

THE EFFECT OF LEARNING VIDEO MEDIA ON THE STUDENTS' III GRADE SCIENCE LEARNING OUTCOMES AT SDN 6 MALAKA

Mujtahid¹

¹SDN 3 Gili Indah, Indonesia

Article Info

Article history:

Received: 6-09-2022

Revised: 12-09-2022

Published: 30-09-2022

Keywords:

Learning Media

Elementary School Students

Video

ABSTRACT

This study aims to conduct research on the Effect of Learning Video Media on Science Learning Outcomes of Third Grade Students of State Elementary School 6 Malacca. Learning video media will be useful to make it easier for students to understand the subject matter and determine the success of a learning process. The research method used is a quantitative method. The form of research used is experimental research. This research was carried out at SDN 6 Malaka. The variables used in this study were independent variables and research variables. The independent variable in this case is learning video media, while the other variables are learning outcomes. The population in this study were students of class III A and B, totaling 44 students. Based on the data from the t test, the data obtained are $\text{sig} > 0.05$, and $\text{sig} = 0.00$. So it can be said that there is a very important difference in the results of learning science class III SDN 6 Malaka, between students who learn to use learning video media and those who do not use learning video media.

This is an open access article under the [CC BY-SA](#) license.



Corresponding Author:

Mujtahid,

SDN 3 Gili Indah,

Jl. Gili Meno, Gili Indah, Kec. Pemenang, Kabupaten Lombok Utara, Nusa Tenggara Barat, Indonesia.

Email: mujtahid030386@gmail.com

1. INTRODUCTION

Two precise elements that are very important in the teaching and learning process are teaching methods and learning media, these two aspects are interrelated. Choosing a particular teaching method affects the right type of learning media, but there are several other aspects to consider when choosing media. This includes learning objectives, types of tasks, appropriate responses that students are expected to learn after learning takes place, and the context of learning. Including the characteristics of students (Arifmiboy, 2019). Nevertheless, one of the main functions of learning media is as an educational tool designed and created by teachers which also influences the climate, conditions, and learning environment (Rofi'ah, 2018). The use of media in learning needs to be appropriate, because not all media can be used properly to convey learning materials to students. We may not be able to achieve our learning objectives because you are using inappropriate learning media. In addition to adapting to the material, the media needs to pay attention to learning objectives, the number of students, and the infrastructure used in schools. One of the subjects in elementary school is science (Alawiyah, 2017). Elementary school science is one of the most important subjects that must be taught to students as the basis for social life and getting to know the environment or the natural surroundings. Because Natural Sciences (IPA) deals with the systematic study of nature, science does not merely acquire a body of knowledge in the

form of facts, concepts, or principles.

The practice of scientific learning must be carried out in a helpful atmosphere in the sense of lively, creative, effective and fun learning activities. To create a useful learning environment, the teacher plays a very important role in choosing the approaches, models, and methods used in the learning process to achieve the optimal success of learning objectives. Currently with the development of technology, learning media are becoming more diverse and there are several groups of media that can be used in the learning process (Atmojo, Muhtarom, & Lukitoaji, 2020). Based on these technological developments, learning media can be divided into four groups. These are media from printing technology, media from audiovisual technology, media from computer-assisted technology, and media from a combination of printing and computer technology (Rahma, 2020). After paying attention to the benefits and types of learning media, researchers will use audiovisual learning media in the form of learning videos in this study. Videotape used in the teaching and learning process has many advantages and disadvantages. For example, videotape replaces the natural environment and can display objects that students would not normally be able to see directly, such as the sun. The video is detailed. Appropriate and repeatable videotapes motivate and encourage students to keep watching (Edu, Jaya, & Ni, 2021).

When the researcher made observations in grade 4 of the State Elementary School 6 Malacca, the researcher observed the science learning process in grade 4. There were several problems found, including the dominant learning was listening to the teacher's explanation in class, taking notes or summarizing lessons and only using the teacher's books and books. and student books only. The learning media used are less varied, the teacher only uses simple power points and does a lot of lectures (Christiana, 2013). Students just sit, listen to lectures or explanations of the material from the teacher. Researchers have not found teachers who use videotape in learning. This makes students feel bored, shows a lack of enthusiasm for learning and is less interested in learning material, some even play alone. When teachers use media, students still cannot pay attention to learning well, this is because the media used is not able to provide a clear picture of the material presented (Sulkipani, 2014). One of the materials taught in the 4th grade science material is about changes in the appearance of the earth, moon and sun. In this material the teacher has difficulty in presenting the original object media. This material is impossible if delivered using the original object.

One alternative so that learning can take place efficiently is to use a learning videotape. The researcher chose the learning videotape because the videotape can display information that cannot be seen directly by the students' sense of sight such as the sun and the process of the movement of the earth and moon around the sun. Students can see the process of changing the appearance of the earth, moon and sun by using videotape directly through animation. Learning video media can create visualization material for changes in the appearance of the earth, moon and sun. The importance of using video media, because elementary school age children, aged 7-12 years are in the concrete operational phase (Andriyani & Suhartono, 2019). With the use of video media will be able to achieve the effectiveness of the learning process, direct students' attention to concentrate on the material being studied so that the learning process becomes interesting, and provide direct experience to students about an event or events. The retention rate (absorption and memory) of students towards the subject matter can increase significantly if the initial information acquisition process is greater through the senses of hearing and sight (Purnamasari & Wahyudi, 2021). Based on the description above, the researcher is interested in conducting research on the Influence of Learning Video Media on Science Learning Outcomes for Class III Students of State Elementary School 6 Malacca. Learning video media will be useful to make it easier for students to understand the subject matter and determine the success of a learning process.

2. RESEARCH METHOD

The research method used is a quantitative method. The form of research used is experimental research (Sugiyono, 2013). This research was conducted at SDN 6 Malacca. The variables used in this study are independent variables and dependent variables. The independent variable in this case is learning video media, while the dependent variable is learning outcomes. The population in this study were students of class III A and B totaling 44 students. The researcher chose a sample using positive attention, one of the strategies used was purposive sampling. One of the researchers' concerns is that the average student learning outcomes are the same. The pattern in this study consisted of 2 groups, namely the experimental group class B consisting of 21 students and the control group class A consisting of 24 students. The data collection technique used is through observation and tests. The data collection instruments used in this study were observation sheets and

test sheets. Observation sheets are used to measure teacher and student activities during the learning process (Jennings, 2018). The test sheet used in this study was in the form of multiple choice questions with 25 questions.

Learning outcomes data have been obtained through pretest and posttest in the experimental class and control class. The data analysis method used is Independent Sample t-test with the help of SPSS model 22 application. However, before trying speculation, it is important to check the provisions first. used are normality examination and homogeneity examination. Normality examination is carried out using Kolmogorov Smirnov examination to determine whether the data used is normal or not. While homogeneity test uses Levene Statistic test, and hypothesis test uses independent sample t-test.

3. RESULT AND DISCUSSION

Prior to the t-test, prerequisite tests were conducted, namely normality and homogeneity tests. The results of the normality test showed that the significance value was 0.200 for the pretest and post-test so that both data were normally distributed. The results of the homogeneity test obtained a significance value greater than 0.05, namely 0.561 for the pretest and 0.090 for the post-test so that the data is categorized as homogeneous or has the same data variance.

Based on t test results which have t-value (-14.442) and sig = 0.000, then the hypothesis is accepted. There is a very significant difference in the science learning outcomes of third grade students of SD Negeri 6 Malaka, between learning that uses learning video media and does not use learning video media.

The effect of learning videos on student learning outcomes for Class III SDN 6 Malacca using a sample of 44 students. Samples were taken from two classes, class A as control class with 24 students and class B as experiment class with 21 students. From the two classes, 44 students were taken as the research class. Previously, 44 students underwent a pre-test to find out their motivation to learn science before using instructional videos in the experimental class. The experimental class was then poured in the form of a science learning video, after which a post-test was conducted to determine whether the learning video had an effect on the science learning outcomes of Class III SDN 6 Malacca. The learning outcomes carried out at SD Negeri 6 Malaka reached the average science learning outcomes. The average science learning outcomes of the group taught by video learning media, namely Class III B as the experimental class was 75.23, and Class IVA as the control class taught without video learning media was 64.23. The difference in average science learning outcomes is because the group of students who use video media is easier for elementary school students to understand, because it can stimulate their curiosity and ability and present scientific material more specifically. This is in accordance with Chalmers' research in (Fauzi, Anar, Rahmatih, Wardani, & Warthini, 2020), where it is not necessary to present an actual object to understand the object, but can be replaced with an object that plays a role. In addition to receiving material from the teacher centrally, by asking questions, giving opinions, actively discussing, and making presentations, learning activities in class become active.

Consistent with the opinion Hotimah et al. (2021), later students will be more active because video media can attract students' attention, expand students' knowledge, increase students' imagination, improve critical thinking skills, and make students more enthusiastic. Students can learn in a way that is right on target in the learning process. In addition, video media has the ability to express concrete things, even though they are not physical. Learning through the two senses of sight and hearing can help students to better understand the material explained by the teacher. Based on the average value of high school science students' learning outcomes, the group taught with video learning media, namely Class III B as the experimental class, averaged 75.23, and the group taught without video was on average. Known 64.23. The average learning outcomes show that science learning outcomes taught using instructional video media are higher than those taught without learning video media. This is because it makes it easier for students to understand subject matter that is more specifically communicated through video media. Science students above, it can be concluded that the use of instructional video media is beneficial for class III science learning outcomes.

The results of this study are related to previous research, namely research in 2016 entitled "The Effect of Using Learning Videos on Science Learning Outcomes for Grade IV Elementary School" by Prayoga Dwi Jatmiko, Anastasia Wijyantini, and Susilaningsih. This type of research is a quasi-experimental research (quasi-experimental) conducted in Class IV SDNI and SDN III Tasikmadu Trenggalek. The results of this study indicate that the use of educational video media affects the learning outcomes of students in class IV SDNI and SDNIII Tasikmadu Trenggalek. These results are supported by the results of data analysis which shows that the

t-test is 3.343 > 2.11 from the t-table. This means that H_0 is accepted, so it can be concluded that the learning outcomes of students who use video media are significantly different (better) compared to students who do not use video media in Class IV SDNI and III IPA Tasikmadu Trenggalek. You can attach it. The subject's video media uses a level of 0.05.

4. CONCLUSION

Based on the data from the t test, the data obtained are $sig > 0.05$, and $sig = 0.00$. So it can be concluded that there is a very significant difference in the science learning outcomes of class III SDN 6 Malaka, between students who learn to use learning video media and those who do not use learning video media. The average learning outcomes obtained from class A as the control class or the class that was not given treatment was 64.23 lower than class B as the experimental class which was given treatment in the form of learning to use learning video media with an average of 75.34. From these data we can see that learning video media can improve student learning outcomes because the learning process is fun and easy to understand by students, so students are able to improve their science learning outcomes.

REFERENCES

- Alawiyah, F. (2017). Standar nasional pendidikan dasar dan menengah. *Aspirasi*, 8(1), 81–92.
- Andriyani, D., & Suhartono, S. (2019). Learning Improvement Efforts Through Reflective Studies in Elementary Schools. *Universal Journal of Educational Research*, 7(12), 2734–2741. doi:[10.13189/ujer.2019.071222](https://doi.org/10.13189/ujer.2019.071222)
- Arifmiboy, A. (2019). Tadaluring Microteaching: An Effective Learning Model to Develop Basic Teaching Skills. *Jurnal Pendidikan Teknologi dan Kejuruan*, 25(1), 141–151. doi:[10.21831/jptk.v25i1.23157](https://doi.org/10.21831/jptk.v25i1.23157)
- Atmojo, S. E., Muhtarom, T., & Lukitoaji, B. D. (2020). The Level of Self-Regulated Learning and Self-Awareness in Science Learning in the Covid-19 Pandemic Era. *Jurnal Pendidikan IPA Indonesia*, 9(4), 512–520. doi:[10.15294/jpii.v9i4.25544](https://doi.org/10.15294/jpii.v9i4.25544)
- Christiana, E. (2013). Pendidikan yang Memanusiakan Manusia. *Humaniora*, 4(1), 398. doi:[10.21512/humaniora.v4i1.3450](https://doi.org/10.21512/humaniora.v4i1.3450)
- Edu, A. L., Jaya, P. R. P., & Ni, L. (2021). The Phenomenon of Learning Motivation of Elementary School Students. *International Journal of Elementary Education*, 5(2), 337. doi:[10.23887/ijee.v5i2.33934](https://doi.org/10.23887/ijee.v5i2.33934)
- Fauzi, A., Anar, A. P., Rahmatih, A. N., Wardani, K. S. K., & Warthini, N. L. P. N. S. (2020). Persepsi Guru Terhadap Siswa Berkesulitan Fungsional Di SD Negeri Gunung Gatep Kabupaten Lombok Tengah. *PROGRES PENDIDIKAN*, 1(2), 72–79.
- Hotimah, H., Ermiana, I., & Rosyidah, A. N. K. (2021). Pengembangan Multimedia Interaktif Berbasis Macromedia Flash Untuk Meningkatkan Kemampuan Komunikasi Matematis. *PROGRES PENDIDIKAN*, 2(1), 7–12. doi:[10.29303/prospek.v2i1.57](https://doi.org/10.29303/prospek.v2i1.57)
- Jennings, M. D. (2018). Gap analysis: Concepts, methods, and recent results. *Landscape Ecology*, 4(3), 56–78. doi:[10.1023/A:1008184408300](https://doi.org/10.1023/A:1008184408300)
- Purnamasari, R. Y. D., & Wahyudi, W. (2021). Pengembangan Media Petualangan Matematika Untuk Meningkatkan Kemampuan Pemecahan Masalah Pada Materi Bangun Datar di SD. *Jurnal Educatio FKIP UNMA*, 7(3), 1120–1126. doi:[10.31949/educatio.v7i3.1376](https://doi.org/10.31949/educatio.v7i3.1376)
- Rahma, D. W. (2020). Embung Sebagai Alternatif Cadangan Air Pada Sawah Tadah Hujan. *Jurnal Rekayasa*, 4(1), 1–6.
- Rofi'ah, F. Z. (2018). Analisis Kurikulum Program Studi Pendidikan Guru Madrasah Ibtidaiyah Universitas Islam Negeri Maulana Malik Ibrahim Malang Mengacu Pada Standar Nasional Pendidikan Tinggi. *Journal of Education and Learning*, 7(3), 122–134.
- Sugiyono. (2013). *Research Methods (discussing Quantitative, Qualitative, and R & D)*. Indonesia: Alfabeta.
- Sulkipani, S. (2014). Prinsip-Prinsip dan Praktik Pendidikan untuk Membangun Warga Negara yang Demokratis. *Bhineka Tunggal Ika: Kajian Teori Dan Praktik Pendidikan PKN*, 1(2), 101.