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Use of Image Media Improves Student Learning Outcomes Science Subjects Classification of Animals Based on Their Food Types in Class V of Elementary School

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ABSTRACT

Objective: *This study aims to improve student learning outcomes on the topic of animal classification based on food type at SDN 15 Pulau Rimau, addressing the low achievement caused by traditional teaching methods.* ***Method:*** *A classroom action research approach was employed, utilizing scientific models and visual media to enhance understanding and engagement. The research was conducted in two cycles, each consisting of planning, implementation, observation, and reflection stages. Data were collected through descriptive analysis, in collaboration with the classroom teacher.* ***Results:*** *The use of scientific models and image media significantly improved student participation and learning outcomes. Observations during both cycles showed increased student engagement and a better grasp of the material.* ***Novelty:*** *This study contributes to the field by demonstrating the effectiveness of combining scientific teaching models with visual aids to foster active learning and improve academic performance, particularly in science education.*

INTRODUCTION

Science learning in Elementary School is a science to equip students with knowledge, skills, and attitudes that are used to continue their education and to adapt to changes around them. In reality, science learning carried out in class shows that student learning outcomes are less than optimal, this is because the use of learning methods and media used is not appropriate so that it can cause dissatisfaction with student learning outcomes about Animal Classification Based on Their Food Types. In science learning, teachers use lecture methods and learning activities are more teacher-centered and giving examples when explaining the material only focuses on the contents of the textbook. In this case, it is important for teachers to use appropriate methods to get maximum learning outcomes.

Education is one of the efforts to educate the nation's life and is planned to develop various potentials of students and can participate in the community environment. The achievement of educational goals cannot be separated from the role of educators in the teaching and learning process. The learning process is the main component that must be established in the teaching process that functions as the success of educators.

Jujun Suria Sumantri in Triono states that natural science is a part of science which originally comes from the English word "scince". The word "scince" itself comes from the Latin word "scientia" which means I know.As educators or teachers in developing the

concept of science learning should be able to improve student learning outcomes, teachers are more active and creative in selecting learning media that can make the implementation of learning more interesting and not boring. The use of image media is a media that can be used by teachers to improve student learning effectiveness and education quality. Dimyanti and Mudjiono stated that learning is a complex activity, after learning people have skills, knowledge, attitudes and values.

The educational process carried out by teachers certainly has an important role in learning that carries out the teaching and learning process, because teachers as facilitators or information providers and students as recipients of information provided by teachers consciously according to student abilities and student interests. with animal grouping activities according to their type of food aims to create a conducive learning situation, namely active, creative, innovative, effective, and enjoyable learning in various learning activities. the use of various media becomes a tool that can facilitate teachers or students in understanding ongoing learning, the use of various media or methods that are in accordance with children's interests can shape the success of teaching and learning activities. in this case creating a pleasant and not boring atmosphere is certainly not easy, there are many inhibiting factors that can come from students who tend to be passive and can even come from teachers themselves who are less innovative and creative, so that learning activities tend to be monotonous and boring.

Sanjaya states that image media is a visual media in the form of images commonly used for various learning activities. Good images can not only convey but can be used to train thinking skills and can develop. Natural science learning that studies the universe and its contents and events related to nature and living things. Science is one of the lessons developed in elementary school (SD) lessons. The process of implementing science learning in elementary schools refers to the achievement of attitude competition, knowledge competence and skill competence, so that in the science learning process it is carried out by focusing on students' abilities and understanding of learning materials, forming attitudes that lead to scientific attitudes through the process of observation and discovery and having skills related to the process of observation and trial in understanding learning concepts [14].

According to Arsyad that image media is a visualization of messages, information, or concepts that want to be conveyed to students can be developed in various forms such as photos, pictures or illustrations, sketches or line drawings, charts, and a combination of two or more forms. using students' imagination skills [1].

Science learning in elementary school is a vehicle that equips students with the knowledge, skills, and attitudes needed to continue their education and to adapt to changes in their surroundings. Based on the reality in the field, it shows that student learning outcomes in science learning are less than optimal, this is triggered by the methods and learning media that are less used by teachers in the teaching and learning process that are less appropriate. The use of this less appropriate method is an obstacle for students in understanding the lesson activities carried out. Explaining science learning materials, teachers are still dominated by knowledge of lecture methods and

activities that are more centered on the teacher and examples given in explaining learning materials to students only through textbooks.

In my opinion, the use of image media is one of the tools that can be used and utilized by educators, in this case teachers, in the learning process, making it easier for teachers to deliver materials and making it easier for students to understand the lessons being carried out. Image media becomes more interesting and children will be more enthusiastic in doing activities. Learning media must be made according to the objectives of children's learning activities according to curriculum standards, safety standards.

The advantages of image media can eliminate verbalism, of course by using image media in learning, the problems discussed will be more interesting or more concrete compared to using verbal language. Using image media can also overcome the limitations of space and time. Using image media can make it easier for students to see what is conveyed by the teacher without daydreaming, meaning that by using image media, objects that cannot be brought into the classroom can be overcome, for example, the teacher explains about elephants, it is impossible for a large elephant to be brought into the classroom just as a real example.

The problems above also occurred in class 5 of SDN 15 Pulau Rimau in the 2024-2025 Academic Year. The science subject scores at SDN 15 Pulau Rimau in the 2024-2025 academic year showed that out of 12 class V students in the science subject, they had not yet achieved class completion, namely: 10 students (85%) completed and 2 students (15%) were declared incomplete. Based on the data obtained, it can be stated that the learning outcomes of class V students at SDN 15 Pulau Rimau, Pulau Rimau District, Banyuasin Regency have not been completed classwise.

In this case, the science learning activities in Class V Animal Classification According to Their Food Types have not been in accordance with what is desired, the learning activities carried out are still monotonous and do not provide a good response for students so that children feel bored with the learning that is carried out. Using appropriate media in science learning requires teachers to find references to choose suitable methods that can be used as a delivery medium using image media so that students are more active in learning activities and easier to understand.

From the descriptions above, it can be concluded that the learning activities carried out by the teacher are not optimal and many students have not succeeded in completing their assignments properly, therefore the author wishes to be able to conduct research at SDN 15 Pulau Rimau, Banyuasin Regency, namely through image media, the Use of Image Media in Improving the Learning Abilities of Students or Students in Classifying Animals According to Their Types of Food.

RESEARCH METHOD

This research is a Classroom Action Research conducted by means of cyclical learning activities. Each cycle consists of 4 stages, namely: (1) planning, (2) action, (3) observation, (4) reflection. According to Kemmis in Sanjaya, classroom action research is a form of reflective and collective research conducted by researchers in social situations

to improve their social practice reasoning [13]. In the implementation of research conducted by the author, the presence of teachers and colleagues in classroom action research provides benefits for researchers, researchers receive input given by colleagues and provide motivation to improve the implementation of subsequent learning. Researchers as implementers who make learning designs so that research can take place which of course will be carried out during learning. During research activities, researchers in this case of course need colleagues or other teachers as observers, in the smooth running of learning research activities carried out. According to Haslay in Sanjaya classroom action research is an intervention in the real world and an examination of the resulting influence of this intervention [13].

RESULTS AND DISCUSSION

Initial test results

Before conducting research improvements to learning in cycle I and cycle II on students in grade V of SDN 15 Pulau Rimau, Banyuasin Regency. On the science learning material about animal classification based on their food types. The researcher first conducted observations conducted through pre-cycle learning first using classical learning using lecture, discussion and question and answer learning methods.

In this kind of learning activity, of course, the researcher made improvements to learning in cycle I of animal classification based on their food types in science subjects by using image media as an aid to be able to provide learning material delivery. In learning activities using image media, the media used produced encouraging results for the researcher, why was the image media taken by the researcher as the media used in this study? Image media is expected to be able to create a learning activity atmosphere that is more interesting and enjoyable. In the implementation of cycle I learning, the achievement of students' grades who passed the KKM increased, which was previously only 55% of students who achieved their KKM scores, now cycle I is 70% of 18 students whose scores reach the KKM. Because in cycle I there are still 30% of students whose scores reach the KKM score, which is 70, therefore the researcher can continue the research in cycle II. In this cycle II activity, the achievement of students' grades can reach the KKM increasing by 90% with an average student score of 75, with the achievement of students' grades reaching an average score of 75, it can be said that students have completed the learning activities. Therefore, it can be said that the researcher has been able to end his research in the second cycle, because in the implementation of the second cycle, the achievement of students' scores that reached the KKM increased rapidly and the scores of students who did not reach the KKM decreased in this cycle. For more details, of course, the researcher carried out several stages to improve learning in cycles I and II, the researcher presented them in the form of a cycle description. The description can be seen as follows:

Cycle I

The planning stages for cycle I learning improvement activities were carried out by the researcher and at this stage the researcher was assisted by colleagues to create a

learning improvement plan as follows:

1. Determining spatial arrangement as a learning strategy in the classroom,
2. Use of the image method, in implementing learning improvements in the classroom,
3. Create and prepare learning media that will be used in class,
4. Prepare improvements to cycle I learning.

In the implementation of learning improvement cycle I, research was conducted on November 25, 2024, in the implementation of this activity assisted by colleagues who acted as observers in the learning process.

The steps for improving learning carried out by the research are as follows:

1. Explain the learning objectives that will be delivered by students,
2. Explaining learning materials using visual learning improvement media in the form of images, in the form of types of animals such as Herbivores, Carnivores, and Omitivores,
3. Conducting Q&A with students about classifying animals based on their type of food,
4. Divide students into several groups,
5. Divide into several groups and explain the results of the learning discussion, namely science learning, classifying animals according to their type of food,
6. Explain the learning material to science students about classifying animals based on their type of food,
7. Observing and assisting students in completing learning evaluations in the form of questions,
8. Request a report on the results of each group's evaluation work,
9. Give students the opportunity to ask questions about the science learning material on classifying animals based on their type of food,
10. Summarize the contents of the materials that are included in the learning and give students the opportunity to take notes.
11. Conduct evaluations for students,
12. Together with students, correct the evaluation,
13. Providing improvements and enrichment,

Providing feedback in the form of assignments to students. The implementation of the observation stage was carried out by researchers assisted by colleagues as observers on November 25, 2024. At this stage, researchers observed student activities during the learning process and assessed the evaluation results in science learning taught in the science subject class on Animal Classification based on their type of food. Some of the results of the researcher's observations.

From the data on student activity in learning above, it can be obtained that the average value obtained by students is 72% of all active students and 28% of inactive students. The use of learning media using picture media is quite capable of making science learning more effective. Students who are less active are those who are less active

during learning activities like to talk to themselves with their deskmates, like to play alone, and do not pay attention to the explanations given by the teacher.

Cycle II

Learning improvement planning in cycle II by researchers is carried out by improving the learning that is implemented. Researchers also prepare learning tools, including the following:

1. Learning Improvement Plan (RPP) in cycle II,
2. Prepare learning media in the form of varied image media,
3. Providing image media that will be used as a medium for delivering material.

The stages of implementation carried out in the initial learning, the researcher carried out learning improvements on 12 March 2024, the implementation of learning improvements was carried out again when the children had returned to school because previously the students were on school holidays due to exam activities in class V. The steps taken by the researcher at the stages of implementing cycle II learning are as follows.

1. Convey the objectives of the learning material to students,
2. Inviting students to learn by looking at pictures of animal groups based on their type of food, namely herbivores, carnivores and omnivores.
3. Explaining learning improvement materials using animal pictures according to their type of food,
4. Give students the opportunity to ask questions,
5. Divide students into several groups,
6. Guide the group so that they can explain the material that has been shared and are able to answer the quiz,
7. Explain the classification of animals according to their type of food,
8. Guiding students when working on independent and group assignments,
9. Observe students when they are working on the tasks that have been given,
10. Summarize the learning material,
11. Give students the opportunity to study the learning material presented by the previous teacher,
12. Conducting evaluations of students,
13. Correcting learning outcomes with students,
14. Provide improvements and enrichment.

Implementation of the learning improvement stage which took place on Friday, December 5, 2024. Learning improvement using image media.

From the data, it can be concluded that 81% of students are active and 19% of students are less active. If in learning only 72% of students are active in the implementation of this learning improvement, it increased by 9% in the implementation of learning improvement. The use of image media can make science learning more effective. Although there are 19% of students who are not active in learning. Students who are less active in implementing learning are students who like to talk to themselves

with their friends, play alone and daydream.

Reflection

The reflection stage carried out by researchers assisted by colleagues after the learning implementation was completed, namely on December 7, 2024. The reflection activity aims to analyze student learning outcomes, which turned out that the improvement of learning in cycle II experienced a rapid increase. Where student learning outcomes reached the minimum completion criteria, the average of which reached 70. Meanwhile, students who achieved KKM reached 98%, namely 11 students and those who had not achieved the KKM score were 2 students.

The level of learning achievement of children can be seen from the table above that 16 students were able to complete the value passing the KKM with a value of 70 and the average value of the learning improvement was 9.8 and 2 students had not completed the results of the learning improvements implemented, but the learning carried out in cycle II has reached the researcher's target. This means that learning in cycle II was declared successful, so the researcher determined that the learning improvement research was completed in cycle II.

Based on the provided references, the use of image media and visual aids can improve student learning outcomes in science subjects, particularly in the classification of animals based on their food types.

Several studies have demonstrated the effectiveness of using visual aids and multimedia in enhancing student learning and motivation [2]; [16]; [4]. The integration of visual elements, such as images, animations, and videos, has been shown to improve students' understanding, engagement, and retention of the subject matter [2]; [16]; [17].

Specifically, in the context of science education, the use of visual aids can help students better comprehend and relate to the concepts being taught [16]; [4]. For example, when learning about the classification of animals based on their food types, visual representations can assist students in making connections between the physical characteristics of the animals and their feeding habits [4].

Furthermore, the use of visual media has been found to be particularly beneficial for younger students and those who are more accustomed to visual communication [21]. This aligns with the notion that the current generation of students, who have grown up in the digital age, are more receptive to and engaged with visual learning approaches [21].

Additionally, the use of visual aids has been shown to improve students' higher-order thinking skills, such as inference, prediction, and evaluation [16]; [5]. This can be particularly valuable in science education, where critical thinking and problem-solving skills are essential.

The references also suggest that the effective use of visual aids requires careful planning and implementation by teachers [7]; [8]. Factors such as the relevance, clarity, and appropriateness of the visual materials, as well as the integration of these aids into the overall learning process, can contribute to their success in enhancing student learning [8]; [9].

In conclusion, the reviewed references provide strong evidence that the use of image media and visual aids can significantly improve student learning outcomes in science subjects, particularly in the classification of animals based on their food types. The visual nature of these aids can enhance students' understanding, engagement, and critical thinking skills, making the learning process more effective and engaging.

CONCLUSION

Fundamental finding : The study demonstrates that the use of image media significantly improves student learning outcomes in science, particularly in the topic of animal classification based on food types, with notable improvements observed in Cycle II. The visual aids provided clarity, helped conceptualize complex information, and fostered increased student engagement. **Implication** : These findings suggest that incorporating visual media into science education can enhance comprehension and participation, offering a practical strategy for improving teaching effectiveness. Teachers are encouraged to integrate such methods to create a more dynamic and interactive learning environment. **Limitation** : This study was conducted in a single classroom, and the results may not be generalizable across different schools or subjects. Additionally, the study was limited to the use of photo-based media, without exploring other forms of visual aids or technological tools. **Future research** : Future studies should explore the use of diverse multimedia tools in varied educational settings and examine their long-term impact on student learning. Additionally, research could investigate how different types of visual media affect learning outcomes across various cognitive levels and subjects.

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