



## THE INFLUENCE OF USING *TIRTAYASA: THE SULTAN OF BANTEN* FILM MEDIA ON THE LEARNING OUTCOMES OF STUDENTS OF X IIS CLASS AT AL-IZZAH IIBS BATU CITY

Wisnu Luhung Pambudi<sup>1(\*)</sup>, Ari Sapto<sup>2</sup>, Ronal Ridhoi<sup>3</sup>

Universitas Negeri Malang, Indonesia<sup>1,2,3</sup>

wisnupambudi786@gmail.com<sup>1</sup>, ari.sapto.fis@um.ac.id<sup>2</sup>, ronal.ridhoi.fis@um.ac.id<sup>3</sup>

### Abstract

Received: 30 Agustus 2025  
Revised: 12 Maret 2026  
Accepted: 30 April 2026

Al-Izzah IIBS Senior High School Batu City is a school that follows rules and has a boarding system. The school does not allow students to carry their phones or devices. So the teachers have to use things like PowerPoint, textbooks and worksheets to teach. These things can be a bit boring and not very interesting for the students. This study is about how a movie called *Tirtayasa: The Sultan of Banten* affects the learning of students in class X IIS who study Social Sciences at Al-Izzah IIBS Senior High School Batu City. The people who did this study used a method to see how the movie would change the students learning. They split the pupils into class X IIS 3 and 4. Class X IIS 3 skipped the movie. Class X IIS 4. Students who viewed the video several times performed better than those who did not. The two groups scored differently.

**Keywords:** Film Media; *Tirtayasa; The Sultan of Banten*; Learning Outcomes

(\*) Corresponding Author: Pambudi, wisnupambudi786@gmail.com

**How to Cite:** Pambudi, W. L., Sapto, A., & Ridhoi, R. (2026). THE INFLUENCE OF USING *TIRTAYASA: THE SULTAN OF BANTEN* FILM MEDIA ON THE LEARNING OUTCOMES OF STUDENTS OF X IIS CLASS AT AL-IZZAH IIBS BATU CITY. *Research and Development Journal of Education*, 12(1), 507-521.

## INTRODUCTION

Interactive, exciting, enjoyable, and challenging learning motivates students to engage according to their abilities, interests, and physical and psychological growth (Mulyasana, 2012). Lefudin (2017) defines learning as a teacher-designed activity that helps students acquire new skills and values via design, execution, and assessment.

History learning itself is often said to be one of the makers of boredom in the learning process because it discusses time and events that make students have to memorize and remember. This makes history learning very boring and seems very old-fashioned (Widja, 2002). History learning is about the past of human life that remembers a lot and memorizes major events, great figures, dates and years. Film medium may also help history students meet learning goals. Al-Izzah IIBS Senior High School in Batu City has severe boarding school rules.

The observations and interviews with Mr. Nur Wahyu Putra, S.Pd. at Al-Izzah IIBS Senior High School Batu City on 7 January 2021 revealed that in class X IIS, they often find sleepy students. Al-Izzah IIBS Senior High School Batu City is a boarding school based on Islamic boarding schools, every student in the afternoon and evening must submit memorization of tahfidz and tahajud to the student supervisor. So, many students in a class are sleepy because students focus on memorizing tahfidz and tahajud. The conditions for learning history at the school use textbooks and do not allow the use of gadgets considering the many negative impacts they cause (Anastasia et al., 2022).

Mr. Nur Wahyu Putra, S.Pd. also explicated in an interview with the researcher that in this school, communication devices such as handphones or laptops are not allowed so the learning media at Al-Izzah IIBS Senior High School Batu City are less interactive. This restriction limits the variety of digital learning tools available. Teachers rely almost exclusively on PowerPoint presentations. While functional, this media is often static, less innovative, and fails to fully engage students or stimulate interactive learning. Monotonous learning in Indonesian History subjects also often makes students less enthusiastic in learning so many students do not get maximum learning results because they only use PowerPoint media. In dealing with these problems, history teachers have provided several solutions to improve learning outcomes in class, by creating small groups for assignments or discussions. In addition, history teachers at the school reprimanded those who slept during class hours. Thus, the researcher proposed using cinema medium to increase Indonesian history student learning.

A conducive learning environment will keep students focused during the lesson, and it is hoped that they will achieve good and satisfactory learning outcomes. Good and satisfactory learning outcomes are inseparable from the success of the learning process. Learning is considered successful if the instructional objectives are achieved. To determine whether this has been achieved, teachers administer formative tests to students to assess their knowledge, retention, and understanding of the material taught in history lessons. The abilities students possess after acquiring knowledge, behavior, and skills will ultimately result in positive changes when they perform certain activities. These three abilities align with graduate competency standards, which encompass attitudes, knowledge, and skills that must be met or achieved by senior high school students (Irhamny et al., 2022; Pratama & Pratiwi, 2019; Rahmawati et al., 2021). One way to achieve this is by testing students' knowledge through exams, which are the outcomes of their learning in class..

The use of the film *Tirtayasa: The Sultan of Banten* for 10th-grade IIS students at Al-Izzah IIBS Senior High School in Batu City was aimed at determining whether the film influenced student learning outcomes in Indonesian History. Based on observations conducted by researchers in class X IIS students at Al-Izzah IIBS Senior High School, the average learning score for Indonesian History in that class was below the minimum completion standard of 75. This was due to the history teacher's use of conventional teaching methods, which resulted in poor student learning outcomes.

There is a need for a "low-tech" yet high-engagement visual medium like film media that complies with school rules while improving student learning outcomes. The film media used was the film media *Tirtayasa: The Sultan of Banten* which was released in 2017 and directed by Darwin Mahesa (Arbi, 2017). This film is set in Indonesia's Banten Sultanate under Sultan Abdul Fattah or Sultan Ageng Tirtayasa. Sultan Ageng Tirtayasa, Banten's 6th Sultan. The Banten Sultanate reached its apex in commerce and economics under Sultan Ageng Tirtayasa until his two sons' dispute with VOC. According to Arbi (2017), the Indonesian Ministry of Education and Culture backed this video in 2017, making it ideal for modernizing Indonesian history during the Banten Sultanate.

Due to supporting sequences, conversations, and backdrops, films may help pupils understand events. Because what is seen and heard is simpler to absorb and retained faster than reading and listening (Novrianto et al., 2024; Widiani et al., 2018). The usage of films as a learning medium for Indonesian history can make students build imaginations according to the story or events when watching the film given. With the help of films providing stories or events in Indonesian history containing a fairly long periodization with discussions that also require a long time, can help shorten the explanation and summarize Indonesian historical events with a short duration. So, students can capture the contents of the discussion from the film and take messages from the film well and easily.

The messages that can be received by students are in the form of moral messages that are gained and character building for students. In addition, the selection of the film *Tirtayasa: The Sultan of Banten* is connected to fundamental competencies (KD) in Indonesian history, such as KD 3.8 assessing governance and cultural life throughout the Islamic Kingdoms in Indonesia and providing evidence that still applies to Indonesian culture now. The film medium exhibits evidence that is still relevant to today's Indonesians, notably in Banten, where debus culture, Qadiriyyah tariqa, social, and political ties persist.

The *Tirtayasa: The Sultan of Banten* film media has a light storyline and also goes straight to the heart of the problem so that students can absorb information from the film with a sense of interest in the storyline given. Supporting media like historical documentaries is essential to increasing student learning (Purwanto, 2022). History instructors must choose effective and efficient learning medium to improve student learning outcomes (Anastasia et al., 2022; Purnomo, 2023). A quasi-experimental research found that class X IIS students' average learning outcome increased from 64.6 to 80.8.

The success factor for learning outcomes must come from individual students and also the role of history teachers as educators in the classroom. Meanwhile, the Indonesian History subject at Al-Izzah IIBS Senior High School Batu City has poor learning outcomes for its students. Therefore, the researcher wants to try using the *Tirtayasa: The Sultan of Banten* film media to find the effect on the learning outcomes of class X IIS students. In theory, history learning uses film media such as documentary-based history learning media, which was originally intended to help learning run according to learning objectives, can not increase students' interest and enthusiasm for learning history and the creativity and critically of history teachers. Borish et al. (2021) argue that the suitability of historical documentaries for history teaching can encourage students to think critically, thereby improving their learning outcomes in understanding historical material through visual and audiovisual media.

Previous studies from this study, namely Hilman (2018), Lego (2018), Nahdiroh & Arisona (2020), Novrianto et al. (2024), Suhendra (2018), and Yafi & Yuliantri (2024) have a common thread regarding the use of audio-visual-based film media on student learning outcomes. While there are many studies on educational films, there is limited research specifically evaluating the film *Tirtayasa: The Sultan of Banten* as a pedagogical tool for class X IIS (Social Science) students. This study looks at a specific historical figure to see if a narrative-driven film can bridge the gap between "boring" history facts and student comprehension.

This study's novelty is discussing the impact of *Tirtayasa: The Sultan of Banten* film media on class X IIS students' learning outcomes using a pretest and post-test control group design that shows the independent sample t-test and compares tcount with ttable from the average pretest and post-test values of the experimental and control classes. This research differs from prior studies in that it is more precise regarding cinema media content and basic competencies (KD) and uses a pretest post-test control group design to present the independent sample t-test findings and compare tcount with ttable.

A quasi-experimental methodology (pretest-posttest) shows that cinema media is quantitatively more successful than PowerPoint in this boarding school scenario. The researcher chose basic competencies (KD) in Indonesian history, specifically KD 3.8, which analyzes government and cultural life during the Islamic Kingdoms in Indonesia and provides evidence that still applies to Indonesian society today. This is following the selection of film media material that the researcher proposed in the study, namely *Tirtayasa: The Sultan of Banten*, which has a background regarding the Islamic Kingdoms in Indonesia.

The urgency of this research is to find and explicate the differences between the influence of film media and learning outcomes. This research contributes to the Study of Media and Learning Resources of History. The objectives of this research are to expound the influence of the *Tirtayasa: The Sultan of Banten* film media learning on the learning outcomes of class X IIS students of Al-Izzah IIBS Senior High School Batu City.

## METHODS

This research uses quantitative methods. The quantitative research approach in this study is quasi-experimental. Experimental study under controlled settings to determine the effects of particular therapies is quasi-experimental (Darmawan, 2014; Riduwan, 2005; Sugiyono, 2015). Quasi-experimental research stresses internal validity by controlling or removing external influences. Experimental study compares the experimental group (treated) to the control group (not treated) to prove cause and influence (Badolo et al., 2025; Priadana & Sunarsi, 2021).

The use of an experimental approach in social and educational research will be faced with problems concerning the research subject (Moleong, 2018). In this case, the use of this quasi-experimental approach will be complex considering that the object being studied concerns human interaction itself. In addition, it is not easy to find people who are willing to volunteer to be the subjects of experimental research. The only quantitative research technique that can test the causal association hypothesis or fulfill internal validity is the quasi-experimental approach. Innovation to improve learning drives most education experiments. Therefore, it frequently involves testing the impact of new educational resources, media, techniques, or practices on student learning (Priadana & Sunarsi, 2021).

T-test analysis can evaluate whether the experimental and control classes vary significantly. According to Kasiram (2008), experimental learning media are more effective than control class media if the mean of the experimental class > control class. The Indonesian History instructor chose X IIS 4 as the experimental class and X IIS 3 as the control class for this research. The experimental class received *Tirtayasa: The Sultan of Banten* cinematic material, whereas the control class did not.

Population and sample decide quantitative research studies since they can supply responses from research outcomes. This research included social science majors in grade X at Al-Izzah IIBS Senior High School Batu City in 2021/2022. The Senior High School (SMA) syllabus and curriculum examines Islamic Kingdoms in Indonesia in class X of the social sciences department, which determined grade X.

Supporting Sugiyono (2015) and Darmawan (2014), population is a generalized area of things or persons with specified attributes and characteristics chosen by researchers to study and derive conclusions. This research uses class X at Al-Izzah IIBS Senior High School Batu City to generalize Islamic Kingdoms learning materials in Indonesia. Population is the complete research object, which might include live creatures, objects, symptoms, test scores, or events as data sources for study characteristics. Research populations may alternatively be the complete unit of analysis whose features will be anticipated. Analysis will be done on the unit of analysis (Sinaga, 2014).

In research, not all populations are always used as objects/subjects of research, their data is revealed, and their characteristics are studied. In cases where the number of research populations is very large, then for certain reasons, researchers are allowed to take only a portion of the population to be used as objects/subjects of research. If the population is enormous and researchers cannot investigate everything owing to limited budget, people, and time, they may utilize samples. Conclusions from the sample will be applied to the

population. Thus, population samples must be representative (Badolo et al., 2025; Muhyi, 2018).

This research employed purposive sampling. Purposive sampling considers factors. This sample is better for non-generalization research (Muhyi et al., 2018). The researcher must know and presume that the sample members can supply the needed information based on the research challenge (Sinaga, 2014). The researcher chooses the sample based on class average ability. Interview with Indonesian History instructor Mr. Nur Wahyu Putra, S.Pd. said that class X IIS 3 struggled to understand the course. This makes it a good experimental class since students are drowsy and learn poorly. Class X IIS 4 is a good control class since its pupils are focused and eager to learn. This research identified class X IIS with 94 students as the population, with X IIS 4 as the experimental class and X IIS 3 as the control class, each with 15 students.

The research instrument gathers data to simplify research. The findings will also be more accurate, thorough, and systematic (Arikunto, 2013). In this study, the researcher employed non-tests and tests to obtain data. Non-test research tools include observation and interviews. Non-test instruments are treatment instruments to find initial data. The use of observation in this study was used as a means of seeing and observing for themselves the influence of the *Tirtayasa: The Sultan of Banten* film media and then recording the behavior and events that occurred in the actual situation during the screening of the *Tirtayasa: The Sultan of Banten* film media with the interaction of students during the screening of the film media in class. Interviews were used in this study as a guide to obtain certain information about the condition of respondents employing one-sided questions and answers during the screening of the *Tirtayasa: The Sultan of Banten* film media. Meanwhile, the test instrument was used to measure students' abilities in the subject of Indonesian History using the *Tirtayasa: The Sultan of Banten* film media, the test instrument was in the form of pre-test and post-test questions.

Data is collected by observation, interviews, documentation, and testing. Researchers employ data collection equipment to work faster. The findings will also be more accurate, thorough, and systematic (Arikunto, 2013). In this study, the researcher employed non-tests and tests to gather data. Non-test research tools include observation and interviews. Non-test instruments are treatment instruments to find initial data. The use of observation in this study is used as a way to see and observe for yourself the influence of the film media of *Tirtayasa: The Sultan of Banten* then records the behavior and events that occur in the actual situation when the film media is played *Tirtayasa: The Sultan of Banten* with the interaction of students during the screening of the film media in class.

Interviews are used in this study as a guide to obtain certain information about the condition of respondents utilizing one-sided questions and answers when the film media is played *Tirtayasa: The Sultan of Banten*. Meanwhile, the test instrument is used to measure students' abilities in the Indonesian History subject using the film media *Tirtayasa: The Sultan of Banten*. The test instrument is in the form of pretest and post-test questions. In the interview, questions and answers are given verbally. Usually, this communication is done in a face-to-face situation, but this communication can also be carried out by telephone (Nasution, 2007). The interview conducted in this study with the Indonesian History subject teacher regarding the process of teaching and learning history activities at Al-Izzah IIBS Senior High School Batu City was head-o at school.

Study data is collected via documentation (Arikunto, 2013). Documentation provides first research data. Initial research data includes population, syllabus, curriculum, learning program design, and semester test results. The experimental and control classes' final results are compared to determine pupil mastery (Sugiyono, 2010).

This final exam is given independently to each class after being provided with Banten Sultanate material and seeing *Tirtayasa: The Sultan of Banten*. Then test results are utilized to solve study difficulties. The multiple-choice exam questions are tested on classes other than the control and experimental classes before the test. This checks question validity and dependability. Questions that are invalid will be replaced with more valid ones throughout the research. This study had two tests: (a) Pretest, which equalizes conditions between the control class and the experimental class before giving the research sample a stimulus, and (b) Post-test, which is the final test. The post-test compares the values of the experimental class and the control class after learning Indonesian History using *Tirtayasa: The Sultan of Banten* film media and learning without using it.

Question validity and reliability are assessed before trials using instrument analysis. Validity measures instrument validity (Arikunto, 2009). A valid instrument properly displays data from the variables researched. Based on variable descriptions, an instrument's high and low validity indicates data accuracy. This research employed item-valid questions. This research used objective multiple-choice questions. Twenty questions were created. Items validity test data was analyzed using SPSS 25. The evaluation instrument is valid if  $r_{count} > r_{table}$ . If  $r_{count} > 0.514$ , this instrument's judgments are legitimate. Using 15 students as research participants, this study calculates  $r_{table}$  value. Based on N of 15 students, the 5% significance level is 0.514. A test is reliable if it yields consistent findings (Arikunto, 2009). The reliability test measures the consistency of multiple-choice question items. Analysis of test reliability test results using SPSS 25. The Alpha Cronbach coefficient value  $> r_{table}$  value indicates a valid test. Alpha Cronbach coefficient values are  $> r_{table}$  with 0.756 bigger than 0.514.

Data analysis from the validity and reliability tests of the questions employed normality, homogeneity, and t-tests. The normality test determines whether experimental and control class value data are regularly distributed (Sugiyono, 2010). This normality test employs SPSS 25's skewness and kurtosis tests. Skewness and kurtosis are data distribution slope and sharpness, respectively. Normally distributed data has skewness and kurtosis ratios between -2 and +2. The skewness and kurtosis formulas (Santoso & Ashari, 2005).

Homogeneity tests assess whether a sample is in the same variation. The homogeneity test uses the t-test formula (Sugiyono, 2010). The Sig. value in the SPSS Test of Homogeneity of Variances output table indicates if the data variance is homogenous. Sig.  $> 0.05$  indicates uniform data variance. If  $t_{count}$  is less than  $t_{table}$ , the sample is homogenous, or vice versa. Independent and dependent t-tests are used in this hypothesis test. It tests the generalization capacity, or significance, of research findings by comparing varied conditions from two sample averages. Sugiyono (2010) lists many t-test formulae and provides instructions for their application.

- a. If  $n_1 = n_2$ , homogeneous variance ( $\sigma_1^2 = \sigma_2^2$ ) then the t-test formula can be used with separated variants or pooled variants. To see the t-test price, the degrees of freedom ( $dk$ ) =  $n_1 + n_2 - 2$  are used.
- b. If  $n_1 \neq n_2$ , homogeneous variance ( $\sigma_1^2 = \sigma_2^2$ ) then the t-test formula can be used with pooled variants. To see the t-test price, the degrees of freedom ( $dk$ ) =  $n_1 + n_2 - 2$  are used.
- c. If  $n_1 = n_2$ , the variance is not homogeneous ( $\sigma_1^2 \neq \sigma_2^2$ ) then the t-test formula can be used with separated variants or pooled variants. With degrees of freedom ( $dk$ ) =  $n_1 - 1$  or  $n_2 - 1$ . So  $dk$  is not  $n_1 + n_2 - 2$ .
- d. If  $n_1 \neq n_2$ , the variance is not homogeneous ( $\sigma_1^2 \neq \sigma_2^2$ ) then the t-test formula can be used with separated variants. The t value as a substitute for  $t_{table}$  is calculated from the difference between the  $t_{table}$  value and  $dk$  ( $n_1 - 1$ ) and  $dk$  ( $n_2 - 1$ ), and then added to the smallest t value. If the  $t_{count}$  value  $> t_{table}$  with alpha 5%, then  $H_0$  is rejected

and  $H_a$  is accepted, and if the  $t_{count}$  value  $< t_{table}$  with alpha 5%, then  $H_0$  is accepted and  $H_a$  is rejected.

To determine the significance of the difference between the Paired Sample T-Test and the Independent Sample T-Test, a statistical table of the critical value of  $t$  is required. If:

If  $t_{count} > t_{table}$ , then  $H_0$  is rejected and  $H_a$  is accepted.  
If  $t_{count} < t_{table}$ , then  $H_0$  is accepted and  $H_a$  is rejected.

The hypotheses tested in this study are as follows:

$H_0 : \mu_1 = \mu_2$ , There is no influence of the *Tirtayasa: The Sultan of Banten* film media on the learning outcomes of class X IIS students of Al-Izzah IIBS Senior High School Batu City.

$H_a : \mu_1 \neq \mu_2$ , There is an influence of the *Tirtayasa: The Sultan of Banten* film media on the learning outcomes of class X IIS students of Al-Izzah IIBS Senior High School Batu City.

## RESULTS & DISCUSSION

### *Results*

The primary result of the study is that there is a significant difference in learning outcomes between students who were taught using the film media and those taught using PowerPoint. Hypothesis testing this research using the statistical analysis usually using an independent sample t-test yielded a significance value (Sig. 2-tailed) lower than 0.05. This conclusion show the null hypothesis ( $H_0$ ) was rejected, meaning the film *Tirtayasa: The Sultan of Banten* has a measurable, positive influence on student learning outcomes.

A study at Al-Izzah IIBS Senior High School Batu City showed that after using this film, the average learning outcome for class X IIS students jumped significantly from a pretest score of 64.6 to a post-test score of 80.8. The study compared two groups of students from class X IIS:

- 1) Control Class (X IIS 3): Used conventional PowerPoint media. While there was some improvement, it was not as high as in the experimental class.
- 2) Experimental Class (X IIS 4): Used the film media. This group showed a much higher improvement from pretest to post-test.
- 3) Effectiveness: The research concluded that cinematic media is more effective than static slides because it increases students' interest and makes historical events easier to visualize and remember.

The effectiveness was particularly notable because of the no-gadget policy at Al-Izzah IIBS Senior High School Batu City. The film provided the "visual stimulation" that students usually lack due to the absence of personal smartphones or laptops. This film media helped students understand the complex conflict between Sultan Ageng Tirtayasa and the VOC, which is often difficult to grasp through text alone.

## **Discussion**

### **The Influence of Film Media of *Tirtayasa: The Sultan of Banten* on the Learning Outcomes of Class X IIS Students of Al-Izzah IIBS Senior High School Batu City in the of Indonesian History Subject**

Class X IIS 4 with 25 students and class X IIS 3 with 24 students were used for this study. The experimental class, class X IIS 4, got the film *Tirtayasa: The Sultan of Banten*, whereas the control class, class X IIS 3, did not. Class X IIS 3 utilized PowerPoint for lectures and questions and answers. Both samples will demonstrate if learning outcomes improve. The researcher pre- and post-tested the experimental and control classes to verify it. The pretest preceded learning. To assess pupils' first comprehension of the content.

The two courses got different treatments throughout the learning process, but the post-test was administered thereafter. The purpose is to assess students' ultimate understanding of the topic and the improvement in learning outcomes between *Tirtayasa: The Sultan of Banten* film media and PowerPoint media. In the previous chapter, a researcher used SPSS 25 to analyze the pretest and post-test outcomes of the experimental and control classes. The experimental class (X IIS 4) descriptive analysis showed an average pretest value of 64.6 and a post-test value of 80.8. Control class (X IIS 3) had an average pretest of 57.7 and post-test of 69.5.

The test results from the experimental and control classes show that learning outcomes are written statements about what is expected to be done by successful students at the end of the qualification of understanding a subject matter (Maisyara et al., 2018; Tanikwele et al., 2021). The key aspect that each of these definitions has in common is the desire to be more thorough and consider what students gain in terms of knowledge and/or skills when they complete a learning period.

The test results demonstrate that the application of historical learning using historical documentary films as learning media has an impact on student learning outcomes. This is evident in the differences in student learning outcomes between the groups using the *Tirtayasa: The Sultan of Banten* film media and PowerPoint. This suggests that when students participate in learning activities using historical documentary films, their learning outcomes differ from those achieved through conventional learning methods (Mariah et al., 2020)

Therefore, the test technique in this study is one of the data collection instruments. A learning test can be said to be valid if the test is truly appropriate and can accurately measure the learning outcomes achieved by students (Daliman, 2006). For the test to function as the most appropriate tool and per the information needed, the test must be well prepared beforehand (Putra, 2012). As a measurement tool in evaluation, the test provides quantitative data in the form of numerical values.

Therefore, the experimental class (X IIS 4) is better and increased more than the control class. This research asks whether *Tirtayasa: The Sultan of Banten* film media and PowerPoint media vary significantly. The researcher used the independent sample t-test to compare two independent and dependent variables.

The independent sample t-test compares the post-test averages of two unpaired samples, the experimental and control classes. This test compares student learning efficiency using *Tirtayasa: The Sultan of Banten* film media with PowerPoint media to determine whether there is a significant difference. The test generalizes the study hypothesis. The independent sample t-test determines whether *Tirtayasa: The Sultan of Banten* cinematic medium differs from PowerPoint-only learning. Different post-test scores in experimental and control classrooms show this. Table 1 shows independent sample t-test findings for the following hypothesis.

Ha = There is a difference in the post-test average between the *Tirtayasa: The Sultan of Banten* film media and the PowerPoint media.

Ho = There is no difference in the post-test average between the *Tirtayasa: The Sultan of Banten* film media and the PowerPoint media.

By deciding on the independent sample t-test with a significance level (Sig.) of 0.05 as follows:

If the Sig. (2-tailed) value > 0.05, then Ho is accepted and Ha is rejected.

If the Sig. (2-tailed) value < 0.05, then Ho is rejected and Ha is accepted.

**Table 1.**  
 Independent Sample T-Test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means		Significance		Mean Difference	Std. Error Difference	95% Confidence Interval of the ...	
		F	Sig.	t	Df	One-Sided p	Two-Sided p			Lower	Upper
PostTes_12	Equal variances assumed	.155	.695	-3.10147	47	.002	.003	-11.21667	3.61715	-18.49343	-3.93991
	Equal variances not assumed			-3.093	45.775	.002	.003	-11.21667	3.62637	-18.51714	-3.91619

Source: Primary Data Processing

The independent sample t-test in Table 1 determines Sig. The 2-tailed value is 0.003 < 0.05. The independent sample t-test shows that Ha is accepted and Ho is rejected, indicating that the *Tirtayasa: The Sultan of Banten* film media and PowerPoint media have different average post-tests. The researcher found a significant value of 0.003 < 0.05 when utilizing the independent sample t-test to compare tcount and ttable for the hypothesis test findings.

As per the test criteria, Ha is allowed while Ho is refused because tcount > ttable. The experimental class and control class have similar average post-test scores, indicating that *Tirtayasa: The Sultan of Banten* film media is more effective than PowerPoint media for history learning in the classroom. This research tested the hypothesis using the t-test formula for normally distributed data and the independent sample t-test for non-normally distributed data (Rezani, 2012). The t-test pretest and post-test experimental group tests assessed student learning after utilizing *Tirtayasa: The Sultan of Banten* film media. The researcher performed a normality test before the t-test. The normality test determines whether data is regularly distributed. The normalcy test determines whether research data is regularly distributed. We must have normal data for paired and independent sample t-tests.

The researcher uses SPSS 25's skewness and kurtosis tests for normalcy. The pretest and post-test normality tests of the experimental and control classes are shown in Table 2, with the experimental class's skewness and kurtosis ratios of -1.217 and 1.200 :

Ha = Data is normally distributed, if the pretest and post-test values of the control class are in the range of -2 to +2.

Ho = Data is not normally distributed, if the pretest and post-test values of the control class are in the range below -2.

**Table 2.**  
 Normality Test Results

	N Statistic	Range Statistic	Minimum Statistic	Maximum Statistic	Mean		Std. Deviation Statistic	Variance Statistic	Skewness		Kurtosis	
					Statistic	Std. Error			Statistic	Std. Error	Statistic	Std. Error
PreTes_ Eksperimen_1	25	50.00	35.00	85.00	64.6000	2.21585	11.07926	122.750	-.565	.464	1.083	.902
PostTes_ Eksperimen_1	25	40.00	60.00	100.00	80.8000	2.37487	11.87434	141.000	-.004	.464	-.797	.902
PreTes_ Kontrol_2	24	55.00	25.00	80.00	57.7083	3.17056	15.53252	241.259	-.708	.472	-.225	.918
PostTes_ Kontrol_2	24	45.00	45.00	90.00	69.5833	2.74054	13.42586	180.254	-.462	.472	-.489	.918
Valid N	24											

*Source: Primary Data Processing*

The normality test in Table 2 showed that the experimental class pretest's skewness ratio was -1.217 and its kurtosis ratio was 1.200. This implies properly distributed experimental class pretest data. The experimental class post-test skewness ratio was -0.008 and the kurtosis ratio was -0.088, indicating that the pretest data was normally distributed. The research also found -1.5 skewness ratio and -0.245 kurtosis ratio for the control class pretest in the -2 to +2 range. The pretest skewness and kurtosis ratios show that experimental class pretest data is regularly distributed. The post-test skewness ratio for the control class was -0.978 and the kurtosis ratio was -0.532, indicating that the experimental class's pre-test data was normally distributed.

This study's homogeneity test determines if a data version from two or more groups is homogenous or heterogeneous. Paired and independent sample t-tests need homogeneous data. The equality of two variances test compares two variances to see whether the data distribution is homogenous. Homogeneous data does not need a repeat homogeneity test if two or more data groups have the same variance (Sianturi, 2022). This research uses the homogeneity test to assess whether the experimental and control class post-test data variants are homogenous. The homogeneity test, conducted in SPSS 25, yields findings in Table 3 with a significance level ( $\alpha$ ) of 0.05.

Ha = Homogeneous data, if the significance value (Sig.)  $> \alpha$  (0.05).

Ho = Data is not homogeneous, if the significance value (Sig.)  $< \alpha$  (0.05).

**Table 3.**  
 Homogeneity Test Results

		Levene Statistic	df1	df2	Sig.
Student Learning Outcomes	Based on Mean	.155	1	47	.695
	Based on Median	.145	1	47	.705
	Based on Median and with adjusted df	.145	1	45.336	.705
	Based on trimmed mean	.129	1	47	.721

*Source: Primary Data Processing*

The homogeneity test in Table 3 shows a mean significance of 0.695 and a median significance of 0.705, proving that student learning outcomes are homogenous and accepting Ha. The paired sample t-test compares the averages of the pretest and post-test of the experimental and control classes. Table 4 displays paired sample t-test results with the following assumptions.

Ha = There is a difference in the average pretest and post-test between the *Tirtayasa: The Sultan of Banten* film media and the PowerPoint media.

Ho = There is no difference in the average pretest and post-test between the *Tirtayasa: The Sultan of Banten* film media and the PowerPoint media.

With the decision-making of the paired sample t-test with a significance level (Sig.) 0.05 as follows.

If the Sig. (2-tailed) value > 0.05, then Ho is accepted and Ha is rejected.

If the Sig. (2-tailed) value < 0.05, then Ho is rejected and Ha is accepted.

**Table 4.**  
 Paired Sample T-Test Test Results

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the ...		T	Df	One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	PreTes_Eksperimen_1 – PostTes_Eksperimen_1	-16.20000	12.35584	2.47117	-21.30024	-11.09976	-6.556	24	<.001	<.001
Pair 2	PreTes_Kontrol_2 – PostTes_Kontrol_2	-11.87500	7.49094	1.52908	-15.03815	-8.71185	-7.766	23	<.001	<.001

Source: Primary Data Processing

The paired sample t-test in Table 4 shows that Pair 1 had a significant difference in average learning outcomes between the pretest and post-test of the experimental class (Sig. (2-tailed) value: < 0.001 < 0.05). Pair 2 showed a significant difference in average learning outcomes between the control class's pretest and post-test, with a Sig. (2-tailed) value of < 0.001 < 0.05. So, Ho is rejected and Ha accepts.

The findings showed that students' active learning of history using the film *Tirtayasa: The Sultan of Banten* in class X IIS 4 as an experimental class increased. The rise in post-test average scores shows that this improves student learning. Furthermore, the history teacher's lessons have effectively used active learning. From the history teacher's activities, which included guiding and observing students to find concepts, working on post-test questions, and providing feedback/evaluation/questions and answers before giving post-test questions, the percentage of active history learning activities was high (Amirullah et al., 2021).

The favorable results from Tampubolon & Tamba (2022) and Pratama & Pratiwi (2019) support the current trend for interactive learning media while studying since it may not affect student focus. Watching, viewing, and listening to historical documentary media like *Tirtayasa: The Sultan of Banten* while learning history does not affect student concentration, which may improve academic performance. Actually, it may boost student academic performance. However, it may boost student academic performance. The post-test provided by the researcher to experimental class pupils shows this.

This film media was deliberately used by history teachers because Sultan Ageng Tirtayasa played a significant role in the development, Sufism, and struggle of Banten. Therefore, it was important to present it as a documentary drama so that the public could learn about their hero. The film's use was also motivated by the goal of instilling exemplary values. The film was used to convey the understanding that Sultan Ageng Tirtayasa was a tenacious figure who resisted Dutch/VOC influence. The goal was to inspire the current generation to be wise in responding to foreign influences, as well as to cultivate patriotism and independence.

Furthermore, legacies from the Banten Sultanate under Sultan Ageng Tirtayasa, such as debus, Sufism, and the Qadiriyyah tariqa (traditional Islamic teachings), still survive and

thrive in the socio-religious life of the Banten people today (Sultani et al., 2021). Therefore, the use of historical documentary film media about Sultan Ageng Tirtayasa is very suitable to be used to test the influence of *Tirtayasa: The Sultan of Banten* film media on the learning outcomes of class X IIS students at Al-Izzah IIBS Senior High School Batu City. The use of *Tirtayasa: The Sultan of Banten* film is based on the strategic reasons of history teachers as a local history education tool, a learning medium that is proven to improve students' academic results, as well as a means of internalizing the values of heroism and national character.

Video can respect, protect, and promote Indigenous beliefs, rituals, and oral history when utilized properly. Borish et al. (2021) show that "Video-based media are best for conveying the social context of information communicated since viewers observe the surroundings, audience, and speaker-audience interaction. It proves documentary cinema can combine thorough investigation and powerful narrative. This changes how qualitative and quantitative research values visual data epistemologically.

## CONCLUSION

Based on study and debate on using *Tirtayasa: The Sultan of Banten* film media to increase student learning outcomes on Islamic Kingdoms in Indonesia at Al-Izzah IIBS Senior High School Batu City. Descriptive analysis for the experimental class showed an average pre-test score of 64.6 and a post-test score of 80.8. Control class scores averaged 57.7 pre-test and 69.5 post-test. The independent sample t-test statistics table gives tcount as 3.101. After conducting a hypothesis test using the independent sample t-test and comparing tcount with ttable, the researcher found a significant value of  $0.003 < 0.05$ . Based on the test criteria,  $H_a$  is accepted while  $H_o$  is rejected because  $tcount > 2.012$ .

The experimental and control classes had significantly different average post-test results, says *Tirtayasa: The Sultan of Banten* film media is effective compared to PowerPoint media. This learning can influence learning outcomes that are different from using PowerPoint media. This is because the use of *Tirtayasa: The Sultan of Banten* film media makes learning history fun. This Indonesian history-themed film media not only attracts the attention of students but also makes them enjoy the process of learning history in class more.

The use of a pretest-posttest control group design provides valid empirical evidence. By comparing the experimental and control classes, this study scientifically proves that the improvement in grades is truly due to the influence of the film, not chance. The *Tirtayasa* film not only provides historical data (cognitive) but also values of struggle and leadership (affective), which perfectly match the student profile at Islamic schools like Al-Izzah IIBS Senior High School Batu City. This study successfully breaks through the history teacher's reliance on monotonous PowerPoint presentations. The results provide a concrete alternative for boarding schools to continue delivering high-tech learning without violating the rules on gadget use.

Because this study was conducted specifically at Al-Izzah IIBS Senior High School Batu City, which has a strict no-communications device policy, the results may not be generalizable to public schools where students have free internet/YouTube access. Film requires a fairly long running time. This risks cutting into discussion time or in-depth material if time management is not strictly implemented. In a quasi-experimental design, there are external factors that are difficult to fully control, such as the fatigue levels of boarding school students during certain class periods or the physical conditions of classrooms, which may differ between the experimental and control classes. Historical

films often incorporate elements of dramatization for cinematic purposes. Without strong history teacher explanations, students may have difficulty distinguishing between genuine historical facts and the filmmaker's creative additions.

This study proves the film's effectiveness, but future research could focus on more specific measurement methods. For example, developing an assessment instrument based on high order thinking skills (HOTS) through analysis of historical film scenes. Further research recommendations from this study include comparing the film with other visual media that can also be used without personal devices. This recommendation aims to analyze the film's character motifs or historical accuracy and to what extent the film is able to shape the character of students in accordance with the school's vision.

## REFERENCES

- Amirullah, Ridha, M. R., & Patahuddin. (2021). Meningkatkan hasil belajar sejarah dengan menggunakan metode problem solving pada siswa kelas VII.1 SMPN 33 Makassar. *Pattingalloang: Jurnal Pemikiran Pendidikan dan Penelitian Kesejarahan*, 8(2), 100-114.
- Anastasia, M. S., Sayono, J., & Subekti, A. (2022). Pengembangan media pembelajaran sejarah "ZAPRA" berbasis pop up book pada materi teknologi hasil kebudayaan zaman praaksara di Indonesia untuk kelas X IIS 3 SMA Darut Taqwa Purwosari Kabupaten Pasuruan. *Candrasangkala: Jurnal Pendidikan dan Sejarah (CJPS)*, 8(2), 65-85
- Arbi, A. (2017). *Garap Tirtayasa-The Sultan of Banten, Kremov Pictures gandeng aktor nasional*. Diakses melalui: <https://www.radarbanten.co.id/garap-tirtayasa-the-sultan-of-banten-kremov-pictures-gandeng-aktor-nasional/>.
- Arikunto, S. (2009). *Dasar-dasar evaluasi pendidikan*. PT Bumi Aksara.
- Arikunto, S. (2013). *Prosedur penelitian: Suatu pendekatan praktik*. PT Rineka Cipta.
- Badolo, M. U., Malik, M. A., Nur, R. A., & Latifa, A. (2025). The impact of metacognitive strategy training on higher-order thinking skills (HOTS) in high school mathematics: A quasi-experimental study. *International Journal of Environment, Engineering and Education*, 7(2), 146-157.
- Borish, D., Cunsolo, A., Mauro, I., Dewey, C., & Harper, S. L. (2021). Moving images, moving methods: Advancing documentary film for qualitative research. *International Journal of Qualitative Methods*, 20, 1-14. <https://doi.org/10.1177/16094069211013646>.
- Daliman, A. (2006). Teknik penyusunan dan pembakuan tes hasil belajar ilmu sosial serta pengolahannya. *Fakultas Ilmu Sosial dan Ekonomi Universitas Negeri Yogyakarta*.
- Darmawan, D. (2014). *Metode penelitian kuantitatif*. PT Remaja Rosdakarya.
- Hilman, A. (2018). Penggunaan media ICT untuk meningkatkan hasil belajar siswa Sekolah Menengah Pertama Negeri 3 Pagaden. *Edutech*, 17(3), 295-315.
- Irhamny, W. F., Marsudi, & Sultani, Z. I. M. (2022). Persepsi guru sejarah sekolah menengah kejuruan negeri (SMKN) di Kota Kediri terhadap aksi sepihak Partai Komunis Indonesia (PKI) di Kediri sebelum meletusnya peristiwa G 30 S/PKI 1965. *Jurnal Artefak*, 9(2), 121-138.
- Kasiram, M. (2008). *Metodologi penelitian: Refleksi pengembangan pemahaman dan penguasaan metodologi penelitian*. Universitas Islam Negeri Maulana Malik Ibrahim Malang Press.

- Lefudin. (2017). *Belajar dan pembelajaran dilengkapi dengan model pembelajaran, strategi pembelajaran, pendekatan pembelajaran, dan metode pembelajaran*. Deepublish.
- Lego, A. A. B. (2018). *Pengaruh penggunaan media pembelajaran berbasis film terhadap peningkatan minat belajar siswa pada mata pelajaran sejarah siswa kelas XII SMA Tamalate Makassar*. [Skripsi S1 tidak diterbitkan]. Program Studi Teknologi Pendidikan, Fakultas Keguruan dan Ilmu Pendidikan (FKIP) Universitas Muhammadiyah Makassar.
- Maisyara, H., Saragi, A. H., & Derlina. (2018). Effect of cooperative learning strategy and interest learning to learning outcomes history student class X SMK 1 Affairs Peureulak lesson year 2018/2019. *Advances in Social Science, Education and Humanities Research*, 200, 277-280.
- Mariah, Sarkadi, & Ibrahim, N. (2020). The effect of talking stick learning model toward students' history learning outcomes. *Jurnal Etika Demokrasi*, 5(2), 213-220.
- Moleong, L. J. (2018). *Metodologi penelitian kualitatif*. PT Remaja Rosdakarya.
- Muhyi, M., Hartono, Budiyo, S. C., Satianingsih, R., Sumardi, Rifai, I., Zaman, A. Q., Astutik, E. P., & Fitriatien, S. R. (2018). *Metodologi penelitian*. Universitas PGRI Adi Buana Surabaya.
- Mulyasana, D. (2012). *Pendidikan bermutu dan berdaya saing*. PT Remaja Rosdakarya.
- Nahdiroh, S., & Arisona, R. D. (2020). Pengaruh penggunaan media pembelajaran berbasis film terhadap hasil belajar IPS siswa SMP materi potensi dan pemanfaatan sumber daya alam. *Asanka: Journal of Social Science and Education*, 1(2), 127-136.
- Nasution, S. (2007). *Metode research: Penelitian ilmiah*. Bumi Aksara.
- Novrianto, M. I., Sayono, J., & Ridhoi, R. (2024). Penggunaan media film tokoh-tokoh pergerakan nasional untuk menanamkan sikap nasionalisme melalui pembelajaran sejarah di kelas XI Madrasah Aliyah (MA) Ibadurrochman Malang. *Candrasangkala: Jurnal Pendidikan dan Sejarah (CJPS)*, 10(1), 37-52.
- Pratama, R. A., & Pratiwi, I. M. (2019). Hasil belajar sejarah Indonesia melalui pembelajaran aktif tipe everyone is a teacher here berdasarkan kemandirian belajar. *SOSIAL HORIZON: Jurnal Pendidikan Sosial*, 6(1), 96-107.
- Priadana, M. S., & Sunarsi, D. (2021). *Metode penelitian kuantitatif*. Pascal Books.
- Purnomo, Y. C., Kustiah, A. I., & Alrianingrum, S. (2023). Peningkatan hasil belajar peserta didik pada mata pelajaran sejarah melalui penerapan model pembelajaran inquiry based learning (IBL) pada kelas XI IPS 2 SMA Negeri 1 Mojokerto, Kabupaten Mojokerto tahun ajaran 2022/2023. *Jurnal Pendidikan Tambusai*, 7(3), 20892-20903.
- Purwanto, E. (2022). Peningkatan efektivitas dan hasil belajar sejarah dengan metode project based learning di SMA. *HISTORIA: Jurnal Program Studi Pendidikan Sejarah*, 10(2), 209-222
- Putra, P. H. (2012). *Penerapan pembelajaran teknik inside-outside circle untuk meningkatkan prestasi belajar sejarah siswa SMAN 1 Imogiri kelas XI IPS 2 semester II tahun ajaran 2011/2012*. [Skripsi S1 tidak diterbitkan]. Jurusan Pendidikan Sejarah, Fakultas Ilmu Sosial Universitas Negeri Yogyakarta.
- Rahmawati, R., Marsudi, & Sultani, Z. I. M. (2021). Pengembangan media e-booklet berbasis sejarah lokal pemerintahan Kota Blitar (1906-1945) untuk pembelajaran sejarah Indonesia pada peserta didik kelas XI di Madrasah Aliyah Negeri (MAN) 1 Kota Blitar. *Jurnal Artefak*, 8(2), 137-158.
- Rezani, R. (2012). *Peningkatan prestasi belajar siswa pada pembelajaran menggunakan mesin untuk operasi dasar dengan bantuan modul di SMK Islam Yogyakarta*.

- [Skripsi S1 tidak diterbitkan]. Jurusan Pendidikan Teknik Mesin, Fakultas Teknik Universitas Negeri Yogyakarta.
- Riduwan, R. (2005). *Belajar mudah penelitian untuk guru, karyawan, dan peneliti pemula*. CV Alfabeta.
- Santoso, P. B., & Ashari. (2005). *Analisis statistik dengan Microsoft Excel & SPSS*. Andi.
- Sianturi, R. (2022). Uji homogenitas sebagai syarat pengujian analisis. *Jurnal Pendidikan, Sains, Sosial, dan Agama*, 8(1), 386-397.
- Sinaga, D. (2014). *Buku ajar statistik dasar*. Universitas Kristen Indonesia Press.
- Sugiyono. (2010). *Statistika dalam penelitian*. CV Alfabeta.
- Sugiyono. (2015). *Metode penelitian pendidikan (pendekatan kuantitatif, kualitatif, dan R&D)*. CV Alfabeta.
- Suhendra, D. (2018). *Pengaruh penerapan media video sejarah terhadap hasil belajar peserta didik pada mata pelajaran sejarah di SMA Negeri 1 Banyuasin 1*. [Skripsi S1 tidak diterbitkan]. Program Studi Pendidikan Sejarah, Jurusan Pendidikan IPS, Fakultas Keguruan dan Ilmu Pendidikan Universitas Sriwijaya.
- Sultani, Z. I. M., Anastasia, M. S., Paramanandana, S., Salamah, K., & Towaf, S. M. (2021). Pesantren sebagai pusat pembelajaran dan pendidikan agama Islam dalam mengembangkan tasawufisasi di Banten (1552-1682). *Candrasangkala: Jurnal Pendidikan dan Sejarah (CJPS)*, 7(1), 34-50.
- Tampubolon, J., & Tamba, E. F. (2022). The effect of accompaniment music on the concentration and learning outcomes of grade VIII students in Alpha Omega Education Tutoring Center. *Journal of Classroom Action Research*, 1(2), 16-22. <https://doi.org/10.52622/jcar.v1i2.92>.
- Tanikwele, M. B., Sarkadi, & Nurzenki. (2021). *Application of distance learning to improve history education learning outcomes (study in SMA Negeri 2 Ambon)*. Proceeding ICHELSS 2021, 25-27 March 2021 in Jakarta, Indonesia, 585-590.
- Widiani, L. S., Darmawan, W., & Ma'mur, T. (2018). Penerapan media film sebagai sumber belajar untuk meningkatkan kemampuan mengolah informasi siswa dalam pembelajaran sejarah Indonesia. *Factum: Jurnal Sejarah dan Pendidikan Sejarah*, 7(1), 123-132.
- Widja, I. G. (2002). *Menuju wajah baru pendidikan sejarah Indonesia*. Lapera Pustaka Utama.
- Yafi, R. A., & Yuliantri, R. D. A. (2024). Documentary film based history learning media material on the Japanese occupation in Pontianak. *Jurnal Penelitian dan Pengembangan Pendidikan (JPPP)*, 8(2), 383-389.