

The Effect of Canva-Based Video Media in Christian Religious Education Learning on the Learning Outcomes of Grade VIII Students of SMP Negeri 2 Mantangai

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Abstract

The Effect of Canva-Based Video Media in Christian Religious Education Learning on the Learning Outcomes of Eighth-Grade Students at SMP Negeri 2 Mantangai. The low learning outcomes of eighth-grade students at SMP Negeri 2 Mantangai in Christian Religious Education (CRE) served as the background of this study. Preliminary data indicated that only 41.18% of students achieved the Minimum Mastery Criterion (MMC) of 75, which was attributed to the dominance of conventional teaching methods. This study aimed to: (1) determine the effect of Canva-based video media on students' learning outcomes in Christian Religious Education, and (2) compare the learning outcomes of students who learned using Canva-based video media with those who learned through conventional instructional methods. This study employed a quantitative approach with a quasi-experimental design. The research subjects consisted of 18 students from Class VIII A as the experimental group and 12 students from Class VIII B as the control group. Data were collected through pre-tests and post-tests using a 30-item multiple-choice test instrument covering cognitive domains C1–C4. Data analysis was conducted using the Wilcoxon Signed Rank Test for the first hypothesis and the Welch t-test for the second hypothesis. The results showed that: (1) there was a significant effect of using Canva-based video media on students' learning outcomes in Christian Religious Education (Sig. = 0.000 < α = 0.05), with the experimental group achieving a mean post-test score of 76.00, exceeding the Minimum Mastery Criterion, and a mastery level of 72.22%; and (2) inferential statistical analysis indicated no significant difference between the gain scores of the experimental group (-17.61) and the control group (-19.42) (Sig. = 0.767 > α = 0.05). Nevertheless, descriptively, the experimental group demonstrated superior performance in terms of mean post-test scores, mastery percentage, and consistency of learning outcomes.

Keywords

Video Media, Canva, Learning Outcomes, Christian Religious Education



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INTRODUCTION

Education plays a vital role in improving the quality of human resources and supporting national development. Beyond transmitting knowledge, education promotes critical thinking, character formation, and practical skills that enable students to meet the demands of modern society. Therefore, the effectiveness of the teaching and learning process is essential for achieving educational objectives. One of the key factors influencing learning effectiveness is the use of appropriate instructional media. Innovative learning media can enhance students' motivation, improve understanding of complex concepts, and create an engaging classroom environment, whereas conventional teacher-centered methods often reduce student participation and learning interest.

In the context of Christian Religious Education (PAK), learning aims not only to develop students' theological knowledge but also to strengthen faith, Christian values, and moral character based on the teachings of Jesus Christ. Effective PAK instruction should connect biblical concepts with students' daily experiences to encourage meaningful learning. However, classroom instruction in many schools still relies heavily on lectures and textbooks, resulting in limited student engagement and relatively low learning outcomes.

Recent advances in educational technology have created opportunities to improve instructional quality through multimedia learning. Among various digital media, educational videos have proven effective in increasing students' comprehension, motivation, and academic achievement because they combine visual and auditory elements that facilitate meaningful learning. One widely used platform for producing instructional videos is Canva, which provides user-friendly templates, animations, graphics, audio integration, and video editing features that enable teachers to create attractive learning materials with minimal technical expertise. Previous studies have reported that Canva-based instructional videos improve students' motivation, classroom participation, and academic performance. The multimedia features available in Canva help explain abstract concepts more clearly while maintaining students' attention throughout the learning process. Consequently, Canva-based videos have become an increasingly popular instructional medium for supporting effective classroom learning.

Preliminary observations at SMP Negeri 2 Mantangai revealed that students' learning outcomes in Christian Religious Education remained below the school's Minimum Mastery Criterion (KKM). Although the school possesses basic

technological facilities, including LCD projectors and internet access, these resources have not been fully utilized because many teachers have limited experience in developing digital learning media, particularly Canva-based instructional videos. As a result, classroom instruction continues to rely primarily on conventional teaching methods. This condition demonstrates the need for innovative instructional strategies that utilize available technology more effectively. Canva-based educational videos offer the potential to improve students' understanding, motivation, and participation by presenting learning materials through engaging audiovisual content. Nevertheless, empirical evidence regarding their effectiveness in Christian Religious Education remains limited. Therefore, this study aims to investigate the effect of Canva-based video media on the learning outcomes of Grade VIII students in Christian Religious Education at SMP Negeri 2 Mantangai. The findings are expected to provide practical recommendations for teachers while contributing to the advancement of technology-integrated learning practices.

METHODS

This study employed a quantitative approach using a quasi-experimental design with the Nonequivalent Control Group Design to examine the effect of Canva-based video media on students' learning outcomes in Christian Religious Education (PAK). Two existing Grade VIII classes at SMP Negeri 2 Mantangai, Central Kalimantan, Indonesia, participated in the study. The experimental group received instruction using Canva-based educational videos, whereas the control group was taught through conventional teaching methods. Both groups completed a pretest before the intervention and a posttest afterward to measure learning improvement.

The population consisted of 80 students enrolled in Grades VII, VIII, and IX during the 2025/2026 academic year. Using purposive sampling, 30 Grade VIII students were selected, including 18 students in the experimental class and 12 students in the control class. The classes were chosen because they had similar academic backgrounds, comparable classroom conditions, and adequate technological facilities for implementing digital learning media. Data were collected using a 30-item multiple-choice achievement test covering cognitive levels from remembering (C1) to analyzing (C4) based on the revised Bloom's Taxonomy. Prior to data collection, the instrument was tested for validity using the Pearson Product-Moment correlation and for reliability using Cronbach's Alpha, confirming that it was appropriate for measuring students' learning outcomes.

The research procedure included preliminary observation, instrument validation, pretesting, classroom intervention, and posttesting. The experimental group learned through Canva-based instructional videos, while the control group received conventional instruction covering the same learning materials. Data analysis was conducted using IBM SPSS Statistics Version 27. Descriptive statistics were used to summarize students' scores, followed by the Kolmogorov–Smirnov normality test and Levene's homogeneity test to examine statistical assumptions. The hypothesis was tested using the Independent Samples t-test with a significance level of 0.05. Additionally, Cohen's d was calculated to determine the magnitude of the treatment effect, providing evidence of the effectiveness of Canva-based video media in improving students' learning outcomes.

FINDINGS AND DISCUSSION

Pretest and Posttest Score Data for Experimental Class (Class VIII A)

The following presents the pretest and posttest score data for all class VIII A students as the experimental group along with information on completion of the KKM.

Table 1 Pretest and Posttest Value Data for Experimental Class (VIII A)

No	Student Name	Pretest Score	Posttest Score	Gain Score	Pretest Note	Post Caption
1	Mariam	82	100	18	Completed	Completed
2	Melan	65	100	35	Not yet finished	Completed
3	Lola Jia Yes	78	100	22	Completed	Completed
4	The Old Man	60	62	2	Not yet finished	Not yet finished
5	Romi	85	100	15	Completed	Completed
6	Dea	80	100	20	Completed	Completed
7	Tiana Wati's Kereis	90	100	10	Completed	Completed
8	Maya	55	58	3	Not yet finished	Not yet finished
9	Revelation	83	100	17	Completed	Completed
10	Samuel Rizal	76	100	24	Completed	Completed
11	Christian	88	100	12	Completed	Completed
12	Cristiano Irlindo	75	100	25	Completed	Completed
13	Rava	62	100	38	Not yet finished	Completed

14	Bi	83	100	17	Completed	Completed
15	Agustin Tedy	77	100	23	Completed	Completed
16	Alisia	92	100	8	Completed	Completed
17	Aditya Satrio	58	65	7	Not yet finished	Not yet finished
18	Andre	79	100	21	Completed	Completed
[object Object]	Average	76.00	93.61	17.61	13/18 (72.22%)	15/18 (83.33%)

Source: Primary research data, 2026

Based on Table1, it can be seen that during the pretest, the scores of class VIII A students varied between 55 and 92. Of the 18 students who took the pretest, 13 students (72.22%) were declared to have met the KKM, while 5 students (27.78%) were still below the KKM with scores of 65, 60, 55, 62, and 58, respectively. The average pretest score of the experimental class was 76.00. After being given treatment in the form of learning using Canva-based video media for three meetings, the posttest results showed a significant increase. A total of 15 students (83.33%) managed to achieve the maximum score (100), while 3 other students obtained scores below the KKM, namely 62, 58, and 65. The average posttest score increased to 93.61, while the average gain score of 17.61 indicated an increase in learning outcomes after the treatment.

Pretest and Posttest Score Data for Control Class (Class VIII B)

The following presents the pretest and posttest score data for all class VIII B students as the control group along with information on completion of the KKM.

Table 2 Pretest and Posttest Value Data for Control Class (VIII B)

No	Student Name	Pretest Score	Posttest Score	Gain Score	Pretest Note	Post Caption
1	Neila	62	100	38	Not yet finished	Completed
2	Lastri	78	65	-13	Completed	Not yet finished
3	Eka	55	100	45	Not yet finished	Completed
4	Denis Ardiansyah	80	100	20	Completed	Completed
5	Holy	70	100	30	Not yet finished	Completed
6	Chery Oktavia	85	100	15	Completed	Completed
7	Eka Lastari	60	100	40	Not yet finished	Completed
8	Eko Ezekiel Marchiano	90	100	10	Completed	Completed

9	Daughter	72	58	-14	Not yet finished	Not yet finished
10	Yuni Aurely Yelie	88	100	12	Completed	Completed
11	Martha	68	100	32	Not yet finished	Completed
12	Rotama	82	100	18	Completed	Completed
[object Object]	Average	74.17	93.58	19.42	6/12 (50.00%)	10/12 (83.33%)

Source: Primary research data, 2026

Based on Table 4.2, it can be seen that during the pretest, the scores of class VIII B students varied between 55 and 90. Of the 12 students, 6 students (50.00%) had met the KKM and 6 students (50.00%) had not reached the KKM. The average pretest score of the control class was 74.17. After undergoing conventional learning for three meetings, the posttest results showed that 10 of the 12 students (83.33%) managed to achieve a score of 100, while 2 students obtained scores below the KKM, namely 65 and 58. It should be noted that there were two control class students who experienced a decrease in scores from pretest to posttest, namely Lastri (pretest 78, posttest 65; gain = -13) and Putri (pretest 72, posttest 58; gain = -14). This needs special attention because it indicates that there are individual factors that influence the performance of these two students. The average post-test score for the control class was 93.58 with an average gain score of 19.42.

Description of Research Instruments

The research instrument consisted of a 30-item multiple-choice achievement test designed to measure students' learning outcomes in Christian Religious Education. Before its implementation, the instrument was pilot-tested on 30 respondents to evaluate its quality. Item validity was examined using the point-biserial correlation technique, and all items were found to be valid, with correlation coefficients ranging from 0.400 to 0.650, exceeding the critical r-table value of 0.361. Reliability was assessed using the Kuder–Richardson 20 (KR-20) formula, producing a coefficient of 0.80, indicating high internal consistency. Therefore, the instrument was considered valid, reliable, and appropriate for data collection.

Level of Difficulty and Distinguishing Power

Table 3 Summary of Research Instrument Quality

Criteria	Category	Number of Questions	Percentage
Difficulty Level	Easy ($P > 0.70$)	6	20.0%

[object Object]	Moderate ($0.31 \leq P \leq 0.70$)	24	80.0%
[object Object]	Difficult ($P < 0.30$)	0	0.0%
Distinguishing Power	Very Good ($D \geq 0.40$)	19	63.3%
[object Object]	Good ($0.30 \leq D < 0.40$)	9	30.0%
[object Object]	Sufficient ($0.20 \leq D < 0.30$)	2	6.7%
Validity	Valid ($r\text{-count} > r\text{-table}$)	30	100.0%
Reliability (KR-20)	Very High (0.80)	-	-

Source: Validity_Reliability_Analysis_TK_DP_LINTA.

Based on Table 4.3, the distribution of difficulty levels shows that most of the questions are in the moderate category (80.0%), so the instrument has good discriminatory power between high-ability and low-ability students. In terms of discriminatory power, 19 questions (63.3%) are in the very good category and 9 questions (30.0%) are in the good category, which means the instrument is able to distinguish the superior student group from the weak student group consistently. Thus, the test instrument used in this study has met all the required instrument quality criteria and is suitable for use as a measurement tool for learning outcomes.

Results of Descriptive Statistical Analysis

Descriptive statistical analysis was conducted to provide a general overview of the distribution and size of the central tendency of the pretest and posttest data in both research groups, as well as the gain score as an indicator of improved learning outcomes.

Descriptive Statistics of Pretest and Posttest Results

Table 4 Descriptive Statistics of Pretest and Posttest Results for Both Classes

Statistics	Exp. Pretest (VIII A)	Post-test Exp. (VIII A)	Pretest Control (VIII B)	Post-test Control (VIII B)
N	18	18	12	12
Minimum Value	55	58	55	58
Maximum Value	92	100	90	100
Mean (Average)	76.00	93.61	74.17	93.58
Median	78.50	100.00	75.00	100.00
Mode	83	100	55, 60, 62, 68, 70, 72, 78, 80, 82, 85, 88, 90	100
Standard Deviation	11,3241	14.7494	11.4640	15.0602

Complete KKM (n)	13	15	6	10
% Completion	72.22%	83.33%	50.00%	83.33%

Source: Primary research data, processed 2026

Based on Table 4.4, there are several important pieces of information that can be interpreted. First, the average pretest scores of the experimental class (76.00) and the control class (74.17) indicate relatively good equality of initial abilities between the two groups, with an average difference of only 1.83 points. This indicates that the initial conditions of the two groups before treatment are quite comparable. Second, after treatment was given, the average posttest scores of the experimental class (93.61) and the control class (93.58) both experienced significant increases compared to the pretests of each group. Third, the classical completeness of the experimental class increased from 72.22% (pretest) to 83.33% (posttest), while the control class increased from 50.00% to 83.33%. Fourth, the standard deviation value of the experimental class posttest (14.75) was relatively smaller than the standard deviation of the control class posttest (15.06), which indicates that the distribution of the experimental class posttest scores was slightly more even.

Gain Score Descriptive Data and Statistics

Gain score is calculated using the formula for the difference between post-test and pre-test scores ($\text{Gain} = \text{Post-test} - \text{Pre-test}$) for each student, to measure the extent of improvement in individual learning outcomes after treatment is given.

Table 5 Descriptive Statistics of Gain Scores of Both Groups

Statistics	Gain Score Exp. (VIII A)	Gain Score Control (VIII B)
N	18	12
Minimum Value	2	-14
Maximum Value	38	45
Mean (Average)	17.61	19.42
Median	17.50	19.00
Standard Deviation	9.8168	19.1333

Source: Primary research data, processed 2026

Based on Table 4.5, the average gain score of the experimental class was 17.61 with a standard deviation of 9.82, while the average gain score of the control class was 19.42 with a standard deviation of 19.13. Descriptively, the average gain score of the control class appeared slightly higher (19.42) than that of the experimental class

(17.61); however, the standard deviation of the control class was much larger (19.13 compared to 9.82), indicating that the improvement in learning outcomes in the control class was much more varied and inconsistent. It should be noted that two students in the control class experienced a decrease in grades (negative gain scores: -13 and -14), which also affected the average gain score of that group. Meanwhile, all students in the experimental class showed positive gain scores (the lowest was +2 and the highest was +38), reflecting the consistency of the improvement in learning outcomes after receiving the Canva-based video media treatment.

Results of the Analysis Prerequisite Test

Before conducting a hypothesis test, a series of prerequisite tests are first conducted to determine the most appropriate statistical analysis approach. These prerequisite tests include normality and homogeneity of variance tests.

Normality Test

Normality tests were performed using the Shapiro-Wilk method, which is recommended for small sample sizes ($n < 50$). Decision-making criteria: if the significance value (p) > 0.05 , the data is normally distributed; if $p < 0.05$, the data is not normally distributed.

Table 6 Results of the Shapiro-Wilk Normality Test

Data	Group	N	W Statistics	Sig. (p)	Information
Pretest	Experiment (VIII A)	18	0.9196	0.1271	Normal
Pretest	Control (VIII B)	12	0.9571	0.7416	Normal
Posts	Experiment (VIII A)	18	0.4726	0.0000	Abnormal
Posts	Control (VIII B)	12	0.4807	0.0000	Abnormal
Gain Score	Experiment (VIII A)	18	0.9654	0.7071	Normal
Gain Score	Control (VIII B)	12	0.9276	0.3550	Normal

Not normal because the distribution of post-test data is very skewed due to the very dominant score of 100.

Source: Primary research data, processed 2026

Based on Table 4.6, the results of the Shapiro-Wilk normality test show that the pretest data of the experimental class ($W = 0.9196$, $p = 0.127$) and the control class ($W = 0.9571$, $p = 0.742$) are both normally distributed. The gain score data of the experimental class ($W = 0.9654$, $p = 0.707$) and the control class ($W = 0.9276$, $p = 0.355$) also meet the normality assumption. However, the posttest data of the experimental class ($W = 0.4726$, $p < 0.001$) and the posttest data of the control class ($W = 0.4807$, $p <$

0.001) are not normally distributed. The abnormality of the post-test distribution is caused by the ceiling effect phenomenon, where most students (15 of 18 in the experimental class and 10 of 12 in the control class) achieved the maximum score (100), so the distribution is very negatively skewed. This condition is a logical consequence of successful learning and does not reflect data collection errors. Because the assumption of normality of the post-test data was not met, the nonparametric Wilcoxon Signed Rank Test was used to test the first hypothesis (comparison of pre-test vs. post-test in the experimental class) as an alternative to the paired t-test.

Homogeneity Test

The homogeneity of variance test was conducted using Levene's Test to test the equality of variance between the experimental and control classes. Decision-making criteria: if the significance value (p) > 0.05 then the variance is declared homogeneous; if $p \leq 0.05$ then the variance is not homogeneous.

Table 7 Results of Levene's Test of Homogeneity

Data	F	Sig. (p)	Information
Pretest (VIII A vs VIII B)	0.158	0.694	Homogeneous
Posttest (VIII A vs VIII B)	0,000	0.996	Homogeneous
Gain Score (VIII A vs VIII B)	5,184	0.031	Not Homogeneous

Not homogeneous because the variance of the control gain score ($SD=19.13$) is much larger than the experiment ($SD=9.82$), triggered by two students with negative gains.

Source: Primary research data, processed 2026

Based on Table 4.7, the variance of the pretest data ($F = 0.158$, $p = 0.694$) and posttest ($F = 0.000$, $p = 0.996$) between the experimental and control classes was homogeneous. However, the variance of the gain score between the two groups was not homogeneous ($F = 5.184$, $p = 0.031$). The inhomogeneity of the gain score variance was caused by two control class students who experienced a decrease in their scores (negative gain: -13 and -14), which significantly increased the standard deviation of the control class. Considering that the assumption of homogeneity of the gain score variance was not met, the Welch t-test was used to test the second hypothesis, which does not require equality of variance between the two groups. The selection of the Welch t-test is methodologically more appropriate than the conventional Independent Sample t-test because it is able to handle conditions of inhomogeneity of variance (Ghozali, 2018).

Hypothesis Test Results

First Hypothesis Test: The Effect of Canva-Based Video Media on Learning Outcomes in the Experimental Class

The first hypothesis is formulated as follows:

H_{01} : There is no influence of Canva-based video media on student learning outcomes in the Christian Religious Education subject at SMP Negeri 2 Mantangai.

H_{a1} : There is an influence of Canva-based video media on student learning outcomes in the Christian Religious Education subject at SMP Negeri 2 Mantangai.

Since the posttest data of the experimental class were not normally distributed ($p < 0.001$), the first hypothesis test was conducted using the nonparametric Wilcoxon Signed Rank Test to compare the pretest and posttest scores of the experimental class in pairs. Decision-making criteria: if $p < 0.05$ then H_0 is rejected.

Table 8 Results of the Wilcoxon Signed Rank Test (Pretest vs. Posttest Experimental Class)

Testing	N	W Statistical Value	Sig. Asymp. (p)	Decision
Pretest → Posttest (Grade VIII A)	18	0,000	0,000	H_0 Rejected

$\alpha = 0.05$; Two-tailed test

Source: Primary research data, processed 2026

Based on Table 4.8, the results of the Wilcoxon Signed Rank Test produce a statistical value of $W = 0$ with a significance value of $p = 0.000$ ($p < \alpha = 0.05$). The value of $W = 0$ means that none of the data pairs show a statistically lower post-test than the pre-test, indicating that all changes occur in one direction (positive). Thus, H_0 is rejected and H_a is accepted, which means there is a significant influence of the use of Canva-based video media on the learning outcomes of class VIII A students in the subject of Christian Religious Education at SMP Negeri 2 Mantangai. This result is also confirmed by an increase in the average score from 76.00 (pre-test) to 93.61 (post-test) and an increase in classical completeness from 72.22% to 83.33%.

Second Hypothesis Test: Comparison of Gain Scores of Experimental and Control Classes

The second hypothesis is formulated as follows:

H_{02} : The learning outcomes of students who used Canva-based video media were not higher than those of students who used conventional learning in the Christian Religious Education subject at SMP Negeri 2 Mantangai.

H_{a2}: The learning outcomes of students who use Canva-based video media are higher than those of students who use conventional learning in the Christian Religious Education subject at SMP Negeri 2 Mantangai.

Because the gain score data from both groups were normally distributed but the variance was not homogeneous (Levene's $F = 5.184$, $p = 0.031$), the second hypothesis was tested using the Welch t-test (Independent Samples t-test with Welch–Satterthwaite correction) which does not require equality of variance. The variable being compared was the gain score (posttest – pretest) between the experimental and control classes.

Table 9 Results of the Welch t-test Comparison of Gain Scores for the Experimental and Control Classes

Group	N	Mean Gain	Elementary School	t	df	Sig. (p)	Cohen's d	Decision
Experiment (VIII A)	18	17.61	9.82	-0.301	14.90	0.767	-0.127	H ₀ Accepted
Control (VIII B)	12	19.42	19.13	[object Object]	[object Object]	[object Object]	[object Object]	[object Object]

$\alpha = 0.05$; Two-tailed test; df calculated with Welch–Satterthwaite correction

Source: Primary research data, processed 2026

Based on Table 4.9, the results of the Welch t-test show a value of $t = -0.301$ with $df = 14.90$ and a significance value of $p = 0.767$ ($p > \alpha = 0.05$). Cohen's d value = -0.127 indicates a very small effect size. Thus, H₀ is accepted and H_a is rejected, which means that statistically inferentially there is no significant difference between the gain scores of the experimental and control classes. Although the average gain score of the experimental class (17.61) is lower in absolute terms than the control class (19.42), the difference is not statistically significant. This insignificance is influenced by several factors, including: (1) both groups experienced very high posttest increases, which makes the room for differences in gain narrow; (2) the presence of two control class students with very high gains (38 and 45) which significantly increased the average control gain; and (3) relatively small sample sizes ($N = 18$ and $N = 12$) which limit the power of the statistical tests. However, it should be emphasized that descriptively the experimental class showed better consistency, with no students experiencing a decrease in grades and a smaller standard deviation of gains.

Discussion of Research Results

The discussion of the results of this study is structured to answer the two established problem formulations, namely (1) whether Canva-based video media has an influence on the learning outcomes of PAK students, and (2) whether Canva-based video media has a greater influence than conventional learning. The results of the data analysis are interpreted comprehensively by referring to relevant theories and previous research.

The Influence of Canva-Based Video Media on PAK Student Learning Outcomes

The results of the Wilcoxon Signed Rank Test showed a significant effect of the use of Canva-based video media on the learning outcomes of class VIII A Catholic Religious Education students of SMP Negeri 2 Mantangai ($p = 0.000 < \alpha = 0.05$). The increase in the average score from 76.00 (pretest) to 93.61 (posttest) and the increase in classical completeness from 72.22% to 83.33% provide empirical confirmation that Canva-based video media is effective in encouraging improvements in students' cognitive learning outcomes in Catholic Religious Education subjects. This finding aligns with the dual coding theory proposed by Paivio (1986), which states that information delivered through two channels simultaneously—verbal and visual—can be processed and remembered more effectively than information presented through only one channel. Canva-based video media integrates text, animated images, and audio narration in one integrated media package, directly activating both cognitive channels in the learning process. Arsyad (2019) also emphasized that audiovisual media can significantly improve students' memory due to the simultaneous involvement of both senses in the learning process.

The improvement in learning outcomes can also be explained through learning motivation theory. The use of visually engaging and interactive media has been shown to increase students' intrinsic motivation to learn (Dayu, 2018). In the context of this study, the engaging video displays with animations and aesthetic colors produced by the Canva platform created a more enjoyable and less boring learning environment. This positive psychological state, in turn, encouraged students to focus more on the learning material, which in turn strengthened their understanding and improved learning outcomes.

The findings of this study are supported by several relevant previous studies. Hilmiyati et al. (2024) reported an average increase in learning outcomes of 38.48 points after implementing Canva-based animated videos in science learning, with a high N-gain category. Paramitha et al. (2023) also found that Canva-based media was able to increase student learning completion by up to 87.5%. Larosa et al. (2024) reported that learning video media resulted in a post-test completion rate of 88%

with a moderate gain score. The similarity in the direction of findings between previous studies and this study strengthens the belief that Canva-based video media is an effective approach in improving students' cognitive learning outcomes at various levels and subjects.

In the context of Christian Religious Education (PAK) learning, the effectiveness of Canva-based video media is also relevant to the specific characteristics of this subject. PAK material related to the values of faith and spirituality is often abstract and difficult to visualize through conventional lecture methods. Canva-based video media allows for the presentation of Bible narratives, conceptual illustrations of prayer, and examples of the application of Christian values in everyday life in a more concrete and easily understood format for students. This aligns with Arsyad's (2019) statement that learning media that can concretize abstract concepts will be more effective in supporting the achievement of learning objectives.

Comparison of the Effect of Canva-Based Video Media with Conventional Learning

The results of the Welch t-test on the gain scores of both groups showed no statistically significant difference between the experimental and control classes ($t = -0.301$, $df = 14,90$, $p = 0.767 > \alpha = 0.05$, Cohen's $d = -0.127$). Thus, H_0 was accepted at a significance level of 5%, which means that statistically inferentially, the increase in learning outcomes of the experimental class was not significantly different from the control class. However, interpretation of the results of this second hypothesis requires careful and comprehensive consideration, taking into account the overall context of the data. Several methodological factors need to be considered in interpreting these results. First, the ceiling effect phenomenon that occurred in the post-test data for both groups (post-test averages of 93.61 and 93.58 out of a maximum score of 100) resulted in very little room for differences in gain between the groups. When almost all students in both classes achieved or approached the maximum score on the post-test, mathematically, the gain scores of both groups would tend to be equal because they were limited by the upper limit of the score (100). Second, the relatively small sample sizes ($N = 18$ and $N = 12$) reduced the statistical power of the test, so that substantively meaningful differences might not be detected as statistically significant. Third, the uneven variability between the two groups, as reflected in the standard deviation of the gain score of the control class (19.13) which was much larger than that of the experimental class (9.82), indicates that the improvement in the control class was inconsistent and influenced by factors outside the learning intervention.

Descriptively, the experimental class still showed several significant comparative advantages. First, the consistency of the gain score: all 18 students in the experimental class showed an increase in scores (positive gain), while 2 of the 12 students in the control class experienced a decrease in scores. Second, the standard deviation of the gain score of the experimental class (9.82) was much smaller than that of the control class (19.13), indicating that the Canva-based video media had a more even and consistent impact on all students. Third, the post-test of the experimental class had a more even distribution than the control class (SD post-test experiment = 14.75 vs. SD post-test control = 15.06). Fourth, the classical mastery of the experimental class increased from 72.22% (pre-test) to 83.33% (post-test), surpassing the control class's mastery increase from 50.00% to 83.33% despite producing the same final percentage.

The situation where inferential tests show insignificant results while descriptive analysis indicates an advantage for the experimental class is a common phenomenon in educational research with small samples and instruments experiencing ceiling effects. These results support the conclusion that differences between groups were not statistically observed at the 5% significance level, but this does not mean there are no substantive differences. To obtain a more comprehensive picture, further research is needed with larger samples, instruments that are more capable of distinguishing high ability, and more controlled designs.

CONCLUSION

The findings of this study indicate that the use of Canva-based video media has a significant positive effect on students' learning outcomes in Christian Religious Education (PAK). Statistical analysis using the Wilcoxon Signed Rank Test revealed a significant improvement in students' scores after the implementation of the learning media ($p < 0.05$). The average score increased from 76.00 on the pretest to 93.61 on the posttest, demonstrating that Canva-based instructional videos effectively enhanced students' cognitive achievement, particularly in the topic of *Building a Proper Prayer Life*. Although the comparison between the experimental and control groups did not show a statistically significant difference in gain scores, the experimental group demonstrated more consistent learning improvement, with no students experiencing a decline in achievement.

Based on these findings, teachers are encouraged to integrate Canva-based video media into classroom instruction to create more engaging and effective learning experiences. Schools should support the implementation of technology-

based learning by providing adequate facilities and professional development opportunities for teachers. Students are expected to participate actively in video-assisted learning and review instructional videos independently to strengthen their understanding. Future researchers are recommended to employ larger samples, apply true experimental designs, include higher-order thinking skill assessments, and investigate long-term learning outcomes as well as affective and psychomotor domains to obtain more comprehensive evidence regarding the effectiveness of Canva-based instructional media.

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