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## IMPLEMENTATION OF PROBLEM BASED LEARNING MODEL TO IMPROVE CRITICAL THINKING SKILLS ON ASTHMA'UL HUSNA

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### ABSTRACT

This study aims to determine the extent to which the use of Problem Based Learning method to improve Critical Thinking Skills of Asthma'ul Husna Class 4B SDN Tambakaji 01. The formulation of the problem is How high is the increase in critical thinking skills of students in class 4B SDN Tambakaji 01 in the subject of Islamic Religious Education and Ethics material Asthma'ul Husna using the Problem Based Learning (PBL) learning model? How can the Problem Based Learning (PBL) learning model improve the critical thinking skills of students in class 4B SDN Tambakaji 01 in learning activities of Islamic Religious Education and Ethics material Asthma'ul Husna ? Collaborators in this class action research are Senior PAI Teacher Peers. This research is a Classroom Action Research consisting of 2 cycles, each cycle consisting of 4 stages, namely planning, implementation, observation, and reflection. The data collection methods used were observation and documentation. Data analysis in this study is by comparing the achievement of grades with criteria for achievement of learning objectives 70-75 and is characterized by an increase in the Classical Completeness Criteria in each cycle. Data collection is done by looking at the critical thinking skills of students during learning activities. From the analysis of the data obtained, it can be concluded that there is an increase in the critical thinking skills of students in the pre-cycle, cycle I and cycle II shows that the critical thinking skills of students have increased, students with scores below Criteria for Achievement of Learning Objectives in the pre-cycle were 52%, in cycle I decreased to 26%, cycle II decreased to 0%. So there is an increase in students in critical thinking skills from 48% to 74%, or an increase of 100%. With this increase, it has shown success in this classroom action research. The classroom action research target on improving critical thinking skills has shown the planned results, namely 85% of active students in the implementation of learning in Cycle II.

**Keywords:**  
*PBL, Critical Thinking Skills, Asthma'ul Husna , Islamic Religious Education and Ethics*

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**Article History:** Received 01 November 2023, Revised 20 Januari 2024, Accepted 29 Januari 2024

## A. Introduction

Education according to Darwiyah Syah (2007) is an effort to realize the occurrence of a learning atmosphere and active learning process, so that students can develop their potential to have religious spiritual strength, self-control, intelligence, personality, noble character, and skills needed by themselves, society, nation and state. Education is very important to develop life skills and spiritual strength of learners.

Abdul Majid (2014) states that Islamic religious education is an effort to prepare students to recognize, understand, appreciate, to believe, fear and have noble character in practicing Islamic religious teachings which are sourced from the Al-Qur'an and also sourced from al-Hadis, through guidance, teaching, training and use of experience. Islamic religious education is also very important for the development of students. Learners not only need general lessons but also Islamic Religion because Islamic religious education can increase the faith, piety of students and prevent negative things.

Learning is an activity that requires an organized and systematic arrangement, because learning is related to what is to be achieved, namely the goals and/or competencies that must be mastered (Didi Supriadi 2020). Teaching and learning activities are activities that are systematically organized. The learning process can be obtained by observing, questioning, reasoning, trying, and communicating.

Based on the view of constructivist learning theory, teaching is not an activity of transferring knowledge from teacher to student, but an activity that allows students to build their own knowledge (Wadsworth, 1971). Teaching means participating with students in forming knowledge, making meaning, seeking clarity, being critical, and justifying. Learning is a process of constructing knowledge. The construction process is done personally and socially. According to Piaget (Wadsworth, 1971) the process of acquiring knowledge is carried out by students actively through assimilation or accommodation. Teaching is an activity of researchers to organize and organize the learning environment of students, in order to foster the desire to learn in students, then in the learning process, researchers act as managers of the teaching and learning process so that students have critical thinking skills. With critical thinking skills, students are taught to be able to analyze, make conclusions, use reasoning, assess or evaluate and make decisions and be able to solve problems.

Critical thinking is logical and reflective thinking centered on deciding what to believe or do (Ennis, 1985). There are five critical thinking frameworks in analyzing concepts according to Ennis (1985), namely: 1) giving simple explanations (elementary clarification), 2) building basic skills (basic support), 3) inferring (inference), and 4) making further explanations (advanced clarification), and 5) applying strategies and tactics.

To help improve students' critical thinking skills, researchers can apply the Problem Based Learning (PBL) learning model. Problem Based Learning is giving

problems related to everyday life to students then students in groups look for alternative solutions to solve the problem (M Amir Taufik 2016).

Problem Based Learning is a learning model designed and developed to develop students' ability to solve problems. Problem Based Learning is a learning model that exposes students to real world problems to start learning and is one of the innovative learning models that can provide active learning conditions for students. Through the Problem Based Learning model, students are expected to increase their activeness in learning so that it can encourage the improvement of students' critical thinking skills.

From the theories above, it encourages researchers' awareness to correct the teaching and learning activities that researchers have been carrying out. The realization that there must be improvements in the learning activities of Islamic Religious Education and Ethics class 4B at SDN Tambakaji 01 Semester 1 of the 2023/2024 school year. Researchers want to strive to improve students' critical thinking skills through the Problem Based Learning (PBL) learning model.

From the initial conditions that researchers observed at SDN Tambakaji 01, it was found that students were less interested in participating in Islamic Religious Education and Ethics learning activities. When learning activities take place, students listen more or answer questions asked by researchers. the critical thinking skills obtained also do not meet the minimum completion criteria standard sufficiently, namely 70-79.

### **Research Question**

Based on the background above, the following questions can be raised:

1. How high is the increase in critical thinking skills of students in class 4B SDN Tambakaji 01 in the subject of Islamic Religious Education and Cultivation of Asthma'ul Husna material using the Problem Based Learning (PBL) learning model?
2. How can the Problem Based Learning (PBL) learning model improve the critical thinking skills of students in class 4B SDN Tambakaji 01 in the learning activities of Islamic Religious Education and Ethics material Asthma'ul Husna ?

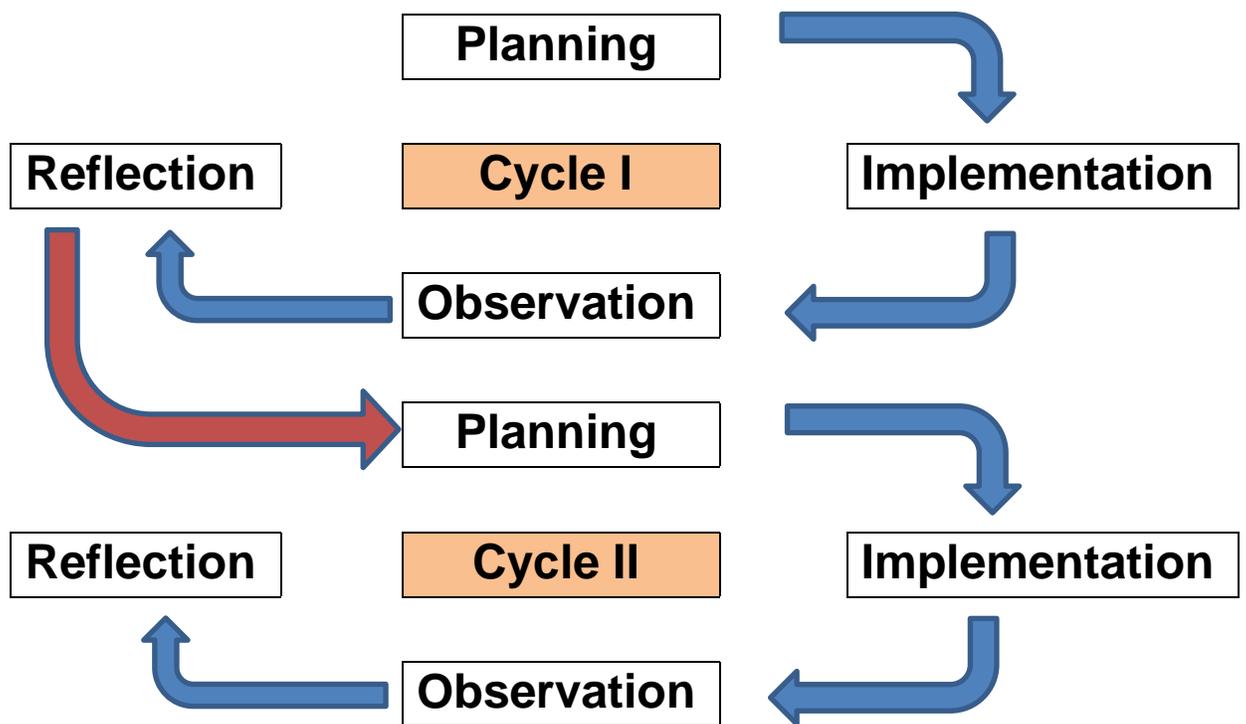
### **Research Objectives**

1. To determine how high the Problem Based Learning (PBL) learning model can improve the critical thinking skills of students in class 4B SDN Tambakaji 01 in the subject of Islamic Religious Education and Ethics material Asthma'ul Husna .
2. To examine how high the Problem Based Learning (PBL) learning model can improve the critical thinking skills of students in class 4B SDN Tambakaji 01 in the learning activities of Islamic Religious Education and Ethics material Asthma'ul Husna .

## **B. Research Methods**

This research is a classroom action research with the research subject is class 4B students of SDN Tambakaji 01, with a total of 27 students in the 2023/2024 academic year consisting of two cycles, where each cycle consists of the following stages: planning, implementation, observation and reflection. Planning is a stage where researchers prepare all learning tools such as Teaching Modules, evaluation tools and teacher and student observation sheets. At the implementation stage, researchers carry out learning in accordance with what has been planned. In the form of a learning process in accordance with the Flow of Learning Objectives and the Teaching Module

of Asthma'ul Husna Material. The implementation of each cycle lasts for two meetings. Based on the results of the analysis, the weakness factors or problems that arose during the use of the Problem Based Learning model in Islamic Religious Education and Ethics learning in cycle I were obtained and improved in the implementation of the next learning. At the observation stage, the researcher gave the observer an observation sheet for the implementation of teacher and student activities to observe the implementation of the learning process. According to Suharsimi Arikunto (2008), all of the above stages that researchers have modified can be described as follows:



At the end of the action, an evaluation of learning outcomes and evaluation of students' critical thinking skills was carried out by giving an essay-shaped critical thinking skills test that was done individually. According to Suharsimi Arikunto (2008), the reflection stage analyzes the results of observations and tests, where the data obtained by researchers in cycle I and cycle II research activities become input in preparing follow-up research. The data analysis technique used was using test data. Criteria for Achievement of Learning Objectives in the field of Islamic Religious Education in class 4B SDN Tambakaji 01 is sufficient, namely 70-75. To determine the increase in critical thinking skills in cycle I and cycle II, as well as an increase in learning presentation, the following formula is used:

a. Average score

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

Description:

$\sum x$  = Student's score

N = Number of students

b. According to Zen Amiruddin (2010), Percentage of Learning Completeness

$$KB = \frac{F}{N} \times 100 \%$$

Description:

KB = Percentage of Learning Completeness

F = Number of students who score above 70 N

N = Total number of students

c. Observation Data

The observation data obtained is used to reflect on the actions that have been taken and processed descriptively by calculating:

$$\text{Average Score} = \frac{\text{Acquisition score}}{\text{maximum score}} \times 100$$

Observation Score of Each Observed Aspect on the observation sheet of researchers and students:

No	Criteria	Score
1	Good	3
2	Fair	2
3	Deficient	1

Grading information:

1. Good if you get a score of 86 - 100

2. Fair if you get a score of 70 - 85

3. Not good if you get a score of less than 70

This class action research is said to be successful if there is a completeness of student learning outcomes, namely at least 85% of the number of students who complete learning, namely obtaining a score greater than or equal to 75. With the application of the Problem Based Learning method in this study, it is hoped that students' learning outcomes can increase from the Criteria for Achievement of Learning Objectives set at 70-75 at least 85% of the number of students who complete learning by obtaining a score greater than or equal to 70. The measuring tool is to analyze the

percentage of students' learning completeness from the cycle tests they have done.

### C. Research Results

This class action research was conducted in the odd semester of 2023/2024, this research was conducted in class 4B at SDN Tambakaji 01 with a total of 27 students, consisting of 12 men and 15 women. Classroom action research was carried out in two cycles starting October 26, 2023 and November 9, 2023. The approach to classroom action research includes planning, implementation, observation, and reflection. Initial research was carried out before cycle action both cycle one and cycle two. Observations that researchers conducted one meeting on October 19, 2023.

This study aims to determine the initial condition of the level of critical thinking skills of students so as to improve learning outcomes through the Problem Based Learning (PBL) learning model in Islamic Religious Education and Cultivation learning material *Asthma'ul Husna* .

Learning using problem-based learning can improve the critical thinking skills of students in class IVB SDN Tambakaji 01. Critical thinking skills of students who before the application of the problem-based learning model have not met the Criteria for Achievement of Learning Objectives, but after applying the problem-based learning model, students' critical thinking skills have increased, seen in the comparison of the test scores of students' critical thinking skills in the pre-cycle, cycle I and Cycle II shows that students' critical thinking skills have increased.

Learners with scores below Criteria for Achievement of Learning Objectives in the pre-cycle were 52%, in Cycle I it decreased to 26%, cycle II decreased by 0%. So there is an increase in students in critical thinking skills from 48% to 74%, or an increase of 100% .

### D. Discussion of Research Results

#### 1. Pre-Cycle Results

In the pre-cycle, the level of mastery of students towards the achievement of learning objectives cannot be achieved, because only 48% of students get scores according to Criteria for Achievement of Learning Objectives. So researchers through the problem-based learning model are expected to improve critical thinking skills and student learning outcomes at SDN Tambakaji 01.

Pre-cycle Table  
Critical Thinking Skills of Class 4B

No	Score	Pre Cycle	
		Quantity	Percentage
1	< 70	14	52%
2	70	11	41%
3	80	2	7%
4	90	0	0%

5	100	0	0%
<b>Quantity</b>		<b>27</b>	<b>100%</b>

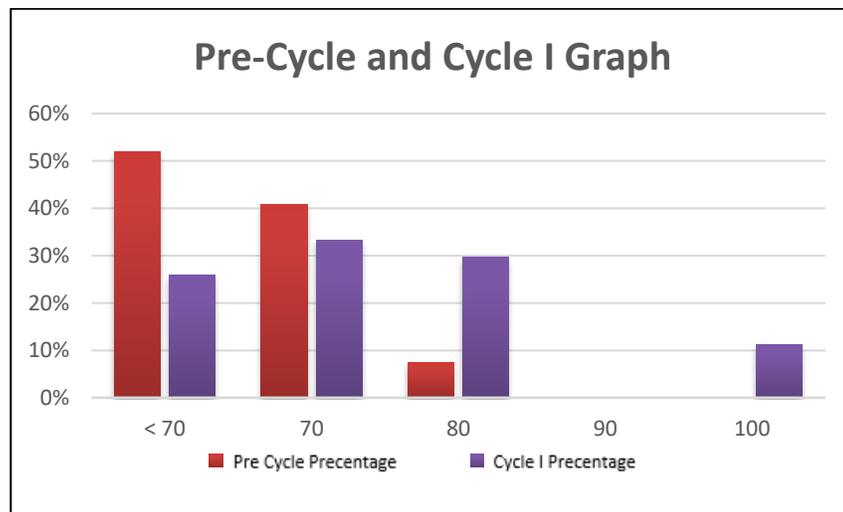
## 2. Cycle I Results

In cycle I, the level of mastery of students towards learning outcomes has not been achieved, because only 74% of students get scores above Criteria for Achievement of Learning Objectives. The increase in critical thinking skills has not shown the planned results, namely 85% of active students in the implementation of learning in cycle I. To show an increase in the acquisition value of Critical Thinking Skills Test scores of class 4B students.

Pre-Cycle and Cycle I Table

No	Score	Pre Cycle		Cycle I	
		Quantity	Percentage	Quantity	Percentage
1	< 70	14	52%	7	26%
2	70	11	41%	9	33%
3	80	2	7%	8	30%
4	90	0	0%	0	0%
5	100	0	0%	3	11%
<b>Quantity</b>		<b>27</b>	<b>100%</b>	<b>27</b>	<b>100%</b>

Cycle I Percentage



Based on the results of observations in the pre-cycle and cycle I, several shortcomings were found, namely: comparison of the test scores of students' critical thinking skills in the pre-cycle with cycle I shows that the critical thinking skills of students are as follows, students with scores below Criteria for Achievement of Learning

Objectives in the pre-cycle were 52%, in cycle I decreased to 26%. So there is an increase in students in critical thinking skills from 48% to 74%, or an increase of 26%. This increase has not shown success in this classroom action research. The increase in critical thinking skills has not shown the planned results, namely 85% of active students in the implementation of learning in cycle I. So this classroom action research still has to be continued to cycle II.

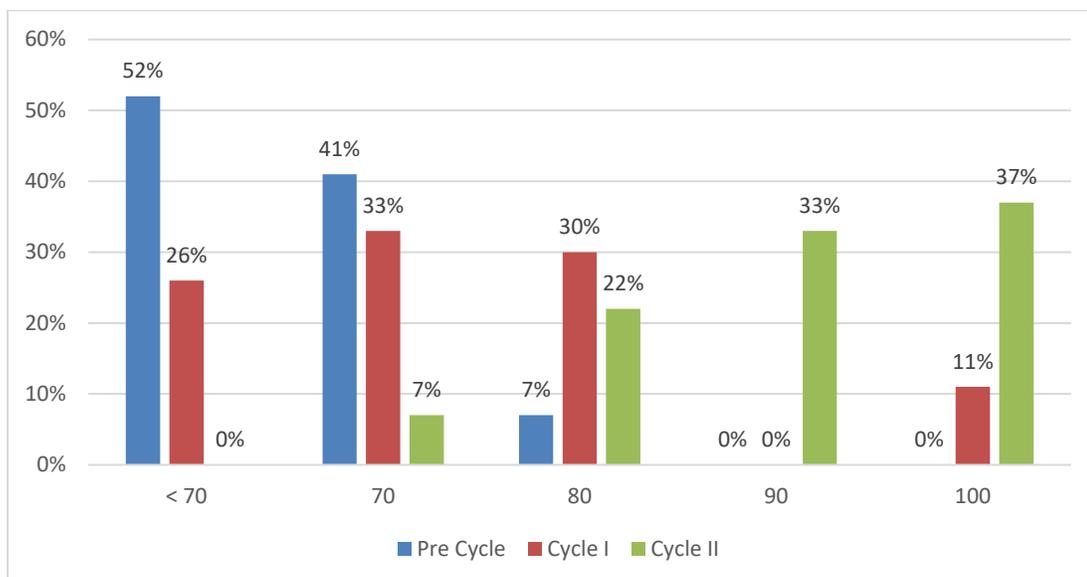
### 3. Cycle II Results

The level of mastery of students towards learning outcomes is 100% achieved, 27 students get scores above Criteria for Achievement of Learning Objectives. The improvement of critical thinking skills has shown the planned results, namely 85% of active students in the implementation of learning in Cycle II. To show an increase in the acquisition value of the Critical Thinking Skills Test scores of class 4B students.

**Table of Pre-Cycle, Cycle I, and Cycle II  
Critical Thinking Skills of Class 4B**

No	Score	Pre Cycle		Cycle I		Cycle II	
		Quantity	Percentage	Quantity	Percentage	Quantity	Percentage
1	< 70	14	52%	7	26%	0	0%
2	70	11	41%	9	33%	2	7%
3	80	2	7%	8	30%	6	22%
4	90	0	0%	0	0%	9	33%
5	100	0	0%	3	11%	10	37%
<b>Quantity</b>		<b>27</b>	<b>100%</b>	<b>27</b>	<b>100%</b>	<b>27</b>	<b>100%</b>

**Graph of Pre Cycle, Cycle I and Cycle II  
Critical Thinking Skills of Class 4B**



Comparison of the test scores of students' critical thinking skills in the pre-cycle, cycle I and cycle II shows that the critical thinking skills of students have increased, students with scores below criteria for achievement of learning objectives in the pre-cycle were 52%, in Cycle I decreased to 26%, cycle II decreased by 0%. So there is an increase in students in critical thinking skills from 48% to 74%, or an increase of 100%. With this increase, it has shown success in this classroom action research. The classroom action research target on improving critical thinking skills has shown the planned results, namely 85% of students are active in implementing learning in cycle II. So this classroom action research does not need to be continued to the next cycle.

### E. Conclusion

Based on the results of data analysis and learning in the previous chapter, it can be concluded that learning using problem-based learning can improve the critical thinking skills of class IVB students of SDN Tambakaji 01. Critical Thinking Skills of Learners who before the application of the problem-based learning model have not fulfilled Criteria for Achievement of Learning Objectives, but after applying the problem-based learning model the critical thinking skills of students have increased, seen in the comparison of the test scores of critical thinking skills of students in the pre-cycle, cycle I and Cycle II shows that the critical thinking skills of students have increased.

Learners with scores below Criteria for Achievement of Learning Objectives in the pre-cycle were 52%, in Cycle I it decreased to 26%, cycle II decreased by 0%. So there is an increase in students in critical thinking skills from 48% to 74%, or an increase of 100%. With this increase, it has shown success in this classroom action research. The classroom action research target on improving critical thinking skills has shown the planned results, namely 85% of students are active in implementing learning in Cycle II. So this classroom action research does not need to be continued to the next cycle.

Thus, the critical thinking skills of students increase towards a better direction with the application of the problem-based learning model compared to using the lecture method or learning methods that were done before.

### **Recommendations**

Based on the results of the study, the researcher put forward various suggestions, namely:

#### 1. For Teachers

a. PAI teachers should be able to study and understand more deeply about the problem-based learning (PBL) model and its implementation procedures as one of the references to improve the quality of learning in the classroom.

b. Teachers can apply the problem-based learning (PBL) model in different classes so that teachers will be accustomed to implementing learning that develops learner activities.

#### 2. For Researchers:

a. Need a deeper understanding of the factors that influence the effectiveness of the implementation of the problem-based learning model, especially with regard to the selection of strategies and media that can be further varied.

b. The application of the problem-based learning model can be used as an alternative variation of the learning model in improving students' critical thinking skills in Islamic education subjects.

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