

Increasing Activities and Student Learning Outcomes with the Project-Based Learning Model in the Thematic Learning Theme of Our Friends in Class V SDN 101911 Sidodadi

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Abstract

This study aims to increase student activity and learning outcomes in thematic learning on the theme of our friend's environment in class V SD Negeri 101911 Sidodadi. This research is a Class Action Research (CAR) using the Kemmis and Mc model. Taggart. This research is descriptive qualitative by using a qualitative approach which is strengthened by a quantitative approach. The results showed that there was an increase in activity and student learning outcomes in thematic learning by using project based learning learning models. The results of the research using the project based learning model were carried out well, as evidenced by the results of teacher observations in cycle I obtaining a percentage of 62.5% (good enough), cycle II increased to 80.3% (good), and cycle III increased to 91, 0% (very good). The results of observations of student learning activities in cycle I obtained a percentage of 32.2% (less active), experienced an increase in cycle II and cycle III, namely 57.9% (quite active) and 70.8% (active). In the learning outcomes of students in the first cycle classically only reached 49.1% of the criteria were not good. In cycle II, classical learning outcomes increased to 66.2% with good enough criteria. In cycle III, student learning outcomes classically experienced an increase again, namely, reaching 77.5% with good criteria. Thus the learning model of project based learning in thematic learning on the theme of our friend's environment in class V SD Negeri 101911 Sidodai can increase student activity and learning outcomes.

Keywords – Project Based Learning Models; Activities; Learning Outcomes.



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1. Introduction

Learning in the 21st century should be adapted to the progress and demands of the times as well as the curriculum currently being developed by schools which are required to change the teacher-centered learning approach to a student-centered learning approach.) in accordance with the demands of the future world of children who must have thinking and learning skills (Thinking and Learning Skills). Thematic learning is an integrated learning model that uses themes to link several subjects so as to provide meaningful experiences for students. Thematic learning places more emphasis on the application of the concept of learning while doing something (learning by doing). Learning tools are an absolute must. teacher prepared. Learning devices are a part of the learning process (Hidayat & Siti Khayroiyah, 2018); (Anugraheni. 2017); (Hidayat & Khayroiyah. 2018).

The learning process carried out by the teacher only uses lectures as the main method (Sukmawarti., Hidayat., & Liliani, O. 2022); (Sukmawarti., Hidayat., & Suwanto. 2021). The application of the lecture method is a conventional way of teaching. Conventional learning does not provide opportunities for students to develop their own potential. In using this method, the condition of the class will be fully handled and handled by the teacher (teacher centered). As a result, students are less challenged to develop and find their own abilities, so students are more passive and wait for teacher information rather than finding the knowledge and skills needed themselves (Sukmawarti, Hidayat & Suwanto, 2021). These factors make students feel bored, inactive and students' curiosity about the material presented by the teacher is low, so that students find it difficult to understand thematic lessons (Hidayat,Sukmawarti,& Suwanto.2021) ; (Kristin. 2016) .

Lack of student involvement during the learning process causes a lack of student activity during the learning process (Parnawi. 2020); (Sukmawarti & Hidayat. 2020); (Sukmawarti., et. al. 2017). Learning activities are activities carried out in the process of interaction between teachers and students in

achieving learning objectives, these interactions can enable students to understand the learning conveyed by the teacher. Kristin (2016) learning outcomes mean the results obtained by someone from the activities carried out and resulting in changes in behavior.

Anugraheni (2017) said that most of the activities or behaviors that a person shows are the result of learning. From this opinion it can be concluded that the activities carried out by students during the learning process are student behavior for learning, if there is a change in behavior as a result of learning it is called learning outcomes. To involve students in the learning process the teacher needs an effort that the teacher can make, namely asking questions to students, holding group discussions, increasing practice such as direct practice of making projects according to the lesson, in this way it can stimulate student activity and student involvement in the learning process so that it will increase the activity and student learning outcomes (Tafonao, T. 2018); (Susila, Sutiadiningsih, & Anifah. 2021) .

The use of learning media that supports learning activities is rarely used by teachers, where teachers use learning media only when needed so that students feel bored if only explained by the lecture method (Nurhidayah, Wibowo, F& Astra. 2021); (Huang, Li, & Shang. 2022). The use of learning media is very important in increasing student learning interest. Tafonao (2018) argues that, the role of learning media in the learning and teaching process is an integral part that cannot be separated from the world of education. Learning media is something that can be used to channel the sender's message to the recipient, so that it can stimulate students' thoughts, feelings, concerns, and interests to learn. To create effective media in the learning process the teacher should understand the learning material to be taught, and what media is used as a suitable tool in delivering the material. Based on the characteristics of elementary school students who are still at the stage of concrete thinking, real problem-oriented learning is which is absolutely essential as an introduction to real problems (Sukmwarti, Hidayat & Oca Liliani, 2022). In addition, teachers are also required

to be smart in determining the types and types of aids to be used in the learning process itself (Yunita, Juandi, Kusumah, & Suhendra. 2021); (Vistara, Rochmad, & Wijayanti. 2022).

The support of students' parents in the learning process is very influential in the present (Handrianto, & Rahman. 2019); (Cahyani. 2021); (Elvianasti, & Kartikawati. 2022) . Support is given as an effort to encourage children to learn, both at home and at school which ultimately changes the way children think for the better about the importance of education. But nowadays, parents generally pay less attention, especially to their children's education. Lack of attention from people This old thing is what causes children to be lazy, do not care and lack interest in participating in learning activities. The factor of the lack of attention of parents in children's education in the family environment is because parents are busy with their respective jobs so that there is less time to take care of and pay attention to children in terms of learning, so that children when they are at school are less active in learning activities.

Based on these problems, it is necessary to carry out a remedial effort or action to increase student activity and learning outcomes (Subeli, & Sapriya. 2020); (Evanita, & Afdal. 2021) . One of the efforts that can be made to increase the activity and learning outcomes of fifth grade students at SD Negeri 101911 Sidodadi is to use a learning model. Learning models have enormous potential to make learning experiences more interesting and meaningful. So that it can increase the activity and learning outcomes. One of the innovative learning models is the Project Based Learning Learning model.

In this learning model the teacher can utilize Information Technology (IT). IT is used as a learning medium and as a learning facility (Sukmwarti et al, 2017). In general, assessments applied in schools do not yet fully measure aspects of knowledge, attitudes and skills in an integrated manner according to the mandate of the 2013 Constitution (Sukmwarti & Hidayat, 2020).

Learning innovations that require educators and students to think creatively and be able to adapt to the times to produce students who are active, creative, innovative and of course have noble character (Sukmawati et al., 2021).

2. Method

The research used was a Classroom Action Research (PTK) design. The term PTK is also known as classroom action research, PTK is part of action research. According to Sulipan (in Parnawi: 2020) Classroom Action Research is research conducted in a class to find out the effects of actions applied to a research subject in that class.

Meanwhile, according to Kunandar (in Parnawi: 2020) Action Research is an activity carried out by educators or together with other people (collaboration) which aims to improve or improve the quality of the learning process in the classroom. Furthermore, according to Kemmis and Mc. Taggart (in Parnawi: 2020) Classroom Action Research is a form of collective self-reflection which is carried out by its participants in social situations to improve the reasoning and fairness of these practices and to the situations in which these practices are carried out.

The subjects in this study were fifth grade students at SD Negeri 101911 Sidodadi, a total of 24 students. This research was conducted in 2022 with an estimated research schedule, namely in the 2022-2023 school year which is located at SD Negeri 101911 Sidodadi Kec. Merbau Fence, Kab. Deli Serdang. This research was planned for two cycles. In each cycle there are 2 meetings. At the end of each cycle a formative test is carried out. The first meeting is used for learning and at the second meeting, one hour lesson is used for learning then one lesson hour is used for formative tests.

The instruments used in this study include: tests, observation sheets. In this study includes qualitative data and quantitative data. Test techniques are used to collect quantitative data, namely data on student learning outcomes. Observation techniques are used to collect qualitative data, namely data on student learning activities and teacher activities in the learning process. After the

data is obtained, the steps taken are to analyze the data obtained. This section will describe the techniques used to analyze the quantitative and qualitative data that have been obtained.

3. Result and Discussion

This research was conducted using a project-based learning model. The data obtained by the researchers from the results of this study included data from observations of teacher activities, observations of student activities and results of students' written tests after taking action. The results of this study consisted of three cycles in which each cycle described several aspects, which included: learning planning, learning implementation which consisted of preliminary activities, core activities, and closing activities, research results, and reflection. The data studied were fifth grade students at SD Negeri 101911 Sidodadi with a total of 24 students.

Based on the research results obtained from teaching and learning activities carried out in three cycles through observation of learning activities, observation of student and teacher activities and assessment of learning outcomes in class V SD Negeri 101911 Sidodadi, it can be said that learning with a project based learning model can increase activity and learning outcomes student. Here's the discussion:

In planning lessons, it is necessary to prepare in preparing lesson plans for each class, preparing materials, media and tools used for learning, preparing research instruments in the form of test questions and preparing activity observation sheets, student learning outcomes, and teacher activities. The preparation of lesson plans is arranged in such a way with a project based learning model. RPP contains KI (Core Competence), KD (Basic Competency), indicators of competency achievement, learning objectives and steps of learning activities. Learning activities consist of introduction, core activities (covering project-based activities namely, planning design stage, schedule preparation stage, the monitoring stage and the results testing stage), and closing activities. In preparing

lesson plans, teachers and researchers collaborate in determining the projects students will work on. The projects undertaken by the students included conducting experiments, making posters, making clippings and making mind maps on a large piece of paper.

From the results of observations of teacher activity that has been carried out in each cycle has increased. In the first cycle, learning using the project based learning model has not been carried out optimally, this has resulted in not achieving the success criteria for teacher activities. In cycle II, improvements were made in accordance with the reflections that had been made, namely increasing the teacher's skills in managing the class, encouraging students to dare to express opinions and answer questions, and monitoring every activity carried out by students. With this improvement, an increase was obtained in the final results of observing teacher activities, so that the predetermined success criteria were achieved, namely ≥ 80 . The following are the results of observations of teacher activities obtained from each cycle:

Table 1. Improvement of Teacher Activity Observation Results

Cycle	Percentage
Cycle I	62, 5%
Cycle II	80,3%
Cycle III	91,0%

The percentage of teacher activity in cycle I, cycle II, and cycle III is presented in the following diagram:

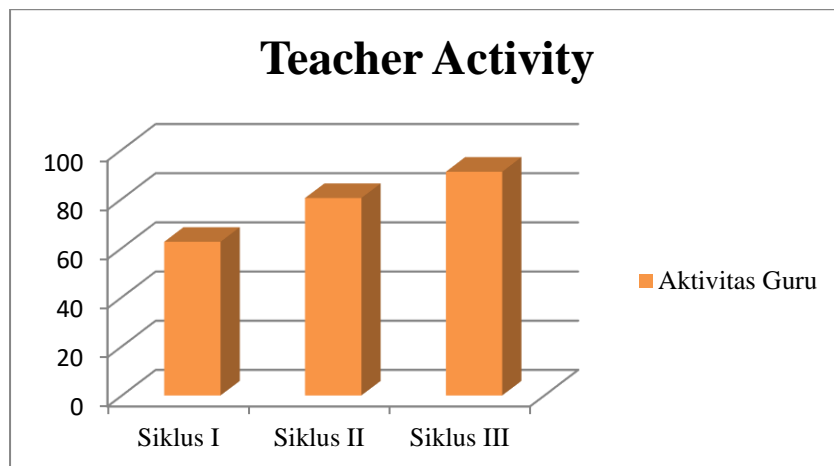


Figure 1. Diagram of Teacher Activity

From the data diagram above, it can be seen that the implementation of observing teacher activities in cycle I shows that learning using the project based learning model is not optimal because the percentage obtained is 62.5% (good enough). In cycle II the teacher's performance has been improved, the teacher acts optimally in conditioning the class and encouraging students to be active in learning, so that it reaches 80.3% better than cycle I. In cycle III it has increased again to 91.0% with very good criteria .

When using the project-based learning model, students are placed in groups of 6 people. In this group, students are distinguished based on their grades. Thus, in this group there are students who are smart, moderate or weak, and each student feels suitable for each other and is allowed to communicate and work together. Project-based learning is a learning method that uses problems as a first step in collecting and integrating new knowledge based on experience in real activities. Students are given the opportunity to share knowledge with their friends. This is in line with what was said by Sitaresmi, et al (in Vebrianto et al, 2021: 10) This project-based learning is a model that is carried out to train students to solve various problems they face independently or in groups.

From the observational data of student learning activities in cycle I in applying the project based learning model, students are less active, there are still some students who do other work during the learning process, many students do not want to ask questions and are embarrassed to give opinions, there are some

students who do not participate. participate in the group, so that student learning activities do not reach. In cycles II and III, improvement efforts were made, students became more focused on learning, more daring to ask questions, enthusiastic about giving their opinions and enthusiasm to participate in groups, so that at the end of the cycle of student learning activities the percentage reached 70.8%. The following are the results of observations of student activities obtained from each cycle:

Table 2. Improvement of Student Activity Observation Results

Cycle	Percentage
Cycle I	32,2%
Cycle II	57,9%
Cycle III	70,8%

The percentage of student activity in cycle I, cycle II, and cycle III is presented in the following diagram:

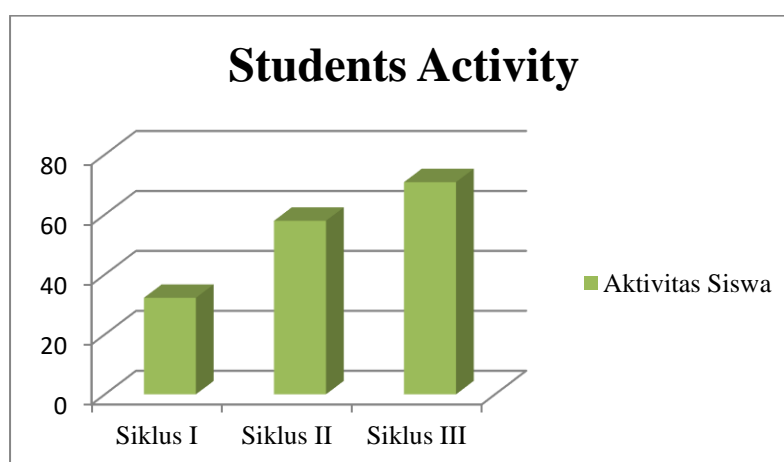


Figure 2. Diagram of Student Activity

From the data diagram above, it can be seen that the implementation of student observations in cycle I in the application of project based learning learning has many students who are less active so that learning is less than optimal, this can be seen from the activities of students who get a percentage of 32.2% so this affects the results student learning. However, from the results of observations of student activity in cycles II and III, there was an increase of 57.9%

and 70.8%, which met the success criteria, namely with a percentage of $\geq 61\%$. This makes students more active in the learning process, so that with project based learning students are more active and make students more enthusiastic in the learning process.

Learning behavior and student responses to learning also experienced improvement for the better. Students who were initially not enthusiastic about participating in learning, were afraid to ask or answer questions, became enthusiastic while learning and were actively involved in the learning process. This certainly shows that in addition to improving learning outcomes, the learning carried out also succeeded in improving the quality of the learning process. The following are the criteria for student learning outcomes and student learning outcomes in a classical manner obtained from each cycle:

Table 3. Criteria for Student Learning Outcomes

Criteria	Percentage		
	Cycle I	Cycle II	Cycle III
Very well	8,3%	25%	58,3%
Well	8,3%	29,1%	16,6%
Pretty good	20,8%	25%	20,8%
Not good	41,6%	20,8%	4,1%
Very Less Good	20,8%	0%	0%

Table 4. Classical Student Learning Outcomes

Cycle	Percentage
Cycle I	49,1 %
Cycle II	66,2%
Cycle III	77,5%

Increasing student learning outcomes classically can be seen in the diagram below:

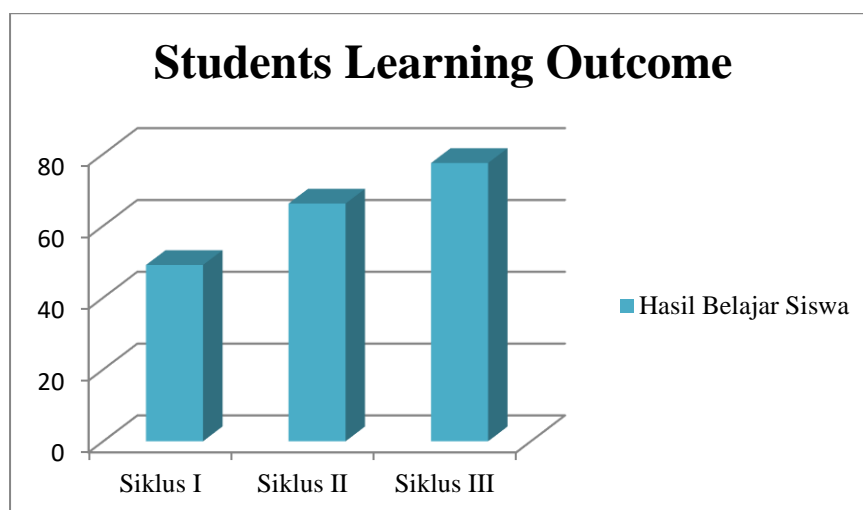


Figure 3. Diagram of Student Learning Outcomes

Based on the table above, it can be seen that, in cycle I, student learning outcomes have not met the predetermined success criteria, this is evident from the research results, namely, 2 students (8.3%) achieved very good criteria, 2 students (8.3%) achieved good criteria, 5 students (20.8%) achieved sufficient criteria, 10 students (41.6%) achieved less criteria and 5 students (20.8%) achieved very poor criteria, so that classical student learning outcomes only reached 49.1% with unfavorable criteria. From this it is necessary to continue with cycle II so that the predetermined success criteria can be met.

In cycle II, the teacher made improvements to the learning process according to reflection, that is, the teacher increased skills in managing the class, the teacher gave motivation and enthusiasm to students and monitored and guided every activity carried out by students. In cycle II, student learning outcomes increased, namely 6 students (25%) very good criteria, 7 students (29.1%) good criteria, 6 students (25%) good enough criteria and 5 students (20.8%) lacking criteria), so that the percentage of learning outcomes classically increased from 49.1% to 66.2%. Learning outcomes have increased but have not achieved success $\geq 72\%$. Therefore research in cycle II is said to have not been successful but to enhance the success of researchers will conduct research in cycle III.

In cycle III there were no more significant obstacles. The increase in learning outcomes in cycle II was caused by students who were familiar with the learning model applied by the teacher. The courage of students is growing, and their activeness is also increasing. This is shown by the many students who take advantage of the opportunity to answer questions, as well as express their opinions regarding the work on the material provided by the teacher. In the third cycle of student learning outcomes, namely the criteria for excellent learning outcomes reached 14 students (58.3%), the criteria for good learning outcomes reached 4 students (16.6%), the criteria for good learning outcomes reached 5 students (20.8%) and the criterion of poor learning outcomes is only 1 student (4.15), so that student learning outcomes in cycle III classically reach 77.5% with good criteria, from this student learning outcomes have achieved success, namely $\geq 72\%$.

From the description and data above, it shows that the project based learning model can increase student activity and learning outcomes. Students are trained to carry out work independently and respect the way others work, and become more active in the learning process. From the results of the research conducted, it can be seen that the research has experienced success.

4. Conclusion

Implementation of learning with a project based learning model can be implemented well. Observation of teacher activity in cycle I shows that learning with a project based learning model is not optimal because the percentage obtained is 62.5% in a fairly good category. In cycle II the teacher's performance has been improved, so that it reaches 80.3% better than cycle I. In cycle III it has increased again to 91.0% with very good criteria. Furthermore, the results of observing student learning activities in cycle I in applying the project based learning model of student learning were less active, this can be seen from student activity which obtained a percentage of 32.2% with the criteria of being less active, in cycle II student learning activities experienced an increase of 57.9% with

a fairly active category, so further research is carried out, namely cycle III. In cycle III, student learning activities increased with the active category, namely 70.8% had fulfilled the success criteria with a percentage of $\geq 61\%$.

In project-based learning model learning, the teacher's function is only as a facilitator, namely providing necessary direction to students. Student involvement is more emphasized in this learning. With this involvement, it will foster high learning motivation in students and will ultimately affect student learning outcomes. In cycle I, the criteria for student learning outcomes were 2 students (8.3%) achieved very good criteria, 2 students (8.3%) achieved good criteria, 5 students (20.8%) achieved sufficient criteria, 10 students (41.6%) achieved less criteria and 5 students (20.8%) achieved very poor criteria, classical student learning outcomes only reached 49.1% with unfavorable criteria. In cycle II the criteria for student learning outcomes increased, namely 6 students (25%) very good criteria, 7 students (29.1%) good criteria, 6 students (25%) good enough criteria and 5 students (20.8%) less criteria, so that the percentage of learning outcomes in a classical manner increased to 66.2% with quite good criteria but did not meet the success criteria, then it was continued with cycle III. In cycle III the criteria for student learning outcomes increased again, namely, the criteria for excellent learning outcomes reached 14 students (58.3%), the criteria for good learning outcomes reached 4 students (16.6%), the criteria for learning outcomes were quite good reaching 5 students (20.8%) and the criteria for poor learning outcomes are only 1 student (4.15%), so that student learning outcomes in cycle III classically reach 77.5% with good criteria, from this student learning outcomes have achieved success, namely $\geq 72\%$.

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