



THE INFLUENCE OF ANIMATED MEDIA ON SCIENCE LEARNING OUTCOMES OF PRIMARY SCHOOL STUDENTS (LIBRARY RESEARCH)

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ABSTRACT

The purpose of this study is to determine the effect of animation media on science learning outcomes of elementary school students. This study is qualitative with library research methods. The data sources used in this study were secondary data that were relevant to the study. The data analysis technique used was qualitative data analysis. The data was analyzed by using Miles and Huberman theory with three stages, consisted of: Data Collection, Data Reduction and Drawing Conclusions. Based on the analysis of the data obtained, it can be concluded that animation media affected on science learning outcomes of elementary school students. From the analysis of the data, animation media has a positive influence on science learning outcomes, teachers must understand the learning steps of animation media on learning process.

Kata Kunci

Animation Media, Science Learning

INTRODUCTION

Education Can develop the potential that exists in humans, both physical and spiritual potential. The importance of education is in line with the thoughts contained in the preamble to the 1945 Constitution, it is stated that one of the goals of the state is to make the life of the nation intelligent. Republic of Indonesia Law NO 20 of the year concerning SISDIKNAS, namely the realization of the education system as a strong and authoritative social institution of high quality so that it is able and practical to answer the challenges of the times. always changing.

One of the educational problems faced by schools in general is the less than optimal quality of education. This can be seen from the weakness of the learning process, for example in the learning model used by teachers who still use conventional learning. Efforts to optimize the quality of education continue to be carried out systematically. This educational reform is a conscious effort that is deliberately carried out with the aim of improving practice seriously. One of the efforts to optimize the quality of education is to improve the curriculum which is more empowering for students. For this reason, it is necessary to design a nationally oriented curriculum. namely producing quality people.

Apart from this, several studies have tried to provide support for the effectiveness of using animation media in teaching natural sciences in their research. The aim of the research Shows That Using Animation Media In The Learning Process Is More Effective Compared To Conventional Methods.

Learning media is a means or tool for the teaching and learning process to occur. The occurrence of learning media in the learning process is very important to provide a concrete picture and it will be easier for students in the teaching and learning process, namely learning media such as technological tools, for example laptops, infocus, teaching aids. With conventional learning methods.

According to Cristios, quoted by Daryanto (2010: 4), media is a component of communication, namely as a messenger from the communicator to the communicant. Based on the opinion above, it can be concluded that channeling the message from the sender to the recipient can stimulate students' thoughts, feelings, attention and interest in the learning process.

Animation is the process of creating motion effects or shape changing effects that occur over a period of time. Suheri (2006:28) says that animation is a collection of images that are processed in such a way as to produce movement. One of the advantages of animation is the ability to explain an event systematically at each change in time. .

Based on observations made during internship II at SD Negeri 060970 Bagan Deli Medan Belawan, it is known that the learning model used by teachers when teaching is a conventional learning model and the teacher has not used learning media. However, it is the ability that it has. Or mastered by students after they receive a lesson

given by the teacher. From the results that have been observed, when the learning process takes place, students are less responsive in participating in learning, especially for Class II students at SDN 060970 Bagan Deli Medan Belawan, totaling 29 students and the KBM (Minimum Learning Completeness) score is 66 out of 28 students, it is known that 12 students (41%) completed the science subject and 17 students (59%) did not complete the science subject.

Teachers must understand student characteristics and look for models that can motivate students. So that students feel happy learning and are directly involved with something real in the learning process. Students can gain direct experience so that more students obtain grades above KBM. This activity often occurs in elementary school students, the atmosphere in teaching and learning activities in the classroom is not pleasant, students' attention is also low due to the teaching and learning process. Students are sometimes sleepy and also don't pay attention to the learning process because students are only required to listen to the teacher explaining the material in front of the class and students are only asked to pay attention to books and without using tools such as media which can make the learning atmosphere more enjoyable and

easier to understand. The things mentioned above are the reasons why if a test on learning results is given that the results are low based on this fact, the author wants to use learning media in the teaching and learning process. Based on the background above, the author is interested in conducting a library research study entitled: "**The Influence of Animation Media on Elementary School Students' Science Learning Outcomes**".

RESEARCH METHOD

This type of research is library research, namely a series of research relating to library data collection methods, or research in which the research object is explored through a variety of library information (books, encyclopedias, scientific journals, newspapers, magazines and documents). According to Nana Syaodih (2009). Literary research or literature review is research that examines or critically reviews knowledge, ideas or findings contained in the literature with a theoretically oriented methodology for a particular topic. According to Cooper and Taylor Mohammad Imam Faris (2010). The focus of library research is to find various theories, principles or ideas that are used to analyze and solve the formulated research questions. The nature of the research formulated. The nature of this research is descriptive analysis (qualitative), namely the regular analysis of the data that has been obtained, then providing understanding and explanation so that it can be understood well by the reader (Syaodin 2009).

RESULT AND DISCUSSION

Based on data analysis techniques according to Miles and Huberman (2014: 17), the stages in data processing are as follows:

1. Arina Nuri Azmi, Nuriman, Agustiningih (2013) This type of research is experimental research using a population of IVA and IVB students. Research data collection uses the test method. This research carried out at SDN Tamanan 2 Bondowoso with the aim of examining the influence of the use of animated videos on the learning outcomes of changes in the appearance of the earth for class IV students. In this study the number of students. There are 32 students in class IVA and 30 students in class IVB. Before determining the experimental class and control class, a homogeneity test was carried out on the population to determine the students' initial level of ability. In the learning process, the experimental class (class IVB) students became more understanding about changes in the appearance of the earth by watching animated videos. Students are able to explain by just observing the animated video because it can be seen clearly the process and impact of changes in the appearance of the earth, but still by providing information from the teacher so that students understand

the material more clearly. This is inversely proportional to students who do not use animated videos in their learning, the control class (class IVA) only uses image media in their learning. The teacher provides information to students thoroughly and shows pictures of changes in the appearance of the earth. Students are less responsive in understanding the material because in the learning process, students are just silent and cannot answer questions from the teacher. The advantage of using animated videos is that learning becomes more interesting so that it can increase learning motivation and students' level of understanding of the learning material because it provides concrete experiences for things. The results of the research show that there is an influence from the use of video animation on the learning outcomes of changes in the appearance of the earth for class IV students at SDN Tamanan 2 Bondowoso. With a relative effectiveness level of 88.16% compared to not using animated videos. This can be seen from the average pre-test and post-test difference in the experimental class of 36.6333 and the average value of the pre-test and post-test difference in the control class of 19.4688 which is abstract. Obtained $t \text{ test} > t \text{ table}$ ($4.355 > 2.00$), thus the alternative hypothesis (H_a) which states that there is a significant influence on the use of animated videos on the learning outcomes of changes in the appearance of the earth for class IV students at SDN Tamanan 2 Bondowoso is accepted.

2. Tituk Suparminingsi (2015) conducted quantitative research using experimental methods to determine whether or not there was an influence of the PALKEM learning strategy with animation media on science learning outcomes. In this study there were 54 students. The sample in this research is a sampling technique carried out by saturated sampling. The sample in this research was class IVA, totaling 27 students and IVB, totaling 27 students. In this research, the researcher started the learning process in the classroom, an experiment, namely class IVA SDN 3 Kedungbanteng Ponorogo, totaling 27 students. The researcher used the PALKEM learning strategy with animation media. During the learning process, students looked enthusiastic. This is because in learning students are fully involved in determining knowledge and activating students to carry out activities real learning, so that students are more enthusiastic in participating in the learning process. This learning model also has the aim of building a dynamic learning process, activating students, creating creativity and making it fun for students during a learning process. Students are also required to be more active during the learning process. After the learning process is complete, a science learning outcomes test is carried out to see the level of student learning success. The results of calculating students' science learning outcomes tests obtained an average score of 90.33. So it can be concluded that student learning outcomes in

science subjects using the PALKEM strategy with animation media are said to be high. In the experimental class research, namely class IVB students at SDN Kedungbanteng Ponorogo, researchers used conventional strategies without using learning media. During the learning process, students are not too focused on learning. Students are less enthusiastic about the material presented. Students feel bored more quickly and this of course affects the quality of their learning. This will of course make student learning outcomes lower. After the learning process, a science learning outcomes test is carried out to see the level of student learning success. The results of calculating students' science learning outcomes tests obtained an average score of 74.44. So it can be concluded that student learning outcomes in science subjects using conventional learning strategies without using learning media are said to be moderate. Based on the results of the hypothesis test has been done can be known. 1.703 so it can be concluded that the use of a learning approach influences science learning outcomes with a significance level of 5% or 0.05. This is further strengthened by the learning results obtained in the experimental class and control class, namely for the experimental class with a total of 27 students, the average score was 90.33. Meanwhile, the control class with the same number of students as the experimental class, namely 27 children, had an average score of 74.44. Based on this data, the experimental class taught using the PALKEM Strategy with animation media had a better average when compared to the control class taught using conventional strategies without using learning media.

3. Ninuk Wahyunita Sari Ahmad Samawi (2014) This research uses a quasi-experiment in the form of a time series design. This research uses test instruments. The results of students' science learning before the use of animation media in learning water cycle material can be seen from the pre-test scores, especially in pre-tests II and IV, two students got a score of 40. This score was considered unsatisfactory because the researcher's target was for students to get a minimum score of 60. in each pre-test implementation. The final average score of the pre-test was 61.6. The difference between the minimum score expected by the researcher and the final average score was only around 1.6 or 2.67%. This means that the achievement of the pre-test results is 2.67% of the minimum standard targeted by researchers. Students' science learning outcomes after using animation media in learning water cycle material have increased. This can be seen from the post-test scores which have been carried out four times. Based on the post-test results, the scores obtained by students met the minimum score standard determined by the researchers, namely 60. During the four post-test implementations, the lowest score was 60 and the highest score was 100. The final average score of the post-test was 80.00. The difference between the

minimum score expected by the researcher and the final average score was around 20 points or 33.3%. This means that the achievement of post-test results is 33.3% of the minimum standard targeted by researchers. The conclusions in this research include (1). The science learning results of class V slow learner students at SD Brawijaya Smart School Malang before using animation media can be seen from the final average result of the pre-test, namely 61.6. Based on the minimum completeness criteria, a score of 61.6 indicates that the completeness of learning outcomes is in the sufficient category. (2). The science learning results of class V slow learner students at SD Brawijaya Smart School Malang after using animation media can be seen from the final average result of the post test, namely 80.0. Based on the minimum completeness criteria, a score of 80.0 indicates that the completeness of learning outcomes is in the good category. (3). There is an influence of the use of animation media on the science learning outcomes of class V slow learner students at SD Brawijaya Smart School Malang. This can be seen from the increase in learning outcomes and hypothesis testing results.

4. I Puti Yuasa I Ketut Ardana Nengah Suadnyana (2014) This type of research is experimental research. This research aims to determine significant differences in the science learning outcomes of students who take learning through approach contextual Teaching and Learning (CTL) With the help of computer animation media, students who take part in conventional learning are 206 students in class V of SD Gugus I Elementary School. The sample was determined using the Random Sampling technique, selecting 30 students at SDN 4 Manukaya Tampaksiring as the experimental class and 30 students at SDN 6 Manukaya Tampaksiring as the control class. Data collection uses tests, namely learning outcomes tests, then the data is analyzed using the t-test technique. Based on the results of normality and homogeneity testing, it was found that the data were obtained from the experimental group and the control group. Based on the analysis of the daily test scores of class V students at SDN 4 Manukaya Tampaksiring and SDN 6 Tampaksiring, it shows that the sample is homogeneous, meaning that the data is normally distributed and has a variance that is not significantly different. This shows that before being given treatment, students had the same initial abilities so that the experimental group was given treatment, namely learning through the Contextual Teaching and Learning (CTL) approach assisted by computer animation media and the control class was given conventional learning, 6 meetings. After being given treatment, both groups, both experimental and control groups, were given a final test (Post-test). From the results of the research analysis, it was found that the average (mean) post-test science learning outcomes in the experimental group was greater than group

control, This means there is influence approach Contextual Teaching And Learning (CTL) Assisted by computer animation media on the science learning outcomes of fifth grade students at SD Gugus I Tampaksiring.

5. Laily Rahmayanti Farida Istianah (2018) The aim of the research is to determine the effect of using animated video media on student learning outcomes, by conducting experimental research. This research aims to determine whether or not there is an influence from the use of animated video media on the learning outcomes of class V students at SDN Se-Gugus Sukodono Sidoarjo. This is because by using animated video media, learning becomes more fun and less boring so it can make students active and improve student learning outcomes. In this research, the samples in this research design used two sample schools, namely SDN Kebonagung 1 and SDN Kebonagung 2. Where in each The school has an experimental class, namely a class where learning is treated using animated video media. And there is a control class, namely a class where learning is carried out conventionally. The population of this study were all fifth grade students at SDN Se-Gus Sukodono Sidoarjo. This research uses a cluster sampling technique (area sample). This area sampling technique is used to determine samples if the object being studied is very large. So to determine the sample in the study, it was chosen randomly using a system according to the area. In this study, the samples to be studied are all fifth grade students at SDN Kebonagung 1 and SDN Kebonagung 2, with a total of 55 students at SDN Kebonagung 1 and 71 students at SDN Kebonagung 2. Then the two schools will divided into two groups, namely class VB as the experimental class and class VA as the control class. Teacher activities in the learning process using animated video media can be carried out well as evidenced by the implementation percentage of 98%. And student activities can also be carried out well and obtain a percentage of 92%. So it can be concluded that the teacher and student activities have been carried out well. The posttest learning results in the experimental class in both samples increased compared to the pretest results. This can be seen in the completeness of the learning results of Experiment class students which shows that previously only a few students got a complete score from the pretest results, whereas for the posttest results almost all students got a complete score. Animated video media has a positive effect on student learning outcomes. In the experimental class the pretest average was 63.44 with a completion percentage of 21.4% (SDN Kebonagung 1) and 55.40 with a completion percentage of 8.8% (SDN Kebonagung 2) while the average post test score for the experimental class was 90 with a completion percentage 96.5% (SDN Kebonagung 1) and 83.24 with a completion percentage of 100%. In the control class the average pretest score was 63.46% with a completion percentage of 15.4% (SDN Kebonagung 1) and

50.73 with a completion percentage of 8.8%. while the average posttest score for the control class was 81.15 with a completion percentage of 84.6% (SDN Kebonagung 1) and 78.8% with a completion percentage of 88.3%. thus it can be known that learning outcomes in the experimental class of the two samples experienced a higher increase compared to the control class.

6. Endah Pebrian Rahman, Asrul, Fthurrahman & Indri Anugrah Ramadhani (2019) The type of research carried out is experimental research. This research aims to see the effect on student learning outcomes in science subjects in class V at SD Negeri 14 Waigama. The research tests the validity of the test instrument used as a research instrument to determine that the test instrument is suitable to be given to the sample. The sample studied was class V which consisted of 20 students as an experimental class. The test method is used by researchers to determine students' science learning outcomes. The test used consists of twenty multiple choice questions about temperature and heat. Shows that the number of classes is 6 with the length of each class interval being 6. The most scores obtained by students are in the 34-40 interval, which is 40% (8 people out of 20 students). Meanwhile, the lowest score obtained was in the 48-54 interval, namely 5% (1 person out of 20 students). The average score obtained for this pre-test score is 38.75. The post-test score shows that there are 6 classes with the length of each class interval being 10. The scores obtained most by students are in the intervals 62-72 and 73-83, namely 30% (6 people out of 20 students). Meanwhile, the lowest scores obtained were in the intervals 40-50 and 95-105, namely 5% (1 person out of 20 students). The average value obtained for this pretest score is 71. Before data analysis is carried out, there are stages that must be passed, namely the data must first be analyzed. test. Does it fulfill the prerequisites for inferential statistical tests? To carry out inferential statistical analysis to test hypotheses, basic testing is required first, including normality tests. Based on Table 3, calculations obtained using SPSS version 16 of the pretest learning results of class V students have a significance level of $0.259 > 0.05$, while the posttest learning results of class V students have a significance level of $0.906 > 0.05$ so it can be concluded that class V is an experimental class. normally distributed. It can be concluded that the data in the research have the same variance, and the data is suitable for use for the next test, namely hypothesis testing. In testing the hypothesis in Table 4, using the one sample t test because there is one variance where the data tested is the posttest results from the experimental class based on the calculation results, the tcount is 2,204 with $dk = n - 1$ ($20-1=19$) The ttable obtained is 1.729. Based on the results of the value data analysis, namely $tcount > ttable$ ($2,204 > 1,729$), with a significance level of 0.05, namely ($0.040 < 0.05$), the hypothesis is accepted, meaning it can be concluded that there is a significant

difference in the average learning outcomes of students with science animation learning media with students taught using the lecture method, which means that there is an influence of learning with animation media on science learning outcomes for class V at SD Negeri 14 Waigama, North Misool.

7. Jumadi (2015) This research is a type of quasi-experimental research (quasi-experiment): This research aims to. 1) Describe science learning outcomes of students who take conventional lessons. 2). Describe the science learning outcomes of students who take part in the lesson. 3). Knowing the significant differences in science learning outcomes between groups of students who study with the STAD type cooperative model using animation media and groups of students who study with conventional learning models in class V elementary school students in Pondok Geulumpang, Mereubo subdistrict, West Aceh Regency. The sample in this research is class V Pondok Geulumpang Elementary School has 30 people. The instrument in this research is the science learning outcomes test. Data collection techniques related to this problem, the author uses several stages of data collection, namely: a written test, a test carried out by students before the learning process and a final test of learning before the test results are collected to analyze the results. Data management techniques are carried out after examining the answers to the questions answered by students. Science learning outcomes using the STAD type cooperative learning model using animation media and using the conventional learning model using a five-item learning outcomes test in the form of a written test at the post-test. To be able to describe the research results, descriptive statistical analysis was carried out on each dependent variable for the experimental and control classes. The results of the analysis show that the difference in the average score of science learning outcomes between the experimental and control groups is $X = 21,11 > X = 17,35$. By using the t-test, the results obtained are $T_{count} = 4,302 > T_{tabel} = 0,05 = 2,021$. Thus, it can be concluded that there is a significant difference in the science learning outcomes of students who study with the STAD Type Cooperative learning model and students who study with the conventional model. The results of the research show that the results of implementing the STAD type cooperative learning model using animation media can improve science learning outcomes. The research results show that there is a significant influence between the STAD type cooperative model using animation on student learning outcomes.
8. Made Suryanta¹, Ida Bagus Gede Surya Abadi², IGA. Agung Sri Asri (2014) This type of research is quasi-experimental research using a none equivalent post test only control group design. This research aims to determine significant differences in science learning outcomes between groups of students taught

using the Scramble learning model assisted by animated image media and groups of students taught using conventional learning in class V Semester I SD Gugus Yos Sudarso South Denpasar. The population in this study were all fifth grade students at Gugus Yos Sudarso Elementary School, Sanur, South Denpasar. The sample for this research was SD N 12 Sanur with a total of 39 students, as the experimental group and SD N 2 Sanur, with a total of 45 students, as the control group. Sample selection was carried out using a random sampling system technique. Data collection in this research was carried out using the test method. Data about students' science learning outcomes were collected using ordinary multiple choice tests, then analyzed using the t-test. Based on The results of the calculations showed that the average value of science learning outcomes in cognitive arrows, for the experimental group who took part in learning using the scramble learning model assisted by animated image media, was 77.05 with a variance of 106.32 and a standard deviation of 10.31. Meanwhile, the average score for cognitive science learning outcomes for the control group who took conventional learning was 69.21 with a variance of 143.70 and a standard deviation of 10.31. Based on these data, the experimental group that took part in learning using the scramble learning model assisted by animated image media had an average learning outcome value that was higher than the control group that took part in conventional learning. Apart from using the scramble learning model. This difference shows that there is a significant influence on learning outcomes between students who study with the scramble learning model assisted by animated image media and students who study with conventional learning in science learning for fifth grade students at Gugus Yos Sudarso Elementary School, South Denpasar.

Drawing Conclusions (Drawing Conclusion)

After carrying out data reduction and displaying the data above, the researcher concluded that there was an influence in each lesson which was about the influence of animation media. Learning outcomes in science subjects in elementary schools can have a positive influence on the ability to use the types of models and media in each lesson that are used to help the learning process. Seen from All of the results of these researchers succeeded in improving learning outcomes in using animation media to assist the learning process of elementary school students. There are factors that influence student learning outcomes that can improve, namely. Use of media and teaching materials that link learning materials with types of learning models.

These things have been proven in the relevant research above, that one of the science learning media that uses animation media can help students' learning process be more understanding and creative, and make it easier for teachers to learn. Therefore,

learning media about the influence of animation media can be used in science learning to improve elementary school students' learning outcomes.

CONCLUSIONS

Based on the results of the discussion in this research, it can be concluded that animation media influences science learning outcomes, with animation media in learning, students will be more focused because using animation media students will not get bored and can also help teachers in learning.

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