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## IMPROVING STUDENT ACTIVITY AND LEARNING RESULTS IN NATURAL SCIENCE CONTENT THROUGH PICTURE AND PICTURE METHOD

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### ABSTRACT

*The selection of appropriate learning methods has a major effect on improving the quality of education. The purpose of this study was to determine how much increase in activity and learning outcomes of fourth grade students of SD Negeri Kamal 3 after applying the picture and picture method. The research data was taken using test, observation, and documentation techniques and then analyzed using an interactive model which has three components, namely data presentation, data reduction, and drawing conclusions. The results of this study indicate an increase in the score of student activity and learning outcomes after applying the picture and picture method. At the end of the cycle the percentage of students who actively asked, answered, and carried out the teacher's orders achieved high scores of 87%, 93%, and 93%, respectively. At the end of cycle II, it also shows that all students have finished studying so that the class can be said to have completed classically. Based on the results of this study, it can be concluded that the application of the picture and picture method can increase the activity and learning outcomes of fourth grade students at SD Negeri Kamal 3.*

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### ARTICLE INFO

**Article History:**

Received 07 Jul 2022

Revised 17 Jul 2021

Accepted 19 Jul 2021

Available online 19 Jul 2021

**Keyword :**

Keyword 1, Activity Outcomes

Keyword 2, Learning Outcomes

Keyword 3, Picture and Picture

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## **A. INTRODUCTION**

Education is an important process that must be taken by humans to be able to live their lives well and of higher quality (Sidik, 2016). Education can also be interpreted as a process of developing one's self-quality (Arianti, 2018). Therefore, all efforts to improve the quality of education are crucial and much discussed. Based on Government Regulation No. 32 of 2013 explains that in the form of life, the intelligence of the nation and state must have a national commitment to improve quality and competitiveness by rearranging Graduate Competency Standards, content, processes and assessments, as well as curriculum.

In terms of improving the quality of education, educators or teachers as educational actors in charge of providing direct learning to students have a very important and crucial role. The basic thing that an educator must do is to generate motivation, attention, and interest in students following new learning, provide a good atmosphere and conditions in order to carry out the learning process, and be able to identify obstacles that arise in the learning. Some of these things are prepared in such a way as to achieve the learning objectives that have been formulated. The learning objectives this time were identified in cognitive, affective, and psychomotor goals (Magdalena et al., 2020). If students are not maximal in these three goals, it means that an educator has not fully provided learning references to students.

The success of teachers in learning can be measured from student learning outcomes. Based on the results of observations made by researchers in class IV SDN 3 Kamal, that most of the students are passive and do not respond well to communication from the teacher. Most of the students were seen taking notes more often and were silent when learning. In the class, discussions and questions and answers did not go as well as they should. This is an indicator of the meaninglessness of learning. This further has an impact on student learning outcomes which also become low. This impact occurs because the learning process is not meaningful and only one-way where the teacher only transfers material from the teacher to students and students also do not proactively build and construct their own learning which also has an impact on student learning outcomes which tend to be low because they do not understand the subject matter.

The selection of learning methods is one of the things that can affect student activity and learning outcomes during learning. According to (Asna, 2019), one of the learning models that can increase students' attention and focus is the picture

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and picture learning model. The picture and picture method is a learning method that uses pictures and is paired/sorted into a logical sequence (Kuraedah & Saliadin, 2016). The application of this method is expected to make the classroom atmosphere more active and meaningful so that student learning outcomes increase. Therefore, the researchers conducted classroom action research which aims to find out how much activity and learning outcomes increase in fourth grade students at SDN 3 Kamal 3 on theme IV science learning content when using the picture and picture method.

## **B. METHOD**

This research is a type of classroom action research. Classroom action research is research conducted by applying a special treatment or action to improve something that is not optimal and improve the quality of learning (Mu'alimin & Cahyadi, 2014). In this CAR, the researcher uses classroom action research procedures in the form of cycles and spirals. The research will be carried out in two cycles, each cycle consisting of 4 actions. The CAR design that the researcher uses is the Kemmis and Mc model design. Taggart. The stages of the Kemmis and Mc. This taggart is the stages of planning, implementation, observation, and reflection (Wulandari, 2017). Data collection techniques used in this study were tests, observations, and documentation. The data obtained, then analyzed using an interactive model that has three components, namely data presentation, data reduction, and drawing conclusions.

## **C. RESULT AND DISCUSSION**

### **1. Precycle**

At this stage the researchers conducted a preliminary study related to learning at SD Negeri Bungulow. From this stage, it was found the problem of low student learning outcomes in science content. Researchers conduct a pre-survey to the class to find out in detail the conditions contained in a class to be studied. From the results of the pre-survey, researchers obtained findings related to many students who have low learning outcomes in theme IV, especially in science learning content. From these problems, the researchers then planned classroom action research by applying the picture and picture method.

## 2. Cycle I

In this cycle, the previous researcher planned in the form of a learning scenario. The implementation of this research consists of the process of teaching and learning activities, evaluation and reflection which are carried out at the end of the cycle. In the first cycle, the researcher carried out teaching and learning activities using the picture and picture method. Here are some data obtained in cycle I:

**Table 1.** Student Observations When Applying the Picture and Picture Method

No.	Students Name	Students Activity					Description
		1	2	3	4	5	
1.	Ahmad Fikri			√			1. Actively ask 2. Actively answer 3. Carry out orders 4. Chat 5. Just shut up
2.	Bian Rejaki			√		√	
3.	Deri Setiana					√	
4.	Destiana Regina Putri			√	√		
5.	Elsa Rismayanti	√	√	√			
6.	Fathur Aditya Putra	√	√	√			
7.	Fitri Rahma Ramdani	√	√	√			
8.	Lia Apriliani	√	√	√	√		
9.	Melani Austina Putri			√	√		
10.	Nena Sabila Marisa				√		
11.	Rafik Aziz		√	√		√	
12.	Ramdan Maulana	√	√			√	
13.	Reivaldi Arya Prasetyo			√	√		
14.	Syam Ilham	√	√	√			
15.	Toni Abdul Pahreji			√		√	
16.	Zafna Medina Abdulla	√	√	√			
Amount		7	8	13	5	5	
Precentage		43%	50%	81%	31%	31%	

Based on the observation sheet, student activities are in the poor category with the results of students who actively ask as many as 43%, students who actively answer by 50%, students who carry out orders by 81%, students who chat by 31% and students who are silent or not active by 31%.

**Table 2.** Cycle 1 learning outcomes

No.	Students Name	Score	Completeness
1.	Ahmad Fikri	70	Complete
2.	Bian Rejaki	58	Not Complete
3.	Deri Setiana	58	Not Complete
4.	Destiana Regina Putri	74	Complete
5.	Elsa Rismayanti	78	Complete
6.	Fathur Aditya Putra	70	Complete
7.	Fitri Rahma Ramdani	77	Complete
8.	Lia Apriliani	74	Complete
9.	Melani Austina Putri	72	Complete
10.	Nena Sabila Marisa	70	Complete
11.	Rafik Aziz	68	Not Complete
12.	Ramdan Maulana	66	Not Complete
13.	Reivaldi Arya Prasetyo	56	Not Complete

14.	Syam Ilham	81	Complete
15.	Toni Abdul Pahreji	57	Not Complete
16.	Zafna Medina Abdulla	75	Complete
Total score		1104	
Average		69	
Lowest Score		56	
Highest Score		81	
Number of students completed		10	
Number of students not completed		6	
Complete presentation		62,5 %	
Percentage of incompleteness		37,5 %	

The table above shows that the average student learning outcomes still show a value below the minimum completeness criteria applied in schools (KKM = 70) which only shows a score of 69. In addition, the number of students who complete is only 16 students with a percentage of 62.5%. Referring to the theory (Trianto, 2012), that a class is declared classically complete if the percentage of students' completeness is 85%, then the percentage of students' completeness in the table above shows that the class is still not classically completed.

Because some of the success targets designed by researchers have not been fully achieved, such as student activity scores including actively asking, answering, and carrying out orders which are still below the percentage of 85% and the number of students who have completed learning which is still below the percentage of 85% so that it is still categorized as classically incomplete, the researcher repeat the action in cycle II. This is in accordance with what was stated (Mulyatiningsih, 2015), that if the success target designed by the researcher has not been achieved, the researcher may repeat the action again in cycle II.

### 3. Cycle II

**Tabel 3.** Student Observations When Applying the Picture and Picture Method

No.	Students Name	Students Activity					Description
		1	2	3	4	5	
1.	Ahmad Fikri	√	√	√			1. Actively ask 2. Actively answer 3. Carry out orders 4. Chat 5. Just shut up
2.	Bian Rejaki	√	√	√			
3.	Deri Setiana			√		√	
4.	Destiana Regina Putri	√	√	√			
5.	Elsa Rismayanti	√	√	√			
6.	Fathur Aditya Putra	√	√	√			
7.	Fitri Rahma Ramdani	√	√	√			
8.	Lia Apriliani	√	√	√			
9.	Melani Austina Putri	√	√	√			
10.	Nena Sabila Marisa	√	√		√		
11.	Rafik Aziz		√	√			
12.	Ramdan Maulana	√	√	√			
13.	Reivaldi Arya Prasetio	√	√	√			
14.	Syam Ilham	√	√	√			
15.	Toni Abdul Pahreji	√	√	√			

16	Zafna Medina Abdulla	√	√	√		
Amount		14	15	15	1	1
Percentage		87%	93%	93%	6%	6%

Based on the observation sheet, the activeness of students in asking, answering, and carrying out orders has increased, each reaching a value of 87%, 93%, 93%. The number of students who chat in class and remain silent has decreased drastically, which is only 6%. Therefore, the target of success in the aspect of student activity in cycle II has been achieved.

**Table 4.** Cycle II Learning Outcomes

No.	Students Name	Score	Completeness
1.	Ahmad Fikri	87	Complete
2.	Bian Rejaki	78	Complete
3.	Deri Setiana	80	Complete
4.	Destiana Regina Putri	90	Complete
5.	Elsa Rismayanti	92	Complete
6.	Fathur Aditya Putra	80	Complete
7.	Fitri Rahma Ramdani	85	Complete
8.	Lia Apriliani	87	Complete
9.	Melani Austina Putri	83	Complete
10.	Nena Sabila Marisa	75	Complete
11.	Rafik Aziz	74	Complete
12.	Ramdan Maulana	78	Complete
13.	Reivaldi Arya Prasetio	78	Complete
14.	Syam Ilham	90	Complete
15.	Toni Abdul Pahreji	82	Complete
16.	Zafna Medina Abdulla	85	Complete
Total score		1324	
Average		82,75	
Lowest Score		74	
Highest Score		92	
Number of students completed		16	
Number of students not completed		0	
Complete presentation		100 %	
Percentage of incompleteness		0 %	

From the table above, there is an increase in the average learning outcome to 82.75%. This score indicates a value above the KKM. In addition, in the second cycle, all students finished studying with a 100% completeness percentage. If referring to the theory (Trianto, 2012), then this percentage indicates that the class can be said to be classically complete. Because the target formulated by the researcher has been achieved, after this action is not carried out again. Based on the results of the research conducted, it can be concluded that the picture and picture method can increase student activity and learning outcomes.

#### **D. CONCLUSION**

Based on the results of the research obtained, it can be concluded that the picture and picture method can increase the activity and learning outcomes of fourth grade students at SDN Kamal 3 in learning theme 4. This is evidenced This is evidenced by the increase in student activity scores and learning outcomes in each cycle. In cycle II the percentage of students who are actively asking, answering, and carrying out the teacher's orders achieved high scores, namely 87%, 93%, and 93% respectively. Students who are more active in class ultimately result in more meaningful learning so that learning outcomes also increase. At the end of cycle II, it shows that all students have finished studying so that the class can be said to have completed classically.

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