriculum innovation. The findings also suggest that technology-based media can bridge the gap between abstract Islamic legal concepts and students' real-life experiences.

This study has several limitations. The sample was limited to 52 students from one Islamic junior high school, which may limit the generalizability of the findings. In addition, the study focused only on short-term learning outcomes measured through post-test scores and did not examine long-term retention, critical thinking skills, or affective learning outcomes. The duration of the treatment was also limited to 3 meetings, which may influence the overall impact of the instructional intervention.

Future research is recommended to involve larger and more diverse samples across different educational levels and geographical areas. Further studies may also explore the long-term effects of animated video media on students' motivation, retention, and higher-order thinking skills. Additionally, comparative studies examining different digital platforms or integrating animated video with other instructional strategies may provide broader insights into the effectiveness of technology-based learning in Islamic education.

4. CONCLUSION

This study concludes that the use of Renderforest-based animated videos has a significant positive effect on students' Fiqh learning outcomes. Students taught using animated video media achieved higher post-test scores than those who received conventional instruction, indicating that animated video is an effective instructional medium for Fiqh learning. The findings demonstrate that animated video media enhances students' understanding of Fiqh concepts and increases students' engagement in learning. Therefore, the integration of technology-based instructional media, such as Renderforest-based animated videos, is recommended as an alternative learning strategy to support more effective and engaging Fiqh instruction at the Islamic Junior High School level.

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