The Effect of Gadget Use on Student Learning Outcomes in Civics Learning for Class V Elementary School

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**Abstract**

This study aims to determine the effect of using gadgets on student learning outcomes in Civics learning in Elementary Schools in Cluster VI, Pallangga District, Gowa Regency. This research was conducted in Cluster VI, Pallangga District, Gowa Regency. The research approach is quantitative. This type of research is a quasi-experimental control pretest-posttest design. The population in this study were all students in Cluster VI, Kec. Pallangga. Sampling technique using random sampling. The sample in this study was class V SD Inpres Watu-Watu totaling 29 people as the experimental class and class V SD Negeri Taipale'eng totaling 28 people as the control class. This type of data collection uses pretest and posttest questions to measure student learning outcomes. The data analysis technique used is the analysis of the difference test / t-test which was previously tested for normality and homogeneity. The statistical results of the t-test of learning outcomes showed the value of sig. (2-tailed) of 0.002 < 0.05 then the hypothesis is accepted. Thus, it can be concluded that there is an effect of using gadgets on student learning outcomes in learning Civics in Elementary Schools of Cluster VI, Pallangga District, Gowa Regency.

**Keywords:** Gadget, learning outcomes, PKn

**Pendahuluan (10%)**

Education is a process in order to influence students to be able to adapt as best as possible to their environment, thus it is hoped that it will cause changes in themselves. School as a formal educational institution, is a means that provides various opportunities for students to carry out various learning activities. Education applied in the school environment is intended to realize the National Education Goals as affirmed in the Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System, according to the Ministry of National Education: Developing the potential of students to become human beings who believe and devoted to God Almighty, noble, healthy, knowledgeable, capable, creative, independent, and become a democratic and responsible citizen.

Students as learning targets are required to improve their learning abilities so that they can have a passion for learning and enable the achievement of educational goals, because one measure of the quality of learning is by looking at student learning outcomes. In achieving these good learning outcomes, students are expected to have motivation and enthusiasm in learning in the classroom.

a. Learning Media

In its development, the media is an intermediary or tool used in teacher teaching activities. The term media provides various meanings from educational experts. According to (Sanjaya 2013), in general "media is the plural
of medium, which means intermediary or introduction”. The word media applies to various activities or businesses, such as media in conveying messages, medium for introducing magnets or heat in engineering.

According to (Hamalik 2015) "learning media is used in the context of the relationship (communication) in teaching between teachers and students as teaching aids both in the classroom and outside the classroom”. Referring to this understanding, according to Heinich et al (Arsyad 2014) that: television, film, photos, radio, audio recordings, projected images, printed materials, and the like are communication media. If the media carries messages or information for instructional purposes or contains teaching purposes, then the media is called learning media.

Media, one of the communication tools in conveying messages, is certainly very useful if it is implemented in the learning process which is intended to facilitate and facilitate communication between teachers and students so that the learning process takes place effectively and works well. Heinich et al (Arsyad 2014) put forward learning media as follows: "The limitation of the medium as an intermediary that delivers information between the source and the recipient".

Based on several expert opinions regarding the definition of learning media, it can be concluded that learning media are everything that can include teachers (people), tools, materials, events or anything that carries messages or information that has instructional purposes or contains educational purposes. The purpose of teaching is used as a tool in creating conditions that allow students to acquire new knowledge, skills or attitudes.

b. Gadget

Gadget is a term that comes from English, which means a small electronic device that has a special function or a mechanical device with practical use but is often known as a novelty. Another definition states that a gadget is a mini device or tool or an interesting and relatively new tool so that it will provide a lot of new pleasure for its users even though it is not practical to use. Gadgets are different from other electronic devices, because there is an element of novelty in gadgets that other electronic devices do not have. That is, from start to finish or from time to time, gadgets always present the latest technology or electronic tools that make life easier and more practical.

Based on the above definition, the author concludes that what is meant by a gadget is a small electronic device that has a special function and is unique compared to other electronic devices. From the special functions and uniqueness of the gadget, every user will feel happy and interested in owning and using it, because this gadget always brings up the latest technology which is considered to make it easier for users.

The learning process using browser media as a supporter also has advantages and disadvantages in it. The advantages of learning by using a browser, namely:

1. Very potential as a learning resource for students who do not have time to study
2. Provide additional learning resources that can be used to enrich the content of learning materials
3. The content of learning materials can be updated very easily
4. Students can learn according to their own characteristics because it is an individualistic learning process that encourages students to learn more actively and independently.

c. Learning outcomes

Learning outcomes are the number of acquisitions achieved by students after following certain subject matter which is usually determined by learning outcomes tests, and is an indicator or indicator of success achieved by students in their learning efforts, or a description of the success of students in absorbing the lessons that have been given to them.

(Hamalik 2015) views that "learning outcomes are, if someone has learned there will be a change in behavior in that person, for example from not knowing to knowing, from not understanding to understanding". That "learning outcomes are things that can be viewed from two sides, namely the students' side and the teacher's side". From the side of students, learning outcomes are a better level of mental development than before learning.

The level of mental development of students is manifested in the cognitive, affective and psychomotor domains. While on the teacher's side, learning outcomes are when the learning materials are completed. In the learning process, learning outcomes are important because they can be a clue to determine the extent to which students are successful in learning activities that have been carried out. Learning outcomes can be known through
evaluation to measure and assess whether students have mastered the knowledge learned under the guidance of the teacher in accordance with the formulated objectives.

The domain of learning outcomes according to Bloom's taxonomy consists of the cognitive, affective, and psychomotor domains. The following is an explanation of the three domains.

(1) Cognitive realm

In the Big Indonesian Dictionary, the cognitive domain is behavior that becomes an activity of cognition or thought. According to Bloom's taxonomy which has been revised by (Anderson 2017) in Siregar and Nara, there are two categories of cognitive domains, namely the dimensions of cognitive processes and the dimensions of knowledge.

In the cognitive process dimension, it consists of six levels of learning outcomes, namely as follows: (1) Remembering, namely increasing memory of the material presented in the same form as taught. (2) Understanding, namely being able to build meaning from learning messages, including oral, written, and graphic communication. (3) Using is using procedures to do exercises or solve problems. (4) Analyzing, namely breaking down materials into their main elements and determining how the parts relate to each other and to the overall structure. (5) Assessing, namely making judgments based on certain criteria and standards. (6) Creating is making a new product by rearranging elements or parts into a pattern or structure that has never existed before.

Meanwhile, the knowledge dimension consists of four categories, namely as follows: (1) Facts (factual knowledge) which contains the basic elements that students must know if they will be introduced to a particular subject or to solve a particular problem (low level abstraction). (2) Concept (conceptual knowledge) which includes schema, mental model or theory in various cognitive psychology models. (3) Procedure (procedural knowledge) is knowledge about how to do something, usually in the form of a set of sequences or steps that must be followed. (4) Metacognitive (metacognitive knowledge) namely knowledge of general understanding, for example awareness of something and knowledge of one's personal understanding.

(b) Affective realm

Attitude is an expression of values or views of self and socially and spiritually owned by a person. (Iskandarwassid 2008). Meanwhile, according to (A.M.Sardiman 2014) in Susanto, attitude is a tendency to do something with certain ways, methods, patterns, and techniques to the surrounding world in the form of individuals or certain objects where attitude refers to actions, behaviors, or actions. somebody.

(c) Ranah psikomotor

Suggested five levels of learning outcomes in the psychomotor domain, namely as follows (Salmia and Yusri 2021): (1) Imitating, namely the ability of students to observe a movement in order to respond. (2) Applying, namely the ability of students to follow directions, choice and support movements by imagining people's movements. other. (3) Stabilizing, namely the ability of students to provide corrected responses or responses with limited or minimal errors. (4) Stringing is the coordination of a series of motions by making appropriate rules. (5) Naturalization is movements that are carried out routinely using energy minimal physical and psychological.

From some of the definitions above, it can be concluded that learning outcomes can be expressed as the level of mastery of lesson materials or something that is obtained after getting a learning experience within a certain period of time which can be measured using certain tests or assessments through a teaching and learning process that involves students and teachers.

d. Civics Learning in Elementary School

Civics subjects are subjects that aim to form a complete Indonesian human based on Pancasila, laws, and norms that apply in society so that these subjects need to be taught to students since elementary school. (Ahmad Susanto 2014) explains the term civic education when studied from foreign literature, has two terms, namely:

(1) Civic education, diartikan sebagai: …the foundational course work in school designed to prepare young citizens for an active role in their communities in their adult lives.
(2) Citizenship education atau education for citizenship, diartikan sebagai: … the more inclusive term and encompasses both these in school experiences as well as out-of-school or ‘non-formal/informal’ learning which takes place in the family, the religious organization, community organization, the media etc., which help to shape the totality of the citizen. 

According to (Mulyasa E 2007), the purpose of Civics subjects is to make students: (1) Able to think critically, rationally, and creatively in responding to life problems and citizenship issues in their country. (2) Able to participate in all activities, actively and responsibly, so that they can act intelligently in all activities.

Based on the description above, it is very important for teachers to understand the characteristics of learning media that can be used to reach all learning styles of students. This study aims to determine the difference in learning outcomes of students who use gadgets and those who do not use gadgets in Civics learning class V.

Metode (15%)

The approach used in this study is a quantitative approach with a quasi-experimental type of research which is intended to determine whether there is an influence given by the use of Gadget media on the learning outcomes of Civics Class V SD Inpres Watu-Watu, Pallangga District, Gowa Regency. In this study, the researcher used two classes as samples, the first class as an experimental class using Gadget media in carrying out the learning process in the classroom, and the second class as a control class with media other than learning media using Gadgets.

1. Data collection techniques
   To obtain information about the activities and responses of students and teachers as well as learning management using gadget media, it is necessary to develop an instrument. The instruments are learning device validation sheets, student activity observation sheets during learning, and learning outcomes tests, questionnaires, and

2. Research instruments
   Based on the data collection techniques used in this study, the instruments used are:
   a. Study Results Test
      Learning outcomes test is an objective test (Multiple Choice) which is used to measure the level of mastery of students' material, this test consists of (1) Pretest is an initial test to measure students' mastery of subject matter before the implementation of learning is given treatment, both the learning process in class experiment and learning in the control class. (2) Posttest is a test conducted to measure students' mastery of the subject matter after being given treatment, both learning in the experimental class and learning in the control class.
   b. Observation guide
      Observation guidelines are guidelines used to determine the extent to which the success of the learning process with the use of Gadget media in Civics learning in class V. Observations were carried out on teachers and students.
   c. Data analysis techniques
      An activity that is quite important in the whole research process is data processing. With data processing can be known about the meaning of the data that has been collected, so that the results of the study will be known immediately. The data analysis technique used in this research is the processing of descriptive statistical analysis techniques and inferential statistical analysis techniques which aim to examine the research variables.
      Based on the description of the implementation of learning through the use of gadget media is explained based on the stages in learning the use of gadget media. To determine whether there is an effect of using Gadget media in Civics learning on the learning outcomes of elementary school students in Cluster VI, Pallangga District, Gowa Regency, t-test analysis was used (data
analysis using SPSS 22.0 software for windows). Before analyzing the hypothesis, a normality test and a homogeneity test were carried out which aimed to see whether the data was normally distributed and homogeneous.

**Hasil dan Pembahasan (70%)**

Based on the research that has been done to determine the effect of gadgets on the learning outcomes of fifth grade students of SD Inpres Watu-Watu, it is obtained as follows:

1. Normality test

This data normality test was conducted to determine whether the sample under study was normally distributed or not. This stage is carried out because the normality test is one of the requirements before the t test (t test). The normality test used is the Shapiro Wilk column on the Kolmogorov-Smirnov test.

**Table 1 Normality Test Results of Pretest and Posttest Data Learning Outcomes**

<table>
<thead>
<tr>
<th>Kelompok</th>
<th>Sigitu ng</th>
<th>Sig,_{min}</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>0,430</td>
<td>0,05</td>
<td>normal</td>
</tr>
<tr>
<td>Kontrol</td>
<td>0,200</td>
<td>0,05</td>
<td>normal</td>
</tr>
</tbody>
</table>

Based on the table above, it is known that the pretest and posttest data on cognitive learning outcomes are normally distributed.

2. Homogeneity test

The homogeneity test aims to determine whether the two groups come from a homogeneous group or not. The homogeneity test used in this study uses the Levene test formula on the SPSS version 24 application.

**Table 2. Homogeneity Test Results of Pretest and Posttest Data Learning Outcomes**

<table>
<thead>
<tr>
<th>Data</th>
<th>Sigitu ng</th>
<th>Sig,_{min}</th>
<th>Keterangan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>0,719</td>
<td>3,05</td>
<td>Homo gen</td>
</tr>
<tr>
<td>Posttest</td>
<td>0,542</td>
<td>0,05</td>
<td>Homo gen</td>
</tr>
</tbody>
</table>

Based on the homogeneity test above, it is known that the students in the experimental group and the control group were homogeneous.

3. Hypothesis test

Based on the Independent Sample test, the following results were obtained:

**Tabel 3 Hasil Output Uji Independent Sample Test data posttest**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>F</th>
<th>Sig,</th>
<th>t</th>
<th>df</th>
<th>Sig, (2-tailed)</th>
<th>Mean Diff.</th>
<th>Std. Error Diff.</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posttest</td>
<td>377</td>
<td>0.542</td>
<td>-3.344</td>
<td>54</td>
<td>0.002</td>
<td>10.35</td>
<td>3.008</td>
<td>16.56 - 7.147</td>
</tr>
</tbody>
</table>

Based on the results of the independent sample test above, it is known that the value of sig. (2-tailed) of 0.002 < 0.05, because the value of sig. (2-tailed) is smaller than 0.05, it can be concluded that there is a difference between the average learning outcomes of the experimental group and the control group. The data on the results of the independent sample test for a more complete post-test data can be seen in appendix 27. From the results of the output of the Independent Sample T-Test, it can be concluded that using gadget technology can have an influence on student learning outcomes in Civics subjects.

1. Conditions Before Treatment

Before the research was carried out, the researchers conducted questions and answers to students and made observations in the classroom in March 2022. From the results of the questions and answers it was found that students still experienced problems in the
learning process, especially in the Civics learning process. This is because in the delivery of learning materials the teacher only uses the lecture, discussion, question and answer method and assignments so that it is considered less effective. One student said that sometimes he felt sleepy when the teacher delivered the material as usual because the learning methods used tended to be monotonous. This is then able to affect student learning outcomes.

The results of observations by researchers, it is known that the delivery of learning materials in the classroom does use the lecture, discussion, question and answer method, and assignments. In the classroom there are learning media such as laptops, LCDs, and projectors. The teacher uses the media in delivering learning materials through power point slides on the front screen of the class, although the method used remains the same, namely lectures, discussions, questions and answers, and assignments. From the results of questions and answers and observations above, it is known that the methods used by teachers in learning tend to be monotonous and less effective for students. There needs to be a variety of strategies and appropriate learning methods in the delivery of learning materials so that students do not get bored quickly and the learning process runs effectively and efficiently and can get satisfactory learning outcomes.

Based on the reality that researchers found, researchers will try to apply learning by using gadgets in the Civics learning process.

The research was continued by giving a pretest to the experimental group with 28 students being the research sample and a pretest to the control group with 28 students being the research sample. Pretest was given to determine the initial ability of students and to find out whether the experimental group and the control group had significant differences or not.

Based on the results of the pretest, the average value of the experimental group was 62.50 in the sufficient category and the average value of the control group was 63.57 in the sufficient category. Furthermore, the researchers gave treatment (treatment) to the experimental group. The experimental group was given learning by applying learning strategies using gadgets and the control group was given lessons commonly used by teachers, namely lectures and questions and answers.

2. Condition After Treatment

After the experimental group was given treatment by applying learning strategies using gadgets and the control group was given the lecture and question and answer method in learning, both groups were given a posttest to determine the final ability of the experimental group and the control group.

Based on the results of the posttest, the average value of the experimental group was 81.07 in the very good category and the average value of the control group was 70.71 in the good category. The experimental group experienced a change in learning outcomes from an average pretest of 62.50 to 81.07 at the posttest. The control group experienced a change in learning outcomes from the pretest average of 63.57 to 70.71 at the posttest. The posttest results show the average value of learning outcomes obtained by the experimental group is higher than the average value of learning outcomes obtained by the control group.

After getting the posttest results from the experimental group and the control group, the researcher then tested the data with the normality test. After it was found that the data were normally distributed, then proceed to the homogeneity test stage so that the data could be known to be homogeneous or not, and based on the results of the homogeneity test output, it was found that the data were normally distributed. Because it has passed that stage, then proceed to the final stage, namely determining the hypothesis by testing the independent sample test. The results of the independent sample test show the value of sig. (2-tailed) of 0.002 < 0.05, according to the basis of decision making for the independent sample test, it can be concluded that there is a significant difference between the posttest results of the experimental group and the control group.

3. The effect of using gadgets on learning outcomes

This study aims to determine the effect of learning strategies using gadgets on Civics learning outcomes. Was there an increase in learning outcomes in the
experimental group that was given learning treatment using gadgets when compared to the control group that was not treated? The pretest value of learning outcomes in the experimental group obtained an average value of 62.50 in the sufficient category and the pretest value of learning outcomes in the control group obtained an average value of 63.57 in the sufficient category. The condition of the pretest scores was relatively the same because the experimental group and the control group received conventional learning before the research was conducted, namely by using lecture and question and answer methods.

During the research, the experimental group was given treatment, namely to apply learning strategies using gadgets.

While the control group learning process using conventional learning, namely lectures and Javanese questions, for more clarity in the control group learning process can be seen in the appendix to the lesson plan using the lecture and question method.

After carrying out the learning process, students do the posttest. The posttest results obtained the average final score of the experimental group was 81.07 in the very good category and the average final score of the control group was 70.71 in the good category. The experimental group experienced changes in learning outcomes from an average pretest of 62.50 to 81.07 at the posttest. The control group experienced a change in learning outcomes from the pretest average of 63.57 to 70.71 at the posttest. The difference in learning outcomes in the two groups was due to different learning applied in the learning process. The increase in learning outcomes in the experimental group occurred because in the learning process applying treatment in the form of learning strategies using gadgets. This can be seen from the results of the independent sample test which shows the value of sig. (2-tailed) of 0.002 < 0.05, according to the basis of decision making for the independent sample test, it can be concluded that there is a significant difference between the posttest results of the experimental group and the control group. The average result of the experimental group’s posttest score was 81.07, which was better than the average pretest score of 70.71.

4. The Effect of Gadget Use on Learning Outcomes

The use of gadgets has an effect on learning outcomes. This is obtained from the results of a questionnaire on the use of the questionnaire. The use of gadgets by students in the experimental class is quite high, it can be seen from the percentage of daily gadget use at 57.14%. Likewise, the activeness of students using gadgets during the learning process is 67.86% or more than half of students are already active in using gadgets. From the results of the questionnaire, it was also found that the use of gadgets, according to students, was influential in increasing their knowledge as much as 67.86%. There are also questionnaire results which illustrate that the use of gadgets is more of an ordinary communication tool so that they answer hesitantly 57.14%

The use of gadgets in doing school assignments is 64.26% and those who are still hesitant to use gadgets are 3.57%. The use of gadgets in social media is also seen quite a lot, namely at 35.71% and WA usage at 67.86%.

For the use of applications on gadgets, it looks very high from the use of google search searches in doing tasks, which is 75%. To take advantage of Ebooks by downloading materials, there are already 35.71%. They also use gadgets for more than 3 hours per day, which is 32.14%. And according to the questionnaire, the use of gadgets was felt by students to increase their creativity as much as 60.71%.

Based on the posttest experimental results, the experimental class pretest results showed that student learning outcomes were still at an average number of 62.50 and after using gadgets in the experimental class posttest, there was an increase in learning outcomes with an average of 81.07. This shows that there is a significant effect of the results of using gadgets in teaching and learning activities. Most students have felt the benefits of using these gadgets to make it easier for them in the teaching and learning process.

Based on the description above, it is known that there is a significant difference between the posttest results in the experimental group and the control group where the posttest results of the experimental group are greater, namely 81.07 than the posttest results of the control group, which are 70.71. So it can be stated that the application of learning strategies
using gadgets has an effect on increasing Civics learning outcomes.

This is reinforced by the opinion of Miarso (2007) in Sumantri (2015:303) which states that learning media are anything that can stimulate the learning process in students. In addition to the above opinion, it is also in line with previous research such as Andi Taufik's research. Hidayat, Aulia Handayani, and Chusna Oktavia Rohmah regarding the use of gadgets in students and the results obtained from this study are that there is a significant influence on students' learning outcomes and interest.

Based on the relevant research, the results show that the use of gadgets affects the Civics learning outcomes of students in class V SD Inpres Watu-Watu, Pallangga District, Gowa Regency. Although the results of previous studies only focused on forms of gadget use, social interaction, and student interest in learning. However, it is proven that the results of this study can also affect the improvement of student learning outcomes.

This is inseparable from the Balitbang theory about the function of gadgets, among others: 1) as a communication tool to stay connected with friends or family, 2) as a business support, 3) as a changer of social boundaries, and 4) as a stress reliever. If the intensity is not followed by proper use, especially for students who are still in elementary school, it can affect their interest in learning so that their learning outcomes can also affect.

Conclusion

Based on the results of research that has been conducted at SD Inpres Watu-Watu regarding the effect of using gadgets on student learning outcomes, it can be concluded that: Student learning outcomes before and after using gadgets in Civics learning at SD Inpres Watu-Watu Kec. Pallangga Kab. Gowa experienced an increase from 62.50 to 81.07. There is an influence from the use of gadgets in Civics learning on student learning outcomes at SD Inpres Watu-Watu Kec. Pallangga Kab. Gowa. This can be seen from the learning outcomes of students in the experimental class which has increased from 62.50 to 81.07. The learning outcomes of students after the posttest in the experimental class were higher than the control class. Therefore, the use of gadgets in Civics learning can improve student learning outcomes.

References


