

## APPLICATION OF COLLABORATION MODEL IN IMPROVING STUDENTS' LEARNING OUTCOMES IN INDONESIAN LANGUAGE SUBJECTS IN GRADE IV OF ELEMENTARY SCHOOLS

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### Abstract

The purpose of the study was to determine the application of the collaboration model in improving student learning outcomes in Indonesian language subjects in Grade IV of Elementary School. The research method used was classroom action research (CAR). The research design adopted the Kemmis and Taggart model which consisted of two cycles, each cycle consisting of four stages, namely planning, implementation, observation and reflection. The subjects of the study were 26 grade IV elementary school students. Data collection through observation and interviews. Data analysis in this study used qualitative data analysis, namely with statistical models such as tables and diagrams from the results of observations and values of each cycle and using quantitative data analysis by comparing data obtained from the implementation of cycle I and cycle II activities. The results of the study showed an increase in learning outcomes after the implementation of the collaboration model in Indonesian language subjects which was proven by the average value of cycle I obtained 70.77 with a percentage of 69.23% in cycle I students who completed 18 students while in cycle II obtained an average value of 82.69 with a percentage of 100% and students who completed 26 students. So it can be concluded that from cycle I and cycle II there was an increase in learning outcomes after the implementation of the collaboration model.

**Keywords:** Learning Outcomes ; Collaboration Model ; Indonesian

## INTRODUCTION

Learning is an important thing in education. Learning is related to learning outcomes and learning outcomes are changes experienced by students after participating in learning including cognitive, affective or psychomotor aspects (Aliyyah et al., 2021). Changes in students' cognitive aspects can be interpreted as going from not knowing to knowing, from not understanding to understanding (Rohman & Rista, 2021).

Learning outcomes are generally abilities in the form of new skills and behavior as a result of practice and experience (Wicaksono & Iswan, 2019). According to (Sari, 2020) which states that learning outcomes can be interpreted as the level of student success in studying school subject matter which is stated in the score obtained from the results of a test to recognize a number of specific subject matters. Learning outcomes are also said to be changes in a student which are known after an evaluation is carried out (Devotion, 2024). Learning outcomes are related to learning activities, because learning activities are a process carried out by a student to gain an understanding or knowledge so that good behavioral changes occur (Adam, 2021).

One of the things that can be done to improve student learning outcomes is to apply a learning model. A learning model that can be integrated with learning is a collaborative model. The collaborative learning model is a model that emphasizes attitudes or behaviors of cooperation, carried out by two or more people in one group and tries to consider students' abilities to predict text fragments assigned to students (Amin & Sumendap, 2022). This learning model can train students to deepen and sharpen their knowledge through the worksheets that are distributed, because students must memorize or at least understand the material to be able to do the task of perfecting sentences correctly and properly. The use of the collaboration model is expected so that all students can learn thoroughly in solving contextual problems. The collaboration model is very effective in learning because it involves students in analyzing the material in detail. This model is a collaborative work model where students act as peer tutors and include fun and strengthening elements (Kertati et al., 2023). Collaborative learning models can be used in various subjects, such as Indonesian.

Based on observation results, data obtained that the learning process in class IV of SD Islam PP Al-Munawir Asahan does not involve students actively, the learning model used is recitation or assignments. The teacher asks students to work on the

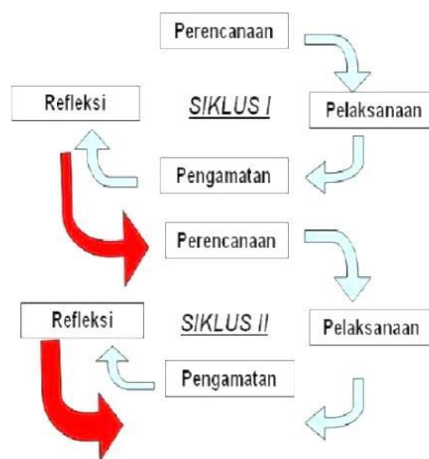
questions in the theme book, in addition, based on the results of the interview, it was found that in the Indonesian language lesson, the material on fictional stories, students had difficulty composing stories, this could be caused by a lack of deep understanding of the concept of the material. This means that the material taught is not optimal and student learning outcomes decline. The learning outcomes obtained by students in the Indonesian language subject are still low, out of 26 students who got scores above the KKM (Minimum Completion Criteria) only 9 students (34.62%) while 17 students (65.38%) got scores below the KKM. The KKM in the Indonesian language subject is 70.

It can be concluded that in learning, teachers are less innovative in using learning models such as collaboration models so that it affects student learning outcomes, especially in the Indonesian language subject. With the right learning model used in the classroom learning system, it will optimize and maximize the success of learning in the classroom and arouse students' interest in learning to get good learning outcomes. This is in line with research (Agustina, 2022; Normila, 2022; Sapa, 2019) that learning with a collaborative model can have a positive effect on students' learning outcomes and learning motivation, and this learning model can be used as an alternative learning. The difference with the research studied lies in the subject and material of Indonesian language lessons. Based on the description above, the purpose of the study is to determine the application of the collaborative model in improving student learning outcomes in Indonesian language subjects in grade IV of elementary school.

## **METHODS**

Yes This research is classroom action research (CAR). Classroom action research is a reflective research, and is carried out by the action actors to improve the quality of learning (Azizah, 2021). This research was conducted at SD Islam PP Al-Munawir Asahan, Air Joman District, Asahan Regency from April 2024 to June 2024. The subjects of the study were 26 fourth grade elementary school students consisting of 12 males and 14 females. The data collection techniques in this study included observation, interviews, tests and documentation. The research design adopted the Kemmis and Taggart model which consists of two cycles, each cycle consisting of four stages, namely planning, implementation, observation, and reflection (Priyanti & Nurhayati, 2023). During the

planning stage, the researcher identified problems that emerged through direct classroom observation during the pre-cycle. Next, create learning tools such as lesson implementation plans, observation sheets, and tests. In the implementation stage, the researcher applied a collaboration model and conducted testing using group competitive games. In the observation stage, the researcher used observation sheets to observe the implementation of the learning model and tests to monitor student learning outcomes. The integration phase ends when data is collected. Due to an increase in learning outcomes in Indonesian language learning, the cycle was stopped at only two cycles and was not continued. The following is a flow diagram of classroom action research, namely:



**Figure 1** Classroom Action Research Flowchart

Data analyzed using qualitative data analysis, namely with statistical models such as tables and diagrams from the results of observations and values for each cycle and using quantitative data analysis by comparing data obtained from the implementation of cycle I and cycle II activities. While quantitative data on the calculation of the average student learning outcomes and the percentage of learning outcome improvement. Here is the formula in calculating the average student learning outcomes:

$$Mx = \frac{\sum x}{N}$$

Information :

Mx = Average value

$\sum x$  = Total of all values

N = Total value

Meanwhile, to determine the increase in student learning outcomes, the following formula is used:

$$\text{Effect size} = x \text{ post test 2} - x \text{ post test 1}$$

Information :

Effect size = Increase in value

X post test 2 = Average value of cycle II

X post test 1 = Average value of cycle I

To calculate the percentage value, the following formula is used:

$$\text{Average value of learning outcomes} = \frac{\text{Total number of student scores}}{\text{Total number of students}}$$

$$\text{Percentage of completion} = \frac{\text{Total number of student scores}}{\text{Total number of students}} \times 100\%$$

To find out the high and low levels of student learning outcomes, substitute the following interpretation:

**Table 1.** Knowing the High and Low Levels of Student Learning Outcomes

High Low Level of Learning Outcomes	Category
0 - 54	Very Low
55 - 64	Low
65 - 74	Currently
75 - 84	Tall
85-100	Very high

In the table, students are said to have completed the learning if their average mastery level and learning completeness each reach a minimum score of 70. Meanwhile, this research is said to be successful if the average class value, absorption capacity, and class completeness reach a percentage of mastery level between 85%-100% with high criteria.

## RESULTS

In the pre-cycle before the action research was conducted in class IV of SD Islam PP Al-Munawir Asahan, most of the students, namely 26 students, had Indonesian language learning outcomes in the low criteria, as many as 8 students were in the medium criteria, and 1 student achieved the high category. This can be seen from the table of student pre-cycle scores below:

**Table 2.**Pre-Cycle Student Score Acquisition

Mark	Number of Students
40	1
50	8
60	8
70	8
80	1
90	-
100	-
Amount	26

Table 2 shows the students' score in the pre-cycle stage, of the 26 students, only one student got a score of 40, while scores of 50, 60, and 70 were each obtained by eight students, indicating an even distribution in the range of scores. There was one student who got a score of 80. However, no students got a score of 90 or 100. Thus, the majority of students got scores in the range of 50 to 70, while only a few students got scores outside the range, indicating a tendency for score acquisition to be quite concentrated in the middle scores. The following is the distribution of student learning outcomes and average scores in the pre-cycle, namely:

**Table 3.**Distribution of Student Learning Outcomes

Score(s)	Frequency (f)	Percentage (%)	S * f	Pre-cycle average score
40	1	03.8%	40	60.00
50	8	30.7%	400	
60	8	30.7%	480	
70	8	30.7%	560	
80	1	03.8%	80	
90	-	0.0%	0	
100	-	0.0%	0	
Amount	26	100%	1,560	

From table 3. The distribution of student learning outcomes in the pre-cycle reached an average score of 60.00 with 17 students who had not completed the course and a percentage of 65.38%, while 9 students completed the course with a percentage of 34.62%.

### **Cycle I**

In the first cycle stage, planning is carried out by observing and observing school conditions, classroom conditions, student conditions, facilities and infrastructure that support learning and models used in implementing learning, formulating learning objectives to improve student learning outcomes through collaboration models, preparing Learning Implementation Plans (RPP), designing instruments and evaluation sheets, preparing observation sheets. Then in the implementation of learning in grade IV in the Indonesian Language subject with the Subtheme of the Beauty of Togetherness of My Nation's Culture, the approach applied involves learning activities by implementing a collaboration model. The Learning Process has changed what was previously teacher-oriented to student-oriented learning. Students are already active in study groups and are able to respond to questions from teachers without feeling afraid and hesitant. The problem of teachers is to be able to manage time and manage their classes so that they are more effective and efficient. Students are trained to work together and compete healthily in a learning atmosphere that is packaged like a game. So that students do not feel afraid and stressed in learning Indonesian. All students then conclude the material on the Beauty of Togetherness of My Nation's Culture. Evaluation of learning outcomes is carried out through multiple choice questions related to the material on me and my needs. The use of the collaboration model is carried out in groups to encourage teamwork and student activeness in learning. Researchers conducted observations during the learning process using the observation sheet that had been created. Observations were made to find out directly how the student learning process and student activities were during the learning process. From the results of observations during the learning process, it was found that several students were still not focused on following the learning, students were still confused in following the game, some teams could not answer the questions given quickly and correctly. Of the 26 students, only eighteen were able to answer the questions given. In the assessment of learning outcomes through tests, only ten students achieved scores above the Minimum Completion Criteria (KKM)  $> 70$ . Although the results of observations prove that there has been an increase in student learning outcomes, the increase is still limited, because this stage is the beginning of

learning Indonesian through a collaborative model. The table of student scores in cycle I is presented as follows:

**Table 4.** Student Score Acquisition in Cycle I

Mark	Number of Students
40	-
50	1
60	7
70	8
80	9
90	1
100	-
Amount	26

From table 4. Student score acquisition in cycle I, students who got scores below KKM were eight students while those who got KKM scores were eight students and those who got scores above KKM were ten students. The score data from the cycle I evaluation were analyzed through tabulation and percentage calculation by grouping and calculating the number of the same scores, percentages, and average scores as follows:

**Table 5.** Distribution of Student Learning Outcomes

Score(s)	Frequency (f)	Percentage (%)	S * f	Average score of cycle I
40	-	0.0%	0	
50	1	03.8%	50	
60	7	26.9%	420	
70	8	30.7%	560	70.77
80	9	34.6%	720	
90	1	03.8%	90	
100	-	0.0%	0	
Amount	26	100%	1,840	

From table 5. Distribution of student training results in cycle I reached an average score of 70.77, students who had not completed were 8 students with a percentage of 30.77% while those who completed were 18 students with a percentage of 69.23%. After the implementation of the action and observation, the next step is reflection. Reflection is carried out by the researcher to find out the obstacles and shortcomings experienced in

the implementation of the cycle I action. Based on the results of observations of the implementation of Indonesian language learning The Beauty of Togetherness of My Nation's Culture through the collaboration model in cycle I has not been implemented optimally. This is due to obstacles or shortcomings in the implementation of learning in stage I. The shortcomings found include several students have not been able to complete tasks properly, especially in distinguishing human needs and desires and various needs. In addition, 8 out of 26 students scored below 70. The learning model used was less effective so that the time used was less, there were still some students who were less active or there were still students who played alone. While the advantage is that students find it easier to understand the material being taught. Based on this reflection, the teacher can draw conclusions to improve learning. By using a variety of learning models, it is hoped that students' attention and learning outcomes in cycle II will be better than cycle I. Therefore, planning for improving learning in cycle II is needed to achieve optimal results.

## **Cycle II**

In the planning stage of cycle II, the learning model is designed with the aim that students can better understand the material I and my needs. At this stage, the action plan carried out in improving learning is starting from initial observation, determining learning objectives, making a learning plan, designing instruments, and making observation sheets. Then, in the implementation stage in cycle II, the steps taken are still the same as cycle I, but Indonesian language learning is carried out on the theme of the Beauty of Togetherness of My Nation's Culture in terms of deepening the material and implementing a collaborative model. During the learning activity, the researcher made observations by evaluating the effectiveness of the improvements that had been implemented and identifying areas that still needed improvement. This improvement shows the effectiveness of the improvement efforts implemented in Cycle II. The improvement process involves steps such as identifying problems, setting clear goals, implementing a collaborative model, evaluating learning outcomes, and adjusting actions according to student needs. Teachers and education staff have worked with researchers to design and implement appropriate action plans to help students who need additional support. Filling out the observation sheet prepared by the researcher. The researcher made observations during the learning activities from beginning to end. The implementation of cycle II learning in Indonesian language learning with the theme of the Beauty of Togetherness of My Nation's Culture with the collaboration model is in

accordance with the planning that has been prepared, the learning process has also run smoothly. Based on the results of observations of student activities in stage II, overall students actively participate in learning according to the steps of the collaboration model. Students appear more enthusiastic and actively participate compared to cycle I. At this stage, all students showed an increase in learning outcomes in Indonesian language learning with the theme of the Beauty of Togetherness of My Nation's Culture using the collaboration model. Judging from the learning outcomes of students in cycle II, there has been an increase, students have participated in learning using collaboration model optimally. The following is a table of student scores in cycle II, namely:

**Table 6.** Student Score Acquisition in Cycle II

Mark	Number of Students
40	-
50	-
60	-
70	5
80	10
90	10
100	1
Amount	26

From table 6. Student score acquisition in cycle II, students who got scores below KKM were zero students while those who got KKM scores were five students and those who got scores above KKM were twenty-one students. The score results from cycle II were analyzed through tabulation and percentage calculation. The list of scores was processed by grouping and calculating the number of the same scores, percentages, and average scores. This analysis is presented in a table format, as follows:

**Table 7.** Distribution of Student Learning Outcomes in Cycle II

Score(s)	Frequency (f)	Percentage (%)	S * f	Average score of cycle II
40	-	0.0%	0	
50	-	0.0%	0	
60	-	0.0%	0	

70	5	19.2%	350	82.69
80	10	38.4%	800	
90	10	38.4%	900	
100	1	3.84%	100	
Amount	26	100%	2.150	

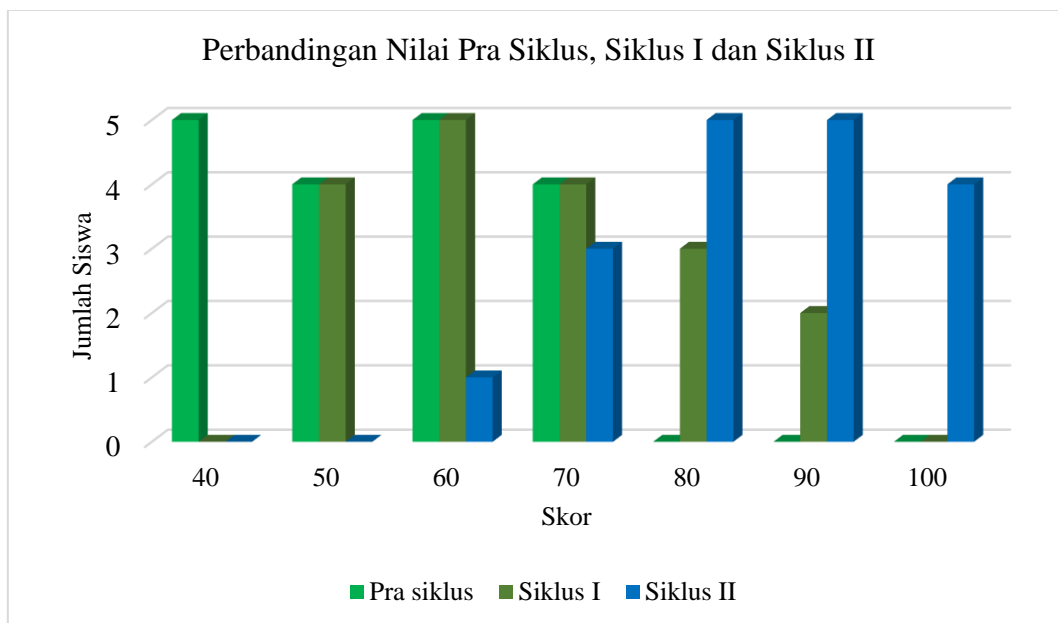
From table 7. Distribution of student learning outcomes in cycle II reached an average score of 82.69, students who have not completed the number of zero students with a percentage of 0.0% while those who completed the number of 26 students with a percentage of 100%. Below is also presented a comparison table of cycle I and cycle II, namely:

**Table 8.** Comparison of learning outcomes between cycle I and cycle II

Information	Pre cycle	Cycle I	Cycle II
KKM	70	70	70
Complete Value	9	18	26
Incomplete Value	17	8	-
The highest score	80	90	100
Lowest Value	40	50	70
Average value	60.00	70.77	82.69

From the comparison table of assessment results between pre-cycle, cycle I and cycle II, it can be observed that there was an increase in the achievement of scores. In the pre-cycle, there were 17 students who did not complete the test, while in cycle I, there were 8 students who did not complete the test and in cycle II, there were none. Meanwhile, in the pre-cycle, there were 9 students who received a passing score, while in cycle I, there were 18 students who received a passing score and in cycle II, there were 26 students. In the pre-cycle, the highest score obtained by students was 70, while in cycle I, the highest score achieved by students was 90 and in cycle II, the highest score was 100. Meanwhile, in cycle I, the lowest score obtained by students was 50. In cycle II, the lowest score was 70, there was one student who obtained that score.

The comparison between the values in cycle I and cycle II can be seen in the following diagram.



**Figure 2.** Bar Chart of Distribution of Values in Pre-Cycle, Cycle I and Cycle II

At the pre-cycle stage, the average score was recorded at 60.00 with the highest score being 70, which had a percentage of 30.7%. Meanwhile, in cycle I, the average score was recorded at 70.77 with the highest score reaching 90 and having a percentage of 38.4%. Meanwhile, in cycle II, the average class score increased to 82.69 with the highest score being 100 with a percentage of 80.64%. From the above explanation, it is that in the Indonesian language subject, the theme of the Beauty of Togetherness of My Nation's Culture, using a collaboration model can improve student learning outcomes. This can result in an increase in student learning scores to achieve the minimum completion criteria (KKM) and achieve the set learning objectives.

**Table 9.** Improvement in Average Student Learning Outcomes

Information	Average value	Learning Completion	Criteria
Cycle I	70.77	69.23%	Pretty good
Cycle II	82.69	100%	Very good

From the table above, the average value of the learning outcomes of class IVA students of SD Islam PP Al-Munawir Asahan using the collaboration model shows a significant increase between cycle I and cycle II. In Cycle I, the average value of students was 70.77

with a percentage of completion reaching 69.23%. After improvements were made to learning and implementation of Cycle II, the average value of students increased to 82.69 with a much higher percentage of completion, namely 100%.

## DISCUSSION

The collaboration model is a learning model that is the same as cooperative learning. This model emphasizes attitudes or behaviors of cooperation, which are carried out by 2 or more people in one group (Husain, 2020). In the Indonesian language learning model, the collaboration model type contains elements of academic games which make students more interested and challenged in participating in learning. Collaboration is a very effective learning model, because it helps students to solve difficulties with their group members (Nugroho, 2022). The collaboration shown involves students and attracts students' attention, so that students are actively involved in the learning process. The success of the collaborative learning model given depends on the creativity of the teacher and also the understanding to apply it in everyday life in the form of simple experiments (Funali, 2014). For this, teachers are required to learn more and try to develop new ideas that can stimulate students' interest in learning.

The analysis of the average percentage of mastery of the material me and my needs in the pre-cycle reached 60.00 which when converted to the PAP conversion table on a five-scale scale, proved that the mastery of knowledge competencies in the pre-cycle was in the low criteria. In cycle I it reached 70.77 which when converted using the PAP conversion table on a five-scale scale, proved that the mastery of knowledge competencies in cycle I was still in the sufficient criteria. Therefore, further learning improvements are needed, considering that the students' learning outcomes in the final test of cycle I have not met the desired criteria. Improvements refer to the results of observations in cycle I. The obstacle found was the lack of students' understanding of the material explained, so they could not answer the questions given during the learning process. In cycle II, student learning outcome data can be seen from the data presented. From the explanation, it can be seen that after going through Cycle II, there was a significant increase in student achievement in the Indonesian Language subject with the theme of the Beauty of Togetherness of My Nation's Culture using the collaboration model in class IVA SD Islam PP Al-Munawir Asahan. Of the 26 students who scored above the KKM 70 or 100%, and

the average student score was 82.69. Obtained through an objective test in the form of multiple-choice questions with a total of 20 items. The average learning outcomes of Indonesian in cycle II reached 82.69, when converted using the PAP conversion table on a five-scale scale, proving that the mastery of knowledge competencies in cycle II was at a high criterion. Thus, learning improvements were not continued to the next cycle.

This research is strengthened by relevant research, namely research conducted by (Zainuddin, 2017) said the implementation of collaborative learning can increase student participation in learning, student social skills, social studies learning achievement, and students' positive responses to the collaborative learning model. Furthermore, the research (Aminah, 2020) that the Collaborative learning model has a positive impact in improving student learning achievement which is marked by an increase in student learning completion in each cycle, namely cycle I (68.18%), cycle II (79.01%), cycle III (86.36%). The collaborative teaching model can make students feel that they are getting attention and the opportunity to express opinions, ideas, ideas and questions. Then the research (Nadifah, 2019) stated that the collaborative learning method can have a positive effect on the achievement and learning motivation of students in class VB MIN 3 Madiun and this learning model can be used as an alternative learning. From several previous studies, it is the same as this study that the implementation of the collaborative model can improve student learning outcomes because there are elements of academic games which make students more interested and challenged in participating in learning. This study has limitations, namely the subject is only one class in one elementary school, less involvement of external factors such as students' socio-economic conditions, parental support, and the learning environment at home.

## CONCLUSION

Collaborative model applied to the Indonesian Language subject with the subtheme of the Beauty of Togetherness of My Nation's Culture in grade IV of elementary school can improve student learning outcomes in Cycle I and Cycle II. The average value of cycle I obtained 70.77 with a percentage of 69.23% in cycle I, 18 students completed, while in cycle II, the average value was 82.69 with a percentage of 100% and 26 students completed. Suggestions for further researchers are to use other learning models or combine

collaborative learning models with other models or media for student learning outcomes and can be implemented in other subjects.

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