

## Implementation of the PBL Learning Model to Improve Motivation Study Student on Eye Lesson Mathematics

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### 1. Abstract

Student Motivation in elementary schools is still low. Students are not enthusiastic about following the learning process that takes place. The purpose of this study was to increase the learning motivation of low grade students in mathematics through Problem Based Learning (PBL). Model for third graders or Tahunan Public Elementary Schools. This type of research is Classroom Action Research (CAR) which is carried out at the Tahunan Public Elementary School. The target of this research was 23 grade 3 students consisting of 9 male students and 14 female students. Data collection techniques using observation and documentation. The results of the research show that through the Problem Based Learning Learning Model it can increase students' motivation in mathematics. The increase in student learning motivation can be seen from the first cycle, the average percentage of the model used in learning, namely the student problem-based learning model, is 58%. In the second cycle, the average percentage of the model used in learning, namely the student problem-based learning model, is 82%. The average student motivation increased 24% from cycle I to cycle II. These results have met indicators of success in research. This percentage has met the indicators of success in research. It is hoped that this study can be continued and developed so that it is better and useful for the world of education, especially for elementary school education

**Keywords:** Student Learning Motivation, Problem Based Learning Models, Mathematics Subjects.

## 2. Introduction

Learning can said to be successful when in process learning student involved in a manner active in organize And find Alone connection information Which obtained. Indicator success student Also Can is known if student own motivation in follow learning. According to Suwardi (Aninditya, 2014) if the motivation in students is very high strong, so matter the can influence results Study Which obtained. Motivation is the urge to make an effort so as to achieve objective Which wanted (Purwanto, 2014).

Activity Which need For noticed in learning Mathematics namely the interaction between students and teachers that facilitate students in follow the process of learning activities. In addition, the success of learning can seen from results motivation Study student moment process learning going on. Good student learning motivation is related to the processteach Which done by the teacher.

Based on results observation Which has done in class III B elementary school Tahunan, in learning mathematics there is a number of problem Which found. There are several causative factors such as first, students are still there who think Mathematics is difficult to learn and boring. Second, Still found student Which No involved active in process learning. Third, student not enough active in follow process learning. Fourth, learning Still done in a manner in the same direction with Teacher more Lots explain material separately direct.

Based on the explanation of the problems above, there is a need for innovation from teachers to improve student motivation, especially in eye learning activities math. This attracted the interest of researchers to carry out classroom action research using the application of the Problem Based Learning model Which is Wrong One alternative For increase motivation

student specifically in payload lesson Mathematics with title study "Application of the PBL Learning Model to Improve Motivation Study Student On Eye Lesson Mathematics".

### **3. Methods**

#### **3.1. Participants and context**

This type of research is Classroom Action Research (CAR). In general, there are four stages in classroom action research, namely planning, implementing, observing, and reflecting (Arikunto, 2010:17). The research was conducted at the Tahunan Public Elementary School. The research subjects were class III students, totaling 23 students. This research was conducted in March-June 2023. In this Classroom Action Research (CAR), the researcher planned 2 action cycles using the Kemmis and Mc Taggart model research procedures. The hypothesis in this study is the use of Problem Based Learning (PBL). the model can increase student motivation in class III students at SD Negeri Tahunan

#### **3.2. Material**

Instruments used in study These are observation and documentation.

#### **3.3. Data Collection and analysis**

Data collection can be carried out in various settings, various sources, and various ways. The way to carry out data collection techniques is through interviews, questionnaires and observation (Sugiyono, 2013: 193-194). In this study the data collection

techniques used were observation techniques and documentation techniques. Instruments in this case this research is used to measure the extent to which the use of Problem Based Learning is still natural, the researcher acts as a key instrument, follow participate direct in field And use technique collection data in a manner triangulation (combined). Same like with Sugiono, according to Moleong (2016) qualitative research is research which aims to understand the phenomenon of the things experienced by the subject study such as behavior, motivation, and others. The PBL learning model can increase student motivation in class III students of SD Negeri 1 Tahun.

### **3.4. Ethical Considerations**

Quantitative data analysis techniques are used to determine student motivation in each cycle and calculate the score of observation of the implementation of learning in the use of Problem Based Learning Models (PBL) by teachers and students. The indicator of success in this case this research is in the cognitive domain of at least 75% of all students in class III Tahunan Affairs.

### **3.5. Limitations to the Study**

A limitation of these Action Research studies is that the findings are tightly integrated with their context. As such, they cannot be generalized to other contexts. there are also limitations of researchers in terms of knowledge and experience of the authors. Being researchers with a background in language education, we have built our study's knowledge base and views on this matter

#### 4. Results and Discussion

Prior to the first cycle of action, the pre-action stage was carried out first. The data obtained at this pre-action stage were the results of observations in the pre- cycle. This pre-action is intended to determine the extent of student learning motivation before being given action. The results of the pre cycle show is 57.60.

The target of student learning motivation to be achieved is 75 when viewed from the results existing observations and documentation, the results of observations are still far from what was before expect . Based on the implementation of learning in the first cycle, it shows that students' learning motivation increases. This increase can be seen from the average student motivation cycle I showing average percentage motivation Study student as big 58 % showing Not yet achieved criteria success action. Process learning Which held on cycle II walk with Good, matter This is effort to repair results reflection cycle I. The average increase in student learning motivation obtained in cycle II was 82%. Increased average motivation student learning in cycle I and cycle II increase 24%.

**Table 1. Comparison of Learning Motivation Data Student  
Cycle I And Cycle II**

No	Indicator	Results Cycle I (%)	Results Cycle II (%)
1	Persistent Face Task	51,17	77,38
2	Like To Activity Mathematics	60,84	76,78
3	Notice Teacher Moment Explain	60,11	86.90
4	Diligent Follow Lesson	60,11	83,33
5	Enthusiastic Do Question Exercise	58,32	83,33
6	Believe Self On Teacher And Her friend	60,71	85,11
<b>Average Motivation student</b>		<b>58%</b>	<b>82%</b>

Based on the data obtained, it is known that the first aspect Which pay attention to the teacher's explanation. In the implementation of the first cycle of students diligently face the task reached 51.17 % has not reached criteria which has determined. On meeting cycle II, that is 77.38 % \_ Already achieve predetermined criteria. So the increase occurred from cycle I And cycle to II of 26.0021 %.

Second aspect namely the pleasure of mathematical activities. On cycles I student who are happy with math activities 60.84 % have not reached predetermined criteria. In the implementation of cycle II, namely 76.78 % Already reach the criteria Which has determined. So that enhancement happen from cycle I And cycle to II as big 15.94 %.

The third aspect is paying attention to the teacher when explaining. In cycle I students who paying attention to the teacher when explaining reached 60.11 % did not reach the criteria which has been specified. In the implementation of cycle II, that is 86.90 % already reach specified criteria. So the increase occurred from cycle I And cycle to II of 26.79 %.

The fourth aspect is being diligent in following the lesson . In cycle

I students who finish task reach 60.11 % \_ frozen reach criteria Which has determined. On implementation cycle II, that is 83 ,33 % Already reach predetermined criteria. So the increase occurs from cycle I And cycle to II as big 23.22 % .

The fifth aspect is Enthusiasm working on practice questions. In cycle I student enthusiastic about doing the exercises reach 58.32 % \_ Not yet achieve predetermined criteria. In the implementation of cycle II, namely 83 ,33 % have met the specified criteria. So the increase happen from cycle I and cycles II of 25.01 %.

The sixth aspect is confidence in the teacher and friends. On cycle I student Wh confident in the teacher and his friends achieve 60.71 % have not met the specified criteria. In the implementation of cycle II, namely 85.11 % have reached the specified criteria. So the increase happen from cycle I and cycles II of 24.40 %.

Regarding the results of using the PBL model in Cycle I and Cycle II, it can be seen in the table below.

**Table 2. Data Process of Use Model PBL Cycle I and Cycle II**

No.	Meeting	Results Percentage	Average
1.	First	68.33%	17.00%
2.	Second	85.83%	

The learning process using the PBL model is measured by using an observation sheet filled out by the observer. At a meeting the first is the use of the PBL model based on the results of the observer's observations showed a result of 68.33 % and at the second meeting it showed results as big 85.83%. Because from results the Still further action is needed

to improve the learning process. So that process the use of the PBL model has increased in each cycle.

## **5. Conclusion**

Based on results study action Which has held on class III elementary school Tahunan. So it can be concluded that of the Problem Based Learning learning model can improve Motivation student And in a manner No direct impact on learning outcomes student. Based on the results of observations at each meeting, the average in cycle I the percentage of the model is 68% In cycle II the average percentage Student motivation is 85%. Average student motivation increased 17% from cycle I to cycle II. Based on the results of observations at each meeting, the average in cycle I the percentage of the model used in learning, namely the student Problem Based Learning model , is 58%. In cycle II, the average percentage of the model used in learning, namely the student Problem Based Learning model , is 82%. Average student motivation increased 24% from cycle I to cycle II.

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