

# EFFECTIVENESS OF MEDIA VIDEO TECHNOLOGY DEVELOPMENTS IN THE COMMUNITY TOWARDS IPS LEARNING OUTCOMES STUDENT MOTIVATION

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# **Abstract**

This research was conducted at SD Negeri 1 Candi, Mlarak District, Ponorogo Regency. The purpose of this research is to know media which provide better learning outcomes IPS between the use of video and non-video media; learning outcomes IPS is better between the have motivation to learn high, medium, and low; the results of social studies better between the use of video and non-video media in each state the motivation to learn. The method design of this study using a quantitative approach with the quasi-experimental method with a factorial design. The sample used in this study were fourth-grade students of SDN 1 Cand I, Mlarak District, Ponorogo Regency which consisted of 2 classes, namely class IV A with a total of 20 students and class IV B with a total of 20 students, the total sample size was 4 0 students. The results showed 1) media video provides better impact on learning outcomes IPS Elementary School fourth grade students 1 Candi; 2) learning outcomes IPS Elementary School fourth grade students 1 Candi who has a high motivation to learn is better than the one having the motivation to learn the medium, and; 3) In each class a good use of video and non-video media, learning outcomes IPS Elementary School fourth grade students 1 Candi who have high motivation to learn is better than the one having the motivation to learn the medium and low; and 4) In each of motivation to learn, the media video provides better impact on learning outcomes IPS Elementary School fourth grade students 1, Candi.

Keywords: Media Video, Results Learning, Motivation



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# **INTRODUCTION**

Social science is one of the subjects that must be studied at the elementary school level. The implementation process is carried out in the form of learning in every basic education unit in Indonesia. Social studies education tries to produce reflective, capable or skilled, and caring citizens. Reflective is being able to think critically and be able to solve problems based on his point of view and based on the values and morals formed by himself and his environment. Skilled means being able to make decisions in solving problems. Caring is being able or sensitive to social life and exercising its rights and obligations in society. (Rahmad, 2016)

The social studies subjects at the primary school level aim to assist students in developing the knowledge, skills, attitudes, values needed to participate in community life at the local, national, and global levels. Its implementation is said to be successful in achieving the goal if students get learning outcomes by the objectives of the social studies

subject described above. However, in reality, many problems occur, such as many students who have low social skills, littering, being disrespectful with parents and teachers, speaking dirty in public places, and many more related to social science problems. These conditions indicate that the achievement of social studies learning outcomes has not been maximal.

SD Negeri 1 Candi is one of the primary schools in Ponorogo Regency. As previously explained, this school does not escape learning problems. The social studies learning outcomes obtained by students are uneven, some get high scores and some get low. Meanwhile, the average score for the fourth-grade students' social studies test was less than the minimum criteria score of 70.

Based on the results of observations in the learning process, and interviews with several teachers and students at the school, several things were found that might influence the existence of these problems. Such as the ineffective learning process, because students are passive and only controlled by a few students. Furthermore, seen from the condition of the students, many give the perception that social studies lessons are boring. The cause of student boredom is that the social studies material has a lot of reading material to memorize. This condition of students will affect their motivation or motivation to learn so that there is no enthusiasm and interest of students to seriously participate in learning.

Based on the explanation of the causes of these problems, it can be concluded that the cause of the low social studies learning outcomes of students is due to ineffective learning and unequal student learning motivation. Such conditions will have an impact on the level of student learning outcomes because students without learning motivation will feel forced to carry out their learning activities and cause brain performance to decrease in understanding the material.

Through an effective learning process will have a positive impact on the process and student learning outcomes. Effective learning is characterized by active learning from students. The active process of students in learning is determined by how the teacher creates learning. One of the things that need attention is to use appropriate learning media that can attract attention and be able to stimulate student learning motivation. (Sitaresmi & Cahyani, 2008)

There are many kinds of learning media, so it is necessary to choose the right one so that it can help students' learning process to achieve their learning goals. If students easily accept lessons and master them, then students will be motivated to be more active and more advanced in learning. This is what will have an impact on the effectiveness and achievement of student learning outcomes.

One of the media that is suitable and influences social studies in the material of technology development, production, communication, and transportation is video media. Social studies learning about technology, production, communication, and transportation is material in which it is explained about technology, production tools, communication tools, and transportation tools so that with the help of video media in the form of examples of these tools it will make it easy for students to understand them., even though the tool is not available in the local area. The condition of students who can understand the material they are learning will have a positive impact on the student learning process. One of the effects is that students can achieve good learning outcomes. (Yumarlin, 2012)

Apart from the form of learning, one of the factors that influenced the low social studies learning outcomes of grade IV students at SD Negeri 1 Candi was the lack of student motivation towards social studies material. Therefore, motivation is closely related to the student learning process. Apart from this, motivation can also affect the quality of achievement of student learning outcomes in certain fields of study including

social studies learning outcomes. A student who has the motivation to learn in social studies will



Automatically take a great interest in social studies and will try to focus more on understanding and mastering any social studies material.

Furthermore, with the learning motivation, students will be able to overcome all the things that can hinder or prevent them from learning. (Nasution, 2019) Students who are studious and earnest in participating in learning will have a good level of understanding. On the other hand, students who are not diligent and do not take the learning seriously will have a poor level of understanding. This will have an impact on the achievement of learning objectives. (Darmawati, 2017) Thus, through the learning process using video media and supported by high learning motivation, it will be able to significantly influence student learning outcomes.

Departing from the background of this problem, this study aims to determine the significant difference between learning using video and non-video learning in the control class with learning motivation limited to the moderator variable which distinguishes students in high, medium, and low levels of learning motivation. The subjects studied are limited to the fourth grade social studies subject with material on technological developments, production, communication, and transportation, the respondents or the subjects studied are limited to fourth grade students of SD Negeri 1 Candi.

Previous research that is relevant to this research is the research written by (Hadi, 2017) with the title Effectiveness Of Using Video As A Learning Media For Primary School Students. This study aims to examine the effectiveness of video as a learning medium for elementary school students. The results of this study found that the advantages of video include being fun for students, being able to provide concrete information, and being able to present learning experiences that are impossible for students outside the school environment, such as the history of independence for example. These three advantages make videos considered effective for improving students' ability to understand concepts, increasing student motivation and being able to improve student learning outcomes. This study will complement the previous research by linking learning questions using video with student motivation and learning outcomes.

#### RESEARCH METHODS

This research is a quantitative type of research, because the primary data used is numerical data derived from the value of learning outcomes and learning motivation of fourth-grade students of SD Negeri 1 Candi.

This study used a quantitative approach and the method used was quasi-experimental. (Sugiyono, 2019) states "the quasi-experimental has a control group, but it cannot fully function to control external variables that affect the implementation of the experiment". In this study, there was an experimental group, namely students who received video learning media treatment, and a control group, namely students who did not receive video learning media treatment.

In this research design, researchers used a 2x3 factorial research design. (Setyosari, 2010) says factorial design is used when researchers consider other independent variables (usually moderator variables) in their research". By thus intended use of the factorial design is intended to determine the effectiveness of video media technology developments in society to the learning outcomes IPS reviewed of student motivation. The research design can be described as follows:

Table 1 Factorial Research Design

		Treatment		
Mo	Media Motivation		Without Media	
	High	$A_1B_1$	$A_2B_1$	
Motivation to learn	Moderate	$A_1B_2$	$A_2B_2$	
	Low	$A_1B_3$	$A_2B_3$	

The population in this study were all fourth-grade students of SD Negeri 1 Candi, Mlarak District, Ponorogo Regency, which consisted of 3 elementary schools, namely SDN 1 Candi, SDN 2 Candi, and SDN 3 Candi.

The sample used in this study were fourth-grade students of SDN 1 Cand I, Mlarak District, Ponorogo Regency which consisted of 2 classes, namely class IV A with a total of 20 students and class IV B with a total of 20 students, the total sample size was 4 0 students. The sampling technique in this study was cluster random sampling. (Nawawi, 2015) states "the cluster sampling technique is also called the group technique, which is done by selecting samples based on the group not on the individual". (Nawawi, 2015) states "the random sampling technique is carried out by providing the same possibility for individuals who are members of the population to be selected as members of the research sample, three ways that can be done, namely by drawing, ordinal and using random number tables".

From the above understanding, it can be concluded that the cluster random sample technique is the taking of sample members from the population randomly by drawing members of the population based on the group.

In this study, there are three kinds of variables, namely the independent variable, the dependent variable, and the moderator variable. The independent variable is a video and non-video media, the dependent variable is social studies learning outcomes, while the moderator variable is learning motivation. Data collection techniques using the method of documentation, tests, and questionnaires (questionnaires).

Before the instrument is used, a learning motivation questionnaire instrument is tested and a learning outcome test is conducted.

The learning motivation questionnaire instrument trial was conducted to determine the validity of the product-moment and its reliability. While testing achievement test is performed to determine the validity of product-moment, reliability, level of difficulty, and different power items.

This hypothesis test using ANOVA two different cell, with further test ANOVA two different cell or test Scheffe previously to test for normality using the test Lilliefors and test the homogeneity using Bartlet test.

#### RESULTS AND DISCUSSION

#### A. Research result

The learning outcome data and the learning motivation questionnaire were taken from class IV SDN 1 Candi which consisted of two classes, namely class IV A which amounted to 20 students as an experimental class using video learning media, and class IV B with 20 students as the control class without using video media.

The normality test is used to find out the data taken from a population that is



normally distributed or not. The normality test in this study used the Liliefors method to achieve the IPS test scores for class IV A, which totaled 20 students, and grade IV B, which amounted to 20 students at SDN 1 Candi.

Table 2 Recapitulation of Data Normality Test

<u> </u>				
Class			Conclusion	
Experiment	0.18	0.189	Data is normally distributed	
Control	0.18	0.198	Data is normally distributed	

Table 2, the results of the analysis of the normality test, shows that the samples from the experimental and control classes came from normally distributed populations. The homogeneity test is used to determine whether or not the variances of several populations are the same. The study tests the homogeneity of the experimental and control classes using the Barlet- test formula. The results of the homogeneity test data analysis of the student learning outcomes are presented in the following table:

Table 3 Recapitulation of Data Homogeneity Test

Su mber	JK	dk	RK	F obs	Fα	P
Ex. Class (A)	1957.04	2	978.52	66.90	3.28	<0.05
Motiv (B)	701.63	1	701.63	47.97	4.11	< 0.05
Interaction (AB)	192.53	2	96.26	6.58	3.28	< 0.05
Error	497.27	34	14.63	-	-	-
Total	3348.46	39	-	-	-	-

Based on the table above, it can be concluded that the sample from the experimental class totaling 20 students and the control class totaling 20 students came from a population that had homogeneous variance.

The hypothesis test used in this study is a two-way variance analysis of different cells. This two-way ANOVA test with different cells was conducted to test the significance of the effect of the two independent variables on the dependent variable. From the results of data analysis on hypothesis testing, it is obtained:

Table 4 Recapitulation of Anova Test Two Different Cell Pathways

Data	$\chi^2$ obs	$\chi^2 \alpha$	Conclusion
Learning Outcomes with video media, learning outcomes without video media	1.75	3,841	Homogeneous

Based on table 4 above, it can be seen that the value of F obsand the value of F  $\alpha$ , thus it can be concluded that FA = 66.90> F  $\alpha$  = 3.28, then H0 is rejected, meaning that there is a difference between video and non-video media on learning outcomes; F B = 47.97> F  $\beta$  = 4.11, then H0 is rejected, meaning that there are differences in learning

motivation high, medium and low on learning outcomes; and F AB = 6.84> F  $\alpha\beta$  = 3.28, then there is an interaction between video media and learning motivation on learning outcomes.

If the results of the two-way variance analysis of the cells are not the same, it shows that H0 is rejected, then a post-ANOVA multiple comparison test is performed using the Scheffe method. Scheffe's method produces the least significant mean difference count compared to other methods. The main objective of post-ANOVA multiple comparisons is to determine the mean difference in each row, each column, and each cell pair.

The two-way ANOVA test for different cells or the Scheffetest resulted in intercolumn and row test results.

- a. Scheffe test between columns
- F 1-2 = 923.28>  $F\alpha$  = 2.49, then  $\mu$  1  $\neq$   $\mu$  2, meaning that students who learn with video media have a better impact on learning outcomes than non-video media.
  - b. Interline Scheffe Test
- F 1-2 = 166.96> F $\alpha$  = 2.49, then  $\mu$  1  $\neq$   $\mu$  2, meaning that in each class both video and non-video students who have high learning motivation have better learning outcomes than students with moderate learning motivation; F 1-3 = 485.08> F $\alpha$  = 2.49, then  $\mu$  1  $\neq$   $\mu$  3, meaning that in each class both video and non-video students who have high learning motivation have better learning outcomes than students with low learning motivation; and F 2-3 = 127.69> F $\alpha$  = 2.49, then  $\mu$  2  $\neq$   $\mu$  3, meaning that in each class both video and non-video students who have moderate learning motivation have better learning outcomes than students with learning motivation low.
  - c. Scheffe Test Between Cells in the Same Column
- F 11-12 = 59.91> F $\alpha$  = 2.49, then  $\mu$  11  $\neq \mu$  12, in video media class students who have high learning motivation have better learning outcomes than students with moderate learning motivation; F 11-13 = 79.92> F $\alpha$  = 2.49, then  $\mu$  11  $\neq \mu$  13, in video media class students who have high learning motivation have better learning outcomes than students with low learning motivation; F 12-13 = 8.99> F $\alpha$  = 2.49, then  $\mu$  12  $\neq \mu$  13, meaning that in the video media class students who have moderate learning motivation have better learning outcomes than students with low learning motivation; F 21-22 = 3.20> F $\alpha$  = 2.49, then  $\mu$  21  $\neq \mu$  22, meaning that in non-video media classes students who have high learning motivation have better learning outcomes than students with moderate learning motivation; F 21-23 = 40.20> F $\alpha$  = 2.49, then  $\mu$  21  $\neq \mu$  23, meaning that in non-video media classes students who have high learning motivation have better learning outcomes than students with low learning motivation; and F 22-23 = 25.03> F $\alpha$  = 2.49, then  $\mu$  22  $\neq \mu$  23, meaning that in non-video media classes students who have moderate learning motivation have better learning outcomes than students with low learning motivation.
  - d. Scheffe Test Between Cells on the Same Row
- F 11-21 = 48.18>  $F\alpha$  = 2.49, then  $\mu$  11  $\neq$   $\mu$  21, this means that for each high learning motivation, students who learn with video media have better learning outcomes than those who learn using non-video media; F 12-22 = 4.38>  $F\alpha$  = 2.49, then  $\mu$  12  $\neq$   $\mu$  22, meaning that for each learning motivation, students who learn using video media have better learning outcomes than those who learn using non-video media; and F 13-23 = 8.82>  $F\alpha$  = 2.49, then  $\mu$  13  $\neq$   $\mu$  23, meaning that for each of the low learning motivation students who learn with video media have better learning outcomes than those who learn with non-video media.

#### **B.** Discussion

The implementation of this research shows that the use of video learning media,



the students' social studies learning outcomes are better than without video media for students who have high, medium, and low motivation. (Widiyasanti & Ayriza, 2018) This shows that the two treatments have different effects or effects. This is also supported by the value of data analysis that video media has more influence on student social studies learning outcomes than without video media.

The influence of video media on social studies learning outcomes is because students in this class appear to be more active in learning, this can be seen with the condition that the average value of the video media class motivation tends to be superior. Because with video media, students will learn easily because through video media students will focus their attention on the media and try to understand it, so that learning runs effectively.(Prasmono, 2011)

This study, also shows that learning motivation influences learning outcomes as evidenced by the results of data analysis. Students who have high motivation have better learning outcomes than students with moderate and low motivation, both who learn with video media and without video media. This is by the results of research in the place of research that students who have high motivation, especially those who have intrinsic motivation, tend to be superior because they without external encouragement are already diligent in learning so that with learning motivation students can learn well. A child who has been motivated to learn something will try to study it well and diligently, in the hope of getting good results.

Therefore, through this strong desire and supported by appropriate learning media, it will be able to have a positive influence on learning persistence and especially on the achievement of student learning outcomes. (Kartika, Husni, & Millah, 2019) While students who have motivation are in a position of wanting to learn that is not optimal but are still able to pay attention to learning with encouragement from outside, be it friends, teachers, or video media who are finally able to understand the material even though it is below students with high motivation. Students with low motivation tend to be passive and rely only on the ability of their friends to face oral tests during learning so that their level of understanding is also low compared to students who have high and moderate motivation. Thus, the results of these studies are following the real conditions in the research place, namely, motivation has a significant effect on student learning outcomes.

The comparison results from the social studies learning experiment with video media and without video media show that students who learn with video media have superior learning outcomes, both in the high, medium, and low motivation group of students. Based on the value of social studies learning outcomes, it can be seen that the condition of the video media class is higher than the class without video media both in terms of average scores, maximum scores, and lowest scores. This means that video media is more effective on social studies learning outcomes than without video media.

Furthermore, the interaction of video media with learning motivation influencing student social studies learning outcomes. Learning media is a means of supporting learning and motivation is a factor that affects learning outcomes. The findings at the research site also showed that students who initially had more motivation increased their motivation with the form of video media learning, so that students who were not motivated would be affected, which in turn, the two variables were interrelated and both affected student learning outcomes.

#### **CONCLUSION**

Based on the research results, it can be concluded that video media has a better impact on social studies learning outcomes for fourth-grade students of SD Negeri 1 Candi;

The social studies learning outcomes of fourth-grade students of SD Negeri 1 Candi who has high learning motivation is better than those who have moderate and low learning motivation. And those who have moderate learning motivation are better than those with low motivation; In each class using both video and non-video media, the social studies learning outcomes of grade IV SD Negeri 1 Candi students who have high learning motivation are better than those who have moderate and low learning motivation. And those who have moderate learning motivation are better than those with low motivation; and for each learning motivation, video media had a better impact on social studies learning outcomes for fourth-grade students of SD Negeri 1 Candi.

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