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The Effect of Using Problem-Based Learning-Based Video Media on Learning Outcomes of Elementary School Students

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ABSTRACT: In the current learning process, the use of innovative learning media is needed to improve students' understanding and learning outcomes. Civics subjects are often considered boring because they contain a lot of theoretical and abstract material. The purpose of the research is whether the use of problem-based learning-based video media affects student learning outcomes. The method of this research used observation, documentation, and tests. The research findings show that the low learning outcomes of students in Civics subjects are thought to be caused by the lack of interesting learning methods and media used. Using video media based on Problem Based Learning (PBL) in Civics learning to present real problems, stimulate students' critical thinking, improve student learning outcomes.

KEYWORDS: Problem Based Learning Model, Video Media, Learning Outcomes.

I. INTRODUCTION

According to Rukmana et.al (2023) Education in Indonesia is organized based on the National Education System Law No. 20 article 3 of 2003 which includes education aims to optimize the potential of students in order to internalize attitudes of faith and devotion to God, develop noble character, maintain health, develop science, improve skills and develop creativity, advance independence, become a society characterized by responsible democracy. Education plays an important role in preparing individuals who have good quality. Through education, everyone can achieve self-development and later achieve a living individual, able to live a happy and safe life Alpian, et al in (Rukmana et al., 2016) One of the subjects that can focus on character education is Civics education (PKN).

Pancasila and Citizenship Education (PPKn) is one of the compulsory subjects from elementary school to college. Pancasila and Citizenship Education is expected to be able to give its attention to the development of values, morals, and behavior of students. Indeed, PPKn is a study of everyday life, teaching how to be a good citizen supporting the values that are the basis of the Indonesian state.

Tarasti et al., (2023) The low quality of learning is one of the problems that arise in the world of education today. There are also still teachers who carry out learning by applying the lecture method. Even though the application of the lecture method in learning is currently not recommended. Because of the application of the lecture method, the process of absorbing knowledge is lacking because it relies on one direction and students easily forget the material that has been delivered. In today's digital era, there are many variations of interesting and interactive learning media so that when applied, students are actively involved in learning activities. In the subject of Civics or Pancasila Education for example, there are quite a lot of students who think that Civics is boring.

Setiadi et al., (2023) One of the problems faced by the world of education is the weak quality of the learning process. In the learning process, children are less encouraged to develop critical and creative thinking skills. The learning process in the classroom is directed towards children's ability to memorize information, children's brains are forced to remember and hoard various information without being required to understand the information without being required to understand the information they remember to connect it with their daily lives. In class learning, students generally think that Civics is one of the boring lessons and is considered easy but in practice it turns out to be quite difficult. To change this paradigm, an appropriate learning application is needed to create an active and creative learning atmosphere, not boring, and develop critical and creative thinking skills.

Yulianti et al., (2016) Most learning in elementary schools learning Civics by only using the lecture method which is certainly less preferred by students. The use of the lecture method results in the material given to students becoming easily bored and does

not last long in memory. Whereas Civics learning should be done with interesting learning, where students can be actively involved in learning, because Civics subjects have a big role in shaping student behavior.

Alkalah, (2016) Learning model is one of the important elements to support the success of the learning process. One of the objectives of selecting a learning model is to ensure that students gain the best possible understanding of the material being taught. Choosing the right model will have an impact on student success and the achievement of learning objectives Ulfa & Saifuddin (2018). To achieve learning objectives, interesting ideas must be used to develop learning so that students become more active in the learning process.

Dewi EK (2015) *The Problem Based Learning* Model focuses on student life problems (authentic) that are meaningful to students, the teacher presents problems, asks questions and facilitates investigation and dialogue. Authentic problems will attract students' interest in learning because students are the subjects of learning, and are related to their daily lives so that the learning carried out can be useful for themselves, because learning raises authentic problems into the classroom. Then the learning activities carried out in the classroom will be more meaningful.

Nurjumiati et al., (2024) The learning process will be more meaningful if the teacher utilizes animated video media that combines audio and visual. Animated video media that combines auditive, visual and kinesthetic student learning types. According to Pietno (2014: 150) that the use of animated video media is one of the efforts to facilitate understanding, attract attention, and improve the quality of teaching and learning. The utilization of animated learning media makes the material more meaningful to students so that later it is expected to have an influence on increasing student learning outcomes.

Ujang Jamaludin et al., (2023) In Indonesia, the development of technology in the field of education is very welcomed and widely utilized as an optimization in learning activities, technology is very helpful in understanding teaching materials so that it can be easier to achieve predetermined learning objectives. Judging from its philosophy, learning is a communication that intends to convey messages or information that can stimulate the thoughts, feelings, interests and attention of students. Of course, in achieving these goals, teachers need to make new innovations that can make it easier for students to process the information provided.

Based on the findings of the research, namely in the fifth grade students of SD Inpres 1 Kawatuna, there is still a lack of understanding related to the formulation and difficulty in determining the attitude of Tolerance in Civics material because they still use the lecture method so that students feel bored in learning. So this research was conducted with the aim of knowing the effect of the *Problem Based Learning* (PBL) learning model with video media on increasing the understanding of grade V students in Civics Education subjects. The magnitude of the influence of the learning model and media that researchers use can be seen from the results of the *Pre-test* and *Post-test of* students. Before and after being treated both from the *pre-test* before the delivery of material and the *post-test* after the acquisition of this material becomes something that can be seen clearly. Coupled with *Problwm Based Learning* assisted by video media, it is hoped that the *post-test* results can be maximized. SD Inpres 1 Kawatuna is the choice for research with 23 students.

II. LITERATURE REVIEW

Video media can contain images and sound in delivering teaching materials. Agree with Ambawati et al (2022) which states that audio visual media is media that contains sound and visuals. Learning outcomes are the achievement of students about how much they understand the material conveyed by the teacher and are closely related to the teaching and learning activities carried out. . Mujahidah F, et al (2023). *Problem Based Learning* Model is a learning model designed so that students are active in discovering the knowledge learned through their own problem-solving skills to the fullest. *Problem Based Learning* in Pancasila Education subject content can improve student learning outcomes. Tarasti et al., (2023).

III. RESEARCH DESIGN

This research uses a quantitative approach with a type of *quasi-experiment* research. experimental research is research used to seek the effect of certain treatments on others under controlled conditions. The research design used in this research is *quasi experiment*. There are several forms of *pre- experimental* design but in this study using *One-Group pretest-posttest Design.*

Table 1. Research Design *Quasi Experimental Design*

Pre-test	Treatmen	*Post-test*
O_1	X	O_2

Description:

O_1 = *Pre-test* before treatment is done

X = Treatment using digital media (powerpoint-based canva)

O_2 = Final Test (*Post-test*) after the treatment is given

The sample in this study were all grade II students of Kabonen State Elementary School totaling 17 students consisting of 8 male students and 9 female students. The data sources used in this study are Primary Data and Secondary Data. The data collection techniques used were observation, tests, and documentation. The test instrument in the form of multiple choice questions that have been done by students at the time of the trial then tested for validity using the help of *Microsoft excel* and IBM SPSS *Statistics* 25.

The basis for decision making in reliability testing is:

- If the value of $r_{(table)} > 0.60$ then the research instrument tool is reliable
- If the value of $r_{(table)} < 0.60$ then the research instrument tool is not reliable

Based on the reliability test assisted by the IMB SPSS *Statistic* 25 program, the reliability index is 0.9061>0.60, it can be concluded that the question instrument is reliable.

Table 2: Reliability coefficient

Reliability Statistics

Cronbach's Alpha	N of Items
.906	14

Source: *data processing results*

Data Analysis Techniques and Hypothesis Testing there are two, namely Descriptive Analysis And Inferential Analysis. The test criteria are said to be normal based on the significant value, namely:

a. If the significance > 0.05, then Ho is accepted and the data is normally distributed.

b. If the significance number is <0.05, then Ho is rejected and the data is not normally distributed.

The hypothesis test used is t-test (paired sample t-test) with the help of the IBM SPSS *Statistic* 25 program. The significant decision making is as follows:

a. Significant value <0.05 then Ho is rejected and accept Ha

b. Significant value> 0.05 then Ho accepted and reject Ha

IV. RESULTS

This research was conducted at SD Inpres 1 Kawatuna to see if there is an effect of using the *Problem Based Learning* Model in Civics subjects, especially the material "Identity and My Environment" for fifth grade students of SD Inpres 1 Kawatuna. Student learning outcomes were obtained using an instrument totaling 14 valid and reliable questions in the form of multiple choice. The results of the analysis of each validation test item can be seen in table 4.1 below:

Table 3. Results of Question Instrument Validity Analysis

NO. SOAL	Pearson Correlation	Value. Sig	Conclusion
1	0,504	0,039	VALID
2	0,518	0,033	VALID
3	0,698	0,002	VALID
4	0,772	0,000	VALID
5	0,759	0,000	VALID
6	0,186	0,474	NOT VALID
7	0,406	0,106	NOT VALID
8	0,745	0,001	VALID
9	0,772	0,000	VALID

10	**0,562**	**0,019**	**VALID**
11	**0,846**	**0,000**	**VALID**
12	**0,667**	**0,003**	**VALID**
13	**0,454**	**0,067**	**NOT VALID**
14	**0,675**	**0,003**	**VALID**
15	**0,269**	**0,297**	**VALID**
16	**0,376**	**0,136**	**NOT VALID**
17	**0,450**	**0,070**	**NOT VALID**
18	**0,420**	**0,093**	**NOT VALID**
19	**0,752**	**0,001**	**VALID**
20	**0,781**	**0,000**	**VALID**

Source: *data processing results*

Based on the results of the validity test with the help of SPSS version 25 *for windows*, the value (r table) with 17 respondents is 0.482, meaning that if the validity test requirement if r count> from r table or Sig value <0.05 then the question is declared valid. There are 14 questions that are declared valid because the sig value <0.05 and judging from the valid questions there are easy and easy question variations so that the questions are valid. While 6 invalid questions are number 6, 7, 13, 16, 17, and 18 because the sig value is> 0.05, and it looks like the 7 questions are too easy to do so that the question is not said to be valid.
The data from the test reliability test with IBM SPSS *Statistic* 25 can be seen in table 4.2 below:

Table 4: *Reliability* Test Results of Research Instruments

Reliability Statistics

Cronbach's Alpha	N of Items
.906	14

Source: *data processing results*

The results of the descriptive analysis using the IMB SPSS *Statistic* 25 application. The results of class V pretest data can be seen in the following table:

Table 5. Results of *Pretest* and *Posttest* Data Analysis

	Minimum	**Maximum**	**Mean**	**Std. Deviation**
Pretest	50.00	78.00	65.9	8.76
Posttest	71.00	100.00	90	9.61

Source: *data processing results*

Based on the data in table 4.3, it can be seen that the initial ability of student learning outcomes in the experimental class, can be seen from the average value of grade V students as an experimental class of 65.9 the results of the experimental class pretests obtained the highest value of 78 and the lowest value of 50. While the results of *posttest* data analysis in the experimental class, can be seen from the average value of grade V students as an experimental class of 90. The results of the experimental class *posttest* obtained the highest value of 100 and the lowest value of 71.
Based on the results of the above analysis, it can be concluded that the use of video media can affect student learning outcomes in Civics learning in class V of SD Inpres 1 Kawatuna. The difference in the increase in average scores on the *pretest* and *posttest* in the experimental class shows that video media is effective for improving student learning outcomes. The results of the data normality test for the experimental class can be seen in the following table:

Table 6. Normality Test Results

Class	*Shapirowilk*		
	Statistic	**df**	**Sig**
Pre-Test Experiment	.909	23	.039
Post-test Experiment	.840	23	.002

Source: *data processing results*

Based on the table above, it shows that the significant value. *Shapiro-wilk* in class V on the *pretest* is 0.039 greater than the level a set (0.39>0.05). This indicates that the *pretest* data is normally distributed and the *Shapiro-wilk* value in class V on the *posttest* is 0.002 greater than the level a set (0.02>0.05). This indicates that the *pretest* and *posttest* data are normally distributed, because the data are normally distributed, the *Paired Sample T-test* hypothesis test is carried out with the help of the IBM SPSS program *Statistic* 25 program obtained the following results.

Table 7. ***Paired Sample T-Test*** **Hypothesis Test Results Paired Samples Test**

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	pretest - posttest	-24.69565	7.16326	1.49364	-27.79328	-21.59803	-16.534	22	,000

Source: *data processing results*

Based on the results of the analysis above, it can be seen that the Sig. (2-tailed) is 0.000 <0.05. Based on these results it can be concluded that Ho is rejected and accepts Ha. Based on this data, it can be concluded that the hypothesis test has an effect on the use of video media on student learning outcomes in Civics subjects in Class V of SD Inpres 1 Kawatuna.

V. DISCUSSION

Based on the analysis of pretests and posttests carried out in class V of SD Inpres 1 Kawatuna, the effect of using video media based on the PBL model proved to be effective in improving student learning outcomes in Civics subjects. The results of data analysis obtained that there is a significant difference between *pretest* and *posttest* scores after learning using PBL-based video media. The average student *pretest* result of 65.9 increased to 90 during the *posttest*. This increase shows that the use of PBLbased video media has a positive impact on student learning outcomes.

The use of video media allows students to gain a more concrete and contextual learning experience. The material taught becomes easier to understand because it is visualized in the form of audio visuals that attract students' attention. This is in line with the opinion of Dewantara (2014) which states that video is a learning media that is able to display a new dimension in the teaching and learning process because it can present moving images and sound simultaneously. Thus students not only hear the teacher's explanation, but also see firsthand the visualization of the material being taught.

In addition, the application of the *Problem Based Learning* model is an important support in the learning process. The PBL model directs students to be actively involved in solving problems raised from their real-life context. In this context, Civics material that tends to be abstract and is considered boring by some students can be packaged into more fun and meaningful learning. Tarasti et al. (2023) stated that PBL is able to improve students' critical thinking skills because the learning process is student-centered and based on problem solving.

From the *pretest* and *posttest* results, there was a significant increase in scores. Before the treatment, students' scores were still in the sufficient category. After learning with video media and the PBL approach, the posttest scores jumped and were in the excellent category. Hypothesis testing using paired sample t-test also showed significant results, namely a significant value (2-tailed) of 0.000 <0.05. So, Ha is accepted and Ho is rejected, so it can be concluded that the use of PBL-based video media has a significant effect on student learning outcomes.

This finding is reinforced by previous research, such as that conducted by Rukmana et al. (2023) which showed an increase in students' understanding of Civics material after PBL-based learning with the help of video media was applied. The same improvement was also found in the research of Nurmasari (2023) and Astuti (2023), which proved that the combination of PBL and visual media such as videos and power points was able to improve learning outcomes, significantly. Thus, the results of this study are in line with the results of previous studies. This increase in learning outcomes not only shows success from an academic perspective, but also in terms of developing critical thinking skills and active participation of students in learning. The PBL model requires students to work together, discuss, and present solutions to the problems given. This has an impact on students' social and communication skills, which are an important part of the Civics learning objectives to form active, intelligent, and responsible citizens.

CONCLUSION

Based on the results and data analysis of the research that has been carried out, it is concluded that there is an effect of using the *Problem Based Learning* (PBL) learning model on the learning outcomes of grade V students in Civics subjects at SD Inpres 1 Kawatuna. This can be seen from the final *Posttest* score in class V in Civics learning using the *Proble Based Learning* (PBL) model obtained an average score of 94. Based on the results of data analysis, it can be concluded that in the *Paired Sample T-test* hypothesis test, a significant value of 0.02 was obtained because the significant value of 0.02 <0.05 so that the Ho hypothesis was rejected and Ha was accepted. This shows that there is an effect of using the *Problem-based Learning* (PBL) model on the Learning Outcomes of Grade V Students in Civics Subjects at SD Inpres 1 Kawatuna.

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