NAHRA-EDU
Journal of Teacher Education and Professional Development

Vol. 2, No. 1, 2025
ISSN (Print) xxx-xxxx | ISSN (Online) xxx-xxxx
pp. 16-24

AN EFFORT TO IMPROVE STUDENT LEARNING OUTCOMES ON MUTUAL RESPECT IN DIVERSITY THROUGH THE PBL MODEL IN GRADE IV

Edi Supriyanto[1], Nurul Akmal[2], Rinti Jamal[3]
[1]*SDN Padang Panyang, Aceh, Indonesia*
[2]*Institut Agama Islam Negeri Lhokseumawe, Aceh, Indonesia*
[3]*SMPN 2 Kuala, Aceh, Indonesia*

Article Info

Article history:

Received February 14, 2025
Revised September 25, 2025
Accepted October 15, 2025

Keywords:

Problem-Based Learning
learning outcomes
diversity

ABSTRACT

This research aims to improve student learning outcomes in the material "Mutual Respect in Diversity" using the Problem-Based Learning (PBL) model for fourth grade students at Padang Panyang State Elementary School. This research uses the Classroom Action Research (CAR) method which is carried out in two cycles. Each cycle consists of planning, implementation, observation, and reflection stages. The research results showed a significant increase in student learning outcomes, where in cycle I, 57% of students achieved the Minimum Completeness Criteria (KKM), while in cycle II it reached 82.6%. With the PBL model, students become more active and involved in the learning process, and understand the importance of appreciating diversity in everyday life.

This is an open access article under the CC BY-SA license.

Corresponding Author:

Name of Corresponding Author
e-mail: edisupriantombo@gmail.com

1. INTRODUCTION

Education in elementary schools plays an important role in shaping students' character and basic skills, including social attitudes such as respecting diversity. In Indonesia, which is characterized by cultural, religious, and ethnic diversity, teaching about diversity is essential so that students can grow up with an attitude of tolerance and respect for differences. The set spans classroom pedagogy, civic and religious education, local-wisdom approaches, the Pancasila Student Profile project, school-level implementation, student diversity attitudes, and teacher practices. Across the collection, the recurring rationale is that Indonesia's diversity is already present in primary-school settings, while multicultural education is used to cultivate tolerance, mutual respect, empathy, and inclusive classroom climates (Darojat et al. 2025). The

table includes relevance labels, publication year, language, and a concise explanation of each paper's fit, with each row linked to its source for sorting, export, and library saving.

However, in reality, intimidation among learners, bullying, and mockery of friends' language, customs, and culture are still frequently found. Learners lack an adequate understanding of diversity, making them unable to apply it in daily life. Therefore, teachers' ability to transfer knowledge is essential in instilling in learners an attitude of mutual respect for differences within diversity. The strongest recurring mechanisms are teacher modeling and equitable behavior, culturally responsive materials, dialogic and participatory learning, mixed-group collaboration, reflection, and school routines that make tolerance a lived practice rather than only a lesson. One primary-school case study specifically recommends gradual introduction through pictures, videos, observation, modeling, and inclusive teacher behavior, while emphasizing teachers' multicultural knowledge (Akil, 2010). The collection also marks the few studies conducted outside elementary settings so they can be screened separately.

As shown in preliminary observations at SD Negeri Padang Panyang, student learning outcomes on the material "Mutual Respect in Diversity" were still relatively low. Only 35% of students met the Minimum Completeness Criteria (KKM). This indicates the need for a more innovative learning approach, one of which is the application of the Problem-Based Learning (PBL) model to improve student learning outcomes in understanding and respecting diversity.

1.1 Literature Review: Learning Outcomes

Learning outcomes are the abilities students acquire after going through the learning process. According to Kusnandar (2019), learning outcomes encompass students' cognitive, affective, and psychomotor abilities after undergoing the teaching and learning process. Nana Sudjana (2017) adds that learning outcomes are influenced by several factors, such as students' internal factors and environmental factors.

1.2 Literature Review: Problem-Based Learning (PBL)

According to Wina Sanjaya (2018), Problem-Based Learning (PBL) is a learning model that positions students as problem solvers through real situations requiring analysis, discussion, and collaboration. Lauda (2021) states that PBL can develop critical thinking and problem-solving skills, as well as increase students' motivation to learn. Sanjaya (2018) also emphasizes that PBL can foster students' interest in learning in a more engaging and meaningful way.

1.3 Literature Review: Steps in Implementing PBL

According to Wina Sanjaya (2018), the Problem Based Learning model consists of five main stages, as follows.

1. Orienting students to the problem, namely explaining the learning objectives and the required logistics, and motivating students to engage in solving the problem they have chosen. Students formulate the problem to be solved.

2. Organizing students to learn, namely helping students define and organize learning activities related to the problem. Students design a solution to the problem that has been formulated.
3. Guiding individual and group investigation, namely encouraging students to gather appropriate information, carry out observation/experimentation to obtain explanations and solve the problem. Students discuss and share information after searching for and gathering information from various sources.
4. Developing and presenting the results of their work, namely helping students plan and prepare an appropriate product, such as a report, poster, or poem. Students present their work and explain the results of their problem-solving activities.
5. Analyzing and evaluating the problem-solving process, namely helping students reflect on or evaluate their investigation and the processes they used.

1.4 Literature Review: Mutual Respect in Diversity

Respecting diversity is an attitude of honoring the differences that exist among individuals in society. In the context of education, Djamaludin Ancok (2020) asserts that respect for diversity is an important foundation for creating a harmonious society. Material on diversity is important to teach from an early age so that students are able to accept the cultural, religious, and ethnic differences around them.

2. RESEARCH METHOD

This research uses a Classroom Action Research (CAR) design carried out in two cycles. Each cycle consists of the stages of planning, action implementation, observation, and reflection. The research subjects were grade IV students of SD Negeri Padang Panyang, totaling 23 students. The learning model applied was Problem-Based Learning (PBL) with the material "Mutual Respect in Diversity."

The steps in each cycle are as follows. In the planning stage, the researcher prepared a teaching module and observation sheet, and designed evaluation questions to measure student learning outcomes. In the implementation stage, the teacher began the lesson by orienting students to a problem related to diversity, after which students were divided into groups to discuss and solve the given problem. In the observation stage, student activity during the learning process was observed using an observation sheet. In the reflection stage, the teacher and researcher analyzed the learning outcomes, and if the results were not yet optimal, the action was improved in the next cycle.

3. RESEARCH FINDINGS AND DISCUSSION

The research results show an improvement in student learning outcomes after the application of the PBL model.

3.1 Cycle I

In this cycle, 57% of students successfully achieved the KKM, with an average student score of 68.26. However, some students were still not actively involved in group discussions, and some still found it difficult to solve problems. The research results can be seen in the following table.

No	Student Code	KKM	Score	Remarks
1	Student-1	70	80	Passed
2	Student-2	70	75	Passed
3	Student-3	70	70	Passed
4	Student-4	70	80	Passed
5	Student-5	70	80	Passed
6	Student-6	70	70	Passed
7	Student-7	70	85	Passed
8	Student-8	70	65	Not Passed
9	Student-9	70	75	Passed
10	Student-10	70	45	Not Passed
11	Student-11	70	80	Passed
12	Student-12	70	60	Not Passed
13	Student-13	70	75	Passed
14	Student-14	70	50	Not Passed
15	Student-15	70	65	Not Passed
16	Student-16	70	70	Passed
17	Student-17	70	70	Passed
18	Student-18	70	65	Not Passed
19	Student-19	70	70	Passed
20	Student-20	70	65	Not Passed
21	Student-21	70	65	Not Passed
22	Student-22	70	55	Not Passed
23	Student-23	70	55	Not Passed

Table 1. *Student Learning Outcomes in Cycle I (Total 1,570; Average 68.26; Highest score 85; Lowest score 45; Completeness rate 57%)*

Thus, the application of the Problem Based Learning (PBL) model in increasing engagement and learning outcomes in Islamic Religious Education (PAI) learning on the material of Mutual Respect in Diversity had not yet reached the maximum indicator results in cycle I, and needed to be improved through action in cycle II.

3.2 Cycle II

After improvements were made following cycle I, student learning outcomes increased. In cycle II, 82.6% of students achieved the KKM, with an average score of 75.86. Students became more active in discussions and better able to solve problems. Student participation in the learning process also increased significantly. The research results can be seen in the following table.

No	Student Name	KKM	Score	Remarks
1	Student-1	70	80	Passed
2	Student-2	70	85	Passed
3	Student-3	70	80	Passed
4	Student-4	70	85	Passed
5	Student-5	70	85	Passed
6	Student-6	70	75	Passed
7	Student-7	70	85	Passed
8	Student-8	70	80	Passed
9	Student-9	70	80	Passed
10	Student-10	70	60	Not Passed
11	Student-11	70	80	Passed
12	Student-12	70	75	Passed
13	Student-13	70	80	Passed
14	Student-14	70	65	Not Passed
15	Student-15	70	80	Passed
16	Student-16	70	75	Passed
17	Student-17	70	75	Passed
18	Student-18	70	70	Passed
19	Student-19	70	75	Passed
20	Student-20	70	70	Passed
21	Student-21	70	65	Not Passed
22	Student-22	70	75	Passed
23	Student-23	70	65	Not Passed

Table 2. *Student Learning Outcomes in Cycle II (Total 1,745; Average 75.86; Highest score 85; Lowest score 60; Completeness rate 82.6%)*

The average score was calculated using the formula $x = \sum x / N = 1,745 / 23 = 75.86$. Learning completeness (KB) was calculated using the formula $P = f / N \times 100\% = 19 / 23 \times 100\% = 82.6\%$.

Based on the results obtained in the table above, the results in cycle II using the Problem Based Learning (PBL) model in improving the process and outcomes of Islamic Religious Education (PAI) learning had reached the maximum indicator results in cycle II, so the cycle was stopped and considered complete.

No	Learning Outcome Aspect	Cycle I	Cycle II
1	Passed	13	19
2	Not Passed	10	4
3	Average Result	68.26	75.86
4	Completeness Percentage	57%	82.6%
5	Incompleteness Percentage	43%	17.4%

Table 3. *Comparison of Student Learning Outcomes in Cycles I and II*

Based on the comparison presented above, it can be concluded that the application of the Problem-Based Learning (PBL) model in Islamic Religious Education (PAI) successfully improved the learning outcomes of Grade IV students at SDN Padang Panyang. The improvement suggests that students benefited from a learning process that required them to participate actively, discuss relevant questions, and apply their understanding to problems rather than merely receive information from the teacher. The PBL model is a student-centered instructional approach in which the teacher presents a problem or an authentic situation and guides students in identifying, discussing, and solving it collaboratively.

In this approach, the teacher does not function only as a transmitter of knowledge but also as a facilitator who guides students' reasoning, encourages participation, and provides feedback during the problem-solving process. Such a role is particularly relevant in PAI learning because religious concepts can be connected to students' daily experiences, moral decision-making, cooperation, responsibility, and respect for others. By discussing realistic situations, students have opportunities to understand the learning material more meaningfully and to apply religious values in practical contexts.

The improvement observed at SDN Padang Panyang is consistent with previous research in elementary education. A classroom-action study found that PBL improved learning outcomes across cycles, with the average score increasing from 60.55% in Cycle I to 89.31% in Cycle II (Wulandari et al. 2025). Other research involving Indonesian elementary students also reported that PBL produced higher learning outcomes than expository instruction, although the effect was influenced by students' level of self-confidence (Ratnaningsih et al. 2019). This indicates that the success of PBL depends not only on the problem presented but also on effective teacher guidance, a supportive classroom environment, students' preparation, and opportunities for every learner to contribute.

Therefore, the findings support the use of PBL as an alternative model for PAI instruction at the elementary level. However, its implementation should be carefully planned through problems that are appropriate to students' developmental level, clear group-work procedures, adequate learning resources, and systematic teacher supervision. These conditions can help ensure that PBL improves not only test scores but also students' understanding, confidence, communication, collaboration, and ability to apply PAI values in everyday life.

3.3 Discussion of the Cycles

Cycle I

The learning process during Cycle I, which employed the Problem-Based Learning (PBL) model, was not implemented effectively. Student participation in listening to the lesson and developing questions remained limited, as several students were still engaged in conversations with their peers. In addition, some students were unable to respond to questions posed by their classmates because they had not read the assigned material thoroughly, resulting in an inadequate understanding of the topic. Other students were reluctant to ask or answer questions because they lacked confidence. These challenges influenced the learning outcomes, with only 57% of students achieving the passing criterion—13 of the 23 students—although this result represented an improvement over the pre-cycle performance.

The findings suggest that the effectiveness of PBL depends not only on the use of problem-based activities but also on students' readiness to participate actively, understand the learning materials, and communicate their ideas. This interpretation is consistent with research involving elementary-school students in Indonesia, which found that the relationship between PBL and learning outcomes was influenced by students' level of self-confidence. PBL produced better outcomes for students with high confidence, whereas students with lower confidence performed better under expository instruction (Ratnaningsih et al. 2019). Therefore, in the next cycle, the teacher should provide clearer guidance before discussion, encourage students to read and prepare the material, assign structured roles within groups, and create a supportive classroom atmosphere in which students feel comfortable asking and answering questions. These improvements may increase participation, strengthen students' understanding, and help the PBL model produce better learning outcomes.

Cycle II

In cycle II, students were already active in learning activities and were able to fully follow the PBL learning model, both in the questions and answers given, and were able to provide additional information in response to questions or answers. In this regard, the teacher only provided direction and supervised the discussion process carried out by the students. There was an increase in student engagement during the learning process; all students made an effort to understand the material given by the teacher and were very enthusiastic in following the question-and-answer session. After the test or assessment at the end of the lesson in cycle II, student learning outcomes showed improvement compared to cycle I: the number of students who passed increased from 13 students (57%) to 19 students (82.6%). This shows that PAI learning using the PBL model can improve student learning outcomes as expected.

In Cycle II, students became more actively involved in the learning activities and were able to follow the stages of the Problem-Based Learning (PBL) model more effectively. They participated in question-and-answer activities, responded to their classmates' questions, and contributed additional information to enrich the discussion. At this stage, the teacher functioned primarily as a facilitator by providing guidance and monitoring the discussion rather than dominating the learning process. This improvement indicates that repeated exposure to the PBL procedure, together with appropriate teacher support, helped students become more familiar with collaborative learning and more confident in expressing their ideas.

Student engagement also increased during the learning process. All students attempted to understand the material presented by the teacher and showed enthusiasm during the question-and-answer session. This finding is consistent with classroom-action research in elementary education showing that the implementation of PBL can improve both student activity and learning outcomes across cycles. In one study, the average learning-outcome score increased from 60.55% in Cycle I to 89.31% in Cycle II (Wulandari et al.2025). Similarly, research on PBL in elementary-school learning found that the model improved student participation and academic achievement when learning was organized around active, problem-based activities (Krisdianto et al. 2026).

The assessment results in the present study further demonstrate this improvement. The number of students who achieved the passing criterion increased from 13 students, or 57%, in Cycle I to 19 students, or 82.6%, in Cycle II. Thus, the proportion of students achieving mastery increased by 25.6 percentage points. These results suggest that PAI learning through the PBL model was effective in improving students' learning outcomes and met the expected success criteria. Nevertheless, the improvement should be interpreted in relation to the classroom-action-research design, because the increase may also have been influenced by students' growing familiarity with the material, the assessment format, and the learning procedures. Overall, the findings support the use of PBL as a student-centered approach that encourages participation, discussion, and improved achievement in PAI learning.

The findings of this research reveal that the use of the Problem Based Learning (PBL) model was proven to improve Islamic Religious Education (PAI) learning outcomes on the material "Mutual Respect in Diversity," as evidenced by the average PAI learning outcomes reaching the Minimum Completeness Criteria (KKM).

4. CONCLUSION

This research concludes that the application of the Problem-Based Learning (PBL) model is effective in improving student learning outcomes, particularly on the material "Mutual Respect in Diversity" in the Islamic Religious Education subject in grade IV of SD Negeri Padang Panyang. Through the PBL model, students became more active in the learning process, engaged in solving real problems, and were better able to improve their understanding of the importance of respecting differences. It is hoped that this PBL model can be implemented more broadly across various learning materials to improve the quality of education in elementary schools.

REFERENCES

Akil, Mansur. 2010. Multicultural Values In Indonesian Primary Schools: A Case Study In Makassar Metropolitan Area. *Jurnal Kajian keislaman, Vol.27 No.3 tahun 2010.* https://doi.org/10.32678/alqalam.v27i3

Ancok, D., & Rahayu, S. (2020). Psikologi Sosial: Teori dan Aplikasi dalam Konteks Pendidikan dan Masyarakat. Jakarta: Raja Grafindo Persada.

Jajat, J. D., & Somantri. (2025). Multicultural Education; An Effort To Build Harmony In Diversity In Elementary Schools. *Journal of Asian Primary Education*, *2*(1), 45–58. https://doi.org/10.59966/joape.v2i1.1655

Dimyati, & Mudjiono. (2016). Belajar dan Pembelajaran. Jakarta: Rineka Cipta.

Faozan, A., & Jamaluddin. (2021). Pendidikan Agama Islam dan Budi Pekerti untuk SD Kelas IV. Jakarta: Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi.

Kusnandar. (2019). Langkah Mudah Penelitian Tindakan Kelas sebagai Pengembangan Profesi Guru. Jakarta: RajaGrafindo Persada.

Kusumawati, L. (2022). Model Pembelajaran Berbasis Masalah untuk Pendidikan Abad 21. Bandung: Alfabeta.

Krisdianto, Indun., Nugraha, Nurhadji., Sudarmiani. 2026. Problem-Based Learning Model in Elementary School Students: Learning Activity and Learning Outcomes. (2026). *Journal Evaluation in Education (JEE)*, *7*(2), 390-398. https://doi.org/10.37251/jee.v7i2.2655

Lauda. (2021). Efektivitas pembelajaran berbasis masalah dalam meningkatkan keterampilan pemecahan masalah siswa sekolah menengah atas. Jurnal Pendidikan dan Pembelajaran, 11(2), 87–99.

Ratnaningsih, Sita., Nahasrtini, Desi., Yuliyani, Atik. 2019. The Effect of Problem Based Learning Methods and Self Confidence to English Learning Outcomes in the Elementary School Students. (2019). *TARBIYA: Journal of Education in Muslim Society*, *5*(2), 135-144. https://doi.org/10.15408/tjems.v5i2.10640

Wulandari, R., Widowati, A., & Destrinelli, D. (2025). Implementation Of Problem Based Learning Model In Improving Learning Outcomes In Ipas Grade IV Elementary School. *International Journal of Science and Environment (IJSE)*, *5*(2), 25–30. https://doi.org/10.51601/ijse.v5i2.134