

# RESEARCH JOURNAL ON TEACHER PROFESSIONAL DEVELOPMENT

2025, VOL.3, NO.1, pp 20-26



OPEN ACCESS

# Application of the Problem Based Learning Model to Improve the Learning Outcomes of Students of PAI Subjects in Integrated Islamic Elementary Schools

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#### **ABSTRACT**

This study aims to describe the implementation and improvement of learning outcomes of students in class IA IT SD IT Ribhul Ulum Kedungmutih in the subject of Islamic Religious Education (PAI) material Faith in Allah SWT through the application of the Problem- Based Learning (PBL) learning model. The type of research used is Classroom Action Research (PTK) which is conducted in two cycles. The research subjects consisted of 18 students of class IA. Data collection was carried out through written tests and observation sheets. The results showed that in the first cycle, there were 8 out of 18 students (44%) who achieved the Minimum Completeness Criteria (KKM) of 70 with an average grade of 64. In cycle II, there was a significant increase, where all students (100%) achieved KKM with an average class score increasing to 80. This shows that the application of the PBL model contributes positively to improving students' understanding, especially in the material of Faith in Allah SWT. The implementation of learning with PBL provides a more active and meaningful learning experience so as to encourage a significant improvement in student learning outcomes. Thus, the PBL model can be an effective learning strategy recommended in the context of Islamic religious education at the elementary school level.

#### **KEYWORDS**

learning outcomes, problem based learning, Islamic education, school.

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### A. Introduction

The learning process is a systematic interaction between teachers, students, and learning resources that aims to achieve the learning goals that have been set (Trianto, 2014). One of the indicators of success in achieving learning objectives is the achievement of the Minimum Completeness Criteria (KKM) by students. In the context of basic education, especially in the subject of Islamic Religious Education (PAI), the achievement of KKM is the main benchmark in assessing the effectiveness of the learning process. Islamic religious education has an important role in shaping the character and morals of students from an early age (Ramayulis, 2018). Therefore, a learning model is needed that is not only able to improve understanding of religious concepts, but also provide a deep and meaningful learning experience. The Problem-Based Learning (PBL) model is considered relevant to be applied because of its focus on problem-solving and real-world situation-based learning, so that it can increase students' active involvement in the learning process (Arends & Kilcher, 2010). The implementation of PBL in PAI learning in Integrated Islamic Elementary Schools is very important as an innovative effort to improve student learning outcomes and bridge the gap between educational expectations and realities in the field.

In the world of education, teachers play a key role as facilitators and motivators in the learning process. The success of students in achieving competency standards cannot be separated from the ability of teachers to choose and apply the right learning strategies, models, and methods (Sudrajat, 2017). Despite this, many teachers still rely on lecture methods that tend to be monotonous and do not actively engage students. This causes low motivation to learn and students' interest, including in PAI learning. Teachers as learning agents certainly have the same expectations, namely so that their students are able to achieve grades according to or above the KKM, even achieving maximum achievement (Sanjaya, 2015). However, to realize these expectations, a balanced synergy between learning strategies, learning environments, and active participation of students is needed. This is where the use of innovative learning models such as PBL is important, which not only increases students' thinking power, but also encourages them to think critically and creatively in understanding the teaching material, including in learning PAI concepts such as faith in Allah SWT (Musfigon, 2012). Thus, the implementation of PBL is expected to be a solution to improve the quality of PAI learning in elementary schools, especially in the context of Integrated Islamic Elementary Schools.

Based on observations in the field, there is a gap between the real conditions of learning and the expectations to be achieved. In the IA CLASS SD IT Ribhul Ulum Kedungmutih, the average learning outcomes of PAI subjects are still below the KKM, which is 70. This fact is a challenge for teachers to find alternative learning models that are more effective and innovative. The results of observations show that the factors causing low student learning outcomes are multifactorial, both from internal and external factors. Internal factors include literacy skills, learning motivation, intelligence level, and student confidence. Many students appear passive during learning, lack enthusiasm, and rarely ask questions or express opinions (Slameto, 2010). Meanwhile, external factors include the learning strategies used by teachers, the lack of variety of methods, and the dominance of the use of lecture methods. In fact, effective learning requires an approach that actively involves students and provides space to construct their own knowledge (Suprijono, 2015). Therefore, the application of the PBL model is considered the right solution to overcome these problems. In addition, this model is able to create an interactive and fun learning atmosphere, so that it can significantly improve student learning outcomes (Rusman, 2018).

#### **B.** Theoretical Studies

The Problem-Based Learning (PBL) learning model is a student-centered learning approach, where the learning process begins with the provision of authentic problems as a stimulus to build a deep understanding of concepts (Arends & Kilcher, 2010). PBL provides

opportunities for students to develop high-level thinking skills, such as analysis, synthesis, and evaluation through the process of solving real problems. In the context of basic education, especially in Integrated Islamic Elementary Schools, this model is relevant because it emphasizes meaningful, active, and hands-on experience-based learning. According to Sanjaya (2014), one of the characteristics of effective learning is the active involvement of students in the learning process, so that it can increase the absorption of materials and learning outcomes. In addition, Rusman (2018) mentioned that PBL helps students in connecting theory with daily life practices, making it suitable for application in Islamic Religious Education (PAI) subjects, especially in material on faith in Allah SWT. Thus, the application of PBL has great potential to improve student learning outcomes through innovative and contextual learning approaches.

The implementation of Problem-Based Learning (PBL) in the subject of Islamic Religious Education (PAI) is important to be studied further, considering the characteristics of PAI which not only requires understanding concepts, but also internalizing religious values in daily life (Ramayulis, 2018). In PAI learning, especially in the material "Faith in Allah SWT", students need to understand the concept of monotheism deeply and be able to relate it to the reality of their lives. The PBL model provides solutions to these challenges by creating an interactive and participatory learning atmosphere, where students are invited to explore real issues related to their beliefs as Muslims (Trianto, 2014). According to Suprijono (2015), learning that uses a problem-solving approach can increase learning motivation and student involvement in the learning process. This is very relevant to the conditions in Integrated Islamic Elementary Schools, where students are expected not only to memorize religious concepts, but also to be able to practice them in daily life. Therefore, the application of PBL in PAI learning has the potential to improve students' understanding as a whole, both from cognitive and affective aspects.

Integrated Islamic Elementary School has a unique vision and mission, which is to integrate general science and religious science in all aspects of learning. Therefore, the learning strategies used must be able to support the achievement of these goals, one of which is through the implementation of Problem-Based Learning (PBL). According to Sudrajat (2017), effective learning for elementary school students is learning that involves balanced physical and mental activities, as well as providing space for students to ask questions, experiment, and find answers to questions that arise on their own. PBL fulfills this principle because it places students as active learning subjects, not passive objects of receiving information (Musfigon, 2012). In addition, Slameto (2010) stated that factors such as motivation, interests, and learning environment greatly affect student learning outcomes. With the PBL approach, teachers can create a learning atmosphere that is interesting, meaningful, and in accordance with the cognitive development of elementary school-age children. At the Integrated Islamic Elementary School, this is very important to form a generation that is not only intellectually intelligent, but also strong in faith and piety. Thus, PBL is feasible to be implemented as an alternative learning model in improving student learning outcomes in PAI subjects.

#### C. Method

This research is a Classroom Action Research (PTK), which is carried out collaboratively between researchers and education practitioners to improve the quality of learning in the classroom. PTK is a type of research that aims to improve and improve the learning process through direct intervention in real situations in the classroom (Wardani et al., 2022). In the context of this research, PTK is used to increase students' understanding of the Six Pillars of Faith material in the subject of Islamic Religious Education (PAI) in class IA SD IT Ribhul Ulum Kedungmutih. In contrast to conventional quantitative or qualitative research, PTK has a main focus on improving learning practices directly by teachers as agents of change in their own classroom environment (Wardani, 2022). Therefore, the results of this study are not intended to be generalized, but rather to improve the contextual and professional development of teachers in developing effective and innovative learning

strategies.

The implementation of Class Action Research (PTK) is carried out in cycles, with each cycle consisting of four main stages, namely planning, acting, observing, and reflecting (Wardani et al., 2022). These stages can then be followed by revision or replanning if necessary to proceed to the next cycle (Wardani, 2022). In this study, the first cycle begins with the preparation of a learning implementation plan (RPP) based on the Problem-Based Learning (PBL) model, which is designed to increase students' participation and understanding of the Six Pillars of Faith material. During the implementation of the action, teachers apply the PBL model with various learning activities that actively involve students. After the action is taken, observations are made to collect data on student responses and learning outcomes. Reflection is carried out to evaluate the effectiveness of the model used and becomes the basis for revising the learning plan in the next cycle. This process continues continuously until a significant improvement in learning outcomes is achieved.

The subjects in this study are all class IA students at SD IT Ribhul Ulum Kedungmutih, Wedung District, Demak Regency, which totals 18 students. The composition of the subjects consisted of 12 boys and 6 girls. The selection of this subject was based on real conditions in the field, where the IA class was chosen as the research location because there was an indication of low student learning outcomes in PAI subjects, especially in the Six Pillars of Faith material. Ribhul Ulum Kedungmutih Integrated Islamic Elementary School (SDS IT) is an educational institution that integrates the national curriculum with Islamic values-based education, so it is relevant to examine the application of a learning model that is able to improve understanding of religious concepts as well as internalize faith values. This research was carried out at the school as an effort to provide concrete solutions to existing learning problems, as well as to develop more innovative and meaningful learning practices for the development of students both academically and spiritually.

#### D. Research Results

The results of the learning improvement research in the first cycle which was carried out on Friday, September 13, 2024 at SDS IT Ribhul Ulum Kedungmutih, it can be seen that out of 18 students, it was stated that 8 students (44%) had obtained scores to reach KKTP (70), 10 students (56%) had not reached KKTP (70). Based on the results of data analysis, it can be said that the first cycle of learning has not met the standards of the success indicators because the average score of student learning outcomes is less than 70, so this research will be continued in the next cycle. The results of the learning improvement research in cycle II which was held on Wednesday, September 18, 2024 at SDS IT Ribhul Ulum Kedungmutih can be seen that all students have completed and are able to achieve a KKTP score of 100%.

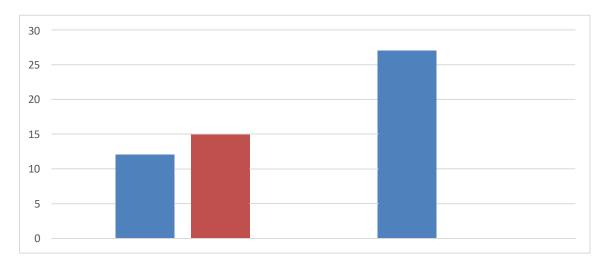
Based on the results of the research on learning improvement in cycles I and II which focused on PAI subjects of faith in Allah SWT in grade II students of SDS IT Ribhul Ulum Kedungmutih through the PBL model, it can be seen that there is an increase in student learning outcomes. The following is a table of the results of the analysis of improving learning improvement in cycles I and II.

	F	∖nal	lysis of	Improvemen	t in	Learning	Improvement	Cyc	le I	and Cy	cle II	
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	Cycle I				Cycle II				
Number of Students	T	%	BT	%	T	%	BT	%	
18	8 44% 10 56%				18	100%	0	0%	
Average	64				80				
Highest Score	90				100				

Lowest Score 40	70
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Based on the table of learning outcomes of cycles I and cycle II, it can be said that in the results of the first cycle of research, out of the total number of students as many as 18 students, there are 8 students with a percentage of 44% who have completed and reached the KKTP and students who have not completed as many as 10 students or 56%. Meanwhile, in cycle II, there were 18 students who had completed (100%) and there were no students who had not completed (0%). The increase in PAI learning outcomes in grade I of SDS IT Ribhul Ulum can be seen from the average score of 64 in the first cycle and increased to 80 in the second cycle. Based on data from the improvement of learning completeness in cycles I and II cycles, it can be presented in the form of the following graph.



Graph of Completeness of Student Learning Outcomes

Based on graph 4.7, there is an increase in the completeness of student learning outcomes from cycle I to cycle II. At the stage of improving learning in the first cycle, as many as 8 students completed and increased to 18 students who completed in the second cycle. Meanwhile, students who have not completed have decreased from 10 students to none of the students who have not completed the improvement of learning cycle II. So because all students have completed and achieved KKTP and have increased in this second cycle, the research stopped in this cycle.

## E. Discussion

The findings of this study show a significant increase in student learning outcomes after the application of the Problem-Based Learning (PBL) model in the subject of Islamic Religious Education material Faith in Allah SWT. The implementation of the first cycle was carried out on September 13, 2024, with the result that out of 18 students, only 8 students (44%) reached the Minimum Completeness Criteria (KKM) of 70, while 10 students (56%) have not reached the KKM, with an average class score of 64. Because it has not met the success indicators, the research was continued to cycle II which was held on September 18, 2024. The results showed an excellent improvement, where all students (18 students or 100%) managed to achieve KKM with an average grade of 80. Thus, it can be concluded that the application of the PBL model is effective in improving student learning outcomes. The increase in learning completeness is also visually visible through the graph, where the number of students who complete increased from 8 students in the first cycle to 18 students in the second cycle, without any students who did not complete. Therefore, the research was stopped at the end of cycle II because it had reached the set success criteria.

The success of improving the learning outcomes of students in grade I SD IT Ribhul Ulum Kedungmutih after the implementation of the Problem-Based Learning (PBL) model can be explained through several relevant learning theories. One of them is the theory of constructivism, which states that students build their own knowledge through experience and reflection on the real problems given (Piaget in Rusman, 2018). In PBL, students do not only receive information passively, but actively seek solutions to problems related to the material of faith in Allah SWT, so that the understanding of concepts becomes deeper and lasts longer. In addition, according to Arends and Kilcher (2010), PBL encourages students to work together, think critically, and connect their knowledge with contextual learning situations. This has a positive impact on student learning motivation and participation, which contributes to a significant increase in learning outcomes from cycle I to cycle II. The PBL approach is also in line with the principle of active learning which places students at the center of the learning process (Trianto, 2014). With discussion activities, problem exploration, and presentation of problem-solving results, students are more motivated and mentally and emotionally engaged, thereby increasing the absorption and understanding of PAI material. Therefore, the application of PBL is effective in improving student learning outcomes because it is in accordance with the principles of experiential learning and the construction of meaning by the students themselves.

This study shows results that are in line with several previous studies that stated that the Problem-Based Learning (PBL) model is effective in improving student learning outcomes (Rusman, 2018; Trianto, 2014). Such as research conducted by Prasetyo & Surya (2017) at SMP Negeri 2 Semarang, which also proves that PBL is able to improve students' understanding of concepts and learning activities. The similarity lies in the principle of active and problem-based learning that encourages students to be more critical and independent in building knowledge. However, this research has novelty because it is applied at the Integrated Islamic Elementary School level, especially in PAI material on faith in Allah SWT, which is rarely studied specifically. In contrast to previous research which generally focused on science or mathematics subjects at the secondary education level, this study has succeeded in proving that PBL is also relevant and effective in applying it at an early age in the context of learning religious values. The results showed an increase in learning completeness from 44% in cycle I to 100% in cycle II, with the average score increasing from 64 to 80, indicating the effectiveness of PBL implementation. This makes a new contribution to the development of innovative and contextual PAI learning strategies in the Islamic based primary education environment.

The results of this study provide important implications for the development of PAI learning in Integrated Islamic Elementary Schools. The results showed that the application of the Problem-Based Learning (PBL) model was able to significantly improve student learning outcomes, from an average of 64 in cycle I to 80 in cycle II, with learning completeness reaching 100% at the end of the study. This shows that PBL can be an effective learning strategy to develop an understanding of religious concepts while building critical thinking and problem-solving skills in early childhood students. The main implication is the need for learning innovations in PAI that not only focus on memorizing materials, but also on internalizing religious values through contextual and participatory approaches. As stated by Ramayulis (2018), effective PAI learning must be able to connect theory with real-life practice, and PBL proves the relevance of these principles. In addition, according to Trianto's (2014) opinion, active learning such as PBL can increase student motivation and participation, so it is suitable to be applied in an Islamic-based basic education environment. Thus, these findings provide strong recommendations for PAI teachers to adopt the PBL model as a more meaningful and in-depth learning alternative.

#### F. Conclusion

Classroom action research conducted in the Ribhul Ulum Kedungmutih elementary school proved that there was a significant increase in student learning outcomes after the application of the Problem-Based Learning (PBL) model in the Islamic Religious Education

subject of Faith in Allah SWT. In the first cycle, out of 18 students, only 8 students (44%) reached the Minimum Completeness Criteria (KKM) of 70, while 10 students (56%) have not met the KKM with an average grade of 64. Because it has not yet achieved success indicators, the research will continue to cycle II which will be held on September 18, 2024. The results showed a very good improvement, all students (100%) managed to achieve KKM with an average grade of 80. This development is also clearly seen through the learning completeness graph, where the number of students who complete increased from 8 in the first cycle to 18 in the second cycle without anything incomplete. With the achievement of complete success criteria, the research was stopped at the end of cycle II.

This research has several limitations that need to be considered. First, the scope of the research was only carried out in one class at SD IT Ribhul Ulum Kedungmutih, so the results could not be generalized widely due to the different school context factors and student characteristics. Second, the relatively short duration of research allows for a short-term effect on student understanding, regardless of the long-term impact of the application of the PBL model. Nevertheless, the results of this study provide important recommendations for PAI teachers to apply active learning models such as PBL in improving student learning outcomes. It is hoped that in future research, it can be developed with a wider sample and a longer implementation time to test the effectiveness of the PBL model in various aspects of student competence, both cognitive and affective. In addition, training or workshop support is needed for teachers to optimize the implementation of PBL in the classroom.

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