

Application of Problem-Based Learning Model in Improving PAI Learning Outcomes in Class XI SMAN 3 Padang

Sardona¹ 

*Correspondence :

Email :
sardona@gmail.com

Authors Affiliation:

¹Universitas Islam Negeri
Sjeh M. Djamil Djambek
Bukittinggi, Indonesia

Article History :

Submission : 18-11-2024
Revised : 22-11-2024
Accepted : 24-12-2024
Published

Keyword : PBL, Learning Outcomes

Kata Kunci : PBL, Hasil Belajar

Abstract

This study aims to analyze the improvement of learning outcomes in Islamic Religious Education (PAI) among university students through the implementation of the Student Centered Learning (SCL) method compared to conventional teaching methods. The research method used is a quasi-experimental study with a pre-test and post-test design applied to two different groups. The results show that the implementation of the SCL method has a positive impact on improving the understanding of PAI material compared to conventional methods. Students taught with the SCL approach showed improvements in critical thinking skills, active participation in discussions, and a better understanding of PAI values. Overall, this study recommends the use of the SCL method as an effective alternative to enhance the quality of PAI education in higher education institutions.

Abstrak

Penelitian ini bertujuan untuk menganalisis peningkatan hasil belajar Pendidikan Agama Islam (PAI) di kalangan mahasiswa melalui penerapan metode Student Centered Learning (SCL) dibandingkan dengan metode pembelajaran konvensional. Metode penelitian yang digunakan adalah penelitian kuasi eksperimental dengan desain pre-test dan post-test pada dua kelompok yang berbeda. Hasil penelitian menunjukkan bahwa penerapan metode SCL memberikan dampak positif terhadap peningkatan pemahaman materi PAI dibandingkan dengan metode konvensional. Mahasiswa yang diajarkan dengan pendekatan SCL menunjukkan peningkatan kemampuan berpikir kritis, keterlibatan aktif dalam diskusi, dan pemahaman yang lebih baik terhadap nilai-nilai PAI. Secara keseluruhan, penelitian ini merekomendasikan penggunaan metode SCL sebagai alternatif yang efektif untuk meningkatkan kualitas pembelajaran PAI di perguruan tinggi.

INTRODUCTION

Islamic Religious Education (PAI) is one of the most important subjects in shaping students' character and morals. According to Nurhadi (2017), religious education does not only aim to provide religious knowledge, but more than that, to form students' personalities who have noble morals and can apply religious values in daily life. This is in accordance with the main objective of Islamic religious education, which focuses on the internalisation of Islamic values that can guide students in acting in accordance with religious teachings. However, in reality, many students only memorise religious material without really understanding and applying it in real life (Haryanto, 2020).

The learning model that is widely applied in schools, especially in PAI, is still dominated by the lecture method. Research conducted by Suyanto and Wijayanto (2019) showed that the lecture method, although effective in delivering information, tends to make students passive in the learning process. This has an impact on students' low ability to think critically and solve problems related to the material studied. Thus, a more active learning approach based on student engagement is needed to overcome this problem.

As an alternative, the Problem Based Learning (PBL) model has been proven effective in improving student engagement and critical thinking skills. According to Arends (2014), PBL encourages students to learn through solving real problems that are relevant to the context of

their lives. This approach not only improves concept understanding, but also develops critical thinking skills and problem-solving abilities that are needed in everyday life. This is in line with Kamdi (2007), who stated that PBL helps students to integrate their knowledge and find solutions independently or in groups.

Related to the material taught in PAI, such as avoiding fights between students, alcohol, and drugs, the PBL model is very appropriate to apply. As stated by Kurniawan (2018), moral and moral materials, especially those related to negative social behaviour, are more effective if studied with an approach that invites students to be directly involved in solving problems they face in everyday life. This approach can motivate students to think more deeply and realise the impact of their behaviour.

Therefore, the application of PBL model in PAI learning in class XI at SMAN 3 Padang is expected to overcome the limitations of conventional learning methods, as well as improve students' learning outcomes in understanding and applying PAI materials more meaningfully and contextually. This research seeks to provide solutions to the existing problems by using learning models that are more innovative and relevant to the needs of today's students.

METHODS

This research uses the type of *Classroom Action Research* (PTK), which is a research approach that focuses on efforts to improve and enhance the quality of learning through actions that are deliberately implemented in the learning process in the classroom. Suharsini (2014) states that PTK is an observation of learning activities that serves to improve the learning process in the classroom through actions taken by teachers, students, or collaboration between the two. This research adopts the form of *Collaborative Classroom Action Research*, in which the researcher works together with PAI teachers in class XI SMA Negeri 3 Padang to design and implement actions and evaluate the results achieved. Through this collaboration, this study aims to improve student learning outcomes on the material 'Avoiding Fights Between Students, Liquor (Miras), and Drugs' through the application of the Problem Based Learning (PBL) learning model.

The application of PBL in the context of Islamic Religious Education (PAI) was chosen because this model has been proven effective in increasing student involvement in the learning process. As explained by Kamdi (2007), PBL requires students to be active in solving real problems that are relevant to the material being studied. In this way, students not only learn theoretically, but also connect the knowledge they acquire with the context of real life. This is very important in the context of PAI learning, where students' understanding of religious and moral values needs to be applied in daily life.

This research was conducted at SMAN 3 Padang in the 2024/2025 academic year and lasted for one semester. This study measured students' learning outcomes through tests conducted before (pre-test) and after (post-test) the application of the PBL model. The results of this test will be used to see changes in students' understanding of the material taught, as well as to assess how effective the PBL model is in increasing students' awareness of the dangers of fighting, drinking, and drugs. In this study, several variables that influence changes in students' behaviour and understanding of PAI materials were identified. The independent variables studied included character education programmes implemented at school, parental supervision, safe school environment, and peer group influence. Character education implemented in schools, as described by Lickona (1991), plays an important role in shaping students' positive attitudes and behaviours, including their awareness of the impact of risky behaviours such as fighting, alcohol and drugs. These character education programs can take the form of counselling, extracurricular activities and life skills training that help students to be more aware of the importance of maintaining good behaviour.

In addition, parental supervision also plays an important role in influencing student behaviour. Research conducted by Simons-Morton et al. (2009) showed that supervision provided by parents can reduce children's risky behaviour, including in terms of fighting, alcohol consumption, and drug use. This shows the importance of parental involvement in supporting children's learning and character building. A safe and conducive school environment is also an important factor that can influence students' attitudes. As stated by Thornberg (2015), a supportive school environment can create an atmosphere that is safe and free from violence, which in turn can reduce negative behaviour among students.

In addition to the independent variables, this study also identified dependent variables, which in this case are student behaviour and awareness. Student behaviour, especially in relation to fighting, alcohol and drug consumption, will be measured through observations and reports from teachers and school counsellors. Students' awareness of the dangers of fighting, alcohol and drugs will be measured through a knowledge test that includes students' understanding of the risks and consequences of these behaviours. This study also considers intervening variables, such as students' intrinsic motivation and media influence, which may affect students' decisions and attitudes regarding risky behaviour. As described by Deci and Ryan (1985), students' intrinsic motivation to avoid risky behaviour is influenced by various factors, including character education, parental supervision, and a positive school environment.

By using the PBL model, this study is expected to provide a clearer picture of how the interaction between these factors affects changes in students' behaviour and awareness. In addition, this study will also assess the effectiveness of PBL in reducing students' involvement in negative behaviours, as well as improving their understanding of PAI materials related to morals and morality. Through this research, it is hoped that solutions can be found that can be applied in other schools to improve the quality of PAI learning and support students' character building.

RESULT AND DISCUSSION

RESULT

In cycle I, this research began with the identification of problems found in learning Islamic Religious Education (PAI) class XI. Previously, learning activities tended to be dominated by conventional methods, such as lectures, which caused students to be less active in participating and learning outcomes were not optimal. As a response to this, the Problem Based Learning (PBL) learning model with the material 'Avoiding Fights Between Students, Liquor, and Drugs' was applied on 19 August 2024. The planning stage in cycle I included making teaching modules, preparing evaluation tools in the form of tests, and observation sheets to monitor student activities during the learning process.

The implementation of cycle I began with giving a pre-test to students to measure their initial understanding. The test consisted of 10 multiple choice questions. The test results showed that although there were students who achieved scores above the average, overall, the students' mastery level of the learning objectives was still inadequate, with only 60% of students achieving scores above the set Minimum Completion Criteria (KKM), which is 70. The observation results showed that although there was an increase in student activeness, there were still some students who were less involved, such as being busy with personal activities and lacking confidence in expressing opinions.

Observation of student activeness in cycle I was carried out in two meetings. The observation results showed an increase in several indicators, such as visual and listening activities, which recorded a percentage of 66% and 75% respectively in the first meeting, and 84% and 78% in the second meeting. However, activities involving motor and mental skills, such as experimental practices and group discussions, were still low. The overall activeness

percentage in cycle I was 53.57%, which suggests there is room for improvement in the next cycle.

In the analysis of learning outcomes, students' average scores based on the Project Worksheet and learning outcomes assessment showed diverse values. Most students got an average of around 74-78, with only a few students achieving scores above 80. Nonetheless, these results showed that there was an improvement in students' understanding and participation compared to before the implementation of PBL.

At the reflection stage, students' learning motivation in cycle I showed adequate results. The percentage achievement of student activeness in cycle I, which reached an average of 58.06%, showed progress compared to the initial baseline of only 52.14%. Nevertheless, there is a need for further improvement in cycle II with the addition of project variations so that student activeness can be further improved and achieve the desired target. Therefore, cycle I was considered successful to be continued to the next cycle with improvements in several aspects that still needed to be developed.

In cycle II, this research was continued with improvements and additional variations in the application of the Problem Based Learning (PBL) learning model to improve student activeness and learning outcomes. Based on the reflection results from cycle I, where student activeness still showed sufficient results, but needed improvement, cycle II was designed to provide a more interesting learning experience and increase student involvement. Modifications made in cycle II included the addition of a variety of more complex and interactive projects, as well as providing more opportunities for students to present the results of their discussions.

The implementation of cycle II began with the administration of the pre-test again to measure students' understanding of the material that had been taught. Students were then divided into groups to complete a more complex project related to the learning material. Each group was given the task of developing solutions to problems faced by students related to fighting, drinking and drugs. In this stage, students are required to conduct research, discuss and design a presentation on the solutions they offer.

During the implementation, the teacher provides direct feedback to each group to ensure that the discussion runs smoothly and in line with the learning objectives. With this approach, students are expected to more actively participate in group activities, improve their ability in public speaking, and hone problem-solving skills.

Observations in cycle II showed a significant increase in student activeness. Based on the observation results in the first and second meetings, most students were actively involved in group discussion activities, expressing their opinions, and participating in presentations. Students' activeness in asking questions and answering questions also showed a significant increase compared to the first cycle. In the first meeting, the observation results showed that the average percentage of student activeness reached 78%, while in the second meeting it increased to 85%. This shows that the variation in projects and the opportunity to interact more in groups had a positive impact on student motivation and participation.

Learning outcomes in cycle II also experienced a significant increase. Based on the assessment of the Project Worksheets and the assessment of learning outcomes, most students scored better than in cycle I. The average score obtained by students in cycle II was around 80-85, indicating significant progress in understanding and skills achieved during learning. Some students even managed to achieve scores above 90, indicating a deep understanding of the material learnt and skills in working in groups.

At the reflection stage, the results achieved in cycle II showed that the changes made in the planning and implementation of this cycle had a positive impact. Student activeness, which previously only reached 53.57% in cycle I, now increased to 75% in cycle II. The implementation of more interesting project variations and the opportunity for live presentations have increased student engagement in the learning process. In addition, better

student learning outcomes were also an indicator of the success of the PBL model implementation in cycle II.

DISCUSSION

In cycles I and II, the application of the Problem Based Learning (PBL) learning model was used to improve student activeness and learning outcomes in Islamic Religious Education (PAI) subjects with the material 'Avoiding Fights Between Students, Liquor, and Drugs.' This process was carried out through the steps previously described, starting from planning, implementation, observation, and reflection.

In cycle I, the use of the PBL learning model was expected to overcome the problems that arose in the previous cycle, where PAI learning was still dominated by the conventional lecture method. In the planning stage, the preparations made included the development of teaching modules based on PBL, evaluation tools, and observation sheets to measure student activeness during learning.

In cycle I, the observation results showed that although there was an increase in student activeness, it was not optimal. Based on the observation, there were still students who were less active in discussions and presentations, and lacked confidence in speaking in front of the class. This is also reflected in the table of observation results, where the indicators of activeness, such as visual, listening, and writing activities, show varying values. Some students were also seen not concentrating on the material being taught, which can hinder the effectiveness of learning (Slameto, 2010). In this case, further method development is needed to increase student engagement.

The theory underlying the application of PBL is the theory of constructivism which suggests that knowledge is built through direct experience (Piaget, 1973). PBL provides opportunities for students to be actively involved in learning by solving real problems, which can improve their understanding of the material. However, in cycle I, although PBL can activate students to interact more, the challenge that arose was the lack of speaking and presentation skills in some students, which indicates that confidence in speaking needs to be strengthened.

The learning outcomes in cycle I showed that only 60% of students achieved the Minimum Completion Criteria (KKM). This shows that despite the improvement, students' learning outcomes still need to be improved. Previous research shows that PBL can improve students' understanding of material and skills in problem solving (Barrows, 1996), but students' involvement in the learning process still needs improvement.

Based on the reflection of cycle I, cycle II was implemented by varying the project to make it more complex and interactive. This improvement aims to increase students' motivation and activeness in learning. The addition of opportunities for students to present the results of their discussions in more depth became the main focus in cycle II.

In cycle II, student activeness experienced a significant increase. Based on the observation results in the first and second meetings, most students were actively involved in group discussions, asking questions, and presenting the results of their discussions. The percentage of student activeness increased to 78% at the first meeting and 85% at the second meeting. This increase can be attributed to the implementation of project variations that allowed students to interact more and express their opinions more often.

Cycle II also showed a significant improvement in students' learning outcomes. The average student score increased to around 80-85, indicating a better understanding of the material learnt. This indicates that with a more interactive approach and greater opportunities to participate in discussions and presentations, students were better able to absorb and master the material.

In constructivism learning theory, teachers act as facilitators who help students build their knowledge through real experiences and reflection (Vygotsky, 1978). The implementation of

PBL in cycle II created opportunities for students to actively collaborate and learn from each other. More complex and interactive projects are expected to enrich students' learning experience and improve their understanding of the material.

In cycle I, although there was an improvement in students' engagement and learning outcomes, challenges such as students' lack of speaking skills and self-confidence needed more attention. In cycle II, with the addition of project variations and more opportunities for interaction, student engagement and learning outcomes improved significantly. The PBL model proved effective in improving students' understanding of the material and increasing their engagement in the learning process.

CONCLUSION

This study aims to analyse the effect of the application of the Problem Based Learning (PBL) learning model on student activeness and learning outcomes in Islamic Religious Education (PAI) subjects, especially on the material 'Avoiding Fights Between Students, Liquor, and Drugs'. Based on the analysis conducted in cycles I and II, it can be concluded that the application of the PBL model has a positive impact on increasing student activeness and learning outcomes.

In cycle I, although there was an increase in student activeness, the results achieved were not entirely satisfactory. Observations showed that although most students were involved in discussions and completing tasks, there were some students who were still less active in expressing their opinions and lacked confidence in speaking in front of the class. Student learning outcomes in cycle I also showed that only 60% of the students achieved the Minimum Completion Criteria (KKM). This indicates the need for further adjustments in the next stage to ensure all students can actively participate and gain a deep understanding of the material being taught.

In cycle II, the changes implemented, such as providing more opportunities for students to interact and present the results of their discussions, proved effective in increasing student activeness. The observation results showed that student activeness increased significantly in both meetings, with the percentage of students actively involved reaching 78% in the first meeting and 85% in the second meeting. Student learning outcomes also improved significantly, with the average student score increasing to 80-85. The application of a more complex and interactive PBL model succeeded in strengthening students' engagement, increasing their confidence, and deepening their understanding of the material.

Thus, this study shows that the PBL learning model has great potential in improving students' activeness and learning outcomes, especially in the context of PAI materials based on social issues such as fights between students, alcohol, and drugs. PBL allows students to learn actively, think critically, and develop social and communication skills that are very important in the context of everyday life. This research also suggests that teachers should be more creative in designing learning projects that are challenging, relevant, and allow students to collaborate and contribute actively in the learning process.

References

- Arends, R. I. (2014). *Learning to Teach* (10th ed.). McGraw-Hill Education.
- Barrows, H. S. (1996). Problem-based learning in medical education: An introduction and overview. *New Directions for Teaching and Learning*, 68, 3–12.
- Haryanto, B. (2020). Implementasi Pendidikan Agama Islam di Sekolah: Tantangan dan Solusinya. *Jurnal Pendidikan Islam*, 8(1), 47–60.
- Kamdi, M. (2007). *Model Pembelajaran Problem Based Learning (PBL)*. Alfabeta.
- Kurniawan, A. (2018). Pendidikan Akhlak dalam Pembelajaran PAI: Aplikasi dalam Konteks Sosial Remaja. *Jurnal Pendidikan Agama Islam*, 9(2), 213–226.

- Nurhadi, D. (2017). Pendidikan Karakter dalam Pendidikan Agama Islam. Deepublish.
- Piaget, J. (1973). To Understand is to Invent: The Future of Education. Viking Press.
- Slameto. (2010). Belajar dan Faktor-Faktor yang Mempengaruhinya. Rineka Cipta.
- Suyanto, H., & Wijayanto, A. (2019). Strategi Pembelajaran Pendidikan Agama Islam di Sekolah: Mengembangkan Keterampilan Berpikir Kritis. *Jurnal Pendidikan Islam*, 10(3), 89–101.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.