

THE USE OF PROBLEM-BASED LEARNING METHODS TO IMPROVE STUDENT'S CRITICAL THINKING SKILLS

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Abstract: This research is a class action research; the subject is the students of class XI IPS 1 MAN 1 Bojonegoro, which amounted to 35 students. This research was conducted four times a meeting and as many as two cycles, each cycle one face-to-face meeting. The data collection methods used were tests, observation, and documentation. The test is used to measure students' critical thinking skills using tests. To process quantitative data using scoring techniques from students' individual scores, the average score of research subjects, and the percentage of classical completeness. The results showed that applying the Problem-Based Learning method made many contributions, including the ease of students in understanding dress code material because of its fun and relaxed delivery. Most students have been able to understand the adab of dressing, but some obstacles lie in student boredom related to learning methods so far; it turns out that during the learning process in class XI US1, the teacher still uses conventional methods, in the form of lectures and assignments so that it has an impact on the condition of students who become passive and bored because learning seems monotonous.

Keywords: Problem Based Learning; Critical Thinking; Students.

INTRODUCTION

Education has a significant role in human life. To fulfill educational needs, humans must follow or enter the world of

education through the teaching and learning process to maintain life and develop themselves in the life of society, nation, and state (Susandi et al., 2022).

One effort made by the government to improve the quality of national education is to improve the curriculum from the 2013 Curriculum, which has been refined into the Independent Curriculum (Mulyadi, 2020).

Curriculum improvement carried out by the government on an ongoing basis is a necessity so that the national education system is always relevant and competitive. The critical thinking ability of each individual is different, depending on the exercises often carried out to develop critical thinking (Yuliani&Nugraha; Hafsa, 2021).

The facts found in XIIPS MAN 1 Bojonegoro class students show that learning Aqidah Akhlak is still theoretical and requires critical thinking skills. Their enthusiasm to answer the teacher's questions is still limited to theory and has yet to develop following their potential and abilities. In addition, some students still find it challenging to work in groups, communicate, solve problems when presented with examples of real problems, and have yet to decide the right solution to a problem.

Based on preliminary observations, the problem in class XI IPS 1 is that

students are less motivated and less active in learning, so the classroom atmosphere tends to be boring. The learning outcomes obtained by students could be better. This is due to monotonous learning methods from time to time. With these observations, various methods are needed in teaching and learning activities (Haryanto, Sukardi, 2018).

The learning method that will be applied is the problem-based learning method on Manners material. Critical thinking skills are critical to instill in students. This needs to be done so that they can see, examine and solve various problems they will face in the community appropriately. During this time, students are accustomed to learning only by listening to the material explained by the teacher and doing independent assignments without them understanding the material taught. After all, they will join the community later (Lieung, 2019).

Learning in schools should focus more on understanding the material realized by applying the material to the community environment that will be faced (Ulfah & Purwanti, 2020). The researcher chose the Problem-Based Learning method to be applied to the Manners material. Because this material is able to present questions that can help students practice critical thinking, be creative, and be able to develop their ideas. The application of the Problem-Based Learning Method to Manners Material is expected to increase student motivation and learning outcomes (Rachmawati et al., 2022).

The problem-based learning model (PBL) or also known as the problem-based learning model, is a learning model that uses real problems encountered in the surrounding environment as a basis for

acquiring knowledge and concepts through critical thinking and problem-solving skills.

According to (Wahyu et al., 2021), the foundation of PBL is a collaborative process. Learners will construct knowledge by building reasoning from all the knowledge they have and from all that is obtained from interacting with fellow individuals. With PBL, students are expected to be able to solve problems with various alternative solutions and identify the causes of existing problems.

Applying the PBL model can help create learning conditions that were initially only the transfer of information from lecturers to students into a learning process emphasizing the construction of knowledge based on understanding and experience gained individually and in groups. The problems raised in problem-based learning are real problems in the field.

The problems raised in PBL learning have a variety of answers, meaning that students must be involved in exploration with several paths to completion. Student involvement in PBL can help develop critical thinking skills because, in PBL learning, students are fully involved in the learning process through problem-solving activities (Husnidar & Hayati, 2021). In this problem-solving activity, students are required to develop critical thinking skills as a step to solve the problems discussed and draw conclusions based on their understanding.

Based on the background description above, it is necessary to conduct educational research. In this case, the author wants to discuss "The Use of Problem-Based Learning Methods to

Improve Students' Critical Thinking Skills."

METHODS

This research aims to explain the use of the Problem-Based Learning (PBL) method for students. This research is descriptive qualitative because it only describes the realization of using the Problem-Based Learning (PBL) learning model to understand critical thinking in class XI IPS 1. Students with competency standards in understanding the material taught. This qualitative approach is naturalistic because this research does occur naturally, such as in a situation that is not manipulated by circumstances and conditions, emphasizing natural descriptions. Data collection or network phenomena is carried out from natural circumstances, known as "natural and natural data collection." This type of research is classroom action research (PTK) (Jacub et al., 2020), which is the "observation of learning activities of an action, which is deliberately raised and occurs in the classroom together. Classroom context that aims to improve learning practices in the classroom to improve process skills and student learning outcomes. The activities that must be prepared in this class action research are Observation, Consultation with tutors, Identification of problems in learning activities, formulating strategies suitable for learning, and Choosing the correct method or strategy.

RESULT

This class action research was conducted in 4 meetings, using two cycles, each consisting of 2 meetings.

1. First Cycle

Planning Before the research is carried out in the actual stage, this research invites students to think critically, develop learning independence, and increase students confidence in class XI IPS 1, MAN 1 Bojonegoro. The planning that will be done by the author in this research is as follows:

First: Problem or Question Presentation Learning revolves around problems or questions that are real and important to students and society. The problems and issues must be authentic, transparent, easy to understand, broad, and valuable.

Second: Linkage to Various Disciplines Problems raised in the learning process should be related to or involve various disciplines.

Third: Authentic Investigation is conducted on authentic issues. In addition, investigations are also needed to find solutions to real problems. In the investigation, students will analyze and formulate problems, develop and make hypotheses, and explain the final results.

Fourth: Producing work In problem-based learning, students are assigned to compile the results of their research in a work and show the results. That is, students are asked to make a report on the results of problem-solving.

Fifth: Collaborative problem-based learning, the tasks given must be completed collaboratively. Collaborative work can be done between students in large or small groups or between students and teachers planning to improve the effectiveness and efficiency of the teaching and learning process in the classroom. This method is carried out to develop abilities.

This cycle was implemented at the first meeting on Wednesday, October 19, 2022. So first, the researcher plans to provide an explanation related to the material of adab dressing. The researcher provides problem identification related to the material being taught by providing several questions asked to students. The questions and problems posed must meet the criteria of authenticity, clear, easy to understand, broad, and valuable.

After that, students are asked to conduct discussions with their groups by conducting investigations related to the problems described in the investigation, and students will analyze and formulate problems, develop and make hypotheses, and describe the final results.

Observation In this first cycle, the researcher only delivered material about the adab of dressing and examples of problems that exist in society in general; when the Problem-Based Learning method began, inevitably, students had to answer or analyze related problems that occurred in society regarding the adab of dressing, based on observations that researchers observed. Students are very enthusiastic about learning akidahakhlak on the subject of adab in dressing, with a simple method that makes students motivated to learn and trained to think critically. The delivery of material about adab in dressing by researchers is a provision for students when solving group problems. Furthermore, the results will be submitted by students; this activity shows the development of critical thinking skills of each individual (Ghannam&Techtman, 2021).

Reflection from the observation of the application of learning by using a problem-based learning method can help

students develop an understanding of critical thinking in students of class XI IPS 1. Evidenced by the students of class XI-US1, who are very enthusiastic about solving and finding solutions to various problems presented; also, the learning outcomes of students of class XI IPS 1 are pretty good.

In practice, researchers explained the meaning of dress etiquette and evidence of problems related to dress etiquette in society through lectures and problem-based learning. Moreover, the students were enthusiastic about adab dressing which was accompanied by the problem-based learning method.

2. Second Cycle

a. **Planning** Based on the results of previous observations, it is known that the problems faced during teaching and learning activities in the classroom take place. At this stage, it was formulated to continue using the problem-based learning model as carried out in the first cycle. b. **Implementation** In this cycle was carried out at the second meeting on Wednesday, October 26, 2022. After students make indirect observations and find solutions that must be done to maintain good manners in society, the next step is for students to develop and present the results of their work.

The teacher helps students plan and prepare an appropriate report form to show the investigation results. The report can be written. The final step in implementing problem-based learning is that the teacher helps students reflect on or evaluate the investigation and the process that has been passed. Furthermore, draw conclusions/generalizations to determine the extent of understanding students' critical thinking in

class XI IPS 1 MAN 1 Bojonegoro on dress code subjects. c. Observation In this second cycle, researchers observed student work results and assessed them individually and in groups. During the teaching and learning process, the class condition changed; namely, students had high motivation in learning, and students were more improved in understanding related learning material with this problem-based learning method.

This can be seen from the activeness of students in participating in learning. Because in the second cycle, the researcher provided a stimulus to the best student groups so that they were more happy and active in competing to present the results of their discussions and analysis with their group friends. However, some students are silent and only depend on the theme of the ground. Reflection Based on the reflection results, it is known that: 1) The discussion has gone well, as evidenced by their enthusiastic response in expressing their opinions on the issues discussed. 2) Teachers and students have responded positively to learning with the Problem-Based Learning Method. 3) Students are increasingly concerned and aware of the many problems of dressing that need to be by Islamic teachings, which are currently being ignored by various circles of society.

It is known that the research subjects totaled 35 students. The implementation of this class action research was carried out in 2 (two) cycles, namely cycle I (on October 19, 2022) and cycle II (on October 26, 2022). The results of the study are presented, which consist of learning outcomes of dressing manners through the Problem-Based Learning model and the results of observations of

the learning process. The delivery of material about dressing manners by researchers is also a provision for students when solving problems in groups. Furthermore, the student's results will be presented; this activity shows the development of critical thinking skills of each individual. The steps used refer to the opinion (Marmuah et al., 2022) which states that the development of thinking skills in the context of problem-solving can be done in several steps, namely: 1) identifying the problem, the suitability of the information obtained; 2) exploring interpretations; 3) determining alternatives as solutions; 4) communicating conclusions; and 5) integrating, monitoring, and refining strategies to solve problems. These steps align with the PBL implementation steps carried out by the researcher.

The problems found based on observation and discussion are relevant to the material being studied. Students learn based on what is obtained theoretically and are directly related to the reality that occurs in the field (community). This prepares students when they enter community life later. In line with the opinion (Novianti & Nurlaelawati, 2019), which states that the higher the relevance of the problem, the higher their desire to work on solving the problem. When students presented the results of discussions from each group, the researcher acted as a facilitator and assisted students in identifying problems and linking them to the knowledge they had acquired. According to (to Nurbaeti, 2019) states that in problem-based learning, the teacher acts as a facilitator and assists students in reminding students of theoretical knowledge relevant to the

problem at hand, as well as directing students in identifying their own misconceptions. This problem-solving process helps students integrate previously acquired knowledge with the problem or information obtained to be able to offer various alternative solutions. It is revealed (Rachmadtullah et al., 2018) that PBL is designed by confronting learning with contextual problems related to learning material so that students know why they learn then identify problems and gather information from learning resources, then discuss them with friends in their groups to get problem solutions while achieving goals. This is also in line with the opinion (Ratnawati et al., 2020) that PBL is a learning approach that uses real-world problems by applying critical thinking processes and problem-solving skills to obtain essential knowledge and concepts from learning materials.

Tabel 1

Kategori Persentase Interval Frekuensi

Frekuensi Interval	Total students	Presentasi	Category
86- 100	0	0%	Sangat baik
71-85	5	14,28%	Sehat
56-70	27	77,14%	Cukup
41-45	3	8,57%	Tidakcukup
< 40	0	0%	Sangat kurang
Amount	35	100%	

From the table above, it can be seen that in the acquisition of learning outcomes of Aqidah Akhlak Clothing Manners through the Problem-Based Learning method, 14.28% of students are in a suitable category, 77.14% are good, 8.57% are sufficient, and 0% are less. The average learning outcomes of Cycle I clothing manners through the Problem-Based Learning method were 68, and individual completeness only reached

77.14%. The portrait of learning morals of faith has yet to achieve the teacher's expected goals as stated in the performance indicators > 85% of the students in the class have reached individual learning completeness, so it is necessary to carry out cycle II.

Observation of the Akhlak Akidah Learning Process. The observation results of cycle II showed a significant improvement. The seriousness of students participating in akidah morals lessons is increasing. Students' attention is entirely focused on the material being taught. Student enthusiasm is increasing; all students follow the lesson enthusiastically, and no one is lazy or lacks enthusiasm in participating in Akidah and Akhlak lessons. Student progress is also seen in terms of student courage when expressing opinions. Students began to dare to express their opinions; this can be seen from the activeness of students asking about material that has not been understood. Students are also no longer embarrassed to answer questions; every student always tries to answer questions correctly without being embarrassed anymore. Students' courage is also increasingly visible when they have to express their critical ideas in class.

Another behavior that showed improvement was in terms of accuracy. The tasks given to students can be completed well, although not all can be completed on time. Another thing that has improved is students' ability to answer questions from various aspects of the problems presented in this problem-based learning method. In addition, in answering questions, students can answer questions on the material studied. Students have not been able to complete the task earlier than

the specified time. This is because students need to get used to completing tasks quickly. However, the ability to answer questions has improved. Students can answer questions quickly and accurately; here, it can be seen that students are very interested and enthusiastic about the method determined; besides, the suitability of the material discussed is significantly related to the problems that exist in society.

Second cycle, exposure to Student Learning Outcomes Based on the data from the results of cycle II research on learning outcomes with a post-test assessment system at the end of Aqidah Akhlak learning on the subject of Adab Dressing through the Problem-Based Learning learning model, the highest data was obtained. The score obtained by the respondent was 90. The lowest score was 79 overall, which can be read in the frequency distribution table classified according to the category of Aqidah Akhlak's learning outcomes on the subject of adab dressing as follows: Table 2 Description of Learning Frequency Classification of Learning Outcomes of Aqidah Akhlak Subjects on Dress Code Cycle II.

Tabel 2

Kategori Persentase Interval Frekuensi

Frekwensi interval	Jumlah siswa	Presentase	Kategori
86- 100	7	20%	Sangat baik
71-85	26	74,28%	Sehat
56-70	2	5,71%	Cukup
41-45	0	0%	Tidak cukup
< 40	0	0%	Sangat kurang
Amount	35	100%	

From the table above, it can be seen that in the acquisition of Akidah Akhlak learning outcomes on the material of Dress Ethics through the Problem-Based Learning learning model, 20% of students are in the Excellent category, 74.28% are good, 5.71% are sufficient, and 0% are less. The average learning outcome of Akidah Akhlak Cycle II through the Problem-Based Learning learning model is 85, and individual completeness reaches 100%. The portrait of Akidah Akhlak's learning has achieved the objectives listed in the performance indicators, namely > 85% of the total number of students in the class have achieved individual learning completeness, so that class action research is declared successful in students' critical thinking skills and in addition that this research has also succeeded in improving student learning outcomes, so there is no need to hold the next cycle. Thus it can be concluded that the action research hypothesis states: "By applying the problem-based learning method can improve the understanding of critical thinking in the lesson of creed, morals, cosmetology material in class XI- IPS 1 MAN 1 Bojonegoro", meaning that the truth is accepted.

DISCUSSION

Applying the Problem-Based Learning approach to improve students' critical thinking skills in Class XI IPS 1 MAN 1 Bojonegoro can run as well as expected. Based on the results of the above research, there are several implications or recommendations to competent parties to achieve the goal of achieving students' critical thinking skills, namely: 1. Through the application of the Problem-Based

Learning approach can improve the ability to think. Critical thinking for students of Class XI IPS 1 MAN 1 Bojonegoro is inseparable from school facilities, infrastructure, and qualified educators. 2. For schools in general and especially in Class XI IPS 1 MAN 1 Bojonegoro, the results of this study can be used as input and reference for policy-making to increase student awareness of preservation in the madrasah environment.

CONCLUSIONS

Based on the research conducted by the author and the analysis of data obtained from the object of research, it can be concluded that: 1. The application of the Problem-Based Learning approach implemented in class XI IPS 1 MAN 1 Bojonegoro in the field of Akidah Akhlak Learning with the material "Adab in Dressing" can improve the understanding of students' critical thinking skills through the application of the Problem-Based Learning approach. This can be seen from the enthusiasm and activeness of students during the application of the Problem-Based Learning approach. 2. The success of the application of the Problem-Based Learning approach in Class XI IPS 1 MAN 1 Bojonegoro, of course, there is an influence from various parties, including educators as a control in the learning process who control students over the process learning activities so that it can be carried out correctly and result in increased student understanding of critical thinking skills on the material taught.

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