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Learning Outcomes of Subject Matter: 'My Indonesia is Rich in Culture' Through Cooperative Learning

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Abstract

This study was conducted to improve science learning outcomes through the Picture and Picture type of Cooperative Learning model for fourth-grade students at SDN Cijantung 03 Pagi. This research utilized Classroom Action Research (CAR) with a mixed-method approach. Data were collected through teacher observation sheets, student observation sheets, and learning outcome tests, analyzed using percentage formulas. The results showed that the initial condition of students' learning outcomes before using the Picture and Picture Cooperative Learning model had a learning percentage of 32% (Very Low). The learning process using the Picture and Picture Cooperative Learning model revealed that teacher activity during the first cycle reached 35.71% (Very Low), improved to 53.57% (Low) in the second cycle, and further increased to 82.14% (Very Good) in the third cycle. Additionally, student learning outcomes using the Picture and Picture model showed that the percentages were 35.71% (Very Low) in the first cycle, increased to 53.57% (Low) in the second cycle, and rose to 82.14% (High) in the third cycle. Thus, it can be concluded that the efforts to enhance science learning outcomes through the Picture and Picture Cooperative Learning model for fourth-grade students at SDN Cijantung 03 Pagi have been successful.

Keywords: Cooperative Learning Picture and Picture, Learning Outcomes, Natural and Social Sciences (IPAS), Primary Education

1 INTRODUCTION

This education provides students with the skills to develop themselves socially as they advance to the next level of education. Challenging and creativity-supporting learning encourages students to think critically, find solutions to complex problems, and generate new ideas. Education must be adaptive to the changing times, with a curriculum development that is responsive to advancements in technology, economy, society, and culture to prepare students for future demands.

In 2024, there will be changes with the introduction of a Competency-Based Curriculum, followed by the Education Unit Level Curriculum in 2006. In 2013, the government, through the Ministry of National Education, reverted to the 2013 Curriculum (Kurtilas), which was revised in 2018 to the Revised Kurtilas. Currently, Indonesia is introducing a new curriculum called the Merdeka Curriculum.

The Merdeka Curriculum is a new educational concept introduced in Indonesia. It emphasizes student independence, innovation, and creativity, while providing schools with the flexibility to develop a curriculum that meets local needs and the characteristics of their students. With the Merdeka Curriculum, the main goal is to prepare students to be independent, critical individuals ready to face challenges in today's global era. The Merdeka Curriculum includes mapping independent learning competency standards and minimal competency assessments, ensuring greater flexibility for educators to formulate learning designs and assessments according to the characteristics and needs of students. The advantages of the Merdeka Curriculum are that it is simpler and more in-depth, and teachers can teach according to the abilities and development levels of students. One of

the newly introduced subjects in the Merdeka Curriculum for elementary school students is Natural and Social Sciences (IPAS).

The IPAS education plays a role in realizing the Pancasila Student Profile, which serves as an ideal representation of Indonesian students. Through IPAS, students will understand the social context around them, including social structures, norms, and cultural values. This subject also encourages students to analyze diverse information and perspectives, develop critical and rational thinking, and adapt to ever-changing social dynamics. However, despite its importance, students often face difficulties in understanding IPAS because it is perceived as requiring extensive memorization, leading to low learning outcomes. Unengaging teaching methods also contribute to students' lack of interest in this subject, negatively impacting their learning outcomes in IPAS.

Learning outcomes are the tangible changes in student behavior that reflect the achievement of learning objectives. This involves cognitive, affective, and psychomotor aspects. As a form of information, learning outcomes help assess students' abilities to understand and master the material being taught. Learning outcomes are influenced by internal factors, such as the students' own abilities, as well as external factors, such as the quality of the learning process related to teachers' expertise and professionalism.

The success of IPAS learning can be seen in the teacher's competence in using the applied learning models in teaching the subject. According to Sutirman, learning models are essentially forms of instruction presented by the teacher from beginning to end. Therefore, it means that teachers should transfer knowledge in a way that is easily understood by students, making learning meaningful and achieving learning objectives. According to Musdiani, learning models should focus on increasing students' effective engagement in the learning process. Therefore, the researcher conducted observational activities in the learning activities of Class IV at SDN Cijantung 03 Pagi, followed by interviews with the fourth-grade teacher.

Based on the observations conducted in August 2023 in Class IV at SDN Cijantung 03 Pagi, with 28 students (14 boys and 14 girls), it was found that there are issues being faced in the learning process. The IPAS teacher still applies a teacher-centered learning (TCL) model, which focuses students on achieving specific performance targets in a relatively short time with a delivery system that is predominantly teacher-driven. Additionally, students tend to not pay attention to the teacher while explaining the material; they actively talk to their peers and engage in activities like playing with writing instruments, tapping on desks, and doodling on paper. Alongside this, interview results indicate that many students scored below The Learning Objectives Achievement Criteria (KKTP) in the IPAS daily tests on the subject matter "My Indonesia is Rich in Culture", with only 32% (9 students) meeting the KKTP completion standard, while 64% (19 students) did not meet it.

To address these issues and create a learning environment that encourages students to be active and creative during the learning process, the Cooperative Learning model type Picture and Picture will be implemented. According to Slavin, cooperative learning is a model where students learn and work in small collaborative groups of four to six members with a heterogeneous group structure. The application of the Picture and Picture type of Cooperative Learning model is deemed suitable for teaching the IPAS subject because, as Yuliana states, cooperative learning is an approach designed to encourage students to work together during the learning process. Furthermore, Woolfolk describes cooperative learning as an arrangement that allows students to collaborate in mixed-ability groups, where they receive recognition if their group achieves success. It is hoped that the use of the Picture and Picture type of Cooperative Learning model in IPAS learning for Class IV at SDN Cijantung 03 Pagi can enhance both teacher and student learning activities, as well as improve student learning outcomes.

Therefore, to address the above problems, teachers must shift from conventional teaching processes to active and creative learning strategies by using the Cooperative Learning model type Picture and Picture to teach the IPAS subject. It is expected that students will develop confidence and decision-making skills, solve problems, and increase

their enthusiasm for learning IPAS through this dynamic new learning model. For this reason, the researcher is interested in conducting a study titled "Efforts to Improve Learning Outcomes in IPAS Subject Matter: My Indonesia is Rich in Culture' Through the Cooperative Learning Model Type Picture and Picture."

2 RESEARCH METHODS

The research to be conducted is Classroom Action Research (CAR) carried out in the fourth-grade class at SDN Cijantung 03 Pagi. CAR focuses on the implementation of actions aimed at improving quality or solving problems faced by students. This research involves observing the level of success of the actions taken, followed by subsequent actions in the form of refinements or adjustments to achieve better results. According to Mulyasa, CAR is an effort to investigate the learning process of students through planned actions by the teacher to analyze the effects of those actions and improve the quality of learning. In line with this, Zainal Aqib and Ahmad Amrullah state that CAR is research conducted by teachers in the classroom where they teach, focusing on the improvement or enhancement of the learning process and practices. Thus, CAR can be summarized as research aimed at addressing obstacles in the learning process to improve quality and learning outcomes through ongoing actions. This research will be conducted in the fourth-grade class with a total of 28 students, using the Kemmis & McTaggart model. This model involves four steps in each cycle: planning, action, observation, and reflection. The research will be carried out in three cycles, with each cycle consisting of two meetings.

Data collection techniques and instruments in this study will be conducted through four stages: observation, interviews, tests, and documentation. Tests will be administered to students after the actions are implemented in the second meeting of each cycle. The tests will consist of individual tests with 20 multiple-choice questions. Data analysis in this Classroom Action Research consists of three stages: data reduction, data description, and data verification. The success of students' learning will be measured using the Learning Objective Achievement Criteria (LOAC), which is a score above 75, or achieving a minimum classical completeness score of 80%.

3 RESULT AND DISCUSSION

From the research that has been conducted, the results concerning the learning outcomes of the IPAS Subject Matter "My Rich Culture of Indonesia" for fourth-grade students in the second semester of the 2023/2024 academic year at SDN Cijantung 03 Pagi are as follows:

3.1 Result

Based on the results obtained in the pre-cycle, the average score of students in IPAS is still below The Learning Objectives Achievement Criteria (KKTP), with a score of 59.64. The breakdown of student scores is as follows: 1 student scored 35, 3 students scored 40, 2 students scored 45, 3 students scored 50, 2 students scored 55, 5 students scored 60, 3 students scored 65, 2 students scored 70, and 2 students scored 75. Meanwhile, The Learning Objectives Achievement Criteria (KKTP) is 75. This indicates that 75% of students still struggle to understand the material, while 25% of students are able to grasp it.

In Cycle I, two meetings were held. The average class test results for mathematics on the topic of three-dimensional shapes were still below The Learning Objectives Achievement Criteria (KKTP), with 13 students (46.43%) not reaching completeness, while the average class score was 65, and The Learning Objectives Achievement Criteria (KKTP) is 75.

In Cycle II, also conducted in two meetings, the learning outcomes improved, with an average class score of 73.93 and 10 students (35.71%) not yet completing the material.

The use of concrete learning media led to a significant improvement in learning outcomes, which coincided with a continuous increase in student enthusiasm.

In Cycle III, conducted over two meetings, the learning outcomes showed further improvement by utilizing the picture and picture learning model. The data revealed that in Cycle III, the average class score for IPAS on the subject matter "My Indonesia is Rich in Culture" exceeded The Learning Objectives Achievement Criteria (KKTP) at 83.21, with 4 students (14.29%) not yet completing the material and 24 students (85.71%) achieving completeness. This data indicates that 85% (24 students) have successfully understood the material.

3.2 Discussion

Based on research conducted in the fourth-grade class of SDN Cijantung 03 Pagi in August 2023, using the Cooperative Learning model of the Picture and Picture type over three cycles, focusing on pre-cycle activities, the learning process, and student learning outcomes in the IPAS subject, the following results were obtained:

3.1.1 Pre Cycle

Before conducting Classroom Action Research (CAR), the researcher carried out pre-cycle activities. According to Najib, this pre-cycle stage provides a reference point for the researcher in conducting the research. The pre-cycle stage was directly conducted by the researcher through observations of the teaching process by the fourth-grade teacher at SDN Cijantung 03 Pagi. From these observations, it was found that no new teaching models were being used by the teacher in classroom activities, making the learning process seem monotonous. This impacted the students' learning outcomes, as the classroom learning tended to be teacher-centered, with the teacher being more active and the students more passive. Below is the pre-cycle data from the results of students' daily tests on the t subject matter "My Indonesia is Rich in Culture" in the fourth-grade class at SDN Cijantung 03 Pagi, shown in Table 1.1

Table 1.1 Pre-Cycle Daily Test Results for IPAS Subject "Indonesiaku Kaya Budaya" in Fourth-Grade Class at SDN Cijantung 03 Pagi

No.	Student Name	Gender	Score	Complete/ Incomplete
1.	ACLK	P	40	Incomplete
2.	APA	P	60	Incomplete
3.	AHK	P	75	Complete
4.	ACM	L	60	Incomplete
5.	ATA	P	75	Complete
6.	AGAAAS	P	35	Incomplete
7.	ARL	P	40	Incomplete
8.	BA	P	70	Incomplete
9.	BCAF	P	65	Incomplete
10.	CRN	L	60	Incomplete
11.	DHW	L	60	Incomplete
12.	DZG	L	65	Incomplete
13.	EAI	P	50	Incomplete
14.	EAG	P	50	Incomplete
15.	EG	L	45	Incomplete
16.	FYA	L	60	Incomplete

No.	Student Name	Gender	Score	Complete/ Incomplete
17.	FAC	L	40	Incomplete
18.	INA	L	65	Incomplete
19.	KAF	L	75	Complete
20.	MAW	L	75	Complete
21.	MAA	L	70	Incomplete
22.	MIW	L	45	Incomplete
23.	MNAP	L	55	Incomplete
24.	NFP	P	75	Complete
25.	NDA	P	55	Incomplete
26.	NQAA	P	80	Complete
27.	NNSPKD	P	50	Incomplete
28.	RTN	L	75	Complete
Total			1670	Very Low
Average			59,64	
Percentage Of Student Learning Completeness			80	
Percentage Of Student Learning Incompleteness			35	

Based on Table 1.1, the average score of the students' daily test in the pre-cycle stage was 60. There were 7 students (25%) who achieved The Learning Objectives Achievement Criteria (KKTP), while 21 students (75%) did not meet the criteria (below KKTP). To better understand the students' learning mastery during the pre-cycle stage, refer to Diagram 1.1 below.

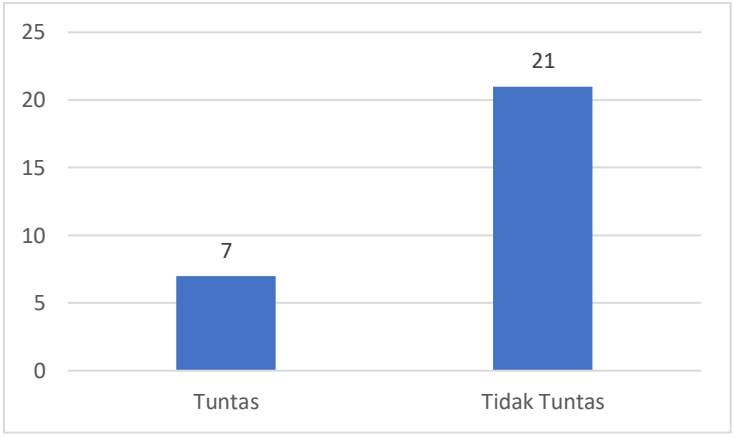

Diagram 1.1 Pre-Cycle Daily Test Results for IPAS Subject "Indonesiaku Kaya Budaya"

Diagram 1.1 shows that the low student learning outcomes from the daily test scores before the intervention indicated that 9 students (32%) achieved mastery learning. Therefore, based on the set success indicator, which requires the percentage of student mastery to exceed 80%, action is needed in Cycle I.

3.1.2 Learning Process

Observations were conducted throughout the learning process from Cycle I to Cycle III. The observations focused on the activities of both the teacher and the students during the IPAS lessons in the fourth-grade class at SDN Cijantung 03 Pagi, where the Cooperative Learning model of the Picture and Picture type was implemented.

3.1.2.1 Teacher Activities During the Learning Process

Based on the observations conducted regarding the teacher's activities over the three cycles, there was an increase in performance. This can be seen from the observation results in Table 1.2 below.

Table 1.2 Results of Teacher Activity Observations During Learning

Cycle	Total Score	Persentage	Category
I	12	60%	Medium
II	14	70%	Good
III	19	95%	Very Good

Table 1.2 shows that the percentage achieved in Cycle I was 60% (Moderate), in Cycle II it was 70% (Good), and it increased to 95% (Very Good) in Cycle III. The improvement from Cycle I to Cycle III was 35%. For a clearer view, please refer to Diagram 1.2 below.

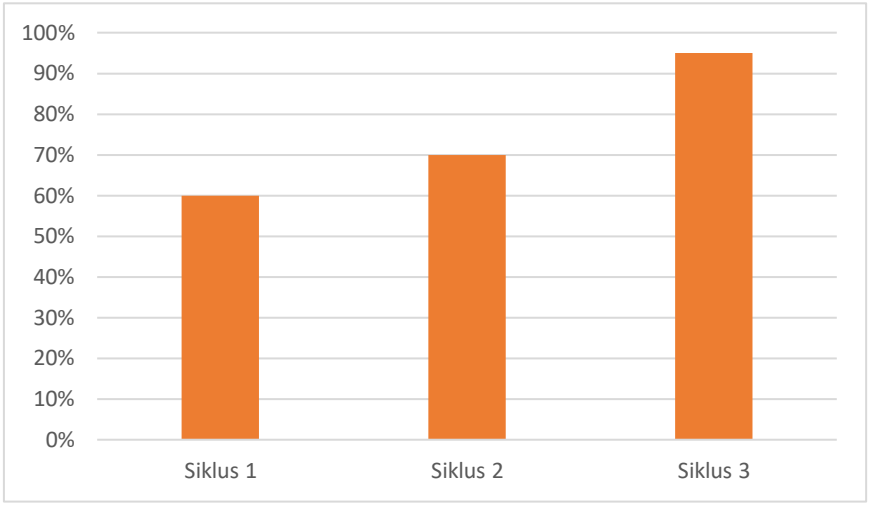

Diagram 1.2 Teacher Activities During the Learning Process

From Diagram 1.2, it can be concluded that the teacher's activities during the three cycles of learning using the Cooperative Learning model of the Picture and Picture type in the IPAS subject showed an improvement and fell into the very good category. This research is supported by other studies indicating that the Cooperative Learning model can enhance teachers' teaching activities. Similar research has also mentioned that the Picture and Picture type of Cooperative Learning model in the learning process of the IPAS subject can improve teachers' teaching activities. This improvement is attributed to the fact that, in Cycle III, the teacher was able to manage the learning process better than in Cycles I and II, and the teacher's activities in conducting the learning

during the initial, core, and closing activities were carried out well in accordance with the teaching module.

3.1.2.2 Student Activities During the Learning Process
Based on the results of observations that have been made regarding student activities during Cycle III, there has been an increase. This can be seen from the observation results in table 1.3 below.

Table 1.3 Observation results of student activities in learning

Siklus	Total Score	Percentage	Category
I	1	20%	Medium
II	3	60%	Good
III	5	100%	Very Good

3.1.2.3 Table 1.3 shows that the percentage obtained in Cycle I was 20% (Medium), in Cycle II 60% (Good), and increased in Cycle III by 100% (Very Good). The increase that occurred from Cycle I to Cycle III was 80%. For more clarity, see diagram 1.3 below.

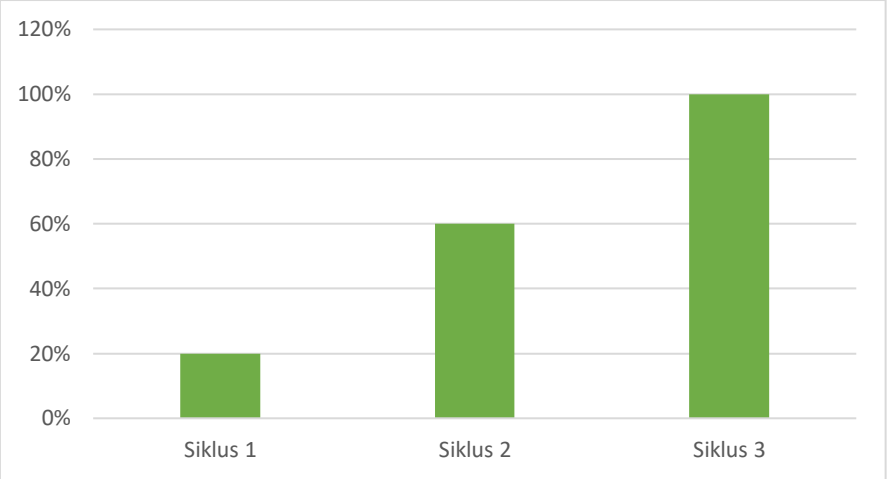

Diagram 1.3 Student Activities During the Learning Process

From diagram 1.3, it can be concluded that the teacher's activities during the third cycle of learning using the Picture and Picture type cooperative learning model in science and science subjects have increased and are in the very good category. This research is supported by other research that the Cooperative Learning model can increase teacher teaching activities. This research also states that the Picture and Picture Cooperative Learning model in the learning process in science and science lessons can improve teachers' teaching activities. This is because in cycle III the teacher can manage learning better than cycles I and II and the teacher's activities in carrying out learning in the initial, core and closing activities have been carried out according to the teaching module well.

3.1.3 Student Learning Outcomes

To see the learning outcomes of students in class IV science and science subjects at SDN Cijantung 03 Pagi in cycle I on local wisdom material, in cycle II on cultural riches, and on cycle III on how to preserve culture, the researchers held a daily repeat test at the end of each meeting. The following are the results of the daily repeat tests for cycles I, II and II in table 1.4 below.

Table 1.4 Student Learning Results in Class IV Science and Science Subjects at SDN Cijantung 03 Pagi

Cycle	Complete	Incomplete	Average Value	Percentage of Completion	Percentage of Incompleteness	Category
I	10	18	65,54	35,71%	64,29%	Very Low
II	15	13	72,32	53,57%	46,43%	Low
III	23	5	81,07	82,14%	17,86%	High

Table 1.4 above shows that in Cycle I, 10 students (35.71%) had completed their studies and 18 students (64.29%) had not completed their studies (under KKTP) with an average score of 65. 54. In Cycle II, 15 students (53.57%) had completed their studies and 13 students (46.43%) had not completed their studies (under KKTP) with an average score of 72.32. Meanwhile, in Cycle III, 23 students (82.14%) had completed their studies and 5 students (17.86%) had not completed their studies (under KKTP) with an average score of 81.07. Discussion of the completeness of student learning outcomes from Cycle I, Cycle II and Cycle III can be seen in diagram 1.4 below.

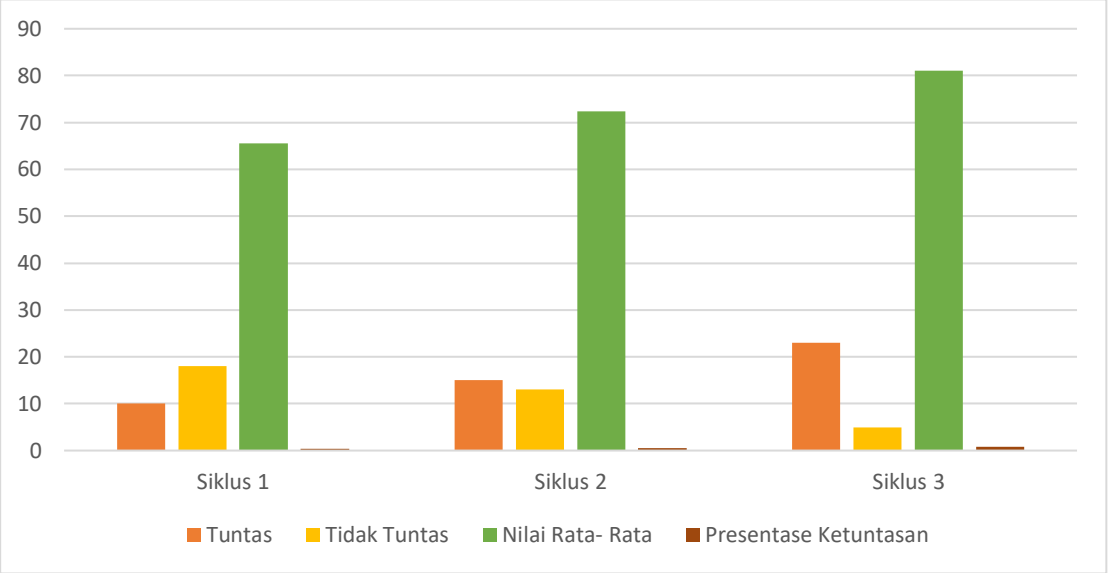

Diagram 1.4 Student Learning Outcomes for Cycle I, Cycle II, and Cycle III

Diagram 1.4 Completeness of Student Learning Outcomes for Cycle I, Cycle II, and Cycle III. Thus, based on the determination of the success indicators, namely the percentage of student learning completeness that has reached > 80%, science learning in class IV at SDN Cijantung 03 Pagi using the Cooperative Learning model is said to be successful. So Classroom Action Research (CAR) was stopped in Cycle III. Apart from that, this research is supported by other research that there is an increase in student learning outcomes through the application of the Cooperative Learning learning model (Atika and

Taufina, 2020). This is because students are able to think critically, shape student character, motivate students more and foster unity in learning.

4 CONCLUSION

The application of the Picture and Picture type Cooperative Learning model in class IV of SDN Cijantung 03 Pagi, Pasar Rebo District, East Jakarta, Even Semester of the 2023/2024 Academic Year can improve student learning outcomes in learning. This can be seen in the learning outcome scores in each cycle where the completion results at the beginning of learning (pre-cycle) were 25%, increasing in the first cycle by 35.71%. The percentage continued to increase in cycle II by 53.57% and in cycle III to 82.14% with The Learning Objectives Achievement Criteria (KKTP) is 75.

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