The Effect of the Use of Audiovisual Media to Learning Outcomes Civics Education in 4th Grade of Bataan 1 Elementary School in Online Learning Period

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Abstract: *The purpose of this research is to know the effect of the use of audio-visual media on civics learning outcomes of 4th grade students of Bataan 1 Bondowoso Elementary School during online learning period. This type of research is a quasi-experimental study with a pretest-post-test control group design pattern. The subjects of this research were students of class IVA and IVB Bataan 1 Bondowoso Elementary School with a total of 40 students. Methods of collecting data through interviews, observations, documents and tests. The results of the t-test showed that the value of $t_{arithmetic} > t_{table}$ was 4.798 > 2.024, So the alternative hypothesis (Ha) is accepted and the null hypothesis (H_0) is rejected. The calculation of the relative effectiveness test (ER) to determine the effect of the use of audio-visual media on Civics learning outcomes is 53% in the medium category.*

Keywords: audiovisual media, learning outcomes.

1. PRELIMIARY

Learning is an activity that occurs because of a pattern of interaction between individuals and their environment. Therefore, learning can occur anytime and anywhere, one of which is the learning process carried out in schools. According to Slameto (in Kurnia 2007:1), learning is a process of effort by individuals to obtain changes in overall behavior as a result of individual experiences in interaction with their environment.

Learning activities are usually carried out face-to-face, but in the current situation both teachers and students have to adapt to quite different situations. Since emergence of outbreaks of the Corona virus, known as Covid-19 in Indonesia in March 2020, the Ministry of Education and Culture together with the Indonesian government to make efforts to reduce the spread of the virus. Government Bondowoso along with the Head of Education to create a circular on the implementation of online learnig period where all the students and teachers should enforce learning activities at home. In this online learning activity, both teachers and students do not meet face to face. Students do not gather together in the classroom to receive learning . In connection with the subject matter delivered by the teacher , in the form of material and assignments provided and sent to students using electronic means. Various media that can be used in the implementation of online learning include: Google Classroom, Zoom, and Whatsapp.

The results of the observation of the learning process in class I V SDN Bataan 1 Bondowoso which took place during the online learning period seemed boring and students seemed less interested when learning activities took place due to the lack of explanations and the implementation of learning which was often carried out by the assignment method. The results of interviews with teachers and students of 4th grade

Bataan 1 Eelementary School, teaching activities carried out during the online learning period still have not optimized the use of learning media, for example giving assignments and explaining material through voice messages in the WhatsApp Group application so that students' understanding of the material presented is still classified as less and the learning outcomes obtained by students decreased. One of the media that can be used in online learning is audio-visual media.

Audio-visual media can be applied to all subjects, one of which is learning Pancasila and Citizenship Education (PPKn). Civics subjects are subjects that play an important role in providing students with knowledge and insight about the State of Indonesia. According to Zamroni (2005:7), the notion of Citizenship Education is democratic education that aims to prepare citizens to think critically and act democratically, through activities to instill awareness to new generations that democracy is a form of community life that best guarantees the rights of citizens. Hutama (2020:33) explain that civics is an education that internalized various noble values of Pancasila as the basis for continuing moral values that stem from the culture of Indonesian nation.

Arnie (in Hendrizal, 2011:37), found subjects PPKn also focused on developing self religiously diverse, socio-cultural, language, age and ethnicity to become Indonesian citizens who are skilled and character. In order for tolerance between students to be fostered, it is necessary to make efforts to instill these values in this case it is the task of educators because civic education does not only expect human intellectual (cognitive) aspects but also must have attitude (affective) and psychomotor aspects.

Rohani (in Haeratunisa, 2011: 97-98) explain that audio-visual media are modern instructional media that are by following per under with the times (advancements of science and technology) including audio, visual, and audio-visual media. In early learning activities, the media must show

something that can attract the attention of all students. Arsyad (2002: 48) argues that audio-visual media also presents information, describes processes, explains complex concepts, teaches skills, shortens and extends the time, and influences nature. It can be concluded that audio-visual media is complete media with all the capabilities that exist in audio and visual. The audio-visual media used in the learning process in this research is video learning.

According to Sanjaya (2010: 211), various kinds of audio-visual media include: video recordings, films, and sound slides. The audio-visual media used in the learning process in this research is video learning. Daryato (in Martono 2014:33) argues that video media is anything that allows audio signals to be combined with sequential moving images. Video can also be used in learning programs because it can provide unexpected experiences for students. Video is a medium that combines sound (audio) and moving images (visual). Video is used in learning as an audio-visual medium because it can display material in real situations. This is can provide unexpected experiences for students. In addition, the use of videos can also improve students' abilities, because with videos students can be more serious in listening to lessons (Satrijono, 2015: 1).

According to Arsyad (2002:48) the advantages of audio-visual learning media, especially video, include: (1) completing the basic experience when students discuss; (2) describe a process accurately and can be presented repeatedly; (3) contains practical values that can invite thought and discussion in student groups; (4) easier and more effective in storage. The disadvantages of using instructional video media include: (1) a small monitor screen will limit the number of viewers; (2) when the video will be used, it must be complete and must match the size and format of the video; (3) must use electricity so that if it goes out it cannot be used.

1. METHOD

This study uses the type of experimental research. Experimental research is research that aims to determine whether there is an effect or impact of a certain treatment on changes in certain conditions or circumstances (Masyhud, 2016: 138). The design of this study used a quasi-experimental pattern with a pretest-post test control group design.

The following is a quasi-experimental design for the implementation of the pretest-postest control group design.

E:	O$_1$	X	O$_2$
C:	O$_1$		O$_2$

Information:
E   : Experimental Group
C   : Control Group
X   : The treatment given to experimental group
O$_1$: Initial Test (*Pre-Test*)
O$_2$: End Test(*Post-Test*) are given after treatment.

(Adapted from: Masyhud, 2016:155-156).

The time of the research was carried out in the even semester of the 2020/2021 academic year. The research target is Bataan 1 Bondowoso Eelementary School. The subjects of this study were all fourth-grade students of Bataan 1 Bondowoso Elementary School, totaling 20 students from class IVA and 20 students from class IVB. Determination of the subject as the experimental class and control class is done by using the homogeneity test first. It is known that the homogeneity test results obtained are t$_0$ 0.379 and the coefficient F = 0.792, the coefficient F shows greater than 0.05 at a significance level of 5% which means that classes IVA and IVB are homogeneous. Therefore, to determine the control class and the experimental class, it was done randomly (random sampling) with the lottery technique. The results of the lottery show that class IVB is the experimental class and class IVA is the control class.

Data collection methods in this study are using interviews, tests, and documentation. The test instrument used by the researcher was questioned that had previously been tested for validity and reliability. The shape of the test instrument in the form of multiple-choice questions that have been validated by the guardian class IV and lecturers and has been tested to the students of 4th class Bataan 1 Bondowoso Elementary School. The validity test carried out aims to determine whether the questions that will be used in the Pre-Test and Post-Test are valid, namely as many as 20 questions. The instruments used for the previous pretest and posttest must be consulted or validated first by the validator. The data on the feasibility of the questions is obtained by scoring from the validator with a value range of 1-5, then the score will be converted to a scale of 100 with the formula:

$$V_{alpro} = \frac{srt}{smt} \ X \ 100$$

Information:
V$_{alpro}$: Instrument validity
Srt   : Real score reached
Smt   : The maximum score that can be achieved
(Masyhud, 2016: 246)

The calculation result is 89.0 so that the test instrument is declared very feasible to be tested at Bataan 1 Bondowoso Elementary School. Furthermore, the results of the validity of the instrument were then calculated eligibility test instrument to test the validity of using the formula of the correlation Product Moment of Pearson.

The correlation results were then consulted with the r-table at a significance level of 0.05. If the correlation value of the item is equal to or higher than the r- table, then the item is valid, and conversely if the item's correlation value is lower than the r-table, then the item is invalid. A total of 2 0 items tested contained about 1 about that not valid, to obtain 19 items are valid questions. The results of the validity test as a follow-up reliability test. Reliability on an assessment tool is the determination or constancy of the tool in assessing what it assesses.

Instrument reliability test in this study using two splits (split-half) by correlating total score of an odd and even-

numbered score. The correlation calculation process uses the product-moment correlation formula with rough numbers. The formula used is as follows:

$$r_{XY} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{[(N\sum X^2) - (\sum X)^2][N\sum Y^2 - (\sum Y)^2]}}$$

Information :
r_X : correlation coefficient of odd item score with even item score
X : score of odd items
Y : skor of even items
N : number of samples (Masyhud, 2016: 305)

The next step is to test and analyze the correlation results using the Spearman-Brown formula as follows.

$$R_{11} = \frac{2 \times r_{xy}\ split - half}{1 + r_{xy}\ split - half}$$

Information :
R_{11} : reliability coefficient
r_{xy} *split-half* : the result of the correlation of halves
(Adapted from Hughes, 1994 in Masyhud, 2016: 304)

The result of the correlation of the number of odd hemisphere scores with the even hemisphere scores is 0.85. The correlation results are then consulted with the r-table at a significance level of 5%, which is 0.444. The correlation value is higher than the r-table (0.85 > 0.444), while the reliability coefficient value of 0.91 is included in the very high-reliability category.

The data analysis technique used the t-test statistical analysis technique with the following formula.

$$t = \frac{M_1 - M_2}{\sqrt{\frac{\sum x_1^2 + \sum x_2^2}{N(N-1)}}}$$

Information :
M_1 = the average value of X1 group (experimental group)
M_2 = the average rat value of a group X2 (control group)
x_1 = deviation of each value x 1 and average x 1
x_2 = deviation of each value x 2 and the mean price x 2
N = number of research subjects
(Adapted from : Masyhud, 2015: 118)

The results of the t-test show that there is an influence or difference between one variable and another. This does not show how much relative effectiveness is achieved by one group compared to other groups. Therefore, the results of the t-test (t-test) still need to be continued with the relative effectiveness test.

The relative effectiveness test can be done using the following formula.

$$ER = \frac{MX_1 - MX_2}{\left(\frac{MX_2 + MX_1}{2}\right)} \times 100\%$$

Information:
ER = the relative effectiveness of the experimental group treatment compared to the control group treatment
MX_1 = mean or average value in the control group
MX_2 = mean or average value in the experimental group
(Masyhud, 2016: 384)

According to Masyhud (2016: 385) the results of the relative activeness are then interpreted based on the criteria in the table as follows.

Table of Interpretation Criteria for Relative Effectiveness Test

Relative Effectiveness Test Results	Effectiveness Category
80% < ER ≤ 100%	Very Worthy
60% < ER ≤ 80%	Worthy
40% < ER ≤ 60%	Decent enough
20% < ER ≤ 40%	Not worth it
0% < ER ≤ 20%	Very Uworthy

Source: Modification from Masyhud, 2016: 285

2. RESULTS AND DISCUSSION

The data analyzed was the difference between the pretest and posttest scores in the experimental class (VB) and the control class (VA). The t-test was conducted with the criteria if t count > t table, then the null hypothesis (H_0) was rejected and the alternative hypothesis (H_a) was accepted. T-test calculations were performed using the SPSS statistic version 18 program. The t table value used is the t table value at the 95% confidence level or 0.05 significant level with a two-part test (two trails) which means it is two-way.

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Pretest-Posttest	Equal variances assumes	6.186	.017	4.798	38	.000	3.75000	.78161	2.16770	5.33230
	Equal variances not assumes			4.798	28.105	.000	3.75000	.78161	4920	5.35080

Calculation of the t-test with SPSS Statistic version 18 program, the average difference before and after treatment in the experimental class (M_x) was 8.95, while the average difference before and after treatment in the control class (M_y) was 5.2.

The results of the t-test calculation using the SPSS Statistics version 18 program, obtained the t- count result of 4.798. The results were then consulted with the t table , it was known that db= (20+20)–2 = 38 at a significant level of 5%, so that the t table value = 2.024. T-test results showed that the value of t count > t table which is 4.7 98 > 2, 024.

The results of the t-test calculation will be tested again using the relative effectiveness formula to find out how much influence is given from the treatment. The results of the relative effectiveness test for the cognitive domain of 53% in the medium category, so that it can be seen that the achievement of learning outcomes in the cognitive domain of students in the experimental class with the application of audio-visual media showed results of 53% more effective when compared to the control class which did not apply the audio-visual media.

3. CONCLUSION

The results of the data analysis and discussion that have been described, it can be concluded that: there is an influence from the application of audiovisual media on the learning outcomes of fourth-grade students at Bataan 1 Bondowoso Eelementary School during the online learning period. The result of calculating the t-test on the learning outcomes of the cognitive domain is 4.798. These results indicate that t count > t table, so that the alternative hypothesis (Ha) is accepted and the null hypothesis (H0) is rejected, while the results of the calculation of the relative effectiveness are 53% in the medium category.

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