

# Improvement of Science Learning Outcomes Classification Material Animals Based on Their Diet Through Interactive Learning Model Type of Picture and Picture

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DOI : <https://doi.org/10.61796/ejheaa.v2i10.1396>



## Sections Info

### Article history:

Submitted: June 30, 2025

Final Revised: July 07, 2025

Accepted: July 14, 2025

Published: August 01, 2025

### Keywords:

Interactive picture and picture type

Learning outcomes

Improvement

Students

## ABSTRACT

**Objective:** The purpose of this study was to obtain data on improving science learning outcomes on the classification of animals based on the type of food through the picture and picture type interactive learning model. In class IV students at SDN Teluk Pucung III, North Bekasi. **Method:** This research method uses classroom action research with a target research design. This research was conducted in 2 cycles. Each cycle consists of 4 stages, namely planning, implementation, observation and reflection. The research time was 3 months, from April 2023 to June 2023 with 35 research subjects, while data was collected through tests, observations, interviews and documentation. **Results:** The results showed that there was an increase in science learning outcomes in fourth grade students. This is evidenced by the average results of the Science test in each cycle, namely the pre-action average value = 64.1, the first cycle = 72.3 and the second cycle = 8.64. While research can be said to be successful if the completeness results obtained by students reach the average criteria determined by the researcher, namely 75%. **Novelty:** This study concludes that learning science materials for classifying animals based on the type of food through the picture and picture type interactive learning model for improving student learning outcomes at SDN Teluk Pucung III, Bekasi.

## INTRODUCTION

Elementary School or Madrasah Ibtidaiyah is one of the levels of basic education in Indonesia that organizes an educational program for 6 years [1], [2], [3], [4], [5]. Elementary School or Madrasah Ibtidaiyah is a very important level of education for every Indonesian citizen to experience, because through education in elementary school a person can obtain basic skills that can be used for an even higher level. The success of education in elementary / MI greatly affects success at a higher level, therefore the quality of education in elementary / MI must always be fostered so that it becomes a quality elementary / MI [5], [6], [7], [8], [9], [10].

Therefore, the role of teachers in developing learning activities is very decisive in shaping students' activeness in learning. However, teachers at SDN Teluk Pucung III tend to use the teaching method with lectures so that students seem bored and inactive in the classroom which makes students tend to be passive and inactive, not focused on the learning that is taking place.

The learning and learning outcomes of students at SDN Teluk Pucung III in the learning process are still low. Students have not been able to develop their ability to carry

out learning activities well, such as discussing, asking questions and expressing opinions to solve a problem, so students only tend to accept lessons. In addition, teachers also provide lessons in a form that does not vary can cause students to become bored during the lesson, so it can be a trigger for students to find it difficult to accept lessons in class.

The development of various learning models is also intended to foster and increase the motivation to learn from students, so that they are not saturated with the ongoing learning process. After studying the material on classifying animals based on the type of food, students are expected to be able to draw conclusions from the activity that the classification of animals/animals based on the type of food is divided into 3 (three) types, namely herbivores (plant-eating animals), carnivores (meat-eating animals), and omnivores (all-eating animals).

From the problems raised above, it is necessary to find a new model in science learning that involves students actively organizing that involves mastering competencies that must be student-centered, provide lessons and learning experiences that are relevant in real life and develop a rich and strong mentality in students.

The interactive learning model aims to create active learning by inviting students to be involved in the learning process. The questions that arise from students are used by teachers to find out the student's initial knowledge. Here, the teacher plays a role in guiding students so that their questions do not deviate from the learning objectives. The questions raised by students show the students' curiosity about the topic to be discussed.

## RESEARCH METHOD

The research aims to improve the learning outcomes of natural sciences (IPA) in the material of classifying animals based on their food through a learning model *Interactive picture and picture type* fourth grade students of SDN Teluk Pucung III Bekasi.

In accordance with the selected research design, namely class action research, this study uses the action research model of Kemmis and McManis, which is in the form of a spiral from one cycle to the next. Each cycle includes *planning, action, observation, and reflection* [11], [12], [13]. The next step in the cycle is revised planning, action, observation, and reflection. Before entering the first cycle, preliminary actions were carried out in the form of identifying problems [14], [15].

The data collection techniques in this study use tests, observations and documentation. The data that has been collected through the test is used to measure the improvement of student learning outcomes. Observation data is used to determine the improvement of student learning outcomes for the subject matter taught and as information in taking into consideration in efforts to improve existing weaknesses.

The indicator of the learning process set in this study is if the involvement of teachers and students in the learning process reaches 75% (sufficient criteria). The indicators of the learning process in this study will be seen from the percentage of success of the action based on score data obtained from the observation results of teachers/researchers and students. To calculate the observation of teacher/researcher

and student activities, the formula for calculating the activities of students and teachers according to arikunto can be explained as follows:

$$\text{Percentage\%} = \frac{\text{Total score} \times 100}{\text{Total score}}$$

## RESULTS AND DISCUSSION

Classroom action research was carried out in 2 cycles each cycle 2 times of meeting and each cycle consisted of 4 stages, namely planning, implementation, observation and reflection. This research was carried out with the aim of improving the learning outcomes of science of animal classification materials based on the type of food through an interactive picture and picture learning model.

The implementation of this class action research was carried out in cycle II. Each cycle is held 2 meetings. Cycle I will be held on April 26 and April 28, 2023, while cycle II will be held on May 9 and May 16.

### 1. Cycle I

From the results of the actions carried out in the first cycle, it can be seen that there is an increase in student learning completeness compared to the results obtained before the action. Before the researcher made improvements, data was obtained on students who achieved scores below the predetermined KKM as many as 21 students or 60% while those who received complete scores were 14 students or 40%, out of a total of 35 students with an average score

The average obtained is 62.4. In the first cycle, the researcher (teacher) also observed the activities of students using 6 aspects for students and 9 aspects for teachers. The results obtained from the observation of students in the implementation of the first cycle were 64% with the category of adequate. Meanwhile, the results of the observation of teachers in the first cycle were 75% in the good category.

### 2. Cycle II

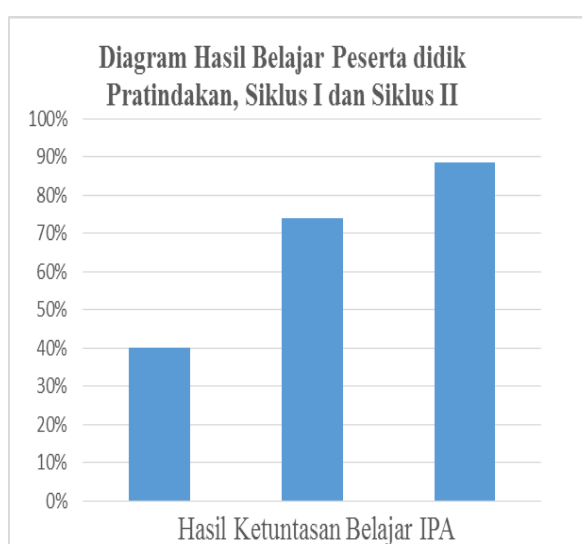
Cycle II was carried out in 2 meetings to make improvements from cycle I. Improvements made include teachers starting learning by perceiving students by providing questions related to students' experiences in daily life. students in their daily lives.

From the results of the improvement of cycle II, it can be seen that there is a significant increase in learning outcomes compared to the data in cycle I. Data obtained from the post-test cycle II of 31 students who got a complete score or 88.5% and 4 students who got a score of less than kkm or 11% with an average score of 8.64. From the completeness of the learning results obtained in cycle II, it has shown success in improving the learning outcomes of science of animal classification materials based on their food type through an interactive learning model *of the picture and picture type*.

**Table 1.** Recapitulation of science learning outcomes-pre-action, cycle I and cycle II.

Yes	Criterion	Value		
		Pre-Actions	Cycle I	Cycle II
1	Total Value	2,185	2,550	3025
2	Average Score	62,4	72,3	8,64
3	Number of Students	35	35	35
4	Conclusion	14	26	31
5	Incomplete	21	9	4
6	Percentage	40%	74%	88,5%

As for being clearer, it can be illustrated with a diagram of learning outcomes obtained in pre-action, cycle I and cycle II, namely:



**Figure 1.** Diagram recapitulation of science learning outcomes-pre-action, cycle I and cycle II.

## ACKNOWLEDGEMENT

Thank you to the lecturer who teaches the Educational research method has contributed a lot and contributed to the completion of this Article.

## CONCLUSION

**Fundamental Finding :** In this class action research, the researcher conducts research on student learning outcomes by conducting 4 stages, namely planning, implementation, observation and reflection. Data obtained by the researcher before the action showed that there were low student learning outcomes at SDN Teluk Pucung III in grade IV students, namely 21 students who got a score below KKM or 60% and 14 students who got a complete score or 40%. So the researcher decided to make improvements. After the researcher made improvements according to the plan that had been made, the completeness of learning outcomes increased by 34%, students who

completed in the first cycle as many as 26 or 74.2% and who received incomplete scores as many as 9 students or 26% with an average score of 73%. **Implication :** In the first cycle, the learning completeness of students increased by 34.2%. Meanwhile, student activities in the first cycle got 69% with the good category and teachers got 75% with the very good category. This indicates that the implementation of the action plan had a significant positive impact on both student performance and engagement, as well as teacher effectiveness in facilitating learning. **Limitation :** However, although improvements were evident, the fact that 9 students or 26% still did not meet the required learning completeness in the first cycle indicates that the intervention did not fully address all student needs. This suggests variability in individual learning responses that may be influenced by other unmeasured factors. **Future Research :** In cycle II, students get an increased completeness of learning outcomes from cycle I. It can be seen that of the 35 students who got a complete score of 31 or 88% and those who did not complete, there were 4 students or 11% with an average score obtained from the learning outcomes of cycle II was 86.4%. Future research can explore deeper instructional strategies or differentiated interventions to support the remaining students who have yet to meet the expected outcomes.

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