

Implementation of Problem Based Learning to Improve the Activity of Class IV Students in IPS Learning at Elementary Schools

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1. Abstract

The objective of this study is to improve student learning activity through the application of the Problem Based Learning model. In the study This collaborative class action is carried out using the model of Kemmis and Mc Taggart which consists of four stages, namely: planning, action, observation and reflection. Subjects in this study are 27 elementary school students. Technical analysis of the data used by the researchers is both quantitative and qualitative descriptive. The results of the study showed an improvement in sentence writing skills in pre-cycles of 57.7% (sufficient category), in cycle I of 64.0% (active category) and in Cycle II of 82% (very active category). As for the indicator of success, which is the observation of pre-examination, cycles I and II indicate that the student's activity has increased. The average percentage of learning activity at the initial observation was 57.7% for the relatively active category, and increased in cycle I to 64.0% for the active criterion and in the cycle II increased to 82% for the highly active criteria. Thus, it can be concluded that the application of the Problem Based Learning model can improve the sentence writing skills of elementary school students because their indicators of success have overcome, or have reached the presentation of their indicator of success.

Keywords: *Student Activity, Problem Based Learning Model elementary school students*

2. Introduction

Education is the process of improving human qualities in terms of knowledge, attitudes, and skills by following certain procedures in order to benefit him, his family, the community, the nation, and the country (Hadist Awalia, 2018: 40). Education not only

develops intellectual abilities, but also how to implement them in social life by instilling moral values. Teachers as educators play an important role in giving knowledge to students so that they have the mastery of real life knowledge and skills. Teacher who will facilitate the students in the teaching learning process to the goal of learning process, teacher who is very important in terms of guiding and educating his students, as well as teacher who more face-to-face with students in his class in this case teacher should play the role of facilitator (Sulistriani, Joko Santoso & Srikandi, 2021).

In the teaching learning process, teachers are required to provide new innovations so that students can gain new experiences in teaching teaching. According to (Selvi Meilasari, Dkk, 2020) the teachers' learning process as educators has a very important role and becomes the key to success in the learning process of teaching, where teachers compile learning design, implement learning and evaluate learning outcomes. In the educational process, the issue lies mainly on the interaction of the teacher with the student. According to (Arifin Handoyono, 2017) said that the educators should be able to plan how to interact with the pupils during the learning process.

According to the observations that have been made, in the learning process the researcher observes the activity of students and teachers, from these observations it is known that students (1) when there is a question from the teacher, students tend to answer by looking at the book, whereas as expected teacher, the student can reveal his ability to think without seeing the book (2) not able to formulate the trees of the problem even though it has been explained (3) can not solve the question properly and correctly. As a result of the observation of the teacher, it is known that the teacher (1) applies the lecture method in the teaching process (2) only uses the theme book as a learning source (3) the learning process also applies teacher centered learning, where students only pay attention to the teacher's explanation. This results in students not being able to give an opinion either orally or in writing because the knowledge obtained comes only from the

book. (I Ketut Muliantara, 2018) says that the conventional learning model, known as the teacher center, is tight with the instructional atmosphere and feels less in line with the dynamics of scientific and technological development that is very fast. On the method of lectures is easy to occur verbalism, which visually becomes a loss, which is hearing greater acceptance and boring for relatively long use (Dina Latifah, dkk, 2023).

The learning process should focus on the context and experience that can make students interested and able to undertake learning activities, in other words the quality of learning will be greatly influenced by the learning planning quality used (Poppy Anggraeni and Aulia Akbar, 2018)

In PP no.32 of 2013 section 19 paragraph 1 also explains about the learning process that sounds Learning processes in educational units are organized in an interactive, inspiring, fun, challenging, motivating students to participate actively. Interactive learning can be the development of learning media and learning methods used by teachers. An effective learning process will work well when teachers can use the right learning model and involve many active roles of students (Nur Afifah, Otang Kurniaman, Eddy Noviana, 2022). One way that can make students active in the learning process is by applying a varied learning model (Riswati, dkk, 2018). As educators, teachers need to choose the right model to convey a concept to their pupils.

The learning model is a general pattern of learning behavior to the expected learning, the learning model can be used as an optional pattern, which means that teachers choose a suitable and efficient learning model to educational goals (Princess K & Syifa M, 2020). Recognizing how important a learning is to develop critical thinking skills of students, it is necessary to implement interesting learning and can involve students directly in such learning activities. Therefore, researchers provide solutions to solve the problem, namely, by applying appropriate learning models to improve students' ability to think critically, the type of model that researchers will use is a problem based

learning model.

Model problem based learning is a learning model that is based on many problems that require authentic research, namely research that requires a real solution of a real problem from examples of real problems if solved effectively, enabling students to understand concepts rather than just memorize concepts. It can train critical thinking by processing information that is already in their mind and compile their own knowledge about the social world and its surroundings (Lutfi Tri Rahmanto 2018). The phase of this learning model begins with the phase (1) student orientation to problems. (2) organizing students to learn. (3) guiding individual and group research. (4) developing and presenting the results of work, and (5) analysing and evaluating the process of problem-solving (Yuyun Dwi Handayani, Budi Febriyanto, 2017). The problem-based learning model can improve the critical thinking ability of students, because learning by applying the problem based learning model may train students to study independently and to think critically (Nisa and Rhosaliana, 2020). Each learning model has some advantages, (Nur Fitriani Zainal, 2022) The advantages of the problem based learning model are that it gives the opportunity to study / investigate multidimensional events with a deeper perspective so that it encourages critical thinking and problem-solving skills of the student, can improve social skills and encourage the student to learn new concepts at the time of solving problems.

From the above description it is necessary to conduct research on collaborative class action using the learning model problem based learning in elementary school students IPS subjects related to student activity. For that, the researchers chose the title of the study on "Application of Problem Based Learning Model to Improve the Activity of Class IV Elementary School IPS Load Students".

3. Methods

3.1. Participants and context

This study uses a qualitative method of Collaborative Class Action Research (PTKK). In this study, using a model from Kemmis and Mc Taggart that consists of four stages, namely: planning, action, observation and reflection (Prihantoro and Agung, 2019). The subject of this study is a student of elementary school grade IV SD IV Loading IPS Elementary School, with a total of 27 students. This collaborative class action research is carried out in two cycles. Implementation of each cycle follows the stages of planning, actions, observations and reflections.

3.2. Material

Research instruments are tools or facilities used by researchers in collecting data to make it easier. The instrument in this research is an observation sheet, on which the observance sheet serves to evaluate the activities performed by researchers in conducting research.

3.3. Data Collection and analysis

Data collection techniques are the most strategic step in research, as the main purpose of research is to obtain data. As for data collection techniques taken, among other things: observation techniques, used to collect data about activity during learning activities, as well as observing learning activity in students.

3.4. Ethical Considerations

All research or research involves human beings as subjects of research. Based on this, in this research there are basic principles of ethics of research, among others: the

first is respect for people; in this case we must respect and respect students, which is the student as a subject of research; then the second is the benefit; in the research there is a benefit for giving benefits to learning in the school, especially in the subject of Social Sciences, that is to increase the learning activity of students; the third is not to harm the research subject, in the study, does not harm the subject because while teaching learning activities are carried out in classroom, not outside the classroom

3.5. Limitations to the Study

There are limitations that researchers have in terms of time, effort, and cost, this research is limited to an effort to improve student learning activity through the application of the Problem Based Learning model to the students of the fourth grade of Elementary School. The language and materials taught are cultural diversity through the problem based learning model.

4. Results and Discussion

Collaborative Class Action Research consists of pre-action, cycle I and cycle II. The results of research on learning activity through the application of the Problem Based Learning model in the students of the fourth grade of primary school, can be described as follows:

Pre-Cycle

Before carrying out the research, the researchers perform observations in the classroom first, especially on IPS learning. This is to find out how learning in classroom. Based on the results of the observations carried out, there are many students who are less active in following learning in Classroom

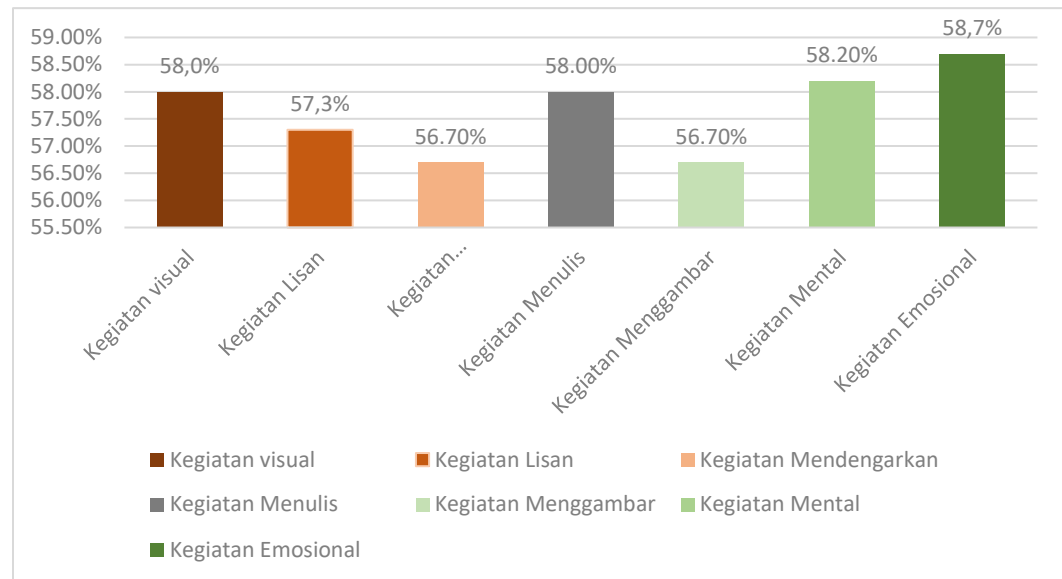


Figure 1. Diagram of increased student activity

From the above diagram you can see there are 7 (seven) indicators of learning activity in the early stages this is still low only reaches 57.7% of all students with sufficient categories.

Cycle I

a. tage of Action Planning

Planning is structured according to the problems to be solved, i.e. increased student learning activity through the application of the learning model Problem Based Learning in students of the fourth grade of primary school. At this stage, the actions carried out during the research are: a) Compilation of teaching modules that correspond to the material and using the Learning model of the problem based learning, b) preparation of learning media, c) Preparation of the learner's sheet of work, d) making the appropriate evaluation rubric.

b. Stage of Implementation

In the first cycle action phase, the learning process is carried out in the classroom using planning that has been structured using the Problem Based Learning learning model. This learning model begins with the phase (1) student orientation to the problem (2) organizing students to learn (3) guiding individual and group research (4) developing and presenting the results of the work, and (5) analysing and evaluating the problem-solving process.

Table 2. Comparison of Percentages of Cycle I Meeting 1 and Meeting 2

No	Treatment observed	Percentage (%)			Criteria
		The meeting 1	The meeting 1	Average	
1	Listen to the teacher or friend's explanation.	60,0%	69,3%	64,7%	Enough
2	Read modules or look for other references related to the materials assigned by the teacher.	58,7%	68,0%	63,3%	Active
3	Students ask about the materials taught by the teacher	60,0%	69,3%	64,7%	Enough
4	Students respond to responses, opinions, and answers from friends	57,3%	69,3%	63,3%	Active
5	Students listen to the teacher's explanation.	60,0%	68,0%	64,0%	Enough
6	Students listen to explanations, statements, answers, and responses from friends	58,7%	68,0%	63,3%	Enough
7	Students make a summary of the teacher's explanation and friend's explanation	57,3%	66,7%	62,0%	Enough
8	Students fill the LKPD of cultural diversity	61,3%	70,7%	66,0%	Enough
9	Students describe cultural diversity	57,3%	69,3%	63,3%	Enough

No	Treatment observed	Percentage (%)			Criteria
		The meeting 1	The meeting 1	Average	
10	Students describe the cultural diversity in Indonesia	60,0%	69,3%	64,7%	Active
11	Students can discuss and work in groups.	58,7%	69,3%	64,0%	Active
12	Students engage in discussion among other groups.	61,3%	69,3%	65,3%	Active
13	Students have the courage to explain the group discussion to the teacher	58,7%	68%	64,0%	Active
14	Students enthusiastic about the IPS learning process	60,0%	68,0%	64,0%	Enough
15	Students are enthusiastic about practicing cultural diversity	58,7%	68,0%	63,3%	Active
Average				64,0%	Active

From the above table it can be seen that each indicator has some different types of activity or behavior of students, of the 7 (seven) indicators of learning activity there are 15 activities or behaviour of students observed and their achievement at the stage of cycle I is still low only reaches 64,0% of all students with the category Active.

Table 3 Qualifications percentage of student learning activity

No.	Category	Level of Success
1	Very active	81- 100%
2	active	61 – 80%
3	enough	41 – 60%
4	lowly	21 – 40%
5	very low	0 - 20%

(Arikunto, 2013:175)

Based on the results of the observations of learning activity of cycle I, the average percentage value is 64,0%. The value is in the range between 61% - 80% with active

category. The average percentual rate of 64% has not reached the minimum criterion of active with percentages of 75%.

c. Observation levels

Conducting direct observation of the activities carried out in this cycle I.

d. Refleck

After taking action on cycle I, the activity reflections resulted in: (a) some students were less active in the discussion, i.e. some were still chatting on their own and did not pay attention when the teacher explained and the student was less brave to ask the researcher or teacher when they had not understood the material, (b) lack of student cooperation among the group members when solving the problem of discussion given by the teacher, (c) the learning process using the Problem Based Learning model improved from previous pre-actions. (d) Students' learning activity has not reached the specified indicators of success.

Cycle II

a. Stage of Action Planning

Planning is structured according to the problems to be solved, i.e. increased student learning activity through the application of Problem Based Learning learning model in students of the fourth grade of primary school. At this stage the actions taken during the research are: a) Preparing a learning implementation plan (RPP) that corresponds to the material and using the learning model of Problem based learning, b) preparing learning media, c) preparation of student sheets, d) making the appropriate evaluation rubric.

b. Stage of Implementation

In the first cycle action phase, the learning process is carried out in the classroom using planning that has been structured using the Problem Based Learning learning model. This learning model begins with the stage (1) student orientation to the

problem. (2) organizing students to learn. (3) guiding individual and group research. (4) developing and presenting the results of the work, and (5) analysing and evaluating the process of problem-solving.

Table 4. Comparison Percentage of Cycle II Meetings 1 and Meetings 2

No	Treatment observed	Percentage (%)			The Criteria
		The meeting 1	The meeting 1	Average	
1	Listen to the teacher or friend's explanation.	77,3%	78,7%	78,0%	Active
2	Read modules or look for other references related to the materials assigned by the teacher.	82,7%	88,0%	85,3%	Very active
3	Students respond to responses, opinions, and answers from friends	77,3%	78,7%	78,0%	Active
4	Students listen to the teacher's explanation.	81,3%	85,3%	83,3%	Active
5	Students listen to explanations, statements, answers, and responses from friends	78,7%	78,7%	78,7%	Active
6	Students make a summary of the teacher's explanation and friend's explanation	80,0%	84,0%	82,0%	Active
7	Students fill the LKPD of cultural diversity	82,7%	86,7%	84,7%	Active
8	Students describe cultural diversity	80,0%	80,0%	80,0%	Very active
9	Students describe the cultural diversity in Indonesia	78,7%	81,3%	80,0%	Active
10	Students can discuss and work in groups.	76,0%	78,7%	77,3%	Active
11	Students engage in discussion among other groups.	82,7%	85,3%	84,0%	Very active

No	Treatment observed	Percentage (%)			The Criteria
		The meeting 1	The meeting 1	Average	
12	Students have the courage to explain the group discussion to the teacher	78,7%	90,7%	84,7%	Very active
13	Students enthusiastic about the IPS learning process	81,3%	82,7%	82,0%	Very active
14	Students are enthusiastic about practicing cultural diversity	78,7%	84,0%	81,3%	Very active
15	Students respond to responses, opinions, and answers from friends	85,3%	93,3%	89,3%	Very active
Rata-rata				82%	Very active

c. Observation levels

Conducting direct observation of the activities carried out in this cycle II.

d. Reflect

After taking action on cycle I, the activity reflections resulted in: (a) students become better prepared in implementing learning, (b) through discussion activities, students exchange ideas with other students well, (c) the learning process using the Problem Based Learning model has improved from previous actions.

The average percentage of learning activity at the initial observation was 57.7 % with a relatively active category, and increased in the first cycle to 64.0 % for an active criterion and in the second cycle increased to 82% with a very active criteria.

5. Conclusion

The results of the collaborative class action research conducted in two cycles can be concluded that, the student's learning activity through the application of the Problem Based Learning model. The problem based learning model can also help students in understanding the material about cultural diversity, because there are group activities

and discussions.

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