IJHE
https://journal.unnes.ac.id/
Indonesian Journal of History Education
2021: 6 (2), 57-70

Differences in Learning Outcomes by Using Educational Video Media and Documentary Video Media in History Learning at SMA N 12 Semarang

Umi Erniasih[1], Suwito Eko Pramono[2], Atno[3]

Abstract

The purpose of this study is to find out the learning outcomes of students using video education media in history learning in X IPS Class N 12 Semarang High School in the academic year 2017/2018, to find out the learning outcomes of students using documentary video media in history learning in X IPS class SMA N 12 Semarang in the academic year 2017/2018, and to find out the differences in learning outcomes by using educational video media with documentary video media on history learning in Class X IPS SMA N 12 Semarang academic year 2017/2018. This study uses a quantitative approach to the type of experiment—research location at SMA N 12 Semarang. The instruments used in this study are documentation, tests, observations, and questionnaires. The results showed that the average learning outcome of students using educational video media was 85.5. While the average learning outcome of students using video documentary media is 74.6. In addition, through the t-test, it was produced that there were differences in the average learning outcomes between students who used educational video media and those who used documentary video media, 3,583.

***Keywords**: Learning Outcomes, Video, Education, Documentary*

Introduction

Education is one of the efforts that can improve the quality and competitiveness of Human Resources (HR) for a nation (Ruhana, 2012; Amirudin, 2019). It plays a vital role in shaping skilled individuals capable of contributing positively to society. Farhatin et al. (2016, p. 22) stated that "education always rests on a historical insight, namely past experiences, current realities and urgent needs, and future aspirations and hopes." This means education must be rooted in understanding past lessons and adapting to present conditions. Education serves as a locomotive for change, driving national development by equipping people with the knowledge and skills needed to excel. Success in education often leads to success in other fields, laying the groundwork for progress in economics, politics, and social development. History learning should focus on memorizing dates and encourage students to analyze and reconstruct information critically (Arfa, 2018; Kristian, 2019). This approach helps students grasp the significance of historical events. Alfian (2011, p. 7) stated, "History education is essential in instilling the values of nationalism and the nation's struggle," highlighting its role in nurturing identity and pride. By integrating these values, history education can inspire students to contribute to the country's development while remaining aware of their roots.

[1] *History Teacher, SMA N 12 Semarang, umierniasih@gmail.com*
[2] *Professor, Universitas Negeri Semarang, suwitoekop@mail.unnes.ac.id*
[3] *Assistant Professor, Universitas Negeri Semarang, atnosejarah@mail.unnes.ac.id*

This also aligns with Widoyoko's (2014, p. 20) statement: "Students follow the learning process by bringing their broad knowledge, goals, and experiences to use them to understand the information they encounter." Another opinion is also expressed by Pramono (2014, p. 14) that "history is not just a story related to what, who, when, and where, but as a story that tries to explain how and why the event happened." This is also reinforced by Kochhar (2008, p. 1), who revealed that learning history is necessary because it relates to human formation. Human beings are formed through lessons that can be taken from past events and used as learning in the future. In addition, Barton (2004, p. 259) states that *"However, the other candidate for history education has far greater potential to inspire the conviction necessary to resist temptations to conformity: Students should learn history to contribute to a participatory, pluralistic democracy."* History learning can be used as a means of confirming an event to be then able to contribute to a pluralistic society.

Learning media, as one of the elements in the learning process, is expected to make it easier for students to understand the subject matter (Maryani, 2013; Tekege, 2017). Utomo et al. (2018, p. 106) stated, "*Learning media are used to generate the same perception of what learning is being done"*. Using media can help students build the same learning perception to understand the subject clearly. The development of science and technology has impacted various fields, including education. These developments have provided renewal efforts using technological results, which are then realized in learning media. This is reinforced by Buchori and Rina (2015, p. 374), who stated, "The media used of instructional in teaching and learning can generate desire and new interests, raise motivation and stimulation of learning activities, and have psychological effects on students." Based on this statement, it can be explained that the use of media in learning can increase learning motivation, stimulate learning activities and psychological effects on students so that learning goals can be adequately achieved.

Various types of media that can be used in learning include human-based, print-based, visual-based, audiovisual, and computer-based media (Arsyad, 2009, pp. 82-96). Audio-visual-based press can also be classified as cheap and affordable media. Arsyad (2009, p. 148) stated, "Once we buy tapes and equipment such as tape recorders, there is almost no need for additional costs because the tapes can be erased after use and new messages can be re-recorded." Based on this statement, it can be explained that audio-visual media can be used many times without additional costs. Atno (2010, p. 93) stated that the approach of learning history that tells more stories makes students perceive that history learning can be mastered only by memorization without questioning the context and essence expected from actual history teaching. Ahmad et al. (2014, p. 124) also supported this, stating that "the use of media is essential to create an

appropriate learning atmosphere. The use of media in learning will facilitate the achievement of a learning goal that has been determined". Dale in Arsyad (2007, p. 23) revealed that "audio-visual materials can provide many benefits as long as teachers play an active role in the learning process." Using audio-visual media such as videos will help teachers in the process of understanding the material in the students who are taught.

Concretizing something abstract and simplifying from something complex is one of the functions of media. Arsyad (2007, p. 26) stated, "The function of learning media can overcome the limitations of senses, space, and time." This statement is also supported by Sudjana (2009, p. 7), who stated that "learning media can enhance the learning process of students in learning, which in turn is expected to enhance the learning outcomes they achieve." Learning materials that are easy for students to understand are also assumed to be directly proportional to the learning outcomes they will produce. The low learning outcomes achieved by students also occurred in Class X IPS SMA N 12 Semarang.

The low learning outcomes of students in learning history are also seen in the mid-semester exam, which shows that 45.6% of students still get a score below the KKM (75), while the remaining 44.4% have reached the KKM. Djemari in Widoyoko (2014, p. 1) states that "the quality of learning can be seen from the learning results". It is through learning outcomes that teachers can determine the next step in a lesson. One of the efforts to overcome obstacles in the implementation of learning is that teachers strive to utilize the surrounding environment in learning (Ahmad et al., 2014, p. 274). This is also supported by Lee et al. (2016)*: "Technology must be used to create authentic experiences that link new knowledge to prior knowledge, in socially interactive environments where questions being pursued are relevant to the student."*

The use of technology in learning can help students associate already-known knowledge with newly acquired knowledge to be able to interact in a relevant social environment. One of the things that can be used is an LCD in the classroom for learning.

Regarding the many types of videos, teachers often use documentary video media, which is included in the media category *by utilization*, which is media without a design where it is used. So, in this case, the researcher tries to compare the learning outcomes of students by using educational video media, which is included in *media by design*, which is media that has been designed for learning so that the content has been adjusted to the learning objectives so that it makes it easier for students in learning which can later help students understand learning. In addition, educational video media is more effective and efficient than documentary video media.

Related to the above statement, the objectives of this study are (1) to find out the learning outcomes of students by using educational video media in history learning in Class X IPS SMA N 12 Semarang for the 2017/2018 school year, (2) to find out the learning outcomes of students by using documentary video media in history learning in Class X IPS SMA N 12 Semarang for the 2017/2018 school year, (3) to find out the difference in learning outcomes between using educational video media and documentary video media in history learning in Class X Social Studies at SMA N 12 Semarang for the 2017/2018 school year.

Method

The experimental method used in this study is the experimental method. The pattern used in this study is *a quasi-experimental design, which is the development of a proper experimental design that* is difficult to implement. Sugiyono (2012, p. 77) states that in *quasi-experimental design,* there is a control group, but it cannot fully function to control external variables that affect the implementation of experiments. The design used is a *nonequivalent control group design*; in this design, the experimental and control groups are not randomly selected. Based on this, the sampling technique used in this study is *purposive sampling*, which is a technique for determining samples with specific considerations (Sugiyono, 2012, p. 85). Based on the recommendation from the history teacher in class X, class X IPS 3 was determined as the control class and class IPS 4 as the experimental class. As for the population, there are 144, which consist of classes X IPS 1, X IPS 2, X IPS 3, and the last one is X IPS 4.

The data collection techniques used by the researcher are documentation, tests, observations, and questionnaires (Anufia et al., 2019; Waskitoningtyas, 2016). At the documentation stage, the researcher checked the Mid-semester Exam (UTS) scores in classes X IPS 1, X IPS 2, X IPS 3, and X IPS 4 as research materials, in addition to the names of students, school profiles, and learning activities during the research. Documentation is data collection on matters or variables in the form of notes, transcripts, books, newspapers, magazines, inscriptions, meeting minutes, *agendas*, and so on (Arikunto, 1998, p. 236).

Observations were made to find out the implementation of history learning. Test instruments determine the learning outcomes produced before and after learning. The questionnaire was used to assess the use of educational video media and documentary videos in understanding the history of material between acculturation and the development of Islamic culture. In the preliminary stage, the researcher conducted *a pretest* to determine the initial state of the experimental and control classes. They then continued learning using educational video media in the experimental class and documentary video media in the control class.

In the final stage, the teacher conducts *a posttest* in the experimental and control classes to determine the learning results. After the learning is complete, it is continued with filling out a questionnaire in each class to determine how students respond to the learning media used. This study was conducted to determine the difference in learning outcomes between the experimental class that used educational video media and the control class that used documentary video media. Data collection was carried out by giving tests to the experimental class and the control class. Data analysis was carried out using *pretest* and *posttest.* From these results, the learning outcomes of students using educational and documentary video media can be obtained.

Results and Discussion

Based on the observations carried out at the research site, namely SMA N 12 Semarang, which is located on Jalan Raya Gunung Pati, Plalangan, Gunung Pati, Semarang City zip code 50225 and telephone number (024) 6932224 the researcher found several potentials available in the form of school facilities, one of which is a classroom equipped with LCD that can be used for the projection of audio-visual media and a laboratory to deepen learning materials.

The problem found in history learning is that teachers still need to be fixated on using documentary video media only. As is known, documentary video media as one of the *media utilization* makes it less effective and efficient. In contrast, educational video media, which is included in the press by design, is designed for learning activities so that it is by learning objectives. It is related to the problems faced by using educational video media in history learning, which is more effective and efficient.

In this study, a requirement test was first carried out with the help of SPSS 21.0 software as one of the requirements for hypothesis testing to find out whether it was accepted or rejected. However, questions were previously tested before being used in experimental and control classes, including validity tests, reliability tests, differentiation tests, and difficulty tests. Of the 40 trial questions that have been provided, 30 questions are included in the valid criteria.

The following is the validity analysis data:

Table 1. Test the Validity of Trial Questions

No.	Question Number	Number of Questions	Criterion
1.	1,2,3,4,5,6,7,8,9,11,12,13,16,17,18,19,22,24,26,27,31,32, 33,34,35,36,37,38,39,40	30	Valid
2.	10,14,15,20,21,23,25,28,29,30	10	Invalid

Source: Research Results, 2018

Based on Table 1, the trial questions that are included in the valid category include questions number 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 16, 17, 18, 19, 22, 24, 26, 27, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40. At the same time, the invalid questions are questions 10, 14, 15, 20, 21, 23, 25, 28, 29, 30. The resulting r11 value is 0.86, then consulted with a table with a = 5% and n = 25, which is 0.396. The result of the r11 > table concluded that the test questions were in the category of high reliability. Meanwhile, the ability to differentiate between students who have high and low skills can be seen in the following table:

Table 2. Test of Difference in Test Questions

No.	Question Number	Number of Questions	Criterion
1.	28,15	2	So bad
2.	4,10,18,20,23,27,29,33	8	Signs
3.	1,5,6,7,8,9,12,13,14,17,19,21,22,24,25,26,30,31, 32,40	20	Enough
4.	2,3,11,16,34,36,37,38,39	9	Good
5.	35	1	Very good

Source: Research Results, 2018

Based on table 2, it is known that the test questions are in the naughty category, namely numbers 28 and 15, the wrong category is 4, 10, 18, 20, 23, 27, 29, 33, the sufficient category is number 1, 5, 6, 7, 8, 9, 12, 13, 14, 17, 19, 21, 22, 24, 25, 26, 30, 31, 32, 40, in the excellent category, namely 2, 3, 11, 16, 34, 36, 37, 38, 39, perfect category number 35.

The difficulty index can be defined as the proportion of students who answer correctly. The following are the results of the analysis of the difficulty level in the test questions:

Table 3. Difficulty Test Trial Questions

No.	Question Number	Number of Questions	Criterion
1.	1,10,15,19,20,23,25,27,28,29,30,31,32,37	14	Difficult
2.	2,3,4,5,6,7,8,11,12,13,14,16,17,18,21,22,24,26,33,34, 35,36,38,39,40	24	Keep
3.	5,9	2	Easy

Source: Research Results, 2018

Based on Table 3, it is known that the questions that are included in the difficult category are numbers 1, 10, 15, 19, 20, 23, 25, 27, 28, 29, 30, 31, 32, 37, medium categories are numbers 2, 3, 4, 6, 7, 8, 11, 12, 13, 14, 16, 17, 18, 21, 22, 24, 26, 33, 34, 35, 36, 38, 39, 40, easy categories are numbers 5 and 9. The test questions included in the valid category will then be used for pretest and posttest questions in the experimental and control classes, determining the difference in learning outcomes between the two.

The pretest and posttest results are then obtained with requirements and hypothesis tests. The requirement tests include normality, homogeneity, and mean difference tests, while the t-test is used to test hypotheses.

Table 4. Recapitulation of the Normality Test

No.	*Pretest*		*Posttest*	
	Experimental Classes	**Control Classes**	**Experimental Classes**	**Control Classes**
1.	0,2	0,2	0,066	0,123

Source: Research Results, 2018

Based on Table 1, the results of the pretest in the experimental class obtained a sig value of 0.2 > 0.05 and the control class of 0.2 > 0.05. So, the results of *the pretest* test in the experimental and control classes are typically distributed. In addition, the normality test was also carried out on the data of *the post-test* results with the experimental class of 0.066 > 0.05 and the control class of 0.123 > 0.05. So, it can be concluded that the posttest data is usually distributed.

The next requirement test is the homogeneity test, which is carried out to test the similarity of variants from the experimental and control classes. The data used were *pretest* and *posttest*

results in the experimental and control classes. The following are the results of the recapitulation of the homogeneity test using *the Levene test*:

Table 5. Recapitulation of Homogeneity Test

No.	Sig value	
	Pretest	***posttest***
1.	0,578	0,141

Source: Research results, 2018

Table 2 shows that the *pretest sig* value was 0.578 > 0.05, and the *posttest sig* value was 0.141 > 0.05. So, it can be concluded that the results of *the pretest* and *posttest* data have homogeneous variants. In addition, a t-test is also carried out, referring to the homogeneity requirement test, which shows that the pretest learning results have the same variance, so the t-value is determined in the *equal variance assured line*. Based on this, it can be seen that the significance value of the t-test produced is 0.723, more significant than 0.05, then H0 is accepted; the conclusion is that there is no difference in the average learning outcome between the experimental class and the control class.

Before the previous hypothesis test was carried out, it was found that in the experimental class using educational video media, the average score was 85.5. In the experimental class, it was obtained that count = 6.56 > table = 1.691, so it can be concluded that the learning results in the experimental class using educational video media have achieved individual learning completeness. In addition, in the classical learning outcome test in the experimental class, classical completeness was obtained at 88.57%, so it can be concluded that the experimental class has achieved classical learning completeness. This is because educational videos that are included in the category *of media by design* have indeed been designed for learning, so educational video media has been adjusted to the learning goals to be achieved, which makes it easier for students to understand learning.

The average learning outcome of the control class using documentary video media was 74.6. The control class using documentary video media with individual learning completeness testing was obtained count = 0.68 < table = 1.694, so it can be concluded that the control class has yet to achieve individual completeness. This can also be seen in the classical learning outcome test in the classroom with the number of classical learning completeness of 57.58%, so it can be concluded that the control class using documentary video media in learning the

history of material between acculturation and the development of Islamic culture has not reached classical completeness.

The hypothesis test uses the t-test to answer the hypothesis, namely whether there is a difference in learning outcomes between the experimental class that uses educational video media and the control class that uses documentary video media in learning material history between acculturation and the development of Islamic culture. It was produced through the t-test with the help of SPSS 21.0 software.

Table 6. Results of T-Test Analysis

	Levene's Test for Equality of Variances		**t-test for Equality of Means**						
	F	**Say.**	**t**	**d**	**Sig. (2-numbered)**	**Mean Difference Std Error Difference**		**Lower**	**Upper**
Equal Variances Assumed	2,216	,141	3,583	66	,001	9,156	2,556	4,054	14,259
Equal Variances Not Assumed			3,557	60,628	,001	9,156	2,574	4,009	14,304

Source: Research Results, 2018

Based on the homogeneity test of *posttest learning results*, which showed that they had the same variant, the t value was determined based on the assumed equal variance. Based on Table 3, As is already known, the data of the posttest results has a *sig value* of 0.01, so H0 is rejected. So, it is concluded that there is a difference in the average learning outcomes of students using

educational video media, such as documentary video media, in learning the history of material between acculturation and the development of Islamic culture.

Questionnaire instruments based on the type of Linkert scale were used to obtain data on students' responses to educational video media in the experimental class and documentary video media in the control class. The results of students' reactions to the media can be seen in the following Table 4:

Table 7. Results of Student Responses

No.	Skala	Frequency	
		Experimental Classes	**Control Classes**
1.	SS	5	2
2.	S	20	11
3.	RG	10	17
4.	TS	0	3
5.	STS	0	0
Sum		35	33

Source: Research Results, 2018

Based on this data, the number of ideal scores (criteria) for all items has been obtained in the experimental class = 5 x 35 = 175. the number of scores received from the study = 135. Therefore, based on this data, the level of approval for educational video media = (135: 175) x 100% = 77.14% of the expected 100%. So, the use of academic video media in history learning lies in the agreeing region. Meanwhile, in the control class using documentary video media, the number of ideal scores (criteria) for the entire item = 5 x 33 = 165. the number of scores obtained from the researcher = 111. Therefore, based on this data, the level of approval for documentary video media = (111:165) x 100% = 67.27% of the expected 100%. So, the use of documentary video media in history learning lies entirely in the regions that agree. Regarding the learning outcomes produced in each class, it can be concluded that using educational video media received a positive response from students. This is based on the questionnaire results, which received a positive reaction of 77.14%, so it can be concluded that the use of educational

video media is included in the agreeing category. This is also supported by Sudjana and Rivai (2003, p. 58), who stated that video media equipment does not have to be classified as a learning experience obtained from visual and auditory sensing but as a technological tool that can enrich and provide concrete experiences to students.

Various advantages and satisfactory hypothesis test results from using educational video media in learning material history between acculturation and the development of Islamic culture. Researchers are also faced with obstacles in the use of educational video media, such as selecting educational videos that are by the subject matter because of the many choices available on the internet. Therefore, teachers need to make a selection in advance to achieve the desired learning goals; time management is also critical because it is related to the duration of the educational video that will be shown.

Conclusion

Based on the research that has been carried out, the researcher concludes that students using educational video media in learning history in Class X IPS SMA N 12 Semarang get a higher average learning outcome than those using documentary video media. The learning outcomes of students using documentary video media in history learning in Class X IPS SMA N 12 Semarang were lower than the average learning outcomes of experimental classes that used educational video media.

There was a difference in the average learning outcomes between students who used educational video media, and students who used documentary video media in history learning in Class X IPS SMA N 12 Semarang was 3,583, where the average learning outcomes of students using educational video media were higher than the learning outcomes of students using documentary video media.

Based on the conclusion above, the researcher suggests that teachers need to use educational video media as one of the innovations in learning, which generally uses more documentary videos. Educational videos make students more focused and make it easier to understand the lesson because of the presentation of material in the form of material points, which makes them more effective and efficient in their use. In addition, history teachers should be able to select the educational videos obtained by the learning goals to be achieved. In addition, reasonable and appropriate time management needs to be considered because it is related to the duration of the educational video that will be aired.

Reference

Ahmad, T. A. (2017). Urgensi dan Relevansi Pembelajaran Sejarah Maritim untuk Wilayah Pedalaman. *Paramita: Historical Studies Journal*, *27*(1), 113–126.

Ahmad, T. A., Sodiq, I., & Suryadi, A. (2014). Kendala-Kendala Guru dalam Pembelajaran Sejarah Kontroversial di SMA Negeri Kota Semarang. *Paramita: Historical Studies Journal*, *24*(2).

Alfian, M. (2011). Pendidikan Sejarah dan Permasalahan yang dihadapi. *Khazanah Pendidikan*, *3*(2).

Amirudin, M. F. (2019). Hubungan pendidikan dan daya saing bangsa. *Belajea: Jurnal Pendidikan Islam*, *4*(1), 35-48.

Anufia, B., & Alhamid, T. (2019). Instrumen pengumpulan data, Sekolah Tinggi Agama Islam Negeri (STAIN) Sorong.

Arfa, F. A., & Marpaung, W. (2018). *Metodologi Penelitian Hukum Islam: Edisi Revisi*. Prenada Media.

Arikunto, S. (2010). Prosedur penelitian suatu pendekatan praktek. *(No Title)*.

Atno, A. (2010). Meningkatkan Hasil Belajar Sejarah Siswa Melalui Pendekatan Pembelajaran Kontekstual Dengan Media VCD Pembelajaran. *Paramita: Historical Studies Journal*, *20*(1).

Barton, K., & Levstik, L. S. (2004). Teacher education and the purposes of history. *Teaching history for the common good*, 244-265.

Buchori, A., & Setyawati, R. D. (2015). The development learning model of character education through e-comic in elementary school. *International Journal of Education and Research*, *3*(9), 369-386.

Farhatin, D., Atmaja, H. T., & Ahmad, T. A. (2016). Pemanfaatan Situs Candi Ngempon Sebagai Sumber Belajar Sejarah di MA Darul Maâ€™ arif Pringapus. *Indonesian Journal of History Education*, *4*(2).

Kochhar, S. K. (2008). Pembelajaran sejarah. *Jakarta: Grasindo*, *161*.

Kristiawan, M. (2019). Analisis pengembangan kurikulum dan pembelajaran. *Upp Fkip Univ. Bengkulu*.

Lathifah, M. F. (2020). Analisis penggunaan media pembelajaran terhadap kemampuan berpikir kritis peserta didik abad ke 21. *Jurnal Ilmiah Profesi Pendidikan*, 5(2), 133–137.

Lee, J. K., & Doolittle, P. E. (2006). Social studies and history teachers' uses of non-digital and digital historical resources. *Social Studies Research and Practice*, *1*(3), 291–311.

Maryani, D. (2013). Pembuatan media pembelajaran interaktif bangun ruang matematika. *Speed-Sentra Penelitian Engineering dan Edukasi*, *6*(2).

Pramono, S. E. (2014). Kinerja Guru Sejarah: Studi Kausal Pada Guru-Guru Sejarah SMA di Kota Semarang. *Paramita: Historical Studies Journal*, *24*(1).

Ruhana, I. (2012). Pengembangan kualitas sumber daya manusia vs daya saing global. *PROFIT: Jurnal Administrasi Bisnis*, *6*(1), 51-56.

Sudjana, N. (2010). *Penilaian hasil proses belajar mengajar*. IAIN Palangkaraya.

Sugiyono, D. (2013). Metode penelitian pendidikan pendekatan kuantitatif, kualitatif dan R&D.

Tekege, M. (2017). Pemanfaatan teknologi informasi dan komunikasi dalam pembelajaran SMA YPPGI Nabire. *Jurnal FATEKSA: Jurnal Teknologi Dan Rekayasa*, *2*(1).

Undang-undang Republik Indonesia Nomor 20 Tahun 2003 Tentang Sisdiknas (Sistem Pendidikan Nasional). 2003.

Utomo, C. B., Amin, S., & Ria, T. N. (2018). Wayang Suluh as Learning Media in Teaching History in High School. *Jurnal Paramita*, *28*(1), 105-111.

Waskitoningtyas, R. S. (2016). Analisis Kesulitan belajar matematika siswa kelas V sekolah dasar kota Balikpapan pada materi satuan waktu tahun ajaran 2015/2016. *JIPM (Jurnal Ilmiah Pendidikan Matematika)*, *5*(1), 24-32.

Widoyoko, E. P. (2014). Penilaian hasil pembelajaran di sekolah. *Yogyakarta: Pustaka Pelajar*, *1*(2), 8.