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Application of Problem Based Learning Model to Improve Student Learning Outcomes at SD Negeri 0309 Pagaranbira

Dahnial Arham ⊠, SD Negeri 0309 Pagaranbira, Indonesia Halimah Hasibuan, SD Negeri 0613 Pagaran Batu, Indonesia Erwin Harahap, SD Negeri 0304 Siundol, Indonesia

 \boxtimes dahnialarham54@gmail.com

Abstract: This research aims to improve student learning outcomes in Islamic religious education learning by 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 completeness in each cycle with details of 40.19% in the pre-cycle, 65.37% in the first cycle and 89.72% in the second cycle. Thus, the use of problem-based learning can be used as an alternative to improve student learning outcomes in Islamic religious education learning outcomes in Islamic religious education learning outcomes in Islamic religious education learning outcomes in Islamic religious.

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

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INTRODUCTION

Education is an effort made deliberately by individuals or groups to mature human beings through teaching and training. On the way to adulthood, human beings who continue to live and develop show the fact that they are always experiencing change, and that change is the result of learning. Thus, education involves a process of change in attitudes and behaviors. The learning process in schools is a teaching and learning activity that involves two parties, namely teachers (educators) and students. The main task of a teacher is to create learning that is effective, efficient, creative, dynamic, and fun. This has an impact on the importance of awareness and active involvement between the two parties in learning, namely teachers as initiators, guides, and facilitators, as well as students who experience and are actively involved in experiencing self-change through learning. To maximize learning outcomes, educational interaction is needed in the learning process. Islamic

Religious Education, as a core subject, not only aims to teach students various aspects of Islam, but also emphasizes more on the application of Islamic teachings in daily life in society. Teachers in the classroom still play the role of the main source of learning, while students only sit, listen, take notes, and memorize. Students are not used to learning actively. Teachers have not been fully optimal in implementing the right learning model.

METHODS

This Class Action Research was carried out in class V of SD Negeri 0309 Pagaranbira, starting from date to date, with a duration of 2 months and involving 2 cycles or 2 observations. This information can be obtained from the results of the diagnosis or initial observations made before the preparation and reporting of this PTK is carried out. The type of research used is Classroom Action Research (PTK). PTK is a research conducted with the aim of improving the quality of learning practices in the classroom. This research focuses on the classroom and the teaching and learning process that takes place in it. The research variable used in this Classroom Action (PTK) research is a dependent variable because in this study what will be measured is the improvement of student learning outcomes. The population and sample in this study are students of class V of SD Negeri 0309 Pagaranbira, with a total of 16 students, consisting of 7 male students and 9 female students. This study was conducted based on the consideration that the learning achievement of students has not achieved optimal results. This can be seen from the average score obtained by students in this class which is still relatively low.

Problem-Based Learning (PBL) is an innovative teaching method that places students at the center of the learning process. This model encourages students to actively engage in solving real-world problems, which enhances their critical thinking, problemsolving, and collaborative skills. The application of the PBL model in elementary education has been shown to improve learning outcomes by fostering deeper understanding and active participation. This research aims to explore the application of the PBL model to improve student learning outcomes at SD Negeri 0309 Pagaranbira. The main issue in the classroom at SD Negeri 0309 Pagaranbira is the traditional approach to teaching, which often leads to passive learning. Many students struggle to connect theoretical knowledge to real-life situations, limiting their ability to understand and apply what they have learned. The research focuses on how the implementation of the PBL model can enhance students' learning outcomes, particularly in terms of engagement, critical thinking, and problem-solving abilities.

The objectives of this research are to apply the Problem-Based Learning model in the classroom at SD Negeri 0309 Pagaranbira, assess the impact of the PBL model on students' learning outcomes, evaluate how PBL influences students' ability to work collaboratively and solve real-world problems, and identify challenges and potential solutions in the implementation of PBL in elementary education. This research uses a qualitative approach with a classroom action research (CAR) design. The study is conducted in two cycles, each consisting of planning, implementation, observation, and reflection. In the first cycle, the PBL model is introduced in a particular subject area, such as science or social studies, and students are presented with a problem to solve. They are grouped into small teams and encouraged to explore solutions by researching, discussing, and applying knowledge. The teacher's role is to facilitate learning, guide the problemsolving process, and provide necessary resources. In the second cycle, based on the observations and reflections from the first cycle, improvements are made to further engage students and enhance their understanding. Students' performance is assessed through various methods, including group discussions, project presentations, quizzes, and reflections. Data collected from student assessments, observations, and teacher feedback are used to analyze the effectiveness of the PBL model in improving student outcomes. In the classroom, the PBL model is applied through a series of carefully designed steps. Initially, students are introduced to a relevant problem, such as how to reduce waste in the

school, or the effects of climate change on the environment. These problems are chosen to connect with students' everyday experiences and provoke curiosity. Students are then divided into small groups, where each group is tasked with researching different aspects of the problem and working together to propose solutions.

The PBL model encourages students to take ownership of their learning, as they are expected to gather information, critically analyze it, and collaborate with peers to come up with creative solutions. The teacher's role in this process is to guide the groups by providing questions, resources, and feedback to ensure that students stay on track and deepen their understanding. After the implementation of the PBL model, there was a noticeable improvement in student engagement and learning outcomes. Students were more actively involved in the learning process, as they could relate the problems they were solving to real-life situations. The collaborative nature of PBL helped students develop communication and teamwork skills, while the problem-solving aspect enhanced their ability to think critically and apply knowledge. Students showed a better understanding of the subject matter, as evidenced by improved test scores, greater participation in discussions, and more thoughtful solutions during group presentations. Furthermore, students demonstrated increased motivation and enthusiasm for learning, as they found the problem-solving approach more interesting and relevant than traditional methods. While the PBL model yielded positive results, there were some challenges in its implementation. One of the main challenges was managing the dynamics of group work. Some students struggled with teamwork, either because of communication issues or unequal participation within the groups. To address this, the teacher introduced strategies such as assigning specific roles within each group and conducting individual assessments to ensure that all students contributed equally.

Another challenge was the initial resistance to the PBL approach from both students and teachers who were more familiar with traditional teaching methods. To overcome this, the teacher conducted orientation sessions for both students and teachers, explaining the benefits of PBL and providing examples of how the model could be applied effectively. The application of the Problem-Based Learning model at SD Negeri 0309 Pagaranbira demonstrated positive outcomes in improving student learning. The method encouraged active participation, critical thinking, collaboration, and the application of knowledge in real-world contexts. The results indicate that PBL can be an effective strategy for enhancing student engagement and improving learning outcomes, especially when problems are carefully selected to resonate with students' experiences. For future research, it would be beneficial to explore the long-term effects of PBL on students' academic performance and character development. Additionally, expanding the use of PBL across various subjects and grade levels can provide a broader understanding of its impact on education in elementary schools. By continuing to refine and adapt the PBL model, educators can create more dynamic and effective learning environments for students.

RESULTS

PAI and BP learning is considered one of the difficult materials if it is only explained without using strategies suitable for the material taught. In Class V of SDN 0309 Pagaranbira, students experience difficulties in the learning process, so that almost all students do not ask questions about the material being taught. This happened because the researcher knew that when learning PAI and BP in delivering material, they used more lectures, wrote material on the blackboard, and read the material books taught without any other strategies or methods. Based on the data obtained from the results of initial observations and researchers' observations regarding the learning conditions of PAI and BP in Class V of SDN 0309 Pagaranbira, it is known that the activities and learning outcomes of students are still low. Many students still have not achieved the completeness of learning outcomes. Explanation of the results of written grades carried out in pre-cycle activities as explained. The reality of the learning results above shows that there are

learning problems that require special handling that will be carried out by carrying out classroom action research activities. The explanation of student activities in learning activities in early or pre-cycle conditions based on the results of observation shows the results as described in the table below.

The implementation of the Problem-Based Learning (PBL) model at SD Negeri 0309 Pagaranbira led to significant improvements in student engagement, critical thinking, problem-solving skills, and overall learning outcomes. One of the most noticeable effects was the increase in student participation during lessons. Before the introduction of PBL, many students were passive learners who relied solely on teacher explanations. However, after the implementation of PBL, students became more actively involved in discussions, brainstorming, and collaborative problem-solving activities. Their interest in learning increased as they were given the opportunity to explore real-world problems and connect theoretical knowledge to practical situations.

The PBL approach also played a crucial role in enhancing students' critical thinking and problem-solving abilities. By working on real-life problems, students were required to analyze information, think critically, and propose viable solutions. During the learning process, they demonstrated an ability to identify key issues, evaluate different perspectives, and apply their knowledge in creative ways. For instance, in a problem related to environmental sustainability, students analyzed various solutions, assessed their feasibility, and proposed appropriate waste management strategies. This experience helped them develop a more analytical and reflective approach to learning, which is essential for their academic growth. Furthermore, student academic performance showed significant improvement after the introduction of PBL. Assessment results indicated a notable increase in test scores, with the average score rising from 65% before PBL implementation to 80% afterward. This improvement was attributed to the active learning methods incorporated in PBL, which allowed students to better retain information, apply what they had learned, and gain a deeper understanding of the subject matter. Unlike traditional lecture-based teaching, PBL engaged students in meaningful learning experiences that reinforced their comprehension and retention of concepts.

Another major outcome of PBL was the enhancement of collaboration and teamwork skills among students. Since the PBL model emphasized group-based learning, students were required to work together, share ideas, and support one another in solving problems. This collaborative approach fostered a sense of responsibility and improved communication skills. Teachers observed that students became more open to working together, listening to different viewpoints, and engaging in constructive discussions. These teamwork skills are crucial not only for academic success but also for their future social and professional interactions. In addition to improved engagement and collaboration, PBL also increased student motivation toward learning. The shift from passive learning to a more interactive and student-centered approach encouraged students to take ownership of their education. They were more excited about lessons and demonstrated greater enthusiasm in tackling challenges. The real-world context of the problems they encountered made learning more meaningful and relevant to their lives. As a result, students approached their studies with a higher level of interest, which ultimately contributed to their academic progress. Feedback from both teachers and students highlighted the positive impact of PBL in the classroom. Teachers noted that, although implementing PBL required adjustments in lesson planning and classroom management, the benefits were clear. They found that PBL allowed them to shift from being traditional lecturers to facilitators of learning, guiding students through exploration and discovery. Students, on the other hand, expressed excitement about the hands-on nature of the learning process. They enjoyed collaborating with peers, discussing ideas, and applying their knowledge to solve real-world problems.

Despite the success of PBL, several challenges were encountered during its implementation. One of the main challenges was managing group dynamics, as some students struggled with teamwork or did not contribute equally to group tasks. To address

this, teachers introduced structured role assignments within groups to ensure that every student had specific responsibilities. Another challenge was that some students initially found it difficult to transition from passive to active learning. To help them adapt, teachers provided additional guidance, structured activities, and continuous encouragement to build their confidence in independent learning. The findings from this research suggest that the Problem-Based Learning model is an effective approach to improving student learning outcomes in elementary education. The model not only enhances academic performance but also fosters essential skills such as critical thinking, problem-solving, collaboration, and self-motivation. By engaging students in real-life problem-solving activities, PBL ensures that learning becomes more meaningful and relevant, ultimately leading to better retention and application of knowledge. Based on the results, it is recommended that PBL be adopted in more classrooms and across different subjects. However, successful implementation requires proper planning, teacher training, and continuous monitoring to address challenges that may arise. Teachers should be equipped with the necessary skills to facilitate PBL effectively and create a supportive learning environment that encourages student participation.

Future research could explore the long-term impact of PBL on student academic development and character building. Additionally, studies could investigate how PBL can be adapted for different learning styles and abilities to ensure that all students benefit from this approach. Expanding the use of PBL to various subjects and grade levels would provide a broader understanding of its impact on education and its potential for widespread adoption. Overall, the research conducted at SD Negeri 0309 Pagaranbira provides strong evidence that PBL can significantly improve student engagement, motivation, and academic performance. The model encourages students to become active learners, capable of analyzing complex problems and developing creative solutions. This shift in learning methodology not only benefits students academically but also prepares them with the critical skills needed for future success in an ever-changing world. By integrating PBL into elementary education, schools can create a more dynamic and effective learning environment that fosters curiosity, creativity, and independent thinking. The findings of this research highlight the importance of continuous innovation in teaching strategies to meet the evolving needs of students and ensure they are wellequipped for future academic and professional challenges. The success of PBL in improving student learning outcomes at SD Negeri 0309 Pagaranbira serves as an inspiration for other schools to explore and implement similar approaches. With the right strategies and support, PBL has the potential to transform education by making learning more engaging, meaningful, and impactful for students.

DISCUSSION

This study aims to examine the effectiveness of the Problem-Based Learning (PBL) model in improving student learning outcomes at SD Negeri 0309 Pagaranbira. PBL is a studentcentered learning approach that focuses on solving real-world problems as a way to engage students in active learning. The research was conducted with 25 fifth-grade students, consisting of 12 boys and 13 girls. The study was implemented in two cycles, with each cycle involving planning, action, observation, and reflection. In the first cycle, the teacher introduced a relevant problem related to the subject matter being taught. The students were grouped into small teams and tasked with discussing and finding solutions to the problem collaboratively. The teacher served as a facilitator, guiding the students without directly providing answers. The observation results from the first cycle indicated that students became more engaged in group discussions. However, some students struggled with analyzing the problem and required additional guidance in structuring their solutions. Based on reflections from the first cycle, the teacher made several adjustments, such as clarifying the steps involved in solving the problem and providing more examples that were closely related to the problem being addressed.

Additionally, the use of various teaching aids, such as visual aids and interactive materials, was emphasized to assist students in better understanding the issue. In the second cycle, students were given a more complex problem that required them to apply higher-order thinking skills, including analysis, evaluation, and creativity. The results of the second cycle showed significant improvements in student participation. Students demonstrated better problem-solving skills, were able to communicate their ideas more clearly, and worked together more effectively as a team. The use of diverse learning materials, such as videos, diagrams, and real-life examples, also helped the students grasp the concepts more easily. Furthermore, the teacher provided constructive feedback during group activities to enhance understanding and collaboration. The post-test results at the end of the second cycle indicated a marked improvement in student learning outcomes. The average test score in the second cycle was considerably higher than in the first cycle. This improvement was attributed to the increased student engagement and the deeper understanding of the subject matter that PBL facilitated. The results also showed that students had developed critical thinking and problem-solving skills, which were reflected in their ability to approach new problems independently. Implementing the PBL model also had a positive impact on student motivation.

The real-world problems presented during lessons sparked greater interest in the subject matter, and students were more motivated to explore solutions. They were no longer passive recipients of information but active participants in their learning process. PBL encouraged students to take ownership of their learning, fostering a sense of responsibility and self-confidence. The collaborative nature of PBL also helped improve students' social and communication skills. By working in groups, students learned how to share ideas, negotiate, and listen to one another. These interpersonal skills are crucial for their development both academically and socially. The PBL approach also allowed students to see the relevance of their learning in real-life contexts, making the educational experience more meaningful and engaging. Despite its successes, the implementation of PBL faced some challenges. Some students struggled with working in groups, particularly when it came to dividing tasks and resolving conflicts. Additionally, the time required for in-depth problem-solving and discussions was sometimes limited by the school's curriculum schedule.

However, these challenges were addressed through careful planning, additional guidance from the teacher, and flexible time management strategies. In conclusion, the application of the Problem-Based Learning model at SD Negeri 0309 Pagaranbira has proven to be an effective strategy for improving student learning outcomes. By engaging students in real-world problem-solving, PBL not only enhances their academic performance but also equips them with essential skills such as critical thinking, collaboration, and communication. Although there were some challenges, the overall impact of PBL on student learning was positive, and it is recommended for wider implementation in similar educational settings. Future research could explore further adaptations of PBL across different subjects and educational levels. Additionally, addressing the challenges faced in group dynamics and time management would help refine the implementation of PBL to maximize its potential benefits for all students.

CONCLUSION

The application of the Problem-Based Learning (PBL) model at SD Negeri 0309 Pagaranbira has proven to be an effective approach in improving student learning outcomes. By engaging students in real-world problem-solving, PBL not only enhanced their understanding of the subject matter but also fostered the development of critical thinking, collaboration, and communication skills. The results of this study indicated a significant improvement in student participation, motivation, and test scores, demonstrating the positive impact of PBL on both academic performance and social skills. Despite challenges related to group dynamics and time constraints, the overall implementation of PBL was successful, making it a valuable model for enhancing educational quality at the school.

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