Research Article

The Application of Murder Model with Image Media to Improving Student **Learning Outcomes at the Fourth Grade Students***

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Abstract

This research is to evaluate the learning outcomes of 4th grade students using the MURDER model with image media. This research is a Class Action Research conducted in three cycles and is collaborative research. Each cycle consists of several stages, namely the planning, implementation, observation, and reflection stages. This third cycle is useful for determining the final results of the research conducted. The subjects of this study were fourth-grade students of SDN (Sekolah Dasar Negeri or State of Primary School) Negeri Gumilir 04 Cilacap Regency, Indonesian Country with a total of 49 students. The conclusion obtained from this study is that the use of the MURDER model with image media can improve the learning outcomes of fourth-grade elementary school students.

Keywords: MURDER model, Image media, student learning outcomes

1. INTRODUCTION

Education is a process of changing human behavior to be independent, mature, and have a personality (Bruner, 2009). This shows that through education, humans grow and develop better. Education is an investment in the long term that requires effort and funds that are not small for the Indonesian people (Rokhman, Hum, & Syaifudin, 2014). So that the Indonesian people have great hopes for educators for the continuity of the future of the Indonesian nation.

The success of a teaching and learning process can be seen from the learning outcomes obtained by students (Vescio, Ross, & Adams, 2008). In this study, data were collected by observing while learning was taking place and also conducting interview sessions with one of the fourth-grade elementary school educators in the city of Cilacap. After observations and interviews were conducted, the results showed that the average score on the initial test was 47.3 while the minimal completeness criteria were 70. Based on these results, so that student learning outcomes could increase so that every learning process was used the learning model and media were able to attract students' attention and according to the theme of learning. According to McCafferty, Jacobs, and Iddings (2006) the selection of models and learning media must not be separated from the nature and characteristics of elementary school children. Teachers apply to learn strategies depending on the approach used; while how the teacher applies the learning strategy can use the appropriate learning model (Sanjaya, 2014). One of the alternative learning models that can be used to improve learning outcomes of fourth-grade students at SDN (Sekolah Dasar Negeri or State of Primary School) Gumilir 04 Cilacap Regency, Indonesian Country is to use the Mood Understand Recall Detect Elaborate Review (MURDER) learning model with image media because it has been developed by education experts based on the perspective of

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cognitive psychology (McCafferty, Jacobs, & Iddings, 2006). In addition, learning that uses the MURDER model with picture media is indeed proven to be able to improve student learning outcomes (Kusmariyatni & Suartama, 2013).

MURDER Model from Hayes in his book entitled The Complete Problem Solver describes that the MURDER model is an acronym for mood, understand, recall, digest, expand, review (Hayes, 2009). The MURDER learning model relies on a good mood for students to instill material concepts and develop knowledge provided by educators from various sources. The mood is a step to make students' moods good, understand is an important and difficult stage of identification of learning, recall is mapping learning, digest to identify the learning that confuses students, expand is the stage of application of learning in everyday life, and review is a stage problem analysis (Glynn, & Muth, 1994).

Image media are included in visual-based media groups. Students cannot always be taken to visit certain objects or events, and also not all objects, objects and events can be brought into the classroom. Therefore, image media is used to simplify the teaching and learning process. The Chinese proverb says "an image speaks more than a thousand words". Individual practices can be improved by devices that rely on sight and sound, beyond that improved through audio-visual aids such as film strips, maps, images and others (Singh, 2005).

The image media in the first cycle consisted of pictures of rocks eroded by wind, covered in the land caused by water and the consequences of earthquake disasters. The image media in the second cycle consisted of images of the position of the sun from rising to sinking, the phases of the moon, and various constellations. While the image media in the third cycle consisted of pictures of bare hills, river bank erosion, seaside abrasion, and images of causes of floods and landslides.

The steps of the MURDER model with image media are relatively easy so that they can give an impression of the teaching and learning process and students can develop material obtained in their own way. Material development can be done by exploring the school environment, books in the library, and asking the teacher. The steps of the MURDER model with the image media used are 1) the teacher arouses the mood of the students by giving pictures related to the material to be discussed, 2) the teacher explains the material to the students, 3) the teacher repeats the material discussed using media images and language understood by students, 4) teachers guide students to study learning, 5) students develop material obtained from various sources, 6) teachers and students re-learn the material obtained.

1.1. Aims of the Study

Purpose of this study is to evaluate the learning outcomes of 4th-grade students using the MURDER model with image media.

2. METHOD

This methodology research is a Class Action Research conducted in three cycles and is collaborative research. Each cycle consists of several stages, namely the planning, implementation, observation, and reflection stages. This third cycle is useful for determining the final results of the research conducted. The study was conducted in the 4th grade of SDN Gumilir 04. The population in this study was all 4th grades of SDN Gumilir 04 totaling 49 students. This study uses total population sampling technique, so the sample used is in accordance with the total population in the class, which are 49 students.

The study was conducted in the second semester, precisely March to May. Data sources in this study are students, class teachers, observers, and documentation in the form of photos and videos. There are two data collection tools, namely the test instrument in the form of an evaluation sheet of

student learning outcomes, and non-test instruments in the form of observation, interviews, and documentation. The type of research used is collaborative research because it collaborates with classroom teachers during the action planning stage in accordance with the initial conditions in class 4, while the implementers of the action are classroom teachers. The observer in this study consisted of researchers and two colleagues. Data from the results of the study consisted of process values, student learning outcomes and observations of the use of MURDER learning models with media images by teachers and students.

Data analysis in the form of quantitative data analysis and qualitative data analysis. Quantitative data analysis is used to analyze numerical data presented in the form of tables and graphs, and in this study, it is used to measure student learning outcomes. Qualitative data analysis is used to analyze data in the form of information data obtained from research observations. The research was conducted in three cycles where two cycles were held in two meetings. In each cycle, it usually consists of four stages, namely planning, implementation, observation and reflection (Arikunto, Suhardjono, & Supardi, 2010). At the planning stage, things are done: studying the syllabus, making lesson plans, preparing media, worksheets, observation sheets, interview guidelines, evaluation sheets, learning outcomes assessment formats, and contacting observers and coordinating with class teachers. The implementation phase is carried out for three cycles and each cycle consists of two meetings so that a total of six meetings are held. The observation phase is carried out simultaneously at the implementation stage. And the reflection stage is done when the teaching-learning process will end.

3. FINDINGS

The use of the MURDER model with image media in learning is carried out for 3 cycles consisting of the cycle I, cycle II, and cycle III. Learning outcomes use the MURDER model with picture media in the first cycle, the percentage of students who complete is 92,5% with an average value of 77. In the second cycle, the percentage of student learning outcomes that are completed increases by 8% to 100% with an average value that also increased to 84,5. While in the third cycle the percentage of students who complete stability is 100% but the class average has increased to 99,57. Overall learning outcomes in learning that use the MURDER model with image media always increase so that researchers adequately act because learning outcomes have reached performance indicators. Based on existing data, it can be concluded that there is an increase in learning outcomes of students using the MURDER model with image media for fourth-grade students of SDN Gumilir 04.

3.1. Cycle 1

The first cycle runs in two meetings. Every meeting, there are stages of planning, implementation, observation, and reflection. At the planning stage, the researcher and the teacher discuss the learning instruments that will be used. The instrument is in the form of a learning implementation plan, learning materials, learning models, learning media, evaluation questions, student worksheets, and how to evaluate them. This planning phase is carried out two days before the implementation stage.

At the implementation stage, the teacher carries out the teaching and learning process based on the instruments agreed upon with the researcher. During the implementation phase, the researcher observes students and the teaching and learning process. Observations made based on observation instruments that have been made before. When the observation took place, the researcher, who was assisted by a colleague as an observer, found several obstacles in applying the MURDER model with image media. The most dominant obstacle during the first cycle is the teacher's time allocation in carrying out the steps of the MURDER model with image media. This happened because the teacher did not fully understand the application of the steps of the MURDER model with image media.

After the first cycle is complete, the teacher and researcher and colleagues reflect on the discussion. In this reflection phase, the teacher is given direction on how to manage the time allocation in applying the MURDER model with image media. In this first cycle, students have begun to see their interest in learning. This proves that the MURDER model with image media is able to attract student learning interest and is expected to improve student learning outcomes. This is evidenced by the following diagram.

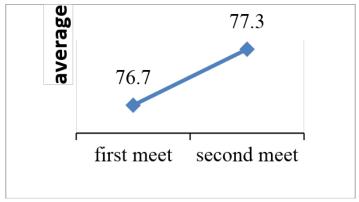


Figure 1. Average in Cycle 1

The diagram above shows the average value of students has increased. The number of students who obtained grades above the minimum completeness criteria or ≥ 70 was 18 students with a percentage of 90% and an average score of 76,7. After the second meeting was held, the number of students who obtained grades above the minimum completeness criteria or ≥ 70 were 19 students with a percentage of 95% and the average value rose to 77,3. The average grade increases from 76,7 to 77,3. The average grade in the first cycle is 77.

3.2. Cycle 2

The second cycle runs in two meetings. Each meeting also consists of stages of planning, implementation, observation, and reflection as in cycle one. At the planning stage, researchers and teachers discuss the learning instruments that will be used. This instrument is in the form of a learning implementation plan, learning material, learning models, learning media, evaluation questions, student worksheets, and how to evaluate them. In addition, researchers and teachers discuss strategies so that the constraints in cycle one do not recur during the second cycle. This planning phase is carried out two days before the implementation phase.

In the implementation phase, the teacher carries out the teaching and learning process based on the instruments agreed with the researcher. During the implementation phase, researchers observe students and the learning process. Observations are made based on the instruments of observation that have been done before. When the observations took place, the researcher was also assisted by colleagues as observers, as in cycle one, finding the teacher was able to control the time allocation better but learning became less than optimal. This is because students seek teacher attention when the question and answer session takes place.

After the second cycle is complete, teachers and researchers and colleagues discuss. Overall the implementation of the second cycle is better than the first cycle. This can be seen from the significant increase in the value of student learning outcomes from cycle one to cycle two. For more details, the following diagram increases the value of student learning outcomes in the second cycle.

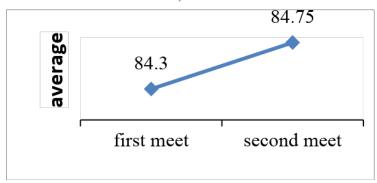


Figure 2. Average in Cycle 2

Based on these diagrams, students who get scores above the minimum completeness criteria or ≥ 70 at the first meeting are 20 students with a percentage of 100% and an average value of 84,3. At the second meeting, students who obtained scores above the minimum completeness criteria or ≥ 70 were 20 students with a percentage of 100% and the average score is 84,75. The average grade for the second cycle is 84,5.

3.3. Cycle 3

The third cycle runs in two meetings. Each meeting also consists of stages of planning, implementation, observation, and reflection as in cycle one. Actually, we are allowed not to continue in the third cycle because in the second cycle the student learning outcomes target has been reached. But to further strengthen the results obtained, this third cycle will be carried out.

At the planning stage, researchers and teachers discuss the learning instruments that will be used. This instrument is in the form of a learning implementation plan, learning material, learning models, learning media, evaluation questions, student worksheets, and how to evaluate them. In addition, researchers and teachers discussed the reflection of the second cycle so that the implementation of the third cycle would be better. This planning phase is carried out two days before the implementation phase.

In the implementation phase, the teacher carries out the teaching and learning process based on the instruments agreed with the researcher. During the implementation phase, researchers observe students and the learning process. Observations are made based on the instruments of observation that have been done before. When the observations took place, the researchers were also assisted by colleagues as observers as in cycles one and two, finding the teacher was skilled in implementing the steps of the MURDER model with image media, the time allocation was getting better, students played an active role in the teaching and learning process.

After the third cycle is complete, teachers and researchers and colleagues discuss. Overall all the better, the teacher increasingly mastered the steps of the MURDER model with image media, the better time allocation, the active role of students in learning using the MURDER model with image media and the increasing student learning outcomes. With the increasing student learning outcomes in this third cycle, the study was declared to have been completed. The following is a diagram of the increase in student learning outcomes in the third cycle.

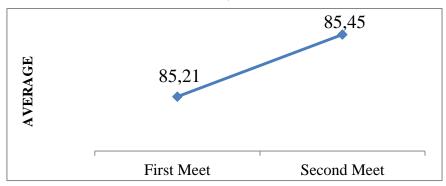


Figure 3. Average in Cycle 3

Based on these diagrams, students who scored above the minimum completeness criteria or ≥ 70 at meeting 1 were 18 students with a percentage of 94,73% and an average value of 85,21. After meeting 2, students who obtained a score above the minimum completeness criteria or ≥ 70 were 19 students with a percentage of 95% and an average value of 85,45.

4. DISCUSSION and CONCLUSION

Based on the research that has been carried out, the results show that the use of the MURDER model with image media can improve the learning outcomes of fourth-grade students of SDN Gumilir 04. This is evidenced by the increase in the average value of student learning outcomes. Even though in the first cycle the teachers and students were unable to master learning using the MURDER model with image media but the average learning outcomes obtained were 77 where the average value of the learning outcomes was above the minimum completeness limit and the teaching and learning process went well with a percentage reaching 95%.

In the second cycle, the average value of student learning outcomes increased to 84.5 along with the better mastery of the use of the MURDER model with image media. Students are so enthusiastic during the implementation of the second cycle because they build their own knowledge by conducting experiments directly in accordance with the learning material. This is evidenced by the percentage of the teaching and learning process which increases to 100%.

In the third cycle, the average value of student learning outcomes again showed an increase to 99,57 and the teaching and learning process using the MURDER model with image media also got better mastery. In cycle III students build their own knowledge by looking for other sources in the school environment with great enthusiasm. The disadvantages of applying the MURDER model to the image media that occurred at SDN Gumilir 04 were the same as those presented by Mustaqim such as requiring longer time in implementation, requiring a strong understanding of students and teachers have to strive so that participants students still feel happy or stay in a good mood (Mustaqim, 2013).

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