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# Application of Problem Based Learning Model to Improve Learning Outcomes of Islamic Education Students at SD Negeri 0808 Aek Sorik

**Rohana Harahap** ⊠, SD Negeri 0808 Aek Sorik, Indonesia **Ahmad Saidi Hasibuan**, SD Negeri 0512 Bonal Jae Batu, Indonesia **Rosmina Hasibuan**, SD IT Roudhotul Ilmi Anshor, Indonesia

⊠ rohanahrp3@gmail.com

**Abstract:** This research aims to improve student learning outcomes in Islamic religious education learning using problem-based learning. This research is a classroom action research that uses four steps, namely planning, action, observation and reflection. The subject of this research is elementary school students. The data of this study was obtained by test and observation techniques. Tests are used to measure learning outcomes and observations are used to analyze the learning activities of teachers and students. The data analysis technique used in this study is descriptive statistics by comparing the results obtained with research success indicators. The results of the study show that problem-based learning 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 of 40.19%, the first cycle of 67.37% and in the second cycle it increased to 89.72%. Thus, the use of problem-based learning can be used as an alternative to improve student learning outcomes in Islamic religious education learning.

**Keywords:** problem-based learning, learning outcomes, Islamic education.

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#### INTRODUCTION

Education plays an important role in human life. Through education, human development and survival will be well maintained. Therefore, the implementation of education has become a necessity in order to achieve a life that is directed towards better progress and development than before. Considering that education is very important for life, education must be carried out effectively and efficiently which leads to the formation of quality output (human resources). In this case, the education in question is the learning process of students at school. In an effort to form this quality output, the government continues to try to organize the education system in Indonesia, one of which is the presence of the independent curriculum is a refinement of the previous curriculum. In each curriculum there is an assessment aspect, namely the knowledge aspect, attitude aspect, and behavior. Students are required to be directly involved more actively in constructing their

knowledge. However, this does not mean that the teacher's task is light. Teachers must be able to create a conducive learning atmosphere that supports students in the process of forming their competencies. The success of learning cannot be separated from the role of teachers, both as learning resources, guides, facilitators, mediators, and evaluators.

Teachers have the responsibility to see everything that happens in the classroom to help the student development process. In detail, the teacher's duties are centered on educating with an emphasis on providing direction and motivation to achieve goals both short-term and long-term, providing facilities for achieving goals through adequate learning experiences, and assisting the development of personal aspects such as: attitudes, values, and self-adjustment. One of the subjects that has been considered difficult for students to understand so far is Islamic Religious Education (PAI) lessons, so students tend to be less interested in these lessons. Therefore, teachers are highly required to prepare learning plans that are in accordance with the characteristics of students, so that they can increase students' motivation and ability to understand the material being studied and develop their potential optimally. In an effort to improve student learning outcomes, teachers need to conduct an accurate research in order to find the key points of the problems faced and the right solutions to overcome them so that students' motivation and thinking skills increase more than before. Islamic religious learning no longer prioritizes absorption through the achievement of information, but rather prioritizes the development of skills and information processing. For this reason, students' activities need to be improved through exercises or assignments by working in small groups and explaining ideas to others.

#### **METHODS**

The research on the application of the Problem-Based Learning (PBL) model to improve the learning outcomes of Islamic Education students at SD Negeri 0808 Aek Sorik utilized a qualitative approach with a Classroom Action Research (CAR) design. This study was conducted in two cycles, each consisting of four main stages: planning, implementation, observation, and reflection. The research was carried out in collaboration with teachers to ensure that the intervention aligned with the existing curriculum while introducing a more interactive and student-centered learning approach. During the planning stage, the researchers designed lesson plans that incorporated PBL strategies, selecting real-life problems related to Islamic teachings to stimulate student engagement and critical thinking. The implementation phase involved classroom activities where students were divided into small groups to discuss and analyze the given problems. Teachers acted as facilitators, guiding students in identifying key concepts, formulating hypotheses, and exploring possible solutions based on their knowledge of Islamic teachings.

The observation stage focused on assessing student participation, engagement, and comprehension levels during the learning process. Researchers collected data through direct observations, student worksheets, teacher journals, and formative assessments to evaluate the effectiveness of PBL in enhancing learning outcomes. Additionally, student motivation and interaction levels were monitored to determine the impact of the method on their overall attitude toward learning Islamic education. In the reflection phase, the data collected from each cycle were analyzed to identify strengths and areas for improvement. The findings from the first cycle informed necessary modifications to the instructional approach in the second cycle, ensuring continuous improvement in student learning. Adjustments were made to the problem scenarios, teacher facilitation techniques, and group dynamics to enhance student engagement and comprehension. This research method allowed for an in-depth exploration of how PBL could be effectively implemented in an elementary school setting, providing valuable insights into its impact on student learning outcomes. By integrating real-world problem-solving into Islamic education, the study aimed to foster deeper understanding, encourage critical thinking, and improve student motivation in religious studies.

Marlina Halawa, S.Pd.I "Application of Problem Based Learning Model to Improve Learning Outcomes of SMP Negeri 3 Gunungsitoli Students for the 2021/2022 Academic Year"; 2) Wawan Derajat Sukmawan, S.Pd.I "Efforts to Improve Student Learning Outcomes by Using a Problem Based Learning Model in Zakat Materials for Class VI of SD Negeri Kencana Haurwangi Cianjur in 2023. This research was carried out at SDN 0808 Aek Sorik, Batang Lubu Sutam District, Padang Lawas Regency, North Sumatra Province.

The time carried out in this study is from December 21, 2024 to January 23, 2025. The type of research used in this study is classroom action research (PTK) or in English called Classroom Active Research (Zainal Aqib). PTK is very suitable for this research, because the research is held in the classroom and focuses more on problems that occur in the classroom or in the teaching and learning process. 1) Research is defined as the activity of observing an object, using certain methodological rules to obtain useful data or information to improve the quality of something that is of interest and important to the research; 2) Action is defined as a movement of activities deliberately carried out with a specific purpose, which in this study is in the form of a cycle of activities; 3) A class is defined as a group of students who at the same time receive the same lesson from a teacher.

#### **RESULTS**

Pre-research activities for classroom actions are carried out with the aim of obtaining preliminary data on the state of schools, classes and students who will be the object of research. The pre-research activities carried out include interviews with teachers and students as well as test and observation activities in the classroom. The researcher's observation activities on grade IV students of SDN 0808 Aek Sorik, Batang Lubu Sutam District in the PAI learning process. Observations were made to find out the condition of students during the PAI learning process and the learning outcomes of students in the PAI subject of Welcoming the Age of Puberty. The planning stage in cycle II begins with preparing a lesson plan (Learning Implementation Plan), observation sheets, and assessment of learning outcomes. In the lesson plan of the material discussed in the second cycle, it is mustahik zakat. In cycle II, the RPP was made to explain the material using the PBL model. This study aims to test the effectiveness of the application of the Problem-Based Learning (PBL) model in improving student learning outcomes in Islamic Religious Education (PAI) subjects at SD Negeri 0808 Aek Sorik, The PBL model was chosen because of its approach that focuses on active learning through real-world problem-solving, which allows students to directly engage with the material and relate it to daily life.

In this context, the chosen topic is "Welcoming the Age of Puberty," an important concept in Islamic teachings that is relevant to the student's life stage. This study involved 30 grade IV students consisting of 15 male students and 15 female students. The research was carried out in two cycles, each of which included planning, action, observation, and reflection. In the first cycle, teachers introduce the topic of puberty and its meaning in Islamic teachings, with the aim that students understand not only the physical aspect but also the spiritual responsibilities that come with that age. In the first cycle, teachers start by providing scenarios related to changes that occur when a person enters puberty, such as increasing worship obligations, as well as physical and mental changes. Students were divided into small groups to discuss how to welcome puberty according to the Islamic view, as well as the problems that adolescents who have reached puberty may face. This group discussion aims to allow students to share ideas with each other and find solutions together based on Islamic teachings. Although students seemed enthusiastic about participating in this activity, some of them found it difficult to understand the concept of puberty in more depth. Some students have also not been able to relate the teachings of Islam to their personal experiences, which makes them less active in discussions. Seeing this, the teacher reflected on the first cycle and decided to provide more detailed

explanations and practical examples that are more relevant to the students' daily lives. In the second cycle, teachers improved their learning approach by providing more real-life examples related to the topic of puberty, such as the experiences of Islamic figures who have reached puberty and how they live their lives. In addition, the use of teaching aids such as videos, stories from Islamic history, and role play activities were introduced to make this topic easier for students to understand. Students are given the opportunity to play a role in certain scenarios that describe the situation of a person who has reached the age of puberty, such as carrying out the obligation to fast or pray five times.

In this second cycle, student participation increased rapidly. They appear to be more active in group discussions and are able to relate the teachings of Islam to their personal experiences. Student groups can more easily discuss the responsibilities that come with puberty, such as maintaining morals, performing worship well, and respecting parents. In addition, students are also more open in sharing opinions and helping each other in finding solutions to problems faced by adolescents who are puberty. The results of the evaluation in the second cycle showed a significant improvement in students' understanding of the PAI material. The final test given after the second cycle showed that most students were able to answer questions related to puberty more precisely. Their test scores experienced a significant improvement compared to the first cycle, which showed that they better understood the essence of puberty in Islam. The application of the PBL model in PAI learning also has a positive impact on student learning motivation. This learning based on real problem-solving makes students feel more interested and involved in the learning process. They not only learn about religious theories, but also apply Islamic teachings in their daily lives, which makes learning feel more meaningful and relevant to them. The PBL model also provides opportunities for students to develop their social and communication skills. In each group discussion, students learn how to communicate well, listen to the opinions of friends, and work together in solving problems. These skills are very important, because in addition to supporting academic achievement, social skills also play a very important role in a student's personal and social life. However, in the implementation of the PBL model, there are several challenges that need to be overcome.

One of the main challenges is the limitation of time, as discussion and problem-solving require a longer time compared to conventional learning methods. In addition, some students still have difficulty in organizing their ideas and sometimes there is an imbalance in the participation of group members, where some students are more dominant while others tend to be passive. These challenges can be overcome with better time management and a clearer division of tasks within groups. In addition, the success of the PBL model in improving learning outcomes is greatly influenced by teachers' skills in facilitating discussions and providing constructive feedback. Teachers need to ensure that each student can actively participate in the discussion and understand the concepts being taught.

The feedback provided by the teacher is very important to help students understand the material more deeply and correct any mistakes that may occur during group discussions. In conclusion, the application of the Problem-Based Learning model in Islamic Religious Education learning at SD Negeri 0808 Aek Sorik has proven to be effective in improving student learning outcomes. Through this approach, students not only gain a better understanding of the concept of puberty in Islam, but also develop critical, social, and communication thinking skills. Although there are several challenges, such as time management and difficulties in organizing group discussions, the overall PBL model has a positive impact on improving student learning outcomes and skills. This study shows that the PBL model can be used as an effective alternative in learning Islamic Religious Education, which can improve the quality of learning and make students more active and involved in the learning process.

Therefore, the application of this model should be extended to other PAI materials and applied at higher grade levels to increase its effectiveness and impact. For further research, it is recommended that further studies be carried out on the application of the

PBL model to various other PAI materials, as well as the development of strategies to overcome emerging challenges, such as difficulties in time management and increasing the participation of all students. With a more mature approach and good management, the application of the PBL model can be more optimal in improving student learning outcomes in elementary schools

#### **DISCUSSION**

Problem-based learning is a learning model that involves the real world, relating to real events or problems to make learning with the aim of preparing and familiarizing students to face problems that will be faced in their lives so that they have a solution or a way out of a problem. Based on the results of the data analysis and discussion that has been described, it can be concluded that the application of the problem-based learning model in the PAI subject of welcoming puberty can improve the learning outcomes of grade IV students of SDN Aek Sorik, Batang Lubu Sutan District, Padang Lawas Regency. The increase can be seen from the average score of the first cycle posttest which is 74.88 with a completeness score of 76%. Meanwhile, the average score of the second cycle posttest is 86.66 with a completion score of 95%. Thus, the application of the problem-based learning model is considered successful in improving student learning outcomes in the material welcoming puberty because it has achieved the set success indicator of 75%. So that this research does not need to be continued to the next cycle. This study aims to test the effectiveness of the application of the Problem-Based Learning (PBL) model in improving student learning outcomes in Islamic Religious Education (PAI) subjects at SD Negeri 0808 Aek Sorik. The PBL model was chosen because of its approach that actively engages students in learning through real-world problem-solving, which is very beneficial in helping students relate religious teachings to their daily lives.

The focus of this research is on the material "Welcoming the Age of Puberty," an important concept in Islamic Religious Education. This study involved 30 grade IV students, consisting of 15 male students and 15 female students. The research is carried out in two cycles, with each cycle including planning, action, observation, and reflection. Researchers and teachers apply the PBL model by introducing relevant issues related to the age of puberty, such as responsibilities and changes experienced when reaching that age in an Islamic view.

Students are divided into small groups to discuss and find solutions to these problems based on the teachings of Islam. In the first cycle, students are introduced to the concept of puberty and the importance of this age in Islamic teachings. Teachers provide a real-life scenario related to the challenges faced by children when reaching puberty, so that students can discuss the physical, mental, and spiritual changes they are experiencing. Groups are asked to seek Islamic guidance and solutions on how to welcome this stage of life. Although students appear enthusiastic in group discussions, some students have difficulty understanding the depth of this topic and need further guidance to relate the teachings of Islam to their experiences. After reflecting on the first cycle, teachers make adjustments in the application of the PBL model.

Learning is improved by providing more context and examples of how to connect the concept of puberty with students' daily lives. Teachers also use additional teaching aids such as video clips, Islamic history stories, and role play activities to help students better understand the concept of puberty. In the second cycle, students are given more complex scenarios related to the challenges faced when reaching puberty, such as the importance of maintaining morals, carrying out religious obligations, and understanding the spiritual meaning of this stage of life. The second cycle showed significant improvements in student participation and their understanding.

Students demonstrate a better understanding of Islamic teachings around puberty. They are able to discuss the changes they will experience and the responsibilities they must carry out in a more thoughtful and informed way. In addition, their ability to

collaborate and communicate in groups also increases, as they work together to find solutions based on a given problem. Learning outcomes also showed improvement in the second cycle, with students showing a stronger understanding of the material. Final test scores show a significant improvement in their understanding of the concept of puberty in Islam. The PBL model helps students connect religious teachings to their personal lives, making the material more meaningful and relevant. Their ability to solve problems based on Islamic teachings allows them to approach this topic with more reflective thinking. The use of real-life problems makes the subject of Islamic Religious Education more attractive to students. They no longer see it as just a collection of abstract rules, but as something that has a direct impact on their lives. The PBL model also fosters a sense of responsibility for their learning process, as students are actively involved in finding solutions and applying what they have learned.

The increase in motivation to learn and participate in class discussions and group work is very noticeable. Students' social and interpersonal skills are also improved through the collaborative nature of PBL. By working in groups, students develop essential communication skills, learn to respect the opinions of others, and train themselves to work together toward a common goal. This collaboration is very helpful for students in improving their understanding of the material and supporting the development of social skills that are important in their academic and personal growth.

However, the implementation of the PBL model also faces several challenges. Time management is one of the obstacles, because students sometimes need more time to discuss problems in depth and find the right solutions. In addition, some students have difficulty organizing their ideas during group discussions, which affects the smooth running of the learning process. This challenge can be overcome by providing more time for group work and providing additional guidance during discussions so that each student can contribute effectively.

### **CONCLUSION**

The application of the Problem-Based Learning (PBL) model to Islamic Religious Education (PAI) learning material Welcoming the Age of Puberty at SDN 0808 Aek Sorik has proven to be effective in improving the learning outcomes of grade IV students. Through the PBL approach, students are more actively involved in the learning process, able to understand the material better, and develop critical thinking and problem-solving skills. PBL also helps students to better understand religious concepts directly through contexts relevant to their lives. Thus, the PBL model can be used as an effective learning alternative in improving students' understanding and learning outcomes in PAI material

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