Proceeding The 2nd ICHELSS, August 24-25, 2022, Jakarta, Indonesia

ISBN: 978-623-92475-1-5
ISSN: 2963-1351

The Effect of the Use of IPS Learning Animation Videos on Learning Outcomes

Hana Eka Pratiwi[1], Budiaman[2], Desy Safitri
Universitas Negeri Jakarta, Indonesia[1,2,3]

Abstract: *The purpose of this research is to determine the effect of using social media animation video media on learning outcomes. The method used is a quantitative method in a True Experimental approach with samples of class VIII A and VIII B. Both samples were given a posttest after being given treatment in the form of learning using animated videos in class VIII A and power point media in class VIII B. The results showed that there was the effect of the use of animated social studies learning video media on student learning outcomes. This can be seen from the results of hypothesis testing using the Mann-Whitney test which produces a significance value (2-tailed) of 0.000 (p<0.05).*

Keywords: *Learning Media, Video animation, social studies learning outcomes*

Introduction

Advances in technology that exist today are the result of the development of science. This technological progress has a big role in that it can affect human life in various aspects, both in the social, economic, political, educational, and cultural fields. The development of science and technology in the field of education makes people involved in the realm of education encouraged to seek updates in utilizing technology in the learning process. However, based on the results of the pre-research from August to November 2021 at SMP Negeri 88 Jakarta. Learning Social Sciences (IPS) in class VIII, still looks less varied, so these students still have difficulty understanding some of the material that has been taught. The learning media used when teaching only uses PowerPoint media. When Distance Learning (PJJ) the learning system at SMP Negeri 88 Jakarta is dominant, only moving offline classes to zoom meetings or google meet.

Social Science subjects (IPS) which are applied to students at the Junior High School (SMP) level are subjects that must be studied. This has been stated in Law No. 20 of 2003 concerning the National Education System, article 37, which reads "Elementary and secondary education curricula must contain social sciences". Social Sciences (Social Sciences) is defined as the integration of various branches of social sciences, such as history, economics, geography, politics, law, and culture which are integrated interdisciplinary after school adapts to the material to be taught by the interests of education and learning (Karim, 2015). Therefore, appropriate learning media are needed to help deliver social studies material so that students can easily understand the information or material presented.

ISBN: 978-623-92475-1-5
ISSN: 2963-1351

Literature Review

Video media is anything that can allow signals from audio to be combined with images that move according to the sequence. The word animation comes from the Greek, namely anima which means to give life (Madcoms, 2006). Animation is an attempt to bring a static presentation to life. In learning media, animated video media is included in the group of audiovisual media. (Sanjaya, 2010) states that audiovisual media is a type of media that does not only contain sound elements, but also contains images that can be seen, such as video recordings, films, sound slides, and so on. Learning media using video media can be considered better and more interesting because video media relies on two senses at once, namely the sense of hearing and the sense of sight. Therefore, video media is expected to increase the attention of students in learning and can clarify the material presented

Gagne in (Purwanto, 2013) states that learning outcomes are the formation of concepts, namely categories that have been assigned to stimuli in the environment, which provide an organized scheme to assimilate new stimuli and determine relationships within and between categories. Learning outcomes according to Winkel 1996 in (Purwanto, 2013) are a change that will cause humans to change in their attitudes and behavior. Winkel also stated that the aspect of change in learning outcomes refers to the taxonomy of teaching objectives that have been developed by several figures, such as Bloom, Simpson, and Harrow, which include cognitive, affective, and psychomotor aspects. Based on Bloom's Taxonomy of behavioral goals related to specific instructional goals, there are three domains, namely: cognitive, affective, and psychomotor. The domain of learning outcomes is psychological behaviors that will be changed when the educational process takes place.

In the cognitive domain, Bloom classifies and ranks thinking skills that will describe the expected goals. The concept of Bloom's taxonomy has changed along with the development and progress of science and technology. Anderson, who is one of Bloom's students, revised Bloom's taxonomy in 1990 and the results were published in 2001 under the name "Revised Bloom's Taxonomy". In this revision, there is a change in the keywords in the category from nouns to verbs. Taxonomy of cognitive domains revised by Lorin Anderson, namely: remembering, understanding, applying, analyzing, evaluating, and creating (Rusman, 2017).

Researchers estimate that this animated video media influences student learning outcomes. This is because animated video media presents the material in the form of sound and images, besides that animated video media is also included in the type of audio-visual media. Every student has a different learning style. Because of the animated video media, students can absorb the material using their respective learning styles. This is reinforced by Supatminingsih et al., 2020 (Hasan dkk, 2021) who argue that there are findings from research that show an interaction between the use of learning media and student learning characteristics in determining student learning outcomes.

Methodology

The type of research used by the researcher is quantitative research with a True Experimental approach because in this design all external variables that influence the course of the experiment will be controlled by the researcher. True Experimental has the main characteristic, namely the samples used for the experimental group and the control group are

ISBN: 978-623-92475-1-5
ISSN: 2963-1351

taken randomly from a certain population (Sugiyono, 2013). The design form used from the True Experimental design is the Posttest Only Control Design.

In research with this design, students in the experimental class will be given learning treatment using animated video media, while students in the control class are not given learning treatment using animated video media. Next, the experimental and control groups will be given a posttest.

The population in this study was class VIII students at SMP Negeri 88 Jakarta in the 2021/2022 academic year, totaling 319 people. The samples in this study were two groups which would later be used as an experimental group and a control group. The sampling technique in this study used simple random sampling. After being randomly selected, the experimental class was class VIII A, and the control class was class VIII B. The following details the number of samples used in this study.

Table 1

Number of research samples

Kelas	Jumlah Siswa
VIII-A	40 orang
VIII-B	40 orang
Jumlah	**80 orang**

Findings & Discussion

On student learning outcomes, the researcher used a written test consisting of 35 multiple choice questions on the material described, namely the material on "National Movements during the Japanese Occupation" at the first meeting and material on "Changes in Indonesian Society during the Colonial Period" at the meeting. second. After the researchers applied the learning media in each class, the students conducted a discussion session to hone their understanding and a discussion session was held for a question session about the material that had been explained. At the third meeting, the researchers gave a written test to the experimental class and also the control class so that researchers could process the data from the post-test results so that researchers could find out whether there was an effect of social studies learning animation video media on learning outcomes.

Table 2

Descriptive Analysis of Experimental Class Learning Results

Statistics		
Kelas Eksperimen		
N	Valid	40
	Missing	0
Mean		96.15
Std. Error of Mean		.743
Median		100.00
Mode		100
Std. Deviation		4.699
Variance		22.079
Range		11
Minimum		89
Maximum		100

ISBN: 978-623-92475-1-5
ISSN: 2963-1351

Sum	3846

The table data was obtained from the frequency distribution of learning outcomes in the experimental class using the SPSS version 24.0 for the windows program. In the experimental class, the highest posttest score is 100, and the lowest posttest score is 89. The average value is 96.15, the range is 11, the median is 100, the mode is 100, and the standard deviation is 4.699.

Table 3

Descriptive Analysis of Control Class Learning Outcomes

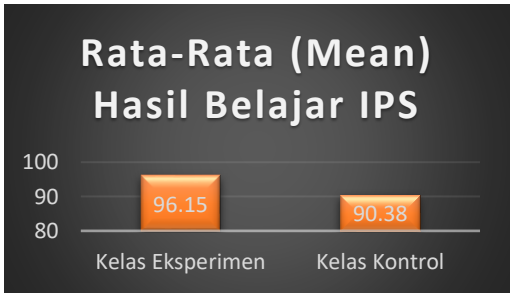
Statistics		
Kelas Kontrol		
N	Valid	40
	Missing	0
Mean		90.38
Std. Error of Mean		.855
Median		90.00
Mode		89
Std. Deviation		5.410
Variance		29.266
Range		17
Minimum		80
Maximum		97
Sum		3615

The table data is obtained from the frequency distribution of learning outcomes in the control class using the SPSS version 24.0 for the windows program. In the control class, the highest posttest score was 97, and the lowest posttest score was 80. The average value was 90.38, range 17, median 90, mode 89, and the standard deviation was 5.410.

The average result of student learning outcomes in the experimental class is 96.28, while in the control class is 91.33. It can be seen that the average score of the experimental class students who used animated video media was higher than the control class that did not use animated video media. To understand this statement, the researcher provides an overview in the form of a histogram presented in Figure 1.

Figure 1

Histogram of Average Social Studies Learning Outcomes



ISBN: 978-623-92475-1-5
ISSN: 2963-1351

From the results of the posttest data analysis, the experimental class and the control class have a significant difference in the average value. The experimental class has a higher average value than the control class. The average value in the experimental class is higher because learning in the experimental class uses animated video media so students are more interested and pay more attention to the material that is being given by educators through learning videos. Then in the discussion session, students can ask questions and provide opinions to answer questions that have been asked, so that students are active in discussing.

Educational media that are used appropriately and diversely will overcome the passive attitude of students (Sadiman, 2011). According to Sutiarso (Kurniawati et al., 2013) the media has a function to present something in a concrete form, even though it is not in physical form.

Test requirements analysis in this study using normality test and homogeneity test. A normality test is used to determine whether the data used is normally distributed or not. The normality test in this study uses the Kolmogorov-Smirnov (K-S) method through the SPSS version 24.0 program for windows as follows:

Table 4

Post-Test Value Normality Test Results

Tests of Normality							
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Kelas	Statistic	df	Sig.	Statistic	Df	Sig.
Hasil Belajar Siswa	Kelas Eksperimen	.319	40	.000	.724	40	.000
	Kelas Kontrol	.175	40	.003	.897	40	.002
a. Lilliefors Significance Correction							

Based on the table, the results of the normality test using the Kolmogorov-Smirnov (K-S) method for student learning outcomes in the experimental class produce a significance value (Sig.) of 0.000, while the control class produces a significance value (Sig.) of 0.002. Therefore, it can be concluded that the experimental class and control class data are not normally distributed, because both have a significance value (Sig.) < 0.05.

A homogeneity test is used to determine whether the data used is homogeneous or has the same variance or not. The homogeneity test in this study used the Kolmogorov-Smirnov (K-S) method through the SPSS version 24.0 program for windows as follows:

Table 5

The Result of Homogeneity of Post-Test Values

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Hasil Belajar Siswa	Based on Mean	.044	1	78	.835
	Based on Median	.346	1	78	.558
	Based on Median and with adjusted df	.346	1	67.881	.558
	Based on trimmed mean	.089	1	78	.766

Based on the table, the results of the homogeneity test using Levene's test method produce a significance value (Sig.) Based on a Mean of 0.835. Therefore, it can be concluded that the data is homogeneous data because it has a significance value (Sig.) > 0.005.

In testing the requirements using the normality test, it is known that the posttest value data from the experimental class and control class are not normally distributed, but in the requirements, test using the normality test, it is known that the data results are homogeneous

ISBN: 978-623-92475-1-5
ISSN: 2963-1351

data. Therefore, the researchers used the Mann-Whitney test to test the hypothesis to know whether there was an effect of social studies learning animation video media on student learning outcomes or not. The Mann-Whitney test in this study was calculated through the SPSS version 24.0 program for windows as follows:

Table 6

Mann Whitney Test Results

Test Statistics[a]	
	Hasil Belajar Siswa
Mann-Whitney U	329.000
Wilcoxon W	1149.000
Z	-4.627
Asymp. Sig. (2-tailed)	.000
a. Grouping Variable: Kelas	

Based on the table, the results of hypothesis testing using the Mann-Whitney test produce the Asymp value. Sig (2-tailed) of 0.000. Therefore, it can be concluded that there is a significant effect, so Ho is rejected, and Ha is accepted. This explains that there is an effect of animated social studies learning video media on the learning outcomes of Class VIII students of SMP Negeri 88 Jakarta.

The influence of animated video media is because animated video media is included in audiovisual media which displays a moving animated image equipped with audio so that students feel facilitated, have enthusiasm in the learning process and their learning outcomes are increasing. This is in line with the opinion of Nasir (Febriani et al., 2022) which reveals that the use of video media can be used as an interesting teaching tool and motivates students in learning.

Animated video media is media that utilizes technology to provide understanding through audio and also visuals to students. This is in line with the opinion of (Sanjaya, 2010) which states that audiovisual media is a type of media that does not only contain sound elements, but also contains images that can be seen, such as video recordings, films, sound slides, and so on.

Animated video media that has been given by educators can be played whenever students want so that students can learn it at any time. However, in the application of animated video media, there are still not many teachers who have competence in designing and managing the use of animated video media in learning activities.

References

Hasan dkk. (2021). *Media Pembelajaran*. Tahta Media Group.

Febriani, E. A., Astriani2, D., & Qosyim, A. (2022). Penerapan Media Video Animasi Untuk Meningkatkan Motivasi Dan Hasil Belajar Siswa Materi Tekanan Zat Cair. *Pensa: E-Jurnal Pendidikan Sains*, *10*(1), 21–25. https://ejournal.unesa.ac.id/index.php/pensa/article/view/41235

Karim. (2015). *Pembelajaran IPS*.

Kurniawati, A., Isnaeni, W., & Dewi, N. R. (2013). Implementasi metode penugasan analisis video pada materi perkembangan kognitif, sosial, dan moral. *Jurnal Pendidikan IPA Indonesia*, *2*(2), 149–155. https://doi.org/10.15294/jpii.v2i2.2716

ISBN: 978-623-92475-1-5
ISSN: 2963-1351

Madcoms. (2006). *Aplikasi Animasi Digital; Adobe Photoshop, Adobe Premier, Adobe After Effect, 3D Studio Max*. Penerbit Andi.

Purwanto. (2013). *Evaluasi Hasil Belajar*. Pustaka Pelajar.

Rusman. (2017). *Belajar dan Pembelajaran Berorientasi Standar Proses Pendidikan*. Kencana.

Sanjaya, W. (2010). *Strategi Pembelajaran Berorientasi Standar Proses Pendidikan*. KENCANA.

Sadiman, dkk. (2011). *Media Pendidikan: Pengertian, Pengembangan dan Pemanfaatannya*. Rajagrafindo.

Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.

About the Author:

Chief Researcher
Hana Eka Pratiwi *State University of Jakarta, Indonesia*
Researcher Member
Budiaman *State University of Jakarta, Indonesia* **Desy Safitri** *State University of Jakarta, Indonesia*