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**IMPROVING COLLABORATIVE SKILLS THROUGH  
PROBLEM-BASED LEARNING MODELS IN THEMATIC  
LEARNING CLASS II ELEMENTARY SCHOOL**

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**1. Abstract**

This research was structured with the aim of increasing student collaboration through the Problem Based Learning learning model for class IIA students at SD Negeri Jurug, Bangunharjo, Sewon, Bantul, Yogyakarta for the 2022/2023 Academic Year. Collaborative students referred to in this study, namely the attitude of collaboration in groups. This type of research is Classroom Action Research (CAR), where the researcher acts as a learning implementer and the teacher acts as an observer. This research design uses. This research was conducted in the even semester of the 2022/2023 academic year, namely from May to June. The subjects of this study were class IIA students at SD Negeri Jurug consisting of 27 students. The object of research is student collaboration. Data collection techniques use observation and interviews. Data analysis is descriptive and presented in tabular form. The results showed that there was an increase in students' collaborative skills, namely in the first cycle of 74.34% with the medium category of 17 students and 10 students in the high category in the keram, then in the second cycle it increased to 81.39%. This means an increase of 7.05%. This the use of the Problem Based Learning (PBL) learning model in

thematic learning can improve the collaborative skills of class IIA students at SDN Jurug Bangunharjo, Bantul.

**Keywords:** *Collaborative, Problem Based Learning, Thematic Learning*

## **2. Introduction**

The development of globalization and the intense competition of the 21st century requires the world of education and educators to develop students' life skills. As one of the development of life skills, teachers as educators need to carry out learning that facilitates, accommodates, and optimizes students' abilities in various activities so that they are ready to be in community life. This is in line with the understanding of learning according to Law No. 20 of 2003 article 1 paragraph 20 which states that learning is a process of interaction between students and educators and learning resources in a learning environment.

Thematic learning is a learning approach that combines several learning subjects into one theme, with this thematic learning requires teachers to be able to teach using models, methods and approaches that can increase student learning motivation. Learning in the classroom is influenced by the main components that are related, namely teachers, students, and the learning model used in the teaching and learning process. Other factors that can influence the success of learning include learning motivation, collaboration skills, level of student understanding, student learning facilities, learning curriculum and learning media used by teachers in teaching. In the learning process the teacher not only has the function of transferring knowledge but is also tasked with providing skills and changing student behavior (Suhadi Astuti, 2016). Skills that can help students in learning are collaboration skills, innovative skills and critical thinking skills. The skills chosen to be improved in this paper are collaboration skills.

One of the life skills that can be developed in elementary school learning is collaboration skills. Collaboration skills are a process in learning that is carried out together to balance differences in views, knowledge, play a role in discussions by giving suggestions, listening, and supporting one another (Greinstien, 2012). Collaboration in the learning process is an important ability that must be mastered by students. This is based on important competencies and skills in the 21st century that must be possessed by students, namely critical thinking, communication, collaboration, and creativity (4C). These skills help students to be able to learn and adapt to changes over time. Humans need an integrated understanding of the big ideas of science and habits of mind such as systematic thinking (Saenab et al. 2019). Collaboration skills are the ability to work together to do something together with one goal. Children will learn faster if they have more opportunities to do something together. Through the process of collaboration in learning, students can develop social skills so that teachers need to carry out learning using appropriate learning models to be able to improve student collaboration skills and also improve student achievement. Children will learn faster if they have more opportunities to do something together. Through the process of collaboration in learning, students can develop social skills so that teachers need to carry out learning using appropriate learning models to be able to improve student collaboration skills and also improve student achievement. Children will learn faster if they have more opportunities to do something together. Through the process of collaboration in learning, students can develop social skills so that teachers need to carry out learning using appropriate learning models to be able to improve student collaboration skills and also improve student achievement.

### **3. Methods**

This research is a Classroom Action Research (CAR) with the Kemmis and Taggart models. This model is a revision of Kurt Lewin's model which Kemmis interprets as a PTK model in the form of a spiral consisting of several activity cycles (Arifin, 2011). This spiral model research begins with the design carried out at the planning stage (plan). After that, an action/implementation (act) is held, which aims to increase or improve what is a problem in learning. While the action is taking place, observations are made to find out and record how the action occurs, therefore the implementation and observation activities cannot be separated because they are included in one unit of activity at one time. Furthermore, to find out any deficiencies that occur during the action, then a reflection of the results of actions and observations by researchers is carried out. The results of this reflection will become the basis for improving or developing plans and actions in the next cycle.

The subjects in this study were class IIA students at SDN Jurug in semester II of the 2022/2023 school year, with a total of 27 students consisting of 14 boys and 13 girls, with the research focus being cooperative or collaborative attitudes and student achievement. This research was conducted in class IIA SDN Jurug. The location of the school is in Bangunharjo, Sewon, Bantul, DI Yogyakarta. The research time is adjusted to the class II elementary school schedule, namely in the morning starting from 07.00 to 11.15 in May to June.

This study has 2 procedures including administrative procedures, and substantive procedures. In administrative procedures, researchers prepare pre-research activities, as well as research action plans using the Problem Based Learning learning model. Then, in substantive procedures there are two instruments prepared including learning instruments

consisting of Learning Implementation Plans (RPP) theme 8 Safety at Home and Travel, teaching materials, learning media, and Student Worksheets (LKPD). Then there are data disclosure instruments including observation sheets for improving student cooperation skills, learning achievement tests and important documentation. The data that has been collected is then processed through qualitative and quantitative techniques. Bogdan (in Sugiyono, 2015) states that "qualitative data analysis is the process of systematically searching for and compiling data obtained from interviews, field notes, and other materials, so that it can be easily understood, and the findings can be informed to others". The data analysis technique used in this study is an interactive model or Flow Model proposed by Miles and Huberman (in Sugiyono, 2015). This analysis consists of three main components, namely data reduction, data presentation and conclusion drawing/verification. While quantitative techniques are used to analyze data in the form of numbers.

#### **4. Results and Discussion**

The Problem Based Learning Learning Model is a learning model that aims so that each member of the discussion group gets the opportunity to provide an opportunity to express his opinion. According to (Duch, 1995), Problem Based Learning (PBL) is a learning model that challenges students to "learn how to learn", work in groups to find solutions to real world problems. This problem is used to bind students to curiosity in the intended learning.

The implementation of the Problem Based Learning model consists of 5 stages of the process, namely: The first stage is the process of oriented students to the problem. At this stage the teacher explains the learning objectives, explains the necessary logistics,

motivates students to engage in problem solving activities, and poses problems. The second stage, organizing students. At this stage the teacher divides students into groups, helps students define and organize learning tasks related to problems. The third stage, guiding individual and group investigations. At this stage the teacher encourages students to collect the information needed, carry out experiments and investigations to get explanations and problem solving. The fourth stage, developing and presenting the results. At this stage the teacher assists students in planning and preparing reports, documentation, or models, and helps them share assignments with their peers. The fifth stage, analyze and evaluate the process and results of problem solving. At this stage the teacher helps students to reflect or evaluate the process and results of the investigation they are doing. (Trianto, 2007)

### **Implementation of Cycle I Learning**

Implementation of learning by applying the Problem Based Learning learning model cycle I was carried out on Thursday, May 4 and Thursday, May 11, Theme 8 Safety at Home and Travel, sub-theme 2 Keeping Safety at Home. Implementation is carried out through the stages of preliminary activities, core activities, and closing activities. In the early learning activities, students line up as usual to enter the room, then the teacher checks the tidiness of the students' bodies and clothes. Furthermore, the teacher conditioned students to sit on their respective benches. After the class started to be conducive, the teacher opened the class by greeting and inviting students to pray and read Asmaul Husna together, which was led by D as the class leader. After finishing praying and reading Asmaul Husna. The activity continued with the singing of national and regional songs.

The core learning activities are carried out in 5 stages according to the stages in the Problem Based Learning (PBL) learning model. Beginning with student orientation activities to the problem, students are asked to observe learning videos related to the use of capital letters and punctuation marks, then proceed with questions and answers. The second stage is organizing activities, the teacher divides students into groups consisting of 3-4 people who are then given group worksheets and students discuss. The third stage is guiding the investigation, where the teacher fully guides students individually or in groups to discuss and solve problems regarding the use of capital letters and punctuation in units of time. The next stage is developing and presenting the results, At this stage students are asked to present the results of group discussions in front of the class. The last stage is analysis and evaluation, at this stage the teacher and students evaluate the group results with the teacher confirming if there are errors and providing corrections. Through this stage students can conclude the results of discussion activities with the direction of the teacher.

After carrying out discussion and presentation activities, the teacher returns the students to sit neatly on their respective benches. Furthermore, students and teachers reflect, convey their impressions and messages on the learning that has been carried out. Then, students are given an evaluation sheet regarding the material that has been studied. Before ending the lesson, the teacher asked the students to pray led by D.

### **Improvement of Cycle I Cooperation Skills**

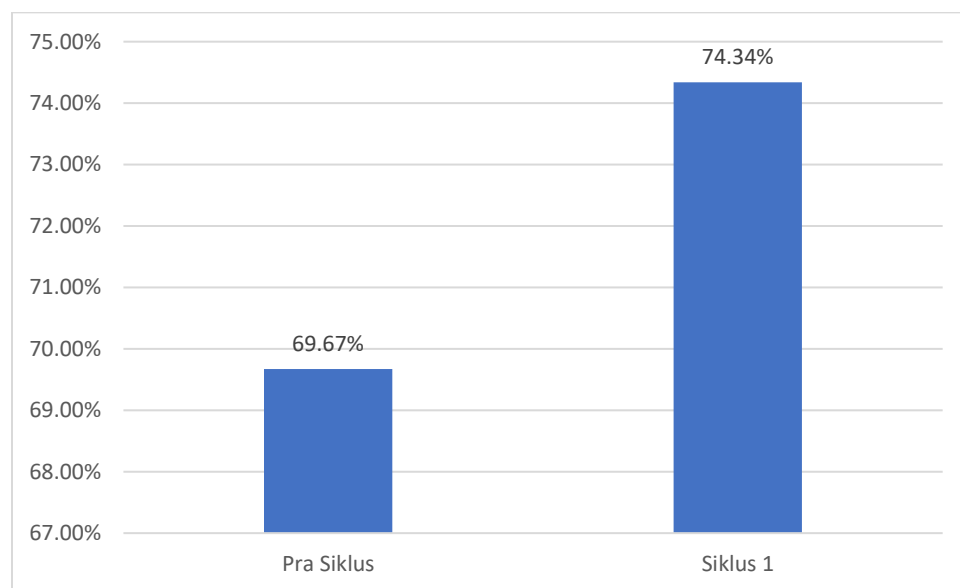
Based on learning by applying the Problem Based Learning (PBL) model that was implemented in cycle I, there was an increase in the collaborative skills of class IIA SDN Jurug students. In the pre-cycle, the average value of the IIA SDN Jurug collaborative skills was 69.67 with a percentage of 69.67%. In cycle I, the average value of collaborative skills

increased to 74.34 with a percentage of 74.34%. The following shows the percentage of student collaboration skills according to their level.

**Table 1**  
**Percentage of Collaborative Skills of Cycle I Students**

No	Percentage	Category	Number of Students	Percentage
1	75-99%	Tall	10	37.03%
2	50-74%	Currently	17	62.98%
3	25-49%	Low	0	0%

The results of the first cycle of research showed that students' collaborative skills had increased and belonged to the moderate category, which can be seen from pre-cycle to cycle I in Figure 1.





**Figure 1 Graph of Comparison of Pre-Cycle and Cycle I Collaborative Skill  
Percentages**

**Implementation of Cycle II Learning**

Cycle II learning was carried out on Wednesday and Thursday, 16 and 17 May 2023 and started at 07.00-11.15 in class IIA SDN Jurug, Bangunharjo, Sewon, Bantul. The learning that was carried out at that time was learning 3 and 4 Theme 8 Safety at Home and Travel, sub-theme 3. Learning was carried out through the stages of preliminary activities, core activities, and closing activities.

The following is a description of activities during cycle II. Preliminary activities students carry out habituation activities such as praying, reading asmaul husna, greeting, checking attendance, and singing national or regional songs. Furthermore, students and teachers conduct question and answer, apperception, relate to learning objectives, explain the activities to be carried out, and provide motivation to students.

In the core activity, learning begins by inviting students to observe the text of the rules for riding a bicycle. In addition, the teacher invites students to listen to the video shown by the teacher regarding the use of capital letters and punctuation. Connecting with the math material the teacher asks the time of the activity with the date of the previous text. Students are invited to observe the time conversion calculation calendar. Furthermore, in group discussion activities, the teacher still divides students into the same groups and distributes group worksheets for discussion. The teacher guides the investigation by ensuring that each individual or group is ready for discussion, the teacher also fully guides

the students. The next step is developing and presenting the results, students are asked to present the results of the discussion, the teacher and other students give appreciation.

After carrying out discussion and presentation activities, the teacher returns the students to sit neatly on their respective benches. Furthermore, students and teachers reflect, convey their impressions and messages on the learning that has been carried out. Then, students are given an evaluation sheet regarding the material that has been studied. Before ending the lesson, the teacher asked the students to pray led by A.

### **Improvement of Cycle II Cooperation Skills**

Based on learning by applying the Problem Based Learning (PBL) model that was implemented in cycle I, there was an increase in the collaborative skills of class IIA SDN Jurug students. In cycle I, the average collaborative skills score increased to 74.34 with a percentage of 74.34% and the number of students belonging to the high category was only 10 people and 17 people in the medium category. In cycle II, the average value of collaborative skills increased to 81.39 with a percentage of 81.39% and the number of students belonging to the high category was 22 people and 5 people in the medium category. Table 2 shows the percentage of students' cooperation skills according to their level.

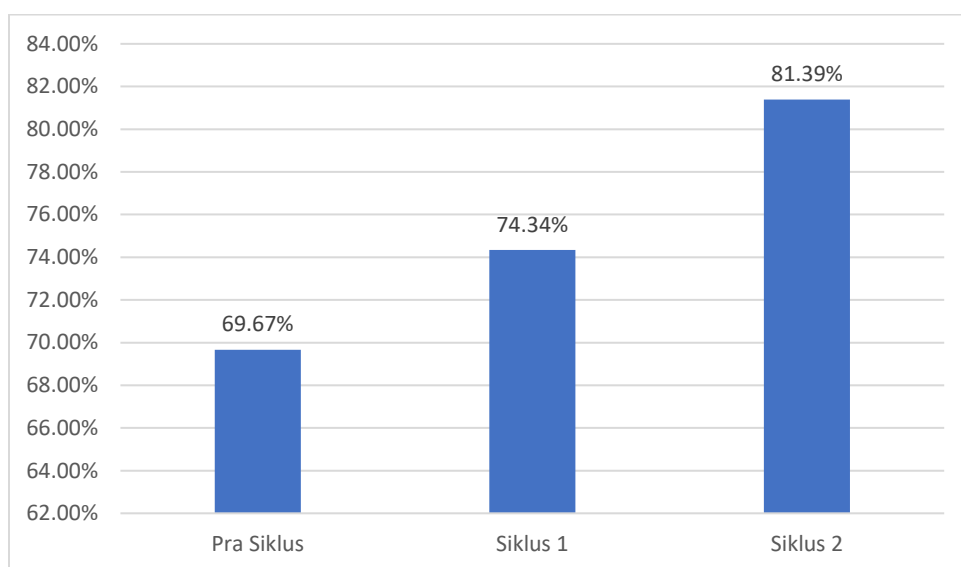
**Table 2**

#### **Percentage of Collaborative Skills of Cycle II Students**

No	Percentage	Category	Number of Students	Percentage
1	75-99%	Tall	22	81.48%
2	50-74%	Currently	5	18.51%

3	25-49%	Low	0	0%
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The results of the second cycle of research showed that students' collaborative skills increased and belonged to a high level of collaborative skills. In the following, you can see an increase in collaborative skills from pre-cycle, cycle I, cycle II in Figure 2



**Figure 2 Graph of Comparison of Percentage of Pre-cycle Collaborative Skills, Cycle I and Cycle II**

The indicators developed in improving students' collaborative skills can be seen in table 3 below.

**Table 3 Student Collaborative Indicators**

No	Indicator
1	Actively involved in group assignments
2	Appreciate the opinion and work of friends

3	Provide input or opinion
4	Help each other and build cooperation

## **5. Conclusion**

Based on the classroom action research that has been carried out in II cycles, as well as the discussion that has been presented regarding improving collaborative skills through the application of the Problem Based Learning (PBL) model in class IIA SDN Jurug, it can be concluded that there has been a visible increase starting from the RPP components which have been prepared based on Permendikbud No. 22 of 2016, and using the steps of the Problem Based Learning (PBL) learning model in the core activities. To further support the RPP, the teacher prepares media such as PPT, videos, concrete media such as clocks, and worksheets that have been prepared to support learning. This is adjusted to the media selection criteria according to Henrawan, et al (2007, p.

In the implementation of learning that has been carried out in the actions of cycle I and cycle II there is an increase in students' collaboration skills, this is because learning using the steps of the Problem Based Learning PBL learning model can facilitate students in increasing their activities to build knowledge independently or in groups. Therefore, in composing their own groups, the teacher divides students into small, heterogeneous groups. This is explained by Slavin (2005) that the group here consists of students who are heterogeneous in terms of academic performance, gender, race, and ethnicity. The learning steps of the Problem Based Learning model according to Trianto (2007) consist of 5 steps, namely student orientation to problems, organizing activities, guiding investigations,

developing and presenting results, analysis and evaluation. According to Rusman (2012, p. 207) cooperation skills can be trained through activities in group learning activities. So that students are encouraged to want to interact and communicate with other members to achieve the learning objectives that have been set.

The Problem Based Learning learning model is proven to be able to improve the collaborative skills of class II students. This is seen based on exposure to increased collaborative skills in the pre-cycle with an average of 69.67% cycle I which has an average of 74.34% to 81.39% in cycle II. Thus the increase obtained from pre-cycle to cycle II is 11.72%.

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