

IMPROVING THE LEARNING OUTCOMES OF NATURAL SCIENCES MATERIAL CLASSIFICATION OF ANIMALS BASED ON TYPE OF FOOD THROUGH *PICTURE AND PICTURE* METHOD

Oktakori Pratiwi*, Sarah Wulan, Syamzah Ayuningrum
Elementary School Teacher Education, STKIP Kusuma Negara Jakarta, Indonesia

Oktakori28@gmail.com

Abstract

This study is motivated by the low learning outcomes of students in the process of learning IPA animal classification material based on the type of food carried out in class III SDN Kalisari 01 East Jakarta. The picture and picture method is a method of presenting lessons by showing pictures to students about classifying animals based on their type of food, either actually or just an imitation that is carried out both in the classroom and outside the classroom. The purpose of this study was to improve science learning outcomes on the material of classifying animals based on their food types using the picture and picture method for third grade students in even semesters of the 2022/2023 school year. This research method is a classroom action assessment that follows the Kemmis Taggart mode. The research time was 1 month, namely in May 2023 with a research subject of 32 students, while the data collected through tests, interviews, and observations. The results showed that there was a significant increase in science learning outcomes in grade III students. This is evidenced by the average results of science tests in each cycle increasing in cycle I = 70 and cycle II = 78.50 and the results of interviews conducted concluded that learning science with the picture and picture method is fun for students. This study concludes that learning science using the *picture and picture* method can improve students' science learning outcomes.

Keywords: Science learning outcomes, *picture and picture* method.

1 INTRODUCTION

Basically, when students learn, they often experience learning difficulties. Usually, this learning difficulty is caused by inappropriate learning media or even teachers still not utilizing the role of learning media in the continuity of the learning process. So that the understanding of what he learns decreases and affects the learning outcomes he achieves.

For educators, learning Indonesian is a challenge. In learning Indonesian is one of the fields for students to learn about good morals. Given that Indonesian is a language of instruction or a link in everyday life, including in the learning process in some schools. Indonesian language learning has a function as a means of conveying ideas and feelings. As well as building good language that can be used in society. Students can express their ideas and feelings with a variety of different imaginatives for each student.

However, the reality in the field during observations at SDN Kalisari 01, there are still problems in thematic learning of Indonesian language content. One of them is the competency of digging for information. Among students, especially in grade

IIID elementary school students who get learning that contains the competence of digging information. In this case, it still shows a lack of student understanding of the competency of extracting information from a reading so that it affects the learning outcomes obtained.

Based on the results of observations made by researchers in the field on January 19, 2023. Shows that in SDN Kalisari 01 students in class IIID with a total of 32 students, from the learning outcomes obtained, the value of Indonesian language on the competency of extracting information from a reading is still low with a standard Minimum Criteria Completeness (KKM) value of 71, obtained as many as 25% of students who reach the KKM value and 75% of students have not reached the KKM value. This is because the teaching and learning process has no appropriate learning media assistance. By not using the appropriate media, the learning process becomes less enjoyable so that this has an impact on students who do not understand the material being studied and the value of learning outcomes obtained in Indonesian language content on the competency of extracting information there are still those who have not reached the KKM standard value.

So far, the learning used by teachers in their classes still uses a relatively fixed type of learning (monotonous) every time they teach, especially the competency of digging for information. That is learning that does not utilize learning media as a support for enjoyable learning. In lessons conducted in class, teachers usually only provide relatively large and long readings and then students are immediately instructed to dig up any information obtained from the reading. As a result, there are still many students found in the results of digging up information that does not match the standard value of KKM. Before students work on practice questions, generally teachers have explained the purpose of the competency of digging up information, but in reality students' understanding is still low. Such as despair when looking at long and dense text reading, low interest in reading, and confused about what information to get. Along with the ability to dig up information that is low, it affects the learning outcomes obtained by students. This study aims to improve the learning outcomes of Indonesian language competence in digging for information through picture story media in class IIID Semester II Academic Year 2022/2023 SDN Kalisari 01 East Jakarta.

The definition of learning outcomes according to Hamalik (Arsyi Midanda, 2018) argues that learning outcomes will appear in every aspect - aspects: knowledge, understanding, habits, skills, appreciation, emotional, social, physical, ethical or ethical relationships, and attitudes. Nana Sudjana's understanding (Haryanto, 2022) explains that what is meant by learning outcomes is essentially a change in behavior as evidence of learning outcomes, in a sense that includes the cognitive, affective and psychomotor fields. In line with Bloom (2021) who says that learning outcomes include cognitive, affective and psychomotor abilities. The process in learning involves students in solving problems, expressing opinions (cognitive), involving students to make decisions (affective) and student involvement in the use of tools in learning (psychomotor) Continued according to Dimyati and Mudjono (Tuti Supatminingsih, 2020) they argue that learning outcomes are results that have been achieved in the form of numbers or in the form of scores after being given a learning outcome test at the end of each learning process.

According to E. Mulyasa, the picture and picture method is one form of cooperative learning model. The cooperative learning model is a learning model that prioritizes groups. Cooperative learning is learning that consciously and systematically develops interactions that are mutually sharpening, a learning method that uses pictures and paired/sorted into a logical sequence. (Mulyasa, 2011)

Natural science is a translation of the English words natural science, which means science (IPA). Natural science is a science such as facts, concepts, ways of thinking, and how we solve problems. Natural science (IPA) is a natural learning concept that has to do with everyday life to be able to foster student interest in learning and make

it easier for students to understand the material to be conveyed, one of the ways that can be used by teachers is by using learning methods. Learning methods are very necessary and support the realization of a learning goal, so an appropriate and appropriate method is needed to make it easier for students to understand the material.

The results of preliminary observations that researchers took during observations of third grade students at SDN Kalisari 01 East Jakarta, found that student learning outcomes were less than satisfactory out of 32 students, there were only 8 students whose scores were above the KKM 71. The remaining 24 students scored below the KKM, so there is a need for method assistance.

Based on observations in the field, when learning natural science (IPA), the problems found include the lack of use of learning methods and media in science lessons. This results in a sense of boredom and boredom and cannot even concentrate in participating in learning so that it can cause a decrease in learning outcomes. Material that is felt to be too much can also cause students to be lazy to learn the material, methods that are not appropriate and are just watching the teacher explain using the lecture method can also affect student learning outcomes. In addition, students are less enthusiastic in participating in the learning process caused by several internal factors from students

2 RESEARCH METHODS

The action research method used in problem solving is Classroom Action Research. In principle, *Classroom Action Research* is applied to overcome a problem that exists in the classroom. Classroom Action Research (PTK) is a form of collaborative research conducted by educators to improve the learning process carried out to improve student learning outcomes through stages known as cycles. (STKIP Kusuma Negara Lecturer Team, 2015). *Kemmis & Mc Taggart* define that: classroom action research as a form of study or inquiry through self-reflection carried out by certain participants in educational activities (for example teachers or principals) in social situations (including education) to improve the rationality and truth and validity of (a) their own educational social practices, (b) their understanding of these practices, and (c) the institutional situation in which these practices are carried out.

According to Arikunto, class action research is an observation of learning activities in the form of an action that is deliberately raised and occurs in a class together. Meanwhile, according to

Zainal Aqib, PTK is research conducted by teachers in the classroom (school) where they teach with an emphasis on improving or improving learning processes and praxis.(Arikuntoro: Suharmisi, 2013)

The subjects of this study were third grade students of SDN Kalisari01 East Jakarta as many as 32 students. Data collection techniques in this study were observation, test assessment, interviews and documentation.

The instruments used in this research are test assessment instruments, activity observation instruments and student attitudes. Pre-cycle assessment was taken from teacher data, cycle 1 as many as 10 multiple choice questions, cycle 2 as many as 10 fill-in questions. Student observation instruments as many as 2 aspects were observed in the learning process that took place with point levels.

3 RESULT AND DISCUSSION

The results of this study have gone through the pre-cycle, cycle I, and cycle III stages which were carried out from February to April 2023

3.1 Results

This research was conducted in 2 cycles, each cycle is 2 learning meetings. In each cycle, researchers have prepared questions in the form of multiple questions and essays. In cycle 1 as many as 10 multiple questions, cycle 2 as many as 10 essay questions. The learning process in cycles 1 and 2 uses 5 stages of learning using the picture and picture method, namely orientation to the problem, explaining the problem, solving the problem, comparing and discussing answers, and concluding the learning outcomes.

3.1.1 Sub dari Sub Hasil 1 (10pt)

Based on the results found by researchers from the implementation of the pre-cycle of 32 class III students, only 8 people (25%) reached the completion value while the remaining 24 people (75%) did not complete. The class average score was 54.91 which was still far from the KKM (minimum completeness criteria) which amounted to

71. Learning conditions in the classroom directly affect student learning outcomes, so researchers intend to conduct classroom action research using the *picture and picture* method. Based on observations, several things are known:

- a. The condition of the face-to-face meeting that has just started makes the class atmosphere not yet conducive
- b. Teachers lack preparation before teaching
- c. The teacher mostly uses the lecture method
- d. The teacher does not use interesting media

The things mentioned above that may result in various problems in science learning are as follows:

- a. The class atmosphere is lively with chatter
- b. Students are sleepy during the learning process
- c. Students easily forget the material taught
- d. Students tend to be passive

It is necessary to apply other methods that are more in line with the problems faced, one of which is the application of experimental methods. The picture and picture method is applied to a class action research that starts from cycle I as an initial step

3.1.2 Cycle I Results

From the results of the implementation of actions in cycle I, there was an increase in student learning outcomes when compared to the pre-cycle results, but the increase was not optimal, because the percentage of learning completeness only reached 50%, meaning that out of 32 students there were still 15 students whose scores had not reached the KKM and 17 students whose scores were above the KKM. So it is necessary to revise learning in an effort to improve science learning outcomes in the next lesson. In cycle I after observing the learning actions in the classroom, then a reflection of the classroom actions that have been carried out is carried out.

In the activities in cycle I, the following reflection results were obtained:

- a. The test results show that there are still 12 students who have not completed and learning completeness is only 50%. So that learning completeness is still far from the predetermined standards.

- b. Students lack cooperation in terms of discussion, because there are still students who play alone.
- c. Each group of students was less prepared to present their experimental results.
- d. Students are not yet confident and are still hesitant and less fluent in conveying the results of the discussion in front of the class.

During the test there were still some students who looked at their friends' answers.

3.1.3. Cycle II results

From the results of the implementation of actions in cycle II, it can be seen that the learning process carried out by researchers has gone well. Student learning activities and science learning outcomes of grade III students have increased. The average student learning outcomes of the class have reached 82.06, with the percentage of completeness of student learning outcomes has reached 91%. From the reflection that has been done in cycle II, the researcher decided to complete the research in cycle III because the target had been achieved.

3.2 Discussion

The implementation of the action refers to the data obtained during the pre-action stage. Data on pre-action in the form of learning outcomes of grade III students, the cause of low student science learning outcomes due to low understanding of concepts. Students feel bored in participating in science learning because the teacher only uses the lecture method so there is a lack of variety.

The application of the picture and picture method in science lessons on animal classification material based on the type of food has shown that the learning process can be done well through improvements made in each cycle. Based on the results of observations in cycles I, II, the following results were obtained:

In the pre-cycle, student learning completeness was only 25% then in cycle I it increased by 50% but did not reach the specified learning completeness in cycle II learning completeness 91% researchers decided to complete the research in cycle II because the target had been achieved.

Based on the results of reflection or evaluation from cycle I to II, the application of the picture and picture learning method in the material of classifying animals based on their food types provides opportunities for students to work in small groups to solve or solve problems together. With group discussions students feel happy and excited in learning. This method, which previously made it difficult for students to do their own tasks, became easier because they could work together with their group. The formation of heterogeneous groups adds to the enthusiasm for learning so that students are more motivated to think about solving problems with their group members.

Based on the above description that has been developed, it can be stated that the application of experimental methods can improve students' science learning outcomes. Because this experimental method is easily understood by students and makes it easier for students to understand learning materials. By Thus, the use of the *picture and picture* method can be an alternative method of learning science material for classifying animals based on their food types, especially in grade III SD. Therefore, it can be concluded that there is a significant increase in research data on student learning outcomes, so this research is considered successful.

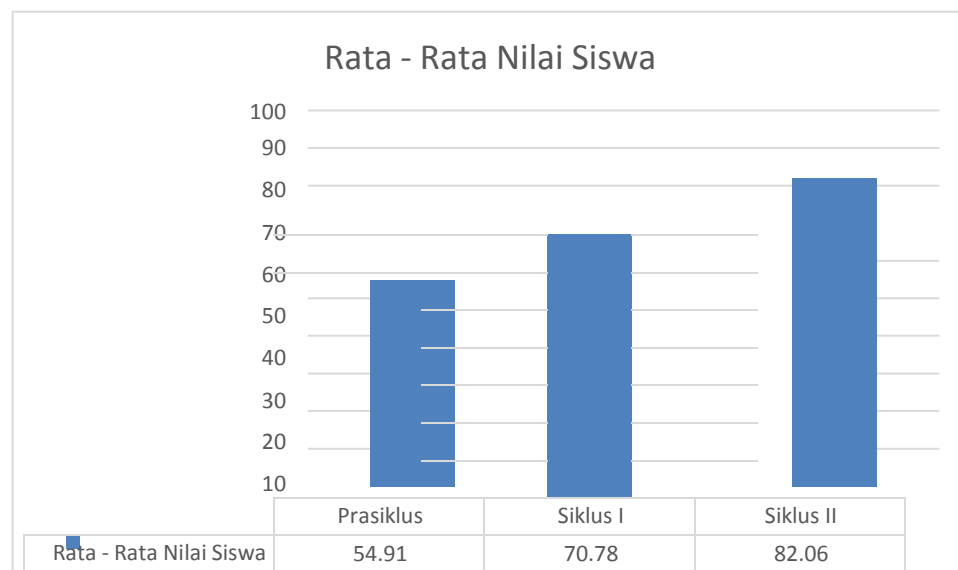
3.3 Table

Tabel 1. Results Comparison Table

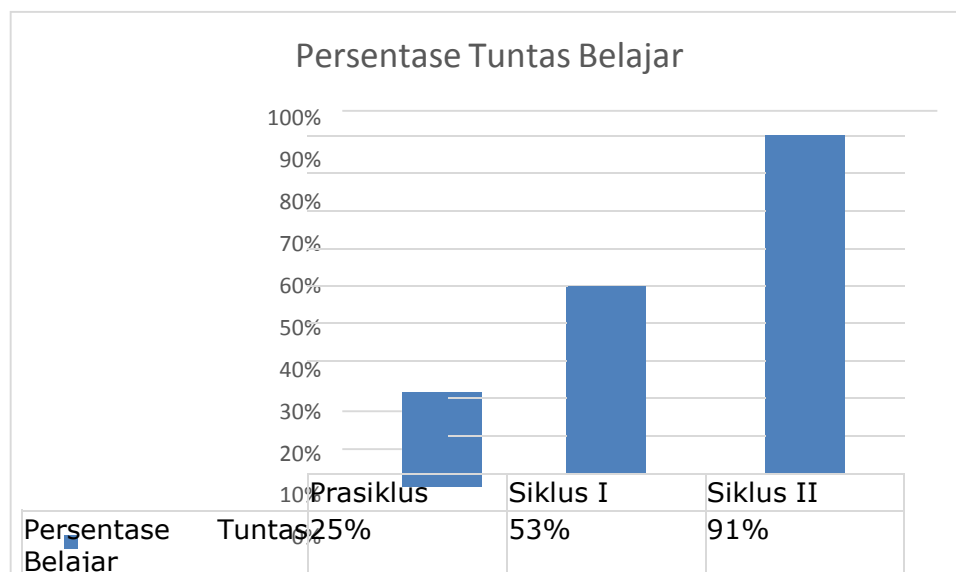
Stage	Number of Students Completed	Number of Incomplete Students	Average Score	Percentage of Classical Completion
Pre-cycle	8	24	54,91	25%
Cycle I	17	15	70,78	47%
Cycle II	30	2	82,06	91%

3.4 Image

To clarify the increase in learning outcomes obtained from Pre-Cycle to Cycle II, it can be seen in the graph below:



Gambar 1. Rata-rata Nilai Siswa



Gambar 2. Persentase Tuntas Belajar

This proves that with the application of the picture and picture method, an increase in learning outcomes is obtained which is followed by an increase and development of student behaviour during learning. The increase occurred due to the application of the picture and picture method as a learning tool in the subject of Natural Sciences competency classification of animals based on the type of food.

4 CONCLUSION

Based on the data obtained from the results of the research and the results of the discussion described earlier, it can be concluded that the picture and picture method can improve Indonesian learning outcomes on animal classification material based on their food types in class IIID SDN Kalisari 01 East Jakarta.

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