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APPLICATION OF KINEMASTER-BASED AUDIO VISUAL LEARNING MEDIA IN THE SUBJECT OF SOCIAL SCIENCES AT SMPN 1 KALITIDU

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ABSTRACT

The learning outcomes of grade VII students during the exam were still relatively low because out of 35 students, 15 students scored above the Minimum Completion Criteria (KKM) of 75 and 20 students scored below the Minimum Completion Criteria of KKM 75. The data proves that students' spatial thinking skills are still weak and can cause difficulties in interpreting maps in social studies geography learning. The ineffective use of computer laboratories and android-based mobile phones in the learning process is one of the causes. The purpose of this study was to analyze the effectiveness of kinemaster-based audiovisual learning media in social studies geography learning at SMP Negeri 1 Kalitidu. The results showed that in the control class the average pre-test score was 43.43 while the average post-test score was 51.25, still lower than the experimental class. In the experimental class the average pre-test score was 45.62 while the average post-test score was 80.93 higher than the control class. The average posttest score for the experimental class > control class was 80.93 > 51.25, which means that the learning outcomes of the experimental class were higher than those of the control class. In the paired t-test, the results obtained were sig.2 tailed at 0.000 < 0.05 Kinemaster-based learning is more effective.

Keywords: *Spatial Thinking; Kinemaster; Social Science*

INTRODUCTION

21st century students are required to be able to master knowledge, have metacognitive skills, be able to think critically and creatively and be able to communicate and collaborate well (Wijayanto, Sutriani, & Luthfi, 2020). The development of social studies education in Indonesia is very dynamic and follows the times, it is interesting to study it in more depth regarding its development in the current school curriculum (Hidayat, 2020). Social studies learning aims to train students' critical thinking, spatial thinking abilities and responsiveness in solving problems in society.

The fact that happens in schools is that not all students have a positive

perception of social studies lessons. Social studies learning in schools tends to be textual because teachers only teach concepts in books and are not applied in everyday life. Teachers' creativity is needed in implementing meaningful social studies lessons. Social studies learning in Indonesia and various other countries is still less interesting accompanied by students' weak spatial thinking. The main cause is the lack of teacher ability in an interesting and meaningful Geography Social Sciences learning process. Even though they are supported by various learning resources such as teachers, creative lesson plans, internal training, parental support and school support, students still often have negative attitudes towards social studies (Setyowati & Fimansyah, 2018)

Minister of Education and Culture Decree No. 56 of 2022 Guidelines for Implementing Curriculum in the Context of Learning Recovery (Independent Curriculum) as a complement to the previous curriculum. The SMP/MTs curriculum structure consists of 1 (one) phase, namely Phase D for class VII, class VIII, and class IX. The SMP/MTs curriculum structure is divided into 2 (two), namely intracurricular learning and the project to strengthen the profile of Pancasila students, allocated around 25% (twenty five percent) of the total JP per year. The implementation of the project to strengthen the profile of Pancasila students is carried out flexibly, both in content and in terms of implementation time

According to Piaget's theory as expressed in Paul Suparno (2001), the character of junior high school students enters the formal operational cognitive development stage. Children are able to think abstractly, analyze a problem, and can relate what they experience with logical thinking. Students have broader thinking power and an increased level of curiosity compared to the previous stage. Students entering adolescence where they are starting to look for their identity will tend to be happy to have lots of friends by expanding their social world and being more interested in new things. Audio visual/video media is needed as a learning resource to support student characteristics. Audio visual/video media can help students analyze the material provided optimally. Students' knowledge is no longer based on what they see but is also based on logic. The media that will be developed is media that can provide a real and broad picture to students to maintain interest in the

Geography Social Sciences material presented.

The use of learning multimedia in the process of conveying information to students will make it easier to understand better. The learning process in schools still does not utilize technology to support students' spatial thinking in geography social studies subjects. Social studies subject matter is so dense that it is very difficult to explain optimally in such a short learning time, especially material that concerns study from a spatial perspective, in this case what is meant is the location and area of Indonesia. The use of audio-visual media in the form of multimedia is very necessary, because multimedia learning has many advantages compared to other media. The advantage of multimedia is that it can improve students' spatial thinking through a combination of text, graphics, audio, moving images (animated video). The multimedia designed must be able to highlight students' spatial intelligence. Multimedia is designed with the aim of attracting students to pay maximum attention and not get bored easily (Prihadi, 2010)

The most prominent problem found at SMP Negeri 1 Kalitidu based on data from interviews and initial observations with social studies subject teachers is that the Minimum Completion Standards (KKM) have not been achieved in social studies subjects, this can be seen from the list of assignment scores for social studies subjects, namely in below 75 (out of 35 students there were 15 students who got a score above 75 and 20 students got a score below 75) on the topic of the location and size of Indonesia and the limited interesting learning media in the social sciences subject of geography. This data proves that students' spatial thinking abilities are still weak. If students' spatial thinking abilities are weak, it can cause difficulties in interpreting maps in social studies geography learning. Study room facilities: Computer laboratories and student personal facilities exist. Students already have Android-based mobile phones, but the use of computer laboratory facilities and Android-based mobile phones is still not effective in the learning process. The importance of using media in learning social studies geography is to improve students' spatial thinking, so teachers need to design interesting learning media for students to improve students' spatial thinking by utilizing existing facilities in the social

studies geography learning process so that students can learn independently easily, effectively, efficiently. and the teaching and learning process can be done anywhere without being limited by the short learning time at school

The ability to think spatially in social studies geography lessons is the result of learning in the cognitive aspect. Spatial thinking abilities can be seen in the results of students' knowledge tests in spatial thinking. Spatial thinking components can be developed referring to eight components, namely spatial comparison, spatial auras, spatial region, spatial transition, spatial hierarchy, spatial analogies, spatial patterns and spatial association components (Bednarz & Lee, 2011; Gersmehl & Gersmehl, 2011; Zwartjes & de Lazaro y Torres, 2019). The role of teachers in improving students' spatial thinking abilities in the social studies learning process using various current technologies is very much needed. The use of multimedia such as Kinemaster and other applications can support the learning process in improving students' spatial thinking in social studies geography subjects.

According to Amelia & Arwin (2020), learning media using the Kinemaster application is declared suitable for use, the feasibility level of learning media based on the Kinemaster application is 95% with very feasible interpretation criteria. From filling out the questionnaire, it was found that the practicality of Kinemaster application-based learning media reached 95.25% with very practical interpretation criteria. These results show that Kinemaster-based learning media makes it easier for students to understand the learning material. Based on the potential and existing problems, the researchers measured the effectiveness of implementing Kinemaster-based audio visual learning media in improving students' spatial thinking abilities in social studies geography lessons at SMPN 1 Kalitidu.

MATERIALS AND METHODS

This research applies quasi-experimental research because it has two groups, namely an experimental group and a control group. The experimental class uses Kinemaster-based audio visual media, while the control class uses LKS media. This research uses a non-equivalent control group design. The location of this research was at SMPN 1 Kalitidu in October semester 1 of the

2023/2024 academic year. This location was chosen based on the low learning outcomes of class VII students in semester 1.

The population in this study was all 64 students of SMPN 1 Kalitidu class VII for the 2023/2024 academic year, divided into two classes, namely A and B, who had equal abilities. Class VII A is the experimental class and class VII B is the control class.

Data collection on initial learning results tests (pre-test) and final learning tests (post-test) was carried out in writing with 20-item multiple choice questions. Documentation is intended to complete data sources during research including student names and number of students.

The effectiveness of using Kinemaster-based audio visual learning media was analyzed using the following statistical tests:

Normality test using Kolmogorov Smirnov. Based on the sample that will be tested, the hypothesis is whether the sample is normally distributed or vice versa. The test criteria are if Lhit < Ltab with a significance level of 0.05 then the variable has a normal distribution, and vice versa (Sudjana, 2014)

If the data is normal and homogeneous then the two samples can be used as samples for this research and the results can be analyzed further. The aim of the homogeneity test for the post-test is that if the Sig F value is > 0.05 then the t test uses Equal Variances Assumed (assumed to be the same variance) and if the Sig F value is < 0.05 to use Equal Variances Not Assumed (assumed different variants). This homogeneity test uses SPSS (Arikunto, 2010)

The data that will be collected is a questionnaire that has been filled in by students regarding spatial thinking in the form of quantitative data, from each sample a normality test is carried out then followed by a t-test (t-test) calculations using SPSS 16, namely as follows:

Ha is accepted if (sig.) > 0.05

"There is no difference between the application of Kinemaster-based audio visual learning media to increasing students' spatial thinking abilities."

Ha is rejected if (sig.) < 0.05

"There is a difference between the application of kinemeter-based audio visual learning media to increasing students' spatial thinking abilities"

RESULTS AND DISCUSSION

The pre-test mean score in the experimental class was 45.625, the

median was 45.00, and the standard deviation was 10.682. The lowest score obtained by students in the experimental class was 30.00 and the highest score was 75.00. The mean score of the control class was 43.43, the median was 45.00 and the standard deviation was 10.957, the lowest score obtained by students was 25.00 and the highest score was 65.00. The mean posttest score for the experimental class was 80.93, the median was 82.50, and the standard deviation was 9.45. The lowest score obtained was 55.00 and the highest score was 95.00. The mean value of the control class is 51.25, the median is 50.00 and the standard deviation is 13.31. The lowest score obtained is 30.00 and the highest score is 80.00.

Table 1. Pre-Test Data Normality Test

Kolmogorov Smirnov Pre-Test	Experimental Class	Control Class
Statistic	1.193	0.563
Sig. (2-tailed)	0.116	0.909
Conclusion	**Normal**	**Normal**

Source: Research Analysis, 2023

Table 1 show results of the normality test calculation show that the pre-test value in the control class is Sig. = 0.909 > 0.05, this shows that Ho is accepted, so it can be concluded that the data comes from a normally distributed population. The results of the Kolmogorov-Smirnov normality test calculation using SPSS 16 showed that the experimental class pre-test value was Sig. = 0.116 > 0.05, this shows that Ho is accepted, so it can be concluded that the data comes from a normally distributed population

Table 2. Post-Test Data Normality Test

Kolmogorov Smirnov Post-Test	Experimental Class	Control Class
Statistic	1.014	0.787
Sig. (2-tailed)	0.255	0.565
Conclusion	**Normal**	**Normal**

Source: Research Analysis, 2023

Table 2 show results of the normality test calculation show that the post-test value for the control class is Sig. = 0.565 > 0.05, this shows that Ho is accepted, so it can be concluded that the data comes from a normally distributed population.

The results of the Kolmogorov-Smirnov normality test calculation using SPSS 16 showed that the post-test value for the

experimental class was Sig. = 0.255 > 0.05, this means that Ho is accepted, so it can be concluded that the data comes from a normally distributed population. It can be concluded that the significance values in the control class and experimental class, both in the pretest and posttest scores, are normally distributed, seen from the resulting significance level of more than 5% or 0.05.

Table 3. Homogeneity of Variance Test

Group	Levene Statistic	Df 1	Df 2	Sig.	Conclusion
Pre-test	0.237	1	62	0.628	Homogen
Post-test	3.432	1	62	0.069	Homogen

Source: Research Analysis, 2023

Table 3 output results of the variance homogeneity test produced an Fcount value (Levene Statistics) that the pretest data group had a homogeneous variance, with a Lavene statistic of 0.237 with a significance level of 0.628 which was greater than the alpha significance level of 0.05. The output results of the variance homogeneity test produced an Fcount value (Levene Statistics) that the posttest data group had a homogeneous variance, with a Lavene statistic of 3,432 with a significance level of 0.069 which was greater than the alpha significance level of 0.05. From the results of the prerequisite tests that have been carried out, it can be concluded that the research data has the same distribution of variants.

Table 4. Independent Sample t –test (pre-test)

Mean		T	Df	Sig. (2-tailed)	Mean Diffrence
Exsperimen	Control				
45.6250	43.4375	0.809	62	0.422	2.18750

Source: Research Analysis, 2023

Table 4 shows results of the independent sample t-test for the initial class (pre-test) show that the Tcount value is 0.809 and ttable with a significance level of 5% or 0.05, degree of freedom (df) = (n-2) so we get t(0, 05) (60) table = 1.67. So the result of the value of tcount < ttable shows a result of 0.809 < 1.67. Meanwhile, with a significance level of 5% or 0.05, namely sig (2t-tailed) has a significance value of α > 0.05, namely sig (2-tailed) of 0.422 > 0.05. So it can be concluded that there was no significant difference in learning

outcomes between the experimental class and the control class before being given treatment, meaning that the experimental class and control class students had the same learning outcomes during the pre-test. This is reinforced by the experimental class getting an average score of 45.62 and the control class having an average score of 43.43

Table 5. Independent Sample t –test (post-test)

Mean		T	Df	Sig. (2-tailed)	Mean Diffrence
Exsperimen	Control				
80.9375	51.2500	10.281	62	0.000	29.8750

Table 5 shows results of the independent sample t-test for the final class (post-test) show that the Tcount value is 10.281 and ttable with a significance level of 5% or 0.05, degree of freedom (df) = (n-2) so we get t(0.05) (62) table = 1.67. So the result of the value of tcount < ttable shows the result 10.281 > 1.61. Meanwhile, with a significance level of 5% or 0.05, namely sig (2-tailed) has a significance value of $\alpha < 0.05$, namely sig (2-tailed) is 0.000 < 0.05. It was concluded that there was a significant difference in learning outcomes between the experimental class and the control class before being given treatment, meaning that students in the experimental class and control class had different learning outcomes when the posttest was carried out. This is reinforced by the experimental class getting an average score of 80.9375 and the control class having an average score of 51.25

Table 6. Paired Sample t-test

Mean		T	Df	Sig. (2-tailed)	Mean Diffrence
Pre-test	Post-test				
44.5312	66.0938	-10.337	63	0.000	-2.156

Source: Research Analysis, 2023

Table 6 shows results of the paired sample t-test on the pre-test and post-test scores for the experimental class showed that the significance value $\alpha < 0.05$, namely sig (2-tailed) 0.000 < 0.05. So it can be concluded that there is a significant difference in the learning outcomes of experimental class students between before being treated with Kinemaster-based audio visual learning media and after being treated with this learning media. This is reinforced by the average pre-test score of 44.5312 and the average post-test score of 66.0938.

It was concluded that the Kinemaster-based audio visual learning media treatment was effective and had an influence on the learning outcomes of experimental class students

KineMaster is an application that can organize various videos with a smartphone or laptop. The application is supported by abundant layers of video, audio, images, text, and effects. KineMaster videos can also be continuously shared on social media accounts (Eka Indriani, 2020). With KineMaster-based videos, learning is believed to be able to create a comfortable and enjoyable atmosphere for students so that it can make them interested in the material being presented. That way, the resulting videos from KineMaster can be directly uploaded to all social media such as WhatsApp, YouTube, Facebook, Google+, and so on. So it makes it easier for students, as well as easier for teachers, to present videos of the material delivered to students. Long distance teaching and learning activities will be fun and can influence the improvement of student learning outcomes. (Khaira, 2021).

KineMaster is an application that can be used with a smartphone which is useful for editing various interesting videos. By presenting a fairly simple appearance, KineMaster has many features. This can help students better understand the lessons presented by teachers (Iryani, 2020). After implementing the KineMaster learning media, there was an increase in student learning motivation. Because KineMaster is one of the most reliable video editing programs that can be used on smartphones (Fajariyah, 2018).

The results of this research are in line with (Gusmania and Dari, 2018) which explains that there is a difference in the impact of using video learning media and not using media in conventional learning on the understanding of mathematical concepts for class VIII students at SMPN 20 Batam. The learning process using video media can be said to be successful compared to learning without using media. This is based on the results of the posttest, the average value of the experimental class is higher than the control class.

Based on research results, the benefits obtained when learning using KineMaster videos are that students understand more about the material presented, especially regarding the location and area of Indonesia. The level

of student understanding can be measured through the results of the learning process obtained through analysis of the learning process. Learning outcomes are the final process of learning that occurs mainly thanks to teacher evaluation. The results of this research are in line with (Busyaeri et al., 2016) which stated that student learning outcomes using learning videos reached 80.63. These results were influenced by the material provided by educators. These results prove the high increase in student learning outcomes using video media

The results of interviews conducted with three informants from class VII students concluded that the KineMaster-based audio visual media involved in learning helped them understand the material and provided a different learning experience. Even though internal learning conditions vary from one student to another, especially in terms of readiness to receive learning material, KineMaster-based image media is considered capable of attracting students' attention to follow the learning.

Based on the results of the effectiveness test in this research, two things can be seen that measure the effectiveness of using media in learning. First, students can actively participate in class dynamics when learning with media is taking place. Second, the evaluation results in the form of students' written tests reach or exceed the KKM. This effectiveness is of course obtained by carrying out a series of preparations, whether carried out by teachers, students, even schools. The following are things that support the effectiveness of learning by using KineMaster-based image media in the location and area of Indonesia, namely achieving maximum learning components, teacher skill and creativity in developing learning media, selecting appropriate learning media, support from the school.

CONCLUSIONS

Hypothesis test results showed that students in the experimental class who used Kinemaster-based audio visual learning media were effective because they had different learning outcomes from control class students who used LKS learning media. Kinemaster-based learning media which has been implemented in class VII-A of SMPN 1 Kalitidu provides opportunities for students to develop their potential optimally in a pleasant class atmosphere, in addition to being supported by the use

of KineMaster-based Audio Visual learning media as a medium for delivering the material. Indonesia's location and size can help students improve their spatial thinking.

It is necessary for students to truly understand that the lessons given by the teacher are an important learning method for students. The application of various learning methods and media carried out by teachers is essentially a step or effort to improve student learning outcomes.

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