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## Improving Student Learning Outcomes with Problem Based Learning Model: A Study at State Senior High School 2 Koto XI Tarusan

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**Abstract:** This study aims to improve student learning outcomes in Islamic religious education learning by using the problem based learning model. This study is a classroom action research that uses four steps, namely planning, action, observation and reflection. The subjects of this study were high school students. The data for this study were obtained using test and observation techniques. Tests are used to measure learning outcomes and observations are used to analyze teacher and student learning activities. The data analysis technique used in this study is descriptive statistics by comparing the results obtained with indicators of research success. The results of the study indicate that the problem based learning model can improve student learning outcomes in Islamic religious education learning. This can be seen from the increase in the percentage of student learning completion in each cycle with details of the pre-cycle 48.71%, the first cycle 66.39% and in the second cycle it increased to 89.66%. Thus, the use of the problem based learning model can be used as an alternative to improve student learning outcomes in Islamic religious education learning.

**Keywords:** Learning outcome, problem based learning, islamic education.

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### INTRODUCTION

Education is an effort to realize planned change compared to the past. The goal is to instill in students a sense of responsibility and independence in carrying out the tasks given, further developing potential, knowledge, skills and attitudes towards life. There are four teachings in education: "special skills," "knowledge," "consideration," and "wisdom." Based on the statement above, this is in accordance with Law Number 20 of the same year and the state-based National Education System. "Article 1, Article 1 of 2003 states: A learning process that actively develops the potential of students to acquire religious spiritual strength, self-control, individuality, intelligence, noble morals and abilities needed by themselves, society and the nation. Islamic religious education subjects are subjects studied in primary, secondary, and high schools. In this case, learning can be interpreted as a change from ignorance to knowledge.

Religious education is very important in daily life, because religion is the most important prerequisite for achieving a meaningful, peaceful, and dignified life. In learning, teachers certainly have various learning methods to help students understand the material they provide. Learning is a process of providing information through actions that

take place directly or indirectly between teachers and students. During the learning process, students strive to actively participate in teaching and learning activities to achieve their learning goals. To achieve quality learning, the role of teachers who are active, creative, innovative, effective and efficient in providing comprehensive learning to students cannot be separated. A comfortable atmosphere for students will usually cause learning activities to be more harmonious. Therefore, one of the ways teachers can help students is by introducing new and appropriate learning methods.

Methods are those used by teachers in the classroom to help students achieve the learning goals that they have developed. In terms of learning, good learning outcomes show the high quality of student learning. Every work if carried out with creativity will run effectively and efficiently, this will create a will in students and motivate students to learn regularly. Many students are actively studying, but the results do not go as planned. One of the causes is his lack of enthusiasm and creative spirit. Through this creativity, students are also taught good learning methods that can support their learning success, especially student learning outcomes. The mind mapping method, according to Windura, is a method that can maximize the work of our brain, namely the left and right sides.

The left brain works using words, numbers, analysis, logic, sequences and counts. Meanwhile, the right brain learns to use images, colors, rhythms, dimensions, imagination and daydreaming. The mind mapping method is the easiest way to put left-thinking information inside and take the information out of the brain. Mind mapping is a creative, effective, and literal way of taking notes that will map our thoughts into neatly arranged concepts. This mind mapping uses the right brain's ability to visually recognize to get the maximum results with a combination of colors, images and curved branches. This method is more visually stimulating than the traditional recording method which tends to be linear and monochromatic, this will make it very easy for students to remember information.

This method is one of the learning methods that automatically gives encouragement to students so that they are interested and willing to accept and cooperate in class. With this method, students' learning outcomes and motivation in learning will also increase. The mind mapping method has advantages and disadvantages when applied. The advantage of the mind mapping method is that it can create a comfortable learning atmosphere and increase students' creativity and interest in learning. However, the disadvantage of the mind mapping method is that it takes a very long time to make mind maps for students who are still beginners and are not very interested in reading. Based on the description above, the author is interested in conducting a previous discussion to find out more clearly about "Improving Students' Learning Outcomes on Strengthening Faith by Maintaining Honor, Sincerity, Shame and Zuhud Through the Application of the Mind Mapping Method for Islamic Religious Education and Ethics Class XI at SMA Negeri 2 Koto XI Tarusan Academic Year 2024/2025".

## **METHODS**

This study uses a type of Classroom Action Research or also known as Classroom Action Research with the aim of improving teacher performance in the learning process so that there is an increase in student learning outcomes. The stages of Classroom Action Research can be seen as follows: Planning, Action, Observation, and Reflection. The procedure of Classroom Action Research is as follows.

This research was carried out at SMA Negeri 2 Koto XI Tarusan, Class XI with the subject in class XI with a total of 24 students in the 2024/2025 school year. The data collection technique in this study is using tests, observations and documentation. The data analysis technique uses descriptive statistical analysis that presents research data through tables to describe the completeness of student learning outcomes. Data was obtained from the results of formative tests in cycles I and II. The material to be studied is "Maintaining Honor, Sincerity, Shame and Zuhud" with a KKM score of 76% for those who complete.

## RESULTS AND DISCUSSION

At the planning stage, teachers prepare and design learning tools such as; Teaching and media modules with material on maintaining honor, sincerity, shame and zuhud. The media used by projectors and laptops to display power points and learning videos to clarify the material of maintaining honor, sincerity, shame and zuhud. The researcher also prepares pre-test questions that will be distributed at the beginning of the learning process. In addition, the researcher prepared a research instrument, namely an observation sheet as a measure of learning outcomes. Furthermore, at the stage of implementing Cycle 1 Actions, in the implementation process there are three steps that are carried out, namely initial or preliminary activities, core and closing activities.

First Preliminary / Initial Activities. The researcher conducted an orientation in the form of saying greetings, asking how was doing, and checking attendance and praying together led by the class followed by praying led by one of the students. The teacher explained the importance of starting the activity with prayer. check the neatness and cleanliness of the classroom. The teacher explained the objectives, benefits and learning activities that will be carried out. were invited to do a "cheer applause" to refresh the atmosphere again. Next, the teacher carried out an aperception activity by asking and answering. The teacher asked the question "what was our lesson in the previous meeting?". answered "Tolerance". The teacher continued the question "what is tolerance?". answered "mutual respect and respect for others". From here, the teacher associates the initial knowledge with the material to be discussed. "Today we will study material on Maintaining honor, sincerity, shame and zuhud".

Second, in the Core Activity, the teacher starts by showing a Learning Video about the material of maintaining honor, sincerity, shame, and zuhud. Most of them seemed to pay attention to the media displayed by the teacher. together with teachers conducted a question and answer activity about strengthening faith by maintaining honor, sincerity, shame and zuhud. Some were seen actively asking questions or answering questions from teachers. However, there are those who seem to still be engrossed in their own world, namely not paying attention to teachers and preferring to occupy themselves with things outside of learning. Then the teacher warned to focus on paying attention to the lesson and invited to do "focus clapping" as a form of encouragement.

After explaining the material, then the teacher divided into 4 groups. After being divided into 4 groups, teachers distributed different materials to each group along with the materials that had been prepared in making the Concept Map (cardboard and other tools). Everyone in each group is responsible for learning the material given by the teacher. For example, Group 1 received honor maintenance material, group 2 Sincere material, Group 3 shame material, and Group 4 zuhud material. Everyone in the group is responsible for making a concept map according to the material that has been given. Then representatives of each group presented the results of the discussion in front of the class. Together with the teacher, they gave appreciation by giving applause.

The third activity was Closing, and the teacher drew conclusions about the material that had taken place today, then reflected together on strengthening faith by maintaining honor, sincerity, shame and zuhud. The teacher greeted and ended the learning activity today. The next stage is observation/Observation cycle I, at this stage there are 2 aspects that are the object of observation, namely teacher activities and activities. This is done during the learning process. Observations are carried out by teachers and peers. Teachers and peers observe learning outcomes by filling out the observation sheet that has been prepared by the teacher. With the categories of assessment of teacher observation results and as follows:

Based on the data above, the results of the observation of activities on teachers, namely researchers who carry out learning by applying the mind mapping method carried out by observer teachers, obtained an average score of 3.4 this value is included in the good category, meaning that in the learning process of teachers with sufficient predicates.

So based on these results, it can be said that the success indicator has not been achieved, so it is one of the reasons why researchers have to continue to cycle II.

Problem-Based Learning is one of the most effective learning methods in improving student learning outcomes in Senior High Schools. PBL prioritizes solving real problems as the core of the learning process. In this approach, students are faced with problems or challenges that are relevant to the material being studied and are asked to find solutions independently or through group collaboration. This method encourages students to think critically, creatively, and applicatively in dealing with real situations, as well as developing problem-solving skills that they can use in everyday life. PBL provides opportunities for students to not only remember information, but also to apply it in a broader context. For example, in biology lessons, students can be given problems related to the impact of climate change on ecosystems, and they are asked to collect data, analyze information, and formulate realistic solutions. Through this approach, students are invited to integrate various sources of information, collaborate with their friends, and develop communication skills to convey the solutions found. PBL also helps students build a deeper understanding of the topics being studied because they are actively involved in the research and discussion process.

In addition, PBL also improves students' social skills because it requires them to work in groups, share ideas, listen to others' opinions, and coordinate efforts to achieve common goals. The collaboration that is established during this learning process improves students' ability to work in teams, which is very important for their success in the professional world. This problem-based learning also provides a sense of ownership over their learning, because students feel the direct benefits of their efforts in solving problems that are relevant to real life. PBL is also very effective in increasing student motivation. When students see the relevance of the material they are learning to the real challenges they face, they feel more interested and engaged in learning. This approach changes learning from a passive activity to an active one, where students feel more empowered and responsible for their learning process. In addition, by solving problems collaboratively and getting concrete results, students feel more confident and motivated to continue learning. Overall, Problem-Based Learning is able to improve student learning outcomes in high school by encouraging them to think critically, apply knowledge in real situations, and develop social and technical skills that are relevant to everyday life. With a more hands-on experience-based approach, PBL provides opportunities for students to understand the material more deeply and prepares them for future challenges.

The problem-based learning model is an approach that emphasizes problem solving as the core of the learning process. In this method, students are given a real problem that is relevant to their lives, then they work individually or in groups to find a solution. This approach can improve student learning outcomes because it actively involves them in the learning process, encourages critical thinking, and improves problem-solving skills that are essential in everyday life.

One of the advantages of problem-based learning is that it increases student involvement in learning. Compared to the lecture method which tends to be passive, PBL requires students to search for information, analyze situations, and formulate solutions independently. This process makes them more motivated to learn, because they feel they have control over their own learning process. This high motivation can have a positive impact on students' understanding and academic achievement.

In addition, problem-based learning helps students develop critical and analytical thinking skills. When faced with a problem, students need to evaluate various possible solutions, consider their advantages and disadvantages, and make the right decision. This process trains them to think more systematically and logically, skills that are very valuable in their academic and professional lives in the future.

This learning model also encourages students' collaboration and social skills. In problem-based learning, students often work in groups to solve a problem. They must communicate, discuss ideas, share tasks, and collaborate to achieve common goals. This

ability to work in a team is very important in the world of work and social life, where collaboration is the key to success.

Another advantage of problem-based learning is that it improves students' ability to connect theory with practice. In traditional learning, there is often a gap between the theory learned in class and real-world applications. With PBL, students are faced with problems that resemble real-life situations, so they can better understand the relevance and benefits of the concepts they learn.

In addition to improving conceptual understanding, problem-based learning also helps students develop research skills. In solving a problem, students must seek additional information from various sources, including books, journals, and the internet. The skills of searching, sorting, and evaluating information are very important in the digital era, where access to information is increasingly widespread, but not all available information is reliable.

problem-based learning also provides a deeper and more memorable learning experience for students. Because they are actively involved in the problem-solving process, the information they acquire tends to be easier to remember and apply in other situations. This is different from memorization methods, which often only produce short-term understanding without being able to develop higher-level thinking skills.

Another advantage of problem-based learning is its flexibility in accommodating various student learning styles. Every student has a different way of learning—some prefer to learn visually, auditorily, or kinesthetically. In PBL, students can choose the strategy that best suits their learning style to find the best solution, thus increasing the effectiveness of their learning.

Despite its many benefits, problem-based learning also requires the active role of teachers as facilitators. Teachers no longer act as the main source of information, but rather as guides who help students find their own solutions. This requires teachers to have the skills to design challenging problems, provide appropriate direction, and ensure that students stay on the right learning track.

With all the benefits offered, problem-based learning can be an effective strategy to improve student learning outcomes. In addition to deepening their understanding of the material, this method also develops critical thinking skills, collaboration, research, and social skills that are important for their future lives. Therefore, the application of problem-based learning in the world of education needs to be continuously developed in order to provide maximum impact on students' academic development and skills.

## **CONCLUSION**

From the results of the research that has been carried out, it can be concluded that using the mind mapping method in learning Islamic Religious Education can improve the learning outcomes of class XI at SMA Negeri 2 Koto XI Tarusan. This can be seen from the learning outcomes of students from cycle I and cycle II, after the implementation of the teaching and learning process at SMA Negeri 2 Koto XI Tarusan. The improvement in student learning outcomes can be seen from the increase in student scores in each cycle. The average score of students in the first cycle was 68.70 with a percentage of 37.5% and in the second cycle the average score of students increased to 85.41 with a percentage of 100%. And the results of the observation of teachers and students were carried out well. Based on the learning results of this research, several suggestions were put forward to school principals, teachers and researchers: School principals should realize that the success of the work achieved by teachers, especially the subject of Islamic Religious Education, requires full support from the school, by providing adequate facilities. Teachers should try to create a fun and interesting learning atmosphere so that students feel comfortable and actively participate in learning, teachers should be more effective in learning Islamic Religious Education by boldly and participating in teaching and learning activities held by teachers.

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