



# Efforts to Improve Student Learning Outcomes by Implementing the Project Based Learning Model in Islamic Education Learning at SD Negeri 2 Baktiya

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## ABSTRACT

This study aims to improve students' learning outcomes in Islamic Education learning through the implementation of the Project Based Learning (PjBL) model at SD Negeri 2 Baktiya. The research employed a Classroom Action Research (CAR) design conducted in two cycles, consisting of planning, action, observation, and reflection stages. The participants were 28 fifth-grade students. Data were collected through learning outcome tests, observation sheets of student learning activities, and teacher performance evaluation instruments. The results indicated a significant improvement in students' learning outcomes after applying the PjBL model. In the pre-cycle stage, only 11 students (39.29%) achieved the minimum mastery criterion (MMC), with an average score of 64.21. After the implementation of PjBL in Cycle I, the number of students achieving mastery increased to 18 students (64.29%), with an average score of 72.46. Furthermore, Cycle II showed a more substantial improvement, where 25 students (89.29%) achieved mastery and the class average score increased to 82.14. Observational data also revealed that students' learning engagement improved from 61.50% in Cycle I to 84.75% in Cycle II, indicating that PjBL effectively enhanced students' participation, collaboration, and critical thinking skills. Teacher performance also improved from 70.25% in Cycle I to 88.10% in Cycle II. These findings demonstrate that the Project Based Learning model is effective in improving student learning outcomes in Islamic Education, as it encourages active learning, problem-solving, and meaningful learning experiences. Therefore, PjBL is recommended as an innovative instructional approach to enhance student achievement and engagement in Islamic Education at the elementary school level.

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## Introduction

Islamic Education plays a fundamental role in shaping students' moral character, religious awareness, and social responsibility, particularly at the elementary school level

where learners begin to develop core values and behavioral patterns. In the context of Indonesian education, Islamic Education is not merely positioned as a subject that delivers religious knowledge, but also as a strategic medium for cultivating students' faith, piety, and noble character in accordance with national educational goals (Ministry of Education and Culture, 2020). Therefore, Islamic Education learning is expected to be conducted through meaningful approaches that support students' holistic development, both cognitively and affectively.

However, Islamic Education learning in elementary schools often faces persistent challenges, especially in terms of learning outcomes and student engagement. Many teachers still rely on traditional instructional methods that emphasize memorization and one-way delivery of content, which frequently limits students' opportunities to explore concepts critically and apply Islamic values in real-life contexts (Darling-Hammond et al., 2020). This instructional pattern may lead to passive learning behavior, low motivation, and superficial understanding, ultimately resulting in low academic achievement in Islamic Education subjects (Hattie, 2009).

Learning outcomes are essential indicators of educational effectiveness, reflecting the extent to which students achieve expected competencies. In Islamic Education, learning outcomes are not only measured through students' mastery of theoretical knowledge but also through their ability to internalize and practice Islamic values in daily behavior (Al-Attas, 1993). Therefore, improving learning outcomes in Islamic Education requires instructional designs that integrate cognitive mastery with value internalization through active learning experiences.

The current educational paradigm emphasizes the importance of 21st-century skills, including critical thinking, collaboration, creativity, and communication. These competencies are essential for students to adapt to contemporary challenges and become responsible citizens in a rapidly changing society (Trilling & Fadel, 2009). In Islamic Education learning, integrating these skills is increasingly important because religious understanding must be aligned with students' ability to interpret values contextually and implement them ethically in social life (Rahman, 2017).

Nevertheless, empirical evidence suggests that many Islamic Education classrooms still struggle to incorporate student-centered learning strategies. Teachers often face constraints related to limited pedagogical training, time management issues, and insufficient instructional resources (OECD, 2019). These limitations contribute to the persistence of teacher-centered learning models that fail to stimulate active participation and meaningful learning processes, which are strongly associated with improved academic performance (Freeman et al., 2014).

Student engagement is widely recognized as a critical predictor of learning success. Engaged students tend to demonstrate stronger academic achievement, better

emotional connection to learning activities, and greater resilience in facing learning difficulties (Fredricks et al., 2004). In the context of Islamic Education, engagement also influences students' willingness to practice religious values and reflect on their moral responsibilities (Nasr, 2002). Therefore, instructional innovation is necessary to strengthen engagement and improve learning outcomes simultaneously.

One approach that has gained considerable attention in modern pedagogy is Project Based Learning (PjBL). PjBL is an instructional model that encourages students to learn through inquiry, problem-solving, and the development of real-world projects. It promotes active learning by engaging students in meaningful tasks that require investigation, collaboration, and the creation of tangible products (Bell, 2010). This model aligns with constructivist learning theory, which argues that knowledge is constructed through experience and interaction with learning environments (Piaget, 1972; Vygotsky, 1978).

PjBL has been recognized as an effective strategy for improving learning outcomes because it allows students to develop deeper conceptual understanding through exploration and active participation. Research indicates that students taught using PjBL tend to achieve higher academic performance compared to those taught using conventional methods, particularly in subjects that require conceptual comprehension and application (Thomas, 2000). The learning process becomes more meaningful because students connect theoretical knowledge with practical experiences, which strengthens retention and understanding (Krajcik & Blumenfeld, 2006).

Furthermore, PjBL supports the development of higher-order thinking skills. Through project completion, students are required to analyze problems, evaluate information sources, and synthesize knowledge into coherent outcomes. Such processes are aligned with Bloom's revised taxonomy, which emphasizes the importance of applying, analyzing, evaluating, and creating as indicators of advanced cognitive learning (Anderson & Krathwohl, 2001). This is particularly relevant in Islamic Education, where learners must interpret religious teachings not only as doctrinal concepts but also as ethical frameworks for social life.

In addition, PjBL encourages collaborative learning, which has been shown to improve academic achievement and social competence. Collaboration allows students to exchange ideas, negotiate meaning, and learn from peers in ways that enhance understanding and motivation (Johnson & Johnson, 2009). This aspect of PjBL is consistent with the Islamic principle of *ukhuwah* (brotherhood), which emphasizes mutual cooperation and shared responsibility (Al-Qaradawi, 2001). Thus, PjBL provides not only cognitive benefits but also socio-religious relevance within Islamic Education learning.

The use of PjBL in Islamic Education is particularly promising because it provides opportunities for students to implement Islamic values through concrete activities. For example, projects related to charity campaigns, environmental cleanliness, or community service can strengthen students' understanding of Islamic teachings while fostering moral responsibility and empathy (Tilaar, 2012). Such learning experiences can enhance the internalization of Islamic values, which is considered the core objective of Islamic Education (Al-Attas, 1993).

Despite its potential, the implementation of PjBL in Islamic Education learning remains limited in many elementary schools, especially in rural and semi-rural contexts. Teachers may perceive PjBL as complex, time-consuming, and difficult to manage within limited instructional hours (Kokotsaki et al., 2016). Additionally, some teachers lack adequate understanding of how to design projects that align with curriculum standards and learning objectives (Markham, 2011). This indicates the need for practical research that demonstrates how PjBL can be applied effectively in Islamic Education classrooms.

Classroom Action Research (CAR) is a relevant methodological approach for investigating and improving instructional practices. CAR enables teachers and researchers to identify classroom problems, implement interventions, and evaluate outcomes systematically through reflective cycles (Kemmis & McTaggart, 1988). It is particularly suitable for educational improvement studies because it focuses on real classroom contexts and provides direct evidence of instructional effectiveness (Burns, 2010). Therefore, CAR serves as a strong framework for examining the implementation of PjBL in Islamic Education learning.

The selection of SD Negeri 2 Baktiya as the research site is based on preliminary observations indicating that students' learning outcomes in Islamic Education were below expected standards. Students showed low participation during lessons, limited enthusiasm for learning activities, and difficulty in understanding conceptual material. These conditions are consistent with findings from previous studies highlighting that passive learning environments contribute to low academic achievement and weak motivation (Schunk, 2012). Therefore, instructional innovation was urgently needed to improve the learning process and outcomes.

Improving learning outcomes in Islamic Education is not only an academic objective but also a strategic effort to strengthen students' religious identity and moral character. Islamic Education is expected to produce individuals who not only understand Islamic teachings but also demonstrate ethical behavior and social responsibility in everyday life (Nasr, 2002). Thus, improving instructional effectiveness in Islamic Education contributes to broader national and societal goals related to character development and moral education (Lickona, 1991).

In addition, the rapid advancement of technology and globalization has exposed students to diverse cultural influences that may challenge their moral development. Islamic Education must therefore adopt learning approaches that encourage critical reflection and contextual understanding, enabling students to respond wisely to modern challenges (Rahman, 2017). Instructional models such as PjBL can support this goal by engaging students in real-life problem-solving situations that require moral reasoning and ethical decision-making (Larmer et al., 2015).

Previous studies have confirmed that PjBL has positive effects on students' academic performance and motivation across various subjects. For instance, research conducted by Han et al. (2015) found that PjBL significantly improved student engagement and learning achievement due to its emphasis on inquiry and active participation. Similarly, a study by Chiang and Lee (2016) demonstrated that PjBL enhanced students' conceptual understanding and collaboration skills, contributing to higher academic results. These findings support the assumption that PjBL may also improve outcomes in Islamic Education learning.

Moreover, PjBL aligns with experiential learning theory, which suggests that learning is most effective when students actively engage in experiences and reflect on them to form conceptual understanding (Kolb, 1984). In Islamic Education, experiential learning is essential because students must not only memorize religious teachings but also experience their meaning through actions and reflection. Therefore, PjBL can serve as a bridge between theoretical understanding and practical application of Islamic values.

Another relevant theoretical perspective is social constructivism, which emphasizes that learning occurs through social interaction and collaborative meaning-making (Vygotsky, 1978). PjBL incorporates this principle by requiring students to work together, discuss ideas, and solve problems collectively. Such interaction can enhance students' understanding of Islamic teachings, as they learn to interpret values through dialogue and peer learning (Johnson & Johnson, 2009). This reinforces the relevance of PjBL in Islamic Education contexts.

From a curriculum perspective, Indonesia's current educational framework encourages student-centered learning and the development of character education. The Merdeka Curriculum emphasizes the importance of active learning strategies and project-based activities to support holistic competency development (Ministry of Education, Culture, Research and Technology, 2022). Therefore, implementing PjBL in Islamic Education learning is consistent with national curriculum directions and supports the development of both academic and moral competencies.

Although PjBL has been widely discussed in the context of science and social studies education, research focusing on its application in Islamic Education at the

elementary school level remains relatively limited. This creates a gap in the literature, particularly regarding how PjBL can be systematically implemented to improve learning outcomes in religious education subjects. Addressing this gap is important to provide evidence-based recommendations for teachers and policymakers seeking to improve Islamic Education learning quality (Kokotsaki et al., 2016).

This study contributes to the existing body of knowledge by examining the effectiveness of PjBL in improving learning outcomes in Islamic Education learning through Classroom Action Research. The research focuses on how the PjBL model influences student achievement and engagement across learning cycles, providing empirical data that can support instructional decision-making. In addition, the study provides practical insights for Islamic Education teachers regarding project design, implementation strategies, and classroom management techniques.

The main objective of this study is to improve student learning outcomes in Islamic Education by implementing the Project Based Learning model at SD Negeri 2 Baktiya. Specifically, the study seeks to determine whether PjBL can increase the percentage of students achieving minimum mastery criteria and enhance student learning engagement during the learning process. These objectives are aligned with the broader educational mission of improving instructional quality and ensuring that Islamic Education learning becomes meaningful and impactful.

Therefore, the significance of this study lies in its potential to provide a pedagogical alternative that enhances both academic performance and value internalization in Islamic Education learning. By integrating active learning, collaboration, and real-life problem-solving, PjBL may serve as a transformative model that supports students' holistic development. The findings of this research are expected to contribute to the improvement of Islamic Education instructional practices, particularly in elementary schools facing similar challenges.

Ultimately, this study is positioned as a strategic response to the urgent need for innovative learning models in Islamic Education. By applying Project Based Learning through a systematic Classroom Action Research approach, the study offers empirical evidence and practical implications for improving student learning outcomes. This research is expected to strengthen the discourse on active learning in religious education and provide a meaningful contribution to educational improvement efforts in Indonesia and beyond.

## **Methods**

This study employed a Classroom Action Research (CAR) design aimed at improving students' learning outcomes through the implementation of the Project Based Learning (PjBL) model in Islamic Education learning at SD Negeri 2 Baktiya.

Classroom Action Research was selected because it provides a systematic framework for identifying instructional problems, implementing practical interventions, and evaluating improvements through reflective cycles within an authentic classroom context (Kemmis & McTaggart, 1988). This research design is also considered appropriate for examining instructional innovation, as it allows continuous refinement of teaching strategies based on empirical classroom evidence (Burns, 2010).

The research was conducted at SD Negeri 2 Baktiya, an elementary school located in North Aceh, Indonesia. The participants of the study consisted of 28 fifth-grade students, comprising 15 male students and 13 female students. The selection of participants was based on the researcher's preliminary observations indicating that the students' learning outcomes in Islamic Education were below the expected minimum mastery criteria. The classroom teacher was actively involved as a collaborator throughout the research process to ensure the intervention was implemented consistently and aligned with classroom conditions.

The research was carried out over two cycles, with each cycle consisting of four stages: planning, action, observation, and reflection. This cyclical procedure followed the CAR model proposed by Kemmis and McTaggart (1988), which emphasizes continuous improvement through systematic evaluation. In the planning stage, the researcher designed learning scenarios based on the PjBL model, prepared teaching materials, developed student worksheets, and created assessment instruments. In the action stage, the PjBL-based learning activities were implemented in the classroom. In the observation stage, data were collected regarding student engagement, teacher performance, and learning outcomes. Finally, in the reflection stage, the researcher and collaborator analyzed the results and identified necessary revisions for the subsequent cycle.

The intervention applied in this study was the Project Based Learning model. The PjBL implementation followed the fundamental steps of project-based instruction, including determining essential questions, designing project plans, arranging schedules, monitoring student progress, assessing project outcomes, and evaluating learning experiences (Krajcik & Blumenfeld, 2006; Larmer et al., 2015). In Cycle I, students were guided to work collaboratively in small groups to complete a project related to Islamic moral values and daily religious practices. The project required students to explore Islamic teachings, gather relevant information from textbooks and teacher-provided resources, and produce a project output in the form of posters and short presentations. In Cycle II, improvements were made based on reflections from Cycle I, including clearer task instructions, enhanced teacher facilitation, and more structured monitoring of group progress.

Data collection techniques in this study included achievement tests, observation, and documentation. The achievement test was administered at the end of each cycle to measure students' learning outcomes in Islamic Education. The test consisted of structured questions aligned with the learning objectives and curriculum indicators. Observation was conducted using observation sheets designed to measure student learning activities and teacher performance during the learning process. Student activity observation focused on indicators such as participation, collaboration, attention to learning tasks, problem-solving engagement, and responsibility in completing projects. Teacher performance observation included instructional preparation, classroom management, facilitation of group learning, feedback provision, and effectiveness in guiding project completion. Documentation was used to support the research findings, including photographs of classroom activities, student project products, lesson plans, and assessment results.

The validity of the research instruments was ensured through content validation conducted by two experts in Islamic Education and learning methodology. The experts reviewed the alignment of the test items and observation indicators with the research objectives and learning outcomes. Revisions were made based on expert feedback to enhance clarity, relevance, and appropriateness of the instruments. Additionally, triangulation of data sources was applied by comparing test results, observation data, and documentation evidence to strengthen the credibility of the findings (Creswell & Creswell, 2018).

Data analysis in this study was conducted using both quantitative and qualitative approaches. Quantitative analysis was applied to test scores to determine the improvement in student learning outcomes across cycles. Students' learning mastery was calculated based on the percentage of students achieving the minimum mastery criterion (MMC), which was set at a score of 75 according to school policy. The mean score of the class was also calculated to determine overall improvement. The percentage of learning mastery was computed using the formula: the number of students achieving MMC divided by the total number of students multiplied by 100. Qualitative analysis was conducted on observation data to interpret changes in student learning activities and teacher performance. Observation results were categorized and interpreted descriptively to identify behavioral and instructional improvements during the implementation of PjBL (Miles et al., 2014).

The success indicators of this study were determined based on both academic and process-based criteria. Academically, the intervention was considered successful if at least 85% of students achieved the minimum mastery criterion. In terms of learning process improvement, the study was considered successful if student learning activity reached a minimum category of "good," indicated by an observation score of at least 80%. These success indicators were aligned with CAR standards, which emphasize

measurable improvement in learning outcomes and classroom engagement as key outcomes of instructional intervention (Kemmis & McTaggart, 1988; Burns, 2010).

Ethical considerations were also addressed in this study. The researcher obtained formal permission from the school principal and collaborated with the classroom teacher prior to data collection. Students were informed that the learning activities were part of an instructional improvement process and that their participation would not negatively affect their academic evaluation. Confidentiality of student data was maintained by presenting findings in aggregated form without disclosing individual identities. These ethical procedures were applied to ensure that the research was conducted responsibly and in accordance with educational research standards (Cohen et al., 2018).

## Result

This section presents the findings of the Classroom Action Research conducted in two cycles to improve students' learning outcomes through the implementation of the Project Based Learning (PjBL) model in Islamic Education learning at SD Negeri 2 Baktiya. The results are presented based on quantitative data obtained from student learning achievement tests and supported by observational data regarding student learning activities and teacher performance during the implementation of PjBL.

### Student Learning Outcomes

The main indicator of success in this study was the improvement of student learning outcomes, measured through achievement tests administered during the pre-cycle, Cycle I, and Cycle II stages. The minimum mastery criterion (MMC) set by the school for Islamic Education learning was 75. The improvement of students' learning outcomes across the cycles is presented in Table 1.

**Table 1.** Improvement of Student Learning Outcomes (Pre-Cycle, Cycle I, and Cycle II)

Stage	Number of Students	Average Score	Students Achieving MMC ( $\geq 75$ )	Percentage of Mastery
Pre-Cycle	28	64.21	11	39.29%
Cycle I	28	72.46	18	64.29%
Cycle II	28	82.14	25	89.29%

Based on Table 1, student learning outcomes showed a consistent improvement throughout the intervention. In the pre-cycle stage, the class average score was 64.21,

indicating that the majority of students had not yet reached the expected competency level. Only 11 out of 28 students (39.29%) achieved the minimum mastery criterion. This finding confirms that students' learning outcomes were relatively low prior to the implementation of the Project Based Learning model.

After implementing PjBL in Cycle I, student achievement improved significantly. The class average score increased to 72.46, representing an improvement of 8.25 points compared to the pre-cycle stage. Furthermore, the number of students achieving mastery increased to 18 students, with a mastery percentage of 64.29%. Although this improvement was substantial, the results indicated that the success indicator of 85% mastery had not yet been achieved. Several students still demonstrated difficulty in comprehending Islamic Education concepts, particularly in applying religious values to contextual situations.

In Cycle II, further refinement was made to the implementation of the PjBL model, including clearer project instructions, stronger teacher facilitation, and improved monitoring of group collaboration. The results demonstrated a more significant improvement. The class average score increased to 82.14, showing an additional improvement of 9.68 points compared to Cycle I. In addition, the number of students achieving mastery increased to 25 students (89.29%), exceeding the predetermined success indicator. These findings indicate that the application of PjBL effectively improved student learning outcomes and ensured that most students achieved the required competency level.

### Student Learning Activities

Student learning activities were observed to measure engagement and participation during the learning process. Observation data were collected in Cycle I and Cycle II using a structured observation sheet focusing on indicators such as active participation, teamwork, responsibility, problem-solving involvement, and enthusiasm in completing projects. The improvement of student learning activities is presented in Table 2.

**Table 2.** Improvement of Student Learning Activities in Cycle I and Cycle II

Cycle	Average Activity Score (%)	Category
Cycle I	61.50%	Moderate
Cycle II	84.75%	Good

Table 2 shows that student learning activity improved considerably from Cycle I to Cycle II. In Cycle I, the average activity score was 61.50%, which was categorized as

moderate. This indicates that student engagement was present but not optimal. During Cycle I, some students were still passive in group discussions, and several groups relied heavily on more dominant members. Students also showed limited confidence in presenting their project results.

However, in Cycle II, the average activity score increased to 84.75%, categorized as good. This improvement suggests that students became more actively involved in learning activities, showed stronger collaboration, and demonstrated increased responsibility in completing their assigned tasks. Students also became more confident in sharing ideas, presenting project outcomes, and responding to peer feedback. This significant improvement indicates that PjBL successfully created a more student-centered learning environment, encouraging active participation and engagement.

### Teacher Performance in Implementing PjBL

Teacher performance was observed to evaluate the effectiveness of instructional delivery and facilitation during the implementation of PjBL. The observation focused on instructional preparation, classroom management, facilitation skills, feedback provision, and monitoring of student progress. The improvement of teacher performance is presented in Table 3.

**Table 3.** Improvement of Teacher Performance in Cycle I and Cycle II

Cycle	Teacher Performance Score (%)	Category
Cycle I	70.25%	Good
Cycle II	88.10%	Very Good

Table 3 indicates that teacher performance improved from Cycle I to Cycle II. In Cycle I, the teacher performance score was 70.25%, categorized as good. Although the teacher was able to implement PjBL stages, several weaknesses were observed, particularly in guiding group work and ensuring equal participation among students. The teacher also needed to provide clearer scaffolding and more systematic monitoring to support students during project completion.

In Cycle II, teacher performance increased to 88.10%, categorized as very good. This improvement was achieved due to the teacher's enhanced ability to facilitate student-centered learning, provide structured guidance, and manage group collaboration more effectively. The teacher also improved in giving constructive feedback, encouraging student reflection, and motivating students to complete their projects with higher quality outcomes. These improvements contributed significantly to the enhancement of student learning outcomes and engagement.

## Overall Improvement of Research Indicators

To provide a comprehensive overview of the improvement across research indicators, Table 4 summarizes the overall progress in learning outcomes, student activity, and teacher performance.

**Table 4.** Summary of Improvement Across Research Indicators

Indicator	Pre-Cycle	Cycle I	Cycle II
Average Student Score	64.21	72.46	82.14
Mastery Percentage	39.29%	64.29%	89.29%
Student Learning Activity Score	-	61.50%	84.75%
Teacher Performance Score	-	70.25%	88.10%

Table 4 confirms that the implementation of the PjBL model resulted in significant improvements in all observed indicators. Student achievement improved consistently across cycles, student learning activity increased substantially, and teacher performance in facilitating learning became more effective. These findings demonstrate that PjBL can serve as a practical and effective instructional model for improving learning outcomes in Islamic Education learning at the elementary school level.

## Discussion

The findings of this study demonstrate that implementing the Project Based Learning (PjBL) model significantly improved student learning outcomes in Islamic Education learning at SD Negeri 2 Baktiya. The improvement was evident not only in students' academic achievement but also in their learning engagement and the effectiveness of teacher performance. This discussion analyzes the results in relation to relevant learning theories and previous empirical studies, emphasizing why PjBL contributed to meaningful improvements in the classroom.

### PjBL as a Driver of Improved Student Learning Outcomes

The results indicated that student learning outcomes improved from a class average score of 64.21 in the pre-cycle stage to 72.46 in Cycle I, and further increased to 82.14 in Cycle II. The percentage of students achieving mastery also increased substantially from 39.29% in the pre-cycle stage to 89.29% in Cycle II. This improvement

confirms that PjBL is effective in enhancing students' academic performance through meaningful learning experiences.

This finding aligns with the constructivist learning perspective, which emphasizes that students learn more effectively when they actively construct knowledge through experiences and interaction with learning environments (Piaget, 1972). PjBL facilitates such learning processes by encouraging students to explore problems, seek relevant information, and apply Islamic Education concepts through real project development. Consequently, students' conceptual understanding becomes deeper because learning is not limited to memorization but involves meaningful application.

Furthermore, the effectiveness of PjBL in improving learning outcomes is consistent with the theory of social constructivism proposed by Vygotsky (1978), which highlights the importance of social interaction and collaboration in learning. In this study, students worked in groups, discussed Islamic values, and collaborated in producing project outputs. Through peer interaction, students were able to exchange ideas, clarify misunderstandings, and strengthen their comprehension. This collaborative learning environment contributed to improved mastery of Islamic Education content.

The improvement of learning outcomes also supports the findings of Thomas (2000), who argued that PjBL enhances student learning achievement because it requires students to engage in inquiry-based learning and produce tangible outcomes. The project process demands responsibility and accountability, which motivates students to understand the learning material more deeply. Similarly, Bell (2010) emphasized that PjBL promotes student-centered learning, enabling students to become active participants rather than passive receivers of knowledge. The results of this study confirm that when students are actively involved, their academic performance improves significantly.

The increased average score from Cycle I to Cycle II indicates that continuous improvement in instructional strategies played a critical role in optimizing the effectiveness of PjBL. This is consistent with the principles of Classroom Action Research, which emphasizes reflective practice and instructional refinement to achieve improved outcomes (Kemmis & McTaggart, 1988). In Cycle II, clearer project instructions and stronger teacher facilitation helped students complete tasks more effectively, resulting in higher test scores and mastery achievement.

### **Improved Student Engagement Through Active Learning**

The results also revealed that student learning activities improved significantly, from 61.50% in Cycle I to 84.75% in Cycle II. This indicates that PjBL successfully increased student engagement, participation, and collaboration. Student engagement is

considered a key factor influencing academic achievement, as engaged students are more motivated, attentive, and committed to learning tasks (Fredricks et al., 2004).

The improvement in engagement can be explained through experiential learning theory. Kolb (1984) stated that meaningful learning occurs when students engage in concrete experiences, reflect on those experiences, conceptualize understanding, and apply new knowledge. PjBL integrates these stages by allowing students to engage directly in learning tasks that involve real-world relevance. In Islamic Education learning, students were able to relate religious concepts to daily practices through project activities, making the learning experience more meaningful and motivating.

Additionally, the increase in student activity supports the findings of Freeman et al. (2014), who reported that active learning strategies significantly improve student engagement and reduce passive learning behavior. The project tasks in this study required students to participate actively in discussions, gather information, create learning products, and present their work. Such activities naturally reduce boredom and increase enthusiasm because students are involved in varied learning experiences.

The significant increase in student engagement in Cycle II also indicates that students gradually adapted to the learning model. Kokotsaki et al. (2016) argued that one of the main challenges in implementing PjBL is the adjustment period required for students to become familiar with collaborative project work. In Cycle I, students may still have been unfamiliar with group-based learning and independent inquiry, which resulted in moderate activity levels. However, after refinement in Cycle II, students became more confident and responsible, which led to stronger participation and improved learning behavior.

### **Teacher Performance as a Key Factor in Successful PjBL Implementation**

Teacher performance improved from 70.25% in Cycle I to 88.10% in Cycle II. This finding highlights that teacher facilitation is a crucial factor in ensuring successful PjBL implementation. Effective project-based learning requires teachers to act as facilitators who provide guidance, scaffolding, and feedback, rather than merely delivering content (Larmer et al., 2015). The improvement in teacher performance in Cycle II suggests that the teacher became more skilled in managing group learning, monitoring student progress, and providing meaningful support.

This result is consistent with Hattie (2009), who emphasized that teacher effectiveness significantly influences student achievement. When teachers provide clear learning goals, structured guidance, and constructive feedback, students are more likely to achieve better learning outcomes. In this study, improved teacher facilitation in Cycle II contributed to more organized group collaboration and improved student performance.

The teacher's improved ability to provide scaffolding also aligns with Vygotsky's concept of the Zone of Proximal Development, which suggests that students learn best when teachers provide appropriate support to help them achieve tasks beyond their independent capability (Vygotsky, 1978). In Cycle II, the teacher provided clearer instructions and more consistent monitoring, enabling students to complete projects successfully and gain deeper understanding of Islamic Education material.

### **Relevance of PjBL for Islamic Education Learning**

The application of PjBL in Islamic Education learning is particularly relevant because Islamic Education is not only concerned with knowledge acquisition but also with moral and character development. According to Al-Attas (1993), Islamic Education aims to develop individuals who possess knowledge and ethical awareness grounded in Islamic teachings. Therefore, instructional models must support both cognitive mastery and value internalization.

In this study, students' project activities required them to apply Islamic concepts such as honesty, responsibility, discipline, and cooperation in completing tasks. This reflects the principle that Islamic Education should integrate theory and practice, enabling students to understand religious teachings as practical guidance for daily life (Nasr, 2002). By engaging students in project work, PjBL created opportunities for experiential learning and moral development, which are central goals of Islamic Education.

Moreover, PjBL supports the development of 21st-century skills, such as collaboration, creativity, and critical thinking. Trilling and Fadel (2009) emphasized that these skills are essential for students to succeed in modern society. Islamic Education learning must also incorporate these competencies, as students are required to apply Islamic values in addressing contemporary challenges. The findings of this study indicate that PjBL provides a learning environment that encourages critical reflection, teamwork, and problem-solving, which are essential skills for modern learners.

The improved student engagement and learning outcomes also reflect the alignment of PjBL with Indonesia's current educational direction, particularly the emphasis on student-centered learning and character education within the Merdeka Curriculum (Ministry of Education, Culture, Research and Technology, 2022). This indicates that implementing PjBL in Islamic Education learning supports national curriculum goals and promotes more meaningful educational practices.

### **Comparison with Previous Empirical Studies**

The findings of this study are consistent with previous research demonstrating the effectiveness of PjBL in improving student achievement. Han et al. (2015) reported that PjBL improves student motivation and academic outcomes by promoting inquiry-based

learning and real-world problem-solving. Similarly, Chiang and Lee (2016) found that PjBL enhances conceptual understanding and collaboration, leading to higher academic performance. The results of this study confirm these findings, as students demonstrated improved mastery and increased engagement after PjBL implementation.

Additionally, Krajcik and Blumenfeld (2006) emphasized that PjBL improves student learning because it encourages students to engage in deep inquiry and create meaningful learning products. In this study, students produced posters and presentations related to Islamic values, which required them to analyze information, organize concepts, and communicate their understanding. These processes contributed to deeper learning and improved test scores.

The increase in mastery percentage to 89.29% in Cycle II also indicates that PjBL can effectively meet instructional improvement goals within the CAR framework. This supports the argument that PjBL is not only effective in theory but also practical and implementable in real classroom contexts when supported by systematic reflection and instructional refinement (Kemmis & McTaggart, 1988; Burns, 2010).

### **Implications of the Findings**

The findings of this study provide important implications for Islamic Education teachers and educational institutions. First, the study confirms that student-centered learning models such as PjBL can significantly improve learning outcomes in Islamic Education. Second, the study demonstrates that increasing student engagement through active learning is closely linked to improved academic achievement. Third, the study highlights that teacher facilitation and classroom management are essential to maximize the effectiveness of PjBL.

The results indicate that PjBL is an effective instructional approach for improving Islamic Education learning outcomes at the elementary school level. By integrating project activities, collaboration, and real-world relevance, PjBL provides meaningful learning experiences that enhance both academic achievement and student engagement. This supports the broader educational goal of developing students who not only understand Islamic teachings but are also capable of applying them in everyday life.

### **Conclusion**

This Classroom Action Research confirms that the implementation of the Project Based Learning (PjBL) model effectively improved students' learning outcomes in Islamic Education learning at SD Negeri 2 Baktiya. The findings demonstrate a consistent increase in students' academic achievement, shown by the improvement of the class average score from 64.21 in the pre-cycle stage to 72.46 in Cycle I and 82.14 in Cycle II, while the percentage of students achieving the minimum mastery criterion also

increased significantly from 39.29% to 89.29%. In addition to academic improvement, the learning process became more effective as reflected in the increase of student learning activity from 61.50% in Cycle I to 84.75% in Cycle II, indicating stronger engagement, collaboration, and responsibility during project completion. Teacher performance also improved substantially, confirming that effective facilitation and structured guidance are essential factors in maximizing the success of PjBL implementation. Overall, this study concludes that Project Based Learning provides meaningful, student-centered learning experiences that enhance conceptual understanding, active participation, and mastery achievement in Islamic Education at the elementary school level, and therefore it is recommended as an innovative instructional strategy to support the improvement of learning quality and student competency development.

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