

## **Student-Centered Learning in Islamic Education: The Impact of Problem-Based Learning on Engagement and Achievement**

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**Abstract** : This study aims to deeply understand the process of improving student learning activities and outcomes through the application of the Problem Based Learning (PBL) model in Islamic Religious Education learning in grade VII A SMPN 1 Kalinyamatan, as well as identify the dynamics of the implementation of learning strategies that are adaptive to the needs of students in the context of classroom learning. This research uses the Classroom Action Research (PTK) method which is carried out in two cycles, including the planning stage, implementation of actions, observation, and reflection. The subject of the study was a student of grade VII A SMPN 1 Kalinyamatan. Data was collected through observation of student learning activities, learning outcome tests, interviews, documentation, and field notes. Data analysis was carried out descriptively, quantitatively, and qualitatively to determine changes in student activities and learning outcomes in each cycle. The results showed that at the pre-cycle stage of student activity was still low with a percentage of activity of 28%, an average score of 64.12, and a learning completeness of 46.87%. After the implementation of PBL in the first cycle, there was an increase in student activity to 40.6%, the average score was 70.45, and learning completeness reached 56.25%, although the implementation of learning still faces obstacles in group participation and understanding of the PBL stages. In cycle II, after improving learning strategies through the use of video media, strengthening teacher scaffolding, simplifying LKPD, and providing rewards, student activities increased to more than 85%, the average score reached 82, and learning completeness increased to 90.63%. The findings of the study show that the implementation of PBL is able to significantly increase activities, learning outcomes, communication skills, cooperation, and students' courage in expressing their opinions. This research contributes to providing an adaptive and contextual Problem Based Learning implementation model to improve the quality of Islamic Religious Education learning at the junior high school level.

**Keywords** : problem-solving skills, modelling method, 4C skills, TPACK

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## INTRODUCTION

Islamic religious education, especially the material of the Qur'an and Sunnah as a guideline for life, has an important role in shaping the character and morals of students (Hang 2025). However, in the practice of learning in the classroom, various problems are still found such as low student participation, dominance of lecture methods, and lack of active involvement in the learning process. Harefa, et al. (2023) this condition has an impact on low student learning outcomes because learning tends to be passive and does not provide space for students to develop critical thinking skills. Therefore, learning innovations that are able to increase student involvement are actively needed, one of which is through the Problem Based Learning (PBL) model (Sari, & Rosidah, 2023). This model emphasizes the process of solving problems related to real life so that students can relate the Qur'an and Sunnah material to the context of daily life. Thus, learning is not only oriented to cognitive aspects, but also affective and psychomotor. The application of the PBL model is expected to increase students' understanding of the values of the Qur'an and Sunnah and be able to significantly improve learning outcomes. In addition, this model also encourages students

to work together, discuss, and find solutions to problems given by teachers, so that the learning process becomes more meaningful and fun.

Wang, (2023) Model Problem Based Learning (PBL) is one of the innovative student-centered learning approaches with an emphasis on critical thinking, problem-solving, and collaboration skills. In the context of learning Islamic Religious Education, especially Qur'an and Sunnah materials, PBL is very relevant because it can connect the values of Islamic teachings with real problems faced by students in daily life. Through this process, students not only receive information from the teacher, but also actively search, analyze, and conclude solutions to a problem. Several studies have shown that the implementation of PBL can significantly improve student learning outcomes. For example, research conducted by Nasir et al. (2023) at SMPN 1 Kadipaten shows that the application of PBL in Islamic Religious Education learning is able to gradually improve student learning outcomes through a structured learning cycle, from planning to reflection, so that students become more active and understand the material better (Wijnen-Meijer, et al. 2022). In addition, research by Rozaq et al. (2023) also shows that PBL is effective in improving students' understanding of religious concepts because it encourages active involvement in the learning process (Jaganathan, Bhuminathan & Ramesh, 2024). Thus, PBL is one of the alternative learning strategies that has great potential to improve the quality of learning outcomes

Various previous studies have proven the effectiveness of the Problem Based Learning model in improving student learning outcomes in Islamic Religious Education subjects. Research by Nasir, Irawan, Karimah, and Robaeah (2023) entitled "The Application of the Problem Based Learning Model to Improve the Learning Outcomes of Islamic Religious Education at SMPN 1 Kadipaten" shows that the implementation of PBL through three learning cycles is able to significantly improve student learning outcomes, where students become more active in the learning process and the average score increases in each cycle (Nasir, et al. 2026). Furthermore, research by Rozaq et al. (2023) entitled "Efforts to Improve PAI Learning Outcomes through the Implementation of the Problem Based Learning Model" also found that the use of PBL in quasi-experimental design was able to improve student learning outcomes compared to conventional methods (Widiastuti, 2023). Another study by Pohan et al. (2024) entitled "The Effectiveness of the Application of the Problem Based Learning Model in Improving Understanding of the Concepts of the Qur'an and Hadith" shows that PBL not only improves cognitive learning outcomes, but also improves students' critical thinking skills in understanding religious materials (Riinawati, 2022). In addition, Sugeng and Syarifin's (2023) research on faith material also proves that PBL is able to increase student learning completeness to 100% in the final cycle (Misqa, et al. 2024). Based on the results of these studies, it can be concluded that the PBL model has high effectiveness in improving student learning outcomes in Islamic Religious Education subjects.

Gürses, Sahin & Güneş, (2022). Although various studies have shown the effectiveness of the Problem Based Learning model in improving the learning outcomes of Islamic Religious Education, there is still room for research that needs to be developed,

especially in the material of the Qur'an and Sunnah as a guideline for life at the junior high school level. Most previous studies have focused more on matters of faith, worship, or basic concepts of PAI in general, while studies that specifically integrate the Qur'an and Sunnah in the context of problem solving are still limited. In addition, research at SMPN 1 Kalinyamatan has also not been widely carried out regarding the application of innovative learning models in improving student learning outcomes in the material. Therefore, this research has novelty in the context of objects, materials, and the application of a more contextual learning model. The main purpose of this research is to improve the learning outcomes of grade VII A SMPN 1 Kalinyamatan students through the application of the Problem Based Learning model to the Qur'an and Sunnah materials as a guideline for life. In addition, this study also aims to describe the process of implementing PBL in learning and to see an increase in student activity and involvement during the learning process (Kocagul, 2024). With this research, it is hoped that it can contribute to the development of Islamic Religious Education learning strategies that are more effective, innovative, and relevant to the needs of students in the modern era.

## **LITERATURE REVIEW**

(Jaboob, Hazaima & Al-Ansi 2025) The study of learning outcomes in Islamic Religious Education (PAI) learning shows that learning outcomes are not only understood as cognitive achievements, but also include affective and psychomotor aspects. According to various educational literature, learning outcomes are relatively permanent behavioral changes as a result of the learning process experienced by students. In the context of the Qur'an and Sunnah as a guideline for life, the expected learning outcomes are not only limited to the ability to memorize or understand concepts, but also the ability to internalize the values contained in them in daily life. However, a number of studies show that PAI learning at the junior high school level is still dominated by lecture methods that tend to make students passive and less actively involved in the learning process. This has an impact on low conceptual understanding and the lack of application of Islamic values in students' lives. Therefore, a more interactive and meaningful learning approach is needed to improve student learning outcomes. In the modern educational literature, student-centered learning approaches are considered more effective in improving critical thinking comprehension and skills (Jiang, 2022). One of the most recommended approaches is the Problem Based Learning (PBL) model, which places students as active subjects in the problem-solving process. Thus, the study of learning outcomes is an important basis in developing learning strategies that are more effective and relevant to the needs of the 21st century.

The material of the Qur'an and Sunnah as a guideline for life has a very important position in the Islamic Religious Education curriculum at the junior high school level. Theoretically, the Qur'an and Sunnah are not only taught as normative texts, but also as a source of value that must be internalized in the lives of learners. Saryanto, (2023) Various Islamic education literature emphasizes that the main purpose of learning this material is to

form the character of students who have noble character, faith, and are able to practice Islamic teachings consistently. However, in practice, learning this material is often still theoretical and less related to the student's real-life context. This causes students to have difficulty understanding the relevance between the material being studied and everyday reality. Several studies show that junior high school students tend to experience boredom in PAI learning because the methods used are less varied and provide less space for exploration of thinking (Zhang, 2026). Therefore, an approach is needed that is able to connect the values of the Qur'an and Sunnah with the real problems faced by students. In the contemporary Islamic educational literature, contextual and problem-based approaches are considered effective for bridging the gap between theory and practice. Thus, learning the material of the Qur'an and Sunnah does not only stop at the cognitive aspect, but is also able to form the spiritual and moral awareness of students in a more profound and applicable way in daily life.

Anggraeni, (2023) The Problem Based Learning (PBL) Model is one of the learning models that emphasizes the problem-solving process as the core of learning activities. According to various education experts, PBL is designed to develop critical thinking, analytical, and problem-solving skills through authentic situations that are relevant to students' lives. In the context of Islamic Religious Education learning, PBL provides opportunities for students to relate the values of the Qur'an and Sunnah to various social and moral problems they face. Educational literacy shows that PBL is able to increase active student involvement in the learning process, because students are encouraged to find, analyze, and discuss solutions to a problem. In addition, PBL also encourages collaboration between students in groups, creating a more dynamic and interactive learning process. Several empirical studies show that the application of PBL in PAI learning can increase students' motivation to learn, understand concepts, and ability to apply religious values in daily life (Ishida & Sekiyama 2024). However, the success of PBL implementation is highly dependent on the role of teachers as facilitators who are able to design relevant issues and guide the discussion process effectively. Thus, PBL not only functions as a learning model, but also as a pedagogical strategy that is able to improve the quality of learning holistically, especially in valuable materials such as the Qur'an and Sunnah.

The relationship between the Problem Based Learning model and improving learning outcomes in Islamic Religious Education learning has been widely studied in various previous studies. Hsbollah & Hassan (2022) Theoretically, PBL is considered to be able to improve learning outcomes because it provides a meaningful and contextual learning experience for students. In learning the material of the Qur'an and the Sunnah as a guideline for life, PBL allows students to not only understand the text literally, but also to interpret the values contained in it in real-life situations. The literature shows that problem-based learning can improve students' knowledge retention, critical thinking skills, and religious attitudes. In addition, PBL also encourages students to be more active in the learning process, thereby increasing their motivation and participation in the classroom. Several previous studies have found that students who learn using PBL show a significant improvement in learning outcomes compared to conventional methods Salam, et al, (2023).

This is because PBL provides a space for students to build their own knowledge through a process of exploration and discussion. In the context of Islamic education, this approach is also in line with the principle of learning which emphasizes the appreciation of religious values, not just memorization. Therefore, the integration of PBL in learning Al-Qur'an and Sunnah materials is one of the relevant strategies to improve the quality of learning outcomes of junior high school students comprehensively, both from cognitive, affective, and psychomotor aspects.

## **METHOD**

This study uses the Kemmis and McTaggart model of Classroom Action Research which consists of four stages, namely planning, action implementation, observation, and reflection which is carried out cyclically (Kumar, & Sharma 2023). This research was carried out at SMP Negeri 1 Kalinyamatan in the even semester of the school year which ran with the subject of the research being students of the class that became the focus of Islamic Religious Education learning. Subjects are selected based on the consideration of the low student learning outcomes in certain materials that have been identified through pre-cycle results. The research variables consist of independent variables in the form of a Problem Based Learning (PBL) model applied in the learning process, and bound variables in the form of student learning outcomes in Islamic Religious Education subjects which include cognitive, affective, and psychomotor aspects (Mayasari, 2022). In addition, this study also considers supporting variables such as teacher activities, student participation, and interaction in the learning process as factors that affect the success of actions. The research is designed in two cycles, and each cycle consists of several learning meetings tailored to the curriculum time allocation. Each cycle aims to correct the shortcomings of the previous cycle so that there is a continuous and measurable improvement in the quality of learning.

The research procedure starts from the planning stage which includes the preparation of Problem-Based Learning-based teaching modules, the preparation of research instruments, and the determination of learning success indicators (Mayasari, 2022). At the stage of implementing the action, teachers apply the PBL model by providing contextual problems that students must solve in groups through discussions and presentations. The observation stage was carried out by researchers and collaborators to observe the activities of teachers and students using structured observation sheets that had been prepared beforehand, including recording student involvement, critical thinking skills, and group cooperation (Alsaleh, 2020). The reflection stage is carried out by analyzing the results of observations and test results to identify the strengths and weaknesses of learning in each cycle. The research instruments used include learning outcome tests in the form of multiple-choice questions or descriptions, observation sheets of teacher and student activities, and documentation in the form of photos of activities, teaching modules, and student work results. To ensure the validity of the data, the source triangulation technique

and method triangulation are used, which are comparing test results, observations, and documentation data to obtain more accurate and credible data.

The data analysis technique in this study uses quantitative and qualitative analysis in an integrated manner (Matović, & Ovesni, 2023). Quantitative data was obtained from the results of the post-test in each cycle which was then analyzed by calculating the average grade of the class and the percentage of student learning completeness. Students are declared complete if they obtain a score greater than or equal to the Learning Goal Achievement Criteria (KKTP), which is 70, while classical completeness is determined if at least 85% of students have achieved this score. Alonso, (2008) The formula used to calculate the percentage of completeness is  $P = f/n \times 100\%$ , with P as the percentage of completeness, f the number of students who complete, and n the number of all students. Qualitative data is analyzed through data reduction, data presentation, and drawing conclusions from the results of observation of teacher and student activities during the learning process. The success of the action is also seen from the increase in student involvement in the learning process and their ability to solve problems. In addition, this study pays attention to the ethical aspects of research by maintaining the confidentiality of students' identities and using data only for academic purposes. The final results of the research are presented in the form of a descriptive narrative that describes the changes in learning outcomes and learning processes from cycle to cycle in a systematic and structured manner.

## RESULT AND DISCUSSION

### *Results*

This class action research began with learning observation activities in grade VII A SMPN 1 Kalinyamatan which was held on September 10-12, 2024. In the initial stage, the researcher coordinated with the principal to ensure the application of the Problem Based Learning (PBL) model in Islamic Religious Education (PAI) learning. After obtaining permission, the researcher conducted interviews with PAI teachers and 32 students of grade VII A. The results of the observation showed that the learning process was still dominated by lectures, questions and answers, and simple assignments. Student activities tend to be passive, lack focus, and often do activities outside of learning. Only about 28% of students actively ask questions or answer teacher questions. In addition, the results of the initial test (pre-test) showed an average student score of 64.12 with a completeness rate of only 46.87%. Many students have not reached the Learning Goal Achievement Criteria (KKTP). This condition shows the need for PBL-based learning innovations to improve student learning activities and outcomes.

In the planning stage of the first cycle, the researcher and PAI teachers developed a more systematic Problem Based Learning (PBL)-based learning tool to improve the quality of learning in grade VII A SMPN 1 Kalinyamatan. Planning begins with a needs analysis based on pre-cycle results that show low student activity and learning outcomes. Furthermore, a PBL-based teaching module was prepared with the topic "Commendable Morals in Daily Life" which was associated with real situations in the school environment and society. In addition, contextual problem-based LKPD was developed that encourages

students to think critically and collaboratively. Teachers also prepare additional learning media in the form of case pictures and short videos lasting 3–5 minutes to improve understanding of concepts. Research instruments in the form of observation sheets of teacher and student activities, as well as cognitive evaluation tests were also prepared in a structured manner. Learning is designed in six heterogeneous groups of 5–6 students each. At this stage, the researcher also compiled indicators of the success of the action, namely a minimum of 75% of students achieving KKTP and a minimum of 70% of students being active in learning. To strengthen the implementation of PBL, teachers are given learning step guides ranging from problem orientation, group organization, investigation, presentation of results, to evaluation. This planning also emphasizes the role of teachers as facilitators, not as the main source of information, so that students can be more independent in finding solutions to the problems given.

**Table 1.** Pre-Cycle

No	Aspects	Results
1	Average score	64,12
2	Completeness	46,87%
3	Active students	28%

The implementation of the first cycle was carried out in two meetings by applying the Problem Based Learning model to commendable moral material. In the early stages, teachers provide perceptions and convey problems regarding the low honesty in the school environment. Students were then divided into six groups to discuss solutions to the problem. However, in the implementation there are still various obstacles. Some students do not understand the steps of PBL so they still depend on the teacher's instructions. Discussion activities are not even because only a few students are active, while others tend to be passive or do activities outside of learning. Of the 32 students, only about 13 students (40.6%) actively participated in the discussion. The presentation of the results of the discussion was also not optimal because only 3 groups were able to convey the results with confidence. The average score of the evaluation results of the first cycle is 70.45 with a completeness rate of 56.25%.

During the learning process, the teacher still dominates the explanation of the material so that the role of students as the center of learning has not been maximized. Nonetheless, there was a small increase in student interest compared to pre-cycle, especially in questioning activities. Some students began to show the courage to express their opinions even though they were still limited. These results show that the implementation of PBL in the first cycle has not run optimally and still requires improvements in the aspects of teacher guidance, discussion management, and student motivation strategies.

**Table 2.** Cycle I

No	Aspects	Results
1	Average score	70,45
2	Completeness	56,25%
3	Student activities	40,6%

The results of observations in the first cycle show that the application of the Problem Based Learning model has not had an optimal impact on student learning activities. Based on the observation sheet, teacher activity obtained an average score of 72.3 which is in the sufficient category, while student activity was at 68.1. Of the 32 students, only 5 students (15.6%) were classified as very active, 10 students were quite active, and the remaining 17 students (53.1%) were still passive in learning activities. In the group discussion process, an imbalance in participation was found, where students with high academic ability dominated the discussion, while other students tended to only follow. In addition, the level of student confidence in the presentation is still low, characterized by a lack of ability to explain the results of the discussion systematically. The use of learning media is also still limited so that it does not attract students' attention. The results of observations show that only about 45% of students are really focused during the learning process. The classroom situation still tends to be less conducive because there are some students who speak outside of the learning topic. This condition indicates that the implementation of PBL requires strengthening the aspect of teacher scaffolding, using more varied media, and more effective classroom management so that all students can be actively involved in the learning process.

Reflection in the first cycle was carried out with collaborator teachers to evaluate the learning process that had taken place. The results of reflection show that the implementation of Problem Based Learning has not gone as expected. The main problem lies in the lack of students' understanding of the PBL stages and the dominance of the teacher's role in the learning process. Teachers still give direct explanations too often, reducing students' opportunities to explore problems independently. In addition, the management of group discussions is not optimal because not all group members are actively involved. Based on reflection notes, only about 40% of students are actively involved in discussions, while the other 60% are still passive.

Another influencing factor is the lack of motivation and confidence of students in expressing opinions. Therefore, several improvements were agreed for cycle II, namely the use of more interesting learning media such as animated videos, the provision of simpler PBL step guides, and the implementation of a reward system to increase student motivation. Teachers also need to improve their ability to facilitate discussions to be more even. This reflection is an important basis for improving learning strategies in the next cycle so that the goal of improving activities and learning outcomes can be achieved optimally.

The planning of cycle II is prepared based on the results of reflection of cycle I with a focus on increasing the effectiveness of learning using Problem Based Learning. At this stage, teachers and researchers revise learning tools, including teaching modules, LKPD, and evaluation instruments. The material used is "Discipline in Everyday Life" which is closer to the student's experience. To increase the attractiveness of learning, a 4-minute

learning video media was added that depicted examples of disciplined behavior in schools. In addition, LKPD is designed to be simpler but still requires students to think critically and work together in groups. Teachers were also given short training on scaffolding techniques and strengthening student motivation. The success indicators of cycle II were improved, namely at least 80% of active students and 75% of students achieved KKTP. A reward system in the form of group points is also applied to increase student motivation in discussions. The fixed group consists of 5–6 students with a more balanced composition based on academic ability. With this more careful planning, it is hoped that learning in cycle II can run more effectively and be able to significantly increase student active participation.

The implementation of cycle II showed a significant increase compared to the previous cycle. Learning begins with a video showing about discipline that manages to grab students' attention. After that, students immediately engage in group discussions to analyze the given problem. In contrast to cycle I, in cycle II students look more active and enthusiastic. Of the 32 students, 27 students (84.3%) were actively involved in the discussion. Teachers act as facilitators who provide more direction and guidance than direct explanations. Each group was able to compile the results of the discussion more systematically and confidently during the presentation.

The whole group managed to present the results well. The classroom atmosphere becomes more lively, interactive, and conducive. The reward system has also been proven to be effective in increasing student motivation. Some students who were previously passive began to dare to express their opinions. The learning process runs according to the stages of PBL, starting from problem identification, discussion, to presentation and evaluation. The results of the evaluation showed a significant increase in students' understanding of the material. The learning in the second cycle shows that the improvement of the strategy has succeeded in improving the quality of the overall learning process.

The results of observations in cycle II showed a very significant increase in all aspects of learning. Teacher activities obtained a score of 86.7 which is included in the very good category, while student activities reached 88.4. Of the 32 students, as many as 29 students (90.6%) are active in the learning process, only 3 students are still less active. The level of student involvement in discussions increased drastically compared to cycle I. In addition, students' ability to present the results of discussions has also experienced a significant increase, characterized by the ability to convey ideas more concisely and confidently.

The use of video media has been proven to be effective in improving students' initial understanding of the material. The classroom atmosphere became more interactive and conducive, with a student focus level of 92% during learning. The results of the evaluation showed an average student score of 82 with a completeness rate of 90.63%. This data shows that most students have achieved KKTP. This observation proves that the implementation of PBL accompanied by improvements in learning strategies is able to significantly increase student activities and learning outcomes.

**Table 3. Cycle II**

No	Aspects	Results
1	Average score	82
2	Completeness	90,63%
3	Student activities	85%

Reflection of cycle II shows that the application of the Problem Based Learning model has succeeded in improving the quality of PAI learning in grade VII A. Teachers and researchers agree that the research objectives have been achieved because the success indicators have been met. Student activity increased to more than 85%, while learning completeness reached 90.63%. Students show significant changes in attitudes, such as being more active in discussions, having the courage to express opinions, and being able to work together in groups. Teachers also experience increased competence in managing problem-based learning. Although there are still some less active students, the number is very small and does not affect the overall results. Reflection also shows that the use of visual media and reward systems is very effective in increasing learning motivation. Thus, this class action research was stopped in cycle II because it had met the set success indicators. These results show that the PBL model is very effectively applied in PAI learning to improve student activities and learning outcomes.

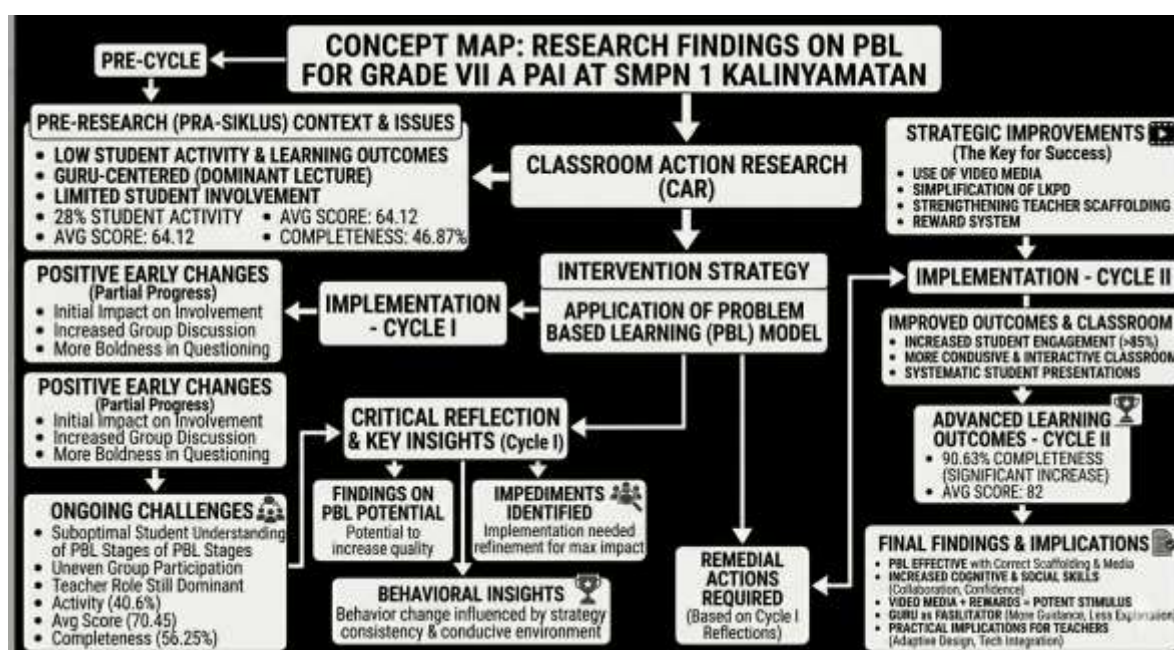
Overall, this classroom action research proves that the application of the Problem Based Learning (PBL) model can improve the activities and learning outcomes of grade VII A SMPN 1 Kalinyamatan students. In the pre-cycle stage, the learning condition is still dominated by the lecture method with a completeness rate of only 46.87%. After the implementation of PBL in the first cycle, there was an increase although it was not optimal with a completeness of 56.25%. The improvement of the strategy in cycle II resulted in a significant increase with completeness reaching 90.63% and an average score of 82. Student activity also increased from 40% in cycle I to more than 85% in cycle II. This data shows that PBL is able to create more active, collaborative, and meaningful learning. In addition, students become more confident, critical, and able to work together in solving problems. Teachers also experienced an increase in their ability to manage problem-based learning. Thus, the PBL model is recommended to be applied in PAI learning and other subjects as an effort to improve the quality of education in schools.

### **Discussion**

The main findings of this study show that the initial learning condition of Islamic Religious Education in grade VII A SMPN 1 Kalinyamatan is still low both in terms of activities and learning outcomes. In the pre-cycle, learning is still teacher-centered with the dominance of the lecture method, so that student involvement is limited; Only 28% of active students with an average score of 64.12 and completeness of 46.87%. After the implementation of the Problem Based Learning model in cycle I, there was an increase, but it was not significant. Student activity increased to 40.6%, the average score became 70.45,

and completeness increased to 56.25%. These findings suggest that PBL is able to have an initial positive impact on student engagement, especially in group discussions and the courage to ask questions. However, its effectiveness is still hampered by the lack of optimal students' understanding of the PBL stages, the lack of even participation in groups, and the dominance of the teacher's role in explaining the material. This condition indicates that the success of PBL implementation is highly determined by the readiness of learning strategies, including proper scaffolding, effective group management, and the use of media that are able to encourage active student participation. Thus, the first cycle is an important finding that PBL has the potential to improve the quality of learning, but still needs to improve implementation so that its impact on learning activities and outcomes can be maximized. These findings also show that changes in students' learning behavior are not only influenced by methods, but also by the consistency of implementing strategies and supporting a conducive classroom environment, so PBL needs to be implemented gradually and sustainably to produce more significant impacts. This emphasizes the importance of collaboration between teachers and researchers in designing learning that is adaptive to the needs of students.

Gorghiu, (2015). The next most important finding shows that in cycle II there was a very significant increase after improvements in Problem Based Learning-based learning strategies. The application of video media, simplification of LKPD, strengthening teacher scaffolding, and providing rewards have proven effective in increasing student involvement. Student activity increased to more than 85%, with a completeness rate of 90.63% and an average score of 82. These findings confirm that the success of PBL is greatly influenced by the quality of implementation, Lantada, (2022). especially in providing an interesting and contextual learning stimulus. The use of learning videos helps students understand initial concepts more concretely, while reward systems encourage intrinsic motivation and active participation in group discussions. In addition, the role of the teacher as a facilitator is more dominant in providing guidance, rather than direct explanations, making students more independent in solving problems. Significant improvements were also seen in students' communication and presentation skills which became more systematic and confident. Classroom conditions have become more conducive, interactive, and student-centered. These findings suggest that PBL not only improves cognitive outcomes, but also social skills such as cooperation, courage to speak up, and responsibility within the group. Thus, cycle II is strong evidence that modification of PBL-based learning strategies can produce optimal improvements in student learning activities and outcomes simultaneously and continuously. Wardianti, & Rini, (2024). These findings also reinforce that the integration of simple technology and problem-based approaches accompanied by motivational reinforcement can be an effective strategy in improving the quality of PAI learning, while providing a more meaningful learning experience for students in the context of daily life at school. So that the results of this study have practical implications for teachers.



The findings of this research can be explained through the perspective of the theory of social constructivism which emphasizes that knowledge is actively constructed through social interaction and direct experience. Lubis, (2023). In this context, the success of improving student activities and learning outcomes after the implementation of Problem Based Learning (PBL) is in line with the view of Social Constructivism developed by Vygotsky, where effective learning occurs when students are in the proximal development zone with the support of teachers and peers. Stewart de Ramirez, (2022). In the pre-cycle condition, the dominance of the lecture method causes students to only become passive recipients of information, so that there is no meaningful knowledge construction process. This explains the low activity and learning outcomes. When PBL is implemented, students begin to be confronted with contextual problems that require them to discuss, analyze, and find solutions collaboratively. This condition reinforces the principle of Problem Based Learning as explained by Howard Barrows who emphasizes real problem-based learning to improve critical thinking skills. In addition, the significant increase in cycle II can also be explained through the active learning theory put forward by Prince (2004), which states that the direct involvement of students in the learning process will improve retention and understanding of concepts Li, Lund & Nordsteien, (2023). Thus, the changes that occurred in this study are not only the result of changes in methods, but are the result of the transformation of the learning process from teacher-centered to student-centered supported by social interaction, real context, and teacher guidance as facilitators in accordance with modern learning theory.

The novelty of this research lies in the implementation of PBL which is specifically contextualized in the learning of Islamic Religious Education (PAI) at the junior high school level with the integration of simple media such as short videos and group-based reward systems. Yeo, (2024) In contrast to Diana Hmelo-Silver's (2004) research which emphasizes more cognitive aspects in the context of medical education, this study shows that PBL is also

effectively applied in character learning and religious values. In addition, the research of John R. Savery (2006) emphasizes the importance of authentic problem design, but has not addressed much about the integration of rewards and simple audiovisual media in increasing the motivation of high school students Hazratifard, Gebali, & Mamun, (2022). Zhang, (2022) The research of David R. Johnson (2003) and Michael Prince (2004) also highlights the importance of collaboration and student activities, but has not been specifically linked to moral values-based PAI learning. Meanwhile, the meta-analysis of Alfons J. Dochy (2003) shows the effectiveness of PBL in general, but does not discuss the context of gradual implementation through the PTK cycle as in this study. The main novelty of this study is the empirical evidence that the combination of PBL, simple visual media, and reward systems in the PTK cycle is able to significantly increase student activities and learning outcomes progressively from pre-cycle to cycle II Mubin, Kim & Fauziah, (2023). This reinforces that the adaptation of the global model into the local context of PAI learning can produce findings that are more applicable and relevant to the needs of students in schools.

An important contribution of this study lies in strengthening the empirical evidence that the Problem Based Learning model is not only effective in improving cognitive abilities, but also able to improve students' affective and psychomotor aspects, such as activeness, courage to speak up, and group cooperation. Theoretically, this study expands the implementation of Problem Based Learning in the context of Islamic Religious Education learning which was previously dominated by conventional methods. Practically, the results of this study contribute in the form of a more adaptive PBL implementation model through the stages of the PTK cycle, so that it can be used as a reference for teachers in improving the quality of learning. In addition, a significant increase from 46.87% to 90.63% of learning completeness shows that a gradual and reflective approach is very effective in addressing learning problems in the classroom. Another contribution is to strengthen the role of teachers as facilitators who are able to manage discussions, provide scaffolding, and create an active learning environment. This strengthens the Constructivist Learning Theory which places students at the center of learning. Thus, this research not only contributes to improving learning outcomes, but also to the development of more effective pedagogical strategies, especially in value- and character-based learning in secondary schools.

For future development, the findings of this study show the need for wider integration between Problem Based Learning and more interactive digital technologies such as online learning platforms or application-based simulations. This is important to increase the engagement of students who are increasingly accustomed to technology. In addition, teachers need to receive continuous training in the design of contextual problems that are more complex and relevant to students' lives so that the application of Problem Based Learning is more optimal. Further research is also recommended to test the effectiveness of PBL in other subjects as well as different levels of education to see the consistency of results. In terms of methodology, advanced research can use quasi-experimental designs to

strengthen the validity of findings. Additionally, it is important to explore psychological factors such as students' intrinsic motivation and self-efficacy in supporting PBL success. Strengthening collaboration between teachers, students, and technology is also an important direction forward. Thus, the future of PBL implementation will not only focus on improving academic outcomes, but also on developing 21st century skills such as critical thinking, communication, collaboration, and creativity more comprehensively and sustainably in the modern world of education.

## CONCLUSION

Overall, this study concludes that the application of Problem Based Learning (PBL) in Islamic Religious Education learning in grade VII A SMPN 1 Kalinyamatan produced findings that are not only significant but also surprising, especially because the spike in learning outcomes did not occur linearly in the early stages of implementation, but only showed a drastic increase after learning strategy modifications were made in cycle II. The surprising finding is that PBL in its initial form has only a limited impact on student activities and learning outcomes, thus refuting the common assumption that the direct application of innovative models will automatically improve the quality of learning. On the other hand, a very sharp increase only emerged when PBL was combined with simple video media, SLKPD simplification, scaffolding strengthening, and a reward system, which collectively drove student engagement to more than 85% with a completeness of 90.63%. This shows that the success of PBL is not solely determined by its model, but by the quality of its implementation and learning design that is adaptive to the characteristics of the students. In addition, this finding is also surprising because it shows that PAI learning, which has been considered dominant in memorization and lectures, is very responsive to a contextual and collaborative problem-based approach. The transformation from teacher-centered to student-centered learning not only enhances the cognitive aspect, but also simultaneously strengthens students' social and religious skills. Thus, this study confirms that learning innovation will be effective if it is accompanied by continuous improvement, media support, and appropriate motivational strategies in the context of real classrooms. The implication is that teachers need to be more reflective and adaptive in designing learning so that optimal impact is achieved sustainably in the classroom in the context of modern PAI learning.

Although this study shows a significant increase in the application of Problem Based Learning (PBL) in Islamic Religious Education learning, there are several weaknesses that need to be observed as evaluation material. First, this study was only conducted in one class with a limited number of subjects so that the generalization of results is still very weak to be applied to the context of other schools that have different student characteristics and learning conditions. Second, the implementation of research in the form of Classroom Action Research (PTK) with two cycles is still not fully able to capture the long-term dynamics of changes in student learning behavior, so the sustainability effect of the implementation of PBL cannot be ascertained. Third, the dependence on teacher interventions such as intensive scaffolding, the use of videos, and rewards shows that the

success of PBL is still highly dependent on the readiness and creativity of teachers, so that if it is not done optimally, the results achieved can return to low as in the initial cycle. Fourth, this study has not explored in depth external factors such as family support, social environment, and differences in students' early abilities that are most likely to affect learning outcomes. Therefore, future research needs to be conducted with a broader design, such as quasi-experiments or mixed methods involving more classes and schools to make the results more representative. The next researcher is also advised to test the sustainability effectiveness of PBL in the long term, not only on the improvement of momentary learning outcomes, as well as integrating other variables such as intrinsic motivation, self-regulated learning, and students' digital literacy. In addition, it is also important to develop a more interactive technology-based PBL model so that learning is more adaptive to the development of the digital era and the needs of 21st century skills in a more comprehensive and sustainable manner at various levels of formal education.

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