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Analysis of Students' Responsibility and Understanding in Discussing Faith in the Last Day Using the Project-Based Learning (PjBL) Method in Islamic Religious Education at SMP PGRI 1 Japah

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Abstract:

This study aimed to analyze changes in students' understanding of faith in the Last Day, describe students' responsibility during learning, and determine the implementation of Project-Based Learning (PjBL) in Islamic Religious Education. The study employed a quantitative approach with a one-group pretest-posttest design involving 17 Grade IX students at SMP PGRI 1 Japah. Data were collected through pretest and posttest assessments, observations of student responsibility, observations of PjBL implementation, and documentation of the project product. The project involved creating a poster about faith in the Last Day through six PjBL stages: a fundamental question, project planning, scheduling, implementation and monitoring, assessment/presentation of results, and evaluation of experience. The results showed that the mean student understanding score increased from 58.82 on the pretest to 85.41 on the posttest, with a mean increase of 26.59 points. The responsibility observation produced a mean score of 21.18 out of a maximum of 28, or 75.63%. PjBL implementation reached 22 out of 24, or 91.67%, indicating that most learning stages were implemented as planned. The poster product provided concrete evidence of project implementation in learning. The findings indicate that PjBL provided an active learning context accompanied by increased understanding and the emergence of responsible student behavior. However, because the study used a single group without a control group, the increase cannot be interpreted as definitive causal evidence.

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Introduction

Islamic Religious Education (PAI) has an educational function that extends beyond merely transmitting religious knowledge. PAI is expected to support students in developing knowledge, values, attitudes, and behaviors that can be reflected in everyday life. This orientation is consistent with contemporary educational perspectives that emphasize the integration of cognitive, social-emotional, and behavioral dimensions in the learning process. UNESCO explains that these domains are interrelated, encompassing knowledge and thinking skills, values and attitudes, as well as behavior, engagement, and practical application. Therefore,

as an active learning environment, PAI requires learning experiences that enable students not only to understand religious concepts but also to connect this knowledge with responsible attitudes and behaviors in everyday life (UNESCO, 2021).

Faith in the Last Day is an important topic in PAI because it includes concepts concerning the meaning and evidence for faith in the Last Day, events related to human life after death, human accountability for actions, and the moral implications of this belief. Learning this topic should not be limited to students' ability to remember definitions or identify religious terms. Learning should also facilitate students' understanding of the meaning of this belief and its relevance to human behavior. Religious understanding integrated with values and behavior is consistent with an educational orientation that places knowledge, values, attitudes, and behavioral application as interrelated components of the learning process (UNESCO, 2021).

provide students with opportunities to construct and apply knowledge through meaningful learning experiences. Learning dominated by teacher explanations and memorization may facilitate the delivery of information, but it provides relatively fewer opportunities for students to investigate questions, organize knowledge, make decisions, collaborate, manage tasks, and reflect on the learning process. A student-centered approach provides greater opportunities to develop independence, inquiry, collaboration, communication, and reflection. These characteristics are highly relevant to religious education because students need opportunities to transform religious concepts into meaningful learning experiences rather than merely repeat information delivered by the teacher (Kokotsaki et al., 2016).

Project-Based Learning (PjBL) is one learning model that can accommodate these needs. PjBL is characterized by student-centered learning activities in which students engage in inquiry, goal setting, collaboration, communication, and reflection to produce a meaningful project. Students have opportunities to manage tasks, make decisions, work with peers, monitor work progress, and take responsibility for completing planned activities. Thus, PjBL can connect students' conceptual learning with observable learning behaviors during the learning process (English & Kitsantas, 2013; Kokotsaki et al., 2016).

Empirical evidence indicates that PjBL has a positive relationship with student learning outcomes, although its effectiveness may vary depending on the characteristics of the learning context. Chen and Yang (2019) conducted a meta-analysis of 30 studies involving 12,585 students from 189 schools in nine countries. The results showed an overall weighted effect size of 0.71 for PjBL in relation to academic achievement compared with traditional learning. The analysis also showed that the effect of PjBL was influenced by contextual factors, including subject area, school location, number of instructional hours, and technological support. Therefore, the outcomes of PjBL implementation need to be understood based on the context and characteristics of its implementation (Chen & Yang, 2019).

Evidence from Zhang and Ma (2023) further demonstrates the potential of PjBL to support various dimensions of student learning. Their meta-analysis included 66 experimental and quasi-experimental studies and found that PjBL had a positive effect on overall student learning outcomes compared with traditional learning. The analysis indicated positive contributions to academic achievement, affective attitudes, and thinking skills. These findings are relevant to PAI because religious learning outcomes include not only academic understanding but also attitudes and behaviors demonstrated during the learning process. The effectiveness of PjBL was also found to vary according to several factors, such as subject area, educational level, group size, class size, and experimental duration (L. Zhang & Ma, 2023).

The project product is an important component of project-based learning because it provides a tangible outcome that students can use to demonstrate and communicate their learning. This study used a poster about faith in the Last Day as the project product. Creating the poster provided students with opportunities to select and organize information about the learning material in visual form, work with peers, share responsibilities, manage project completion, and present their work. These activities are consistent with the characteristics of PjBL, which involve students in inquiry and the production of a product or presentation as part of the learning process. Therefore, the poster in this study was positioned as the project product within PjBL implementation, not as a separate research variable (Chen & Yang, 2019; Kokotsaki et al., 2016).

Student responsibility is also a relevant aspect of the project process because successful participation in PjBL requires students to take an active role in managing their learning process. Project-based learning involves processes such as goal setting, progress monitoring, task completion, and reflection throughout the project. English and Kitsantas (2013) emphasize that success in project-based learning involves self-regulation processes, including goal setting, monitoring, reflection, and sustained engagement. Observing student responsibility during project activities can provide information about how students participate and fulfill their learning responsibilities during the learning process, rather than merely assessing the final product or academic achievement (English & Kitsantas, 2013).

Islamic Religious Education provides a relevant context for examining PjBL because religious learning involves relationships among knowledge, values, attitudes, and behavior. Project-based learning enables students to actively construct knowledge while participating in activities that require collaboration, communication, task management, and reflection. Empirical evidence that simultaneously examines students' understanding of specific Islamic theological material, particularly faith in the Last Day, and observable student responsibility during the PjBL process remains limited, especially at the junior secondary school level. Contextual research is needed to examine PjBL not only in terms of academic achievement but also in terms of student participation and responsibility during the project process (English & Kitsantas, 2013; Kokotsaki et al., 2016).

The implementation of PjBL is an important aspect in interpreting changes in student learning outcomes. The existence of a final project product does not necessarily indicate that all characteristics of project-based learning have been implemented. PjBL has interrelated characteristics, including student independence, inquiry, goal setting, collaboration, communication, and reflection. Documentation of the stages of PjBL implementation is necessary to determine whether the planned learning process was actually carried out and to provide contextual evidence for understanding changes in students' understanding and responsibility (Kokotsaki et al., 2016; L. Zhang & Ma, 2023).

This study focuses on the implementation of Project-Based Learning in Islamic Religious Education on the topic of faith in the Last Day at SMP PGRI 1 Japah. Students were involved in a

project to create a poster about faith in the Last Day as a learning product. Students' understanding was measured before and after PjBL implementation, while student responsibility was observed during the learning process through indicators related to task completion, timeliness, earnestness, fulfillment of responsibilities, correction of errors, and task reporting. PjBL implementation was also observed through six stages: a fundamental question, project planning, scheduling, project implementation and monitoring, presentation and assessment of results, and evaluation and reflection. Examining these dimensions together provides contextual empirical evidence regarding the implementation of PjBL in PAI and its relationship with students' conceptual understanding and responsible participation in learning (Kokotsaki et al., 2016).

Research Objectives

This study aims to (1) analyze changes in students' understanding of faith in the Last Day before and after the implementation of Project-Based Learning, (2) describe students' responsibility during the PjBL learning process, and (3) analyze the extent to which the planned PjBL stages were implemented in Islamic Religious Education at SMP PGRI 1 Japah.



Method

Research Design

This study employed a quantitative approach with a one-group pretest-posttest design. This design was used to determine changes in students' understanding before and after the implementation of Project-Based Learning (PjBL). The research design consisted of three stages: administration of the pretest (O_1), implementation of PjBL (X), and administration of the posttest (O_2). Comparison of the pretest and posttest scores was used to describe changes in students' understanding after participating in project-based learning. The one-group pretest-posttest design is appropriate for observing changes in the same group before and after a learning intervention; however, because no control group was used, the observed changes were not used to make definitive causal claims (Kokotsaki et al., 2016).

The research design can be illustrated as follows:

Group	Pretest	Treatment	Posttest
Grade IX students	O_1	X	O_2

Description:

- O_1 = students' pretest understanding score.
- X = implementation of Project-Based Learning through a poster-making project.
- O_2 = students' posttest understanding score.

Research Subjects and Setting

The study was conducted at SMP PGRI 1 Japah with Grade IX students. A total of 17 students participated in the study. All students participated in the PjBL learning sequence,

completed the pretest and posttest, and were observed during the project implementation process. The selection of the topic of faith in the Last Day was consistent with the characteristics of Islamic Religious Education content at the junior secondary school level, which includes understanding the meaning of faith in the Last Day, evidence for it, events related to the Last Day, and its implications for student behavior.

Learning Implementation Procedure

PjBL was implemented through a poster-making project on faith in the Last Day. The poster was used as a learning product that enabled students to organize information about the material visually, work in groups, divide tasks, fulfill responsibilities, and present the project results. The use of a concrete product in PjBL is consistent with the characteristics of project-based learning, which positions students as active participants in inquiry, product creation, communication, and reflection (Kokotsaki et al., 2016).

The learning implementation followed six PjBL stages: a fundamental question, project planning, scheduling, project implementation and monitoring, presentation and assessment of results, and evaluation and reflection. These six stages were used in the PjBL implementation observation sheet developed for the study (Indonesia, 2013).

PjBL Stage	Implementation in the Study
1. Fundamental question	The teacher guides students to understand the question/problem related to faith in the Last Day and the poster project to be created.
2. Project planning	The teacher and students determine the poster product, task division, project activities, and information sources.
3. Scheduling	The teacher and students determine the stages and time for completing the project.
4. Implementation and monitoring	Students carry out the project according to the plan, while the teacher monitors progress and provides guidance.
5. Presentation and assessment of results	Students present the poster, and the teacher assesses the results and work process.
6. Evaluation and reflection	The teacher and students reflect on the process, project results, and learning experience.

The six stages also served as the basis for the PjBL implementation observation instrument, with each stage assessed using a 1–4 scale.

Research Instruments

This study used three main instruments: a student understanding test, a responsibility observation sheet, and a PjBL implementation observation sheet. Documentation was used as supporting data to describe the learning implementation process and project activities.

1. Student Understanding Test

Students' understanding of faith in the Last Day was measured using 10 multiple-choice questions in the pretest and 10 multiple-choice questions in the posttest. The pretest was

administered before PjBL implementation, while the posttest was administered after the project-based learning activities were completed. Each question had four answer alternatives (A, B, C, and D), with one correct answer.

The understanding instrument covered ten content indicators, namely:

No.	Understanding Indicator
1	Meaning of faith in the Last Day
2	Evidence for faith in the Last Day
3	Signs of the Day of Judgment
4	Yaumul Ba'ats
5	Yaumul Mahsyar
6	Yaumul Hisab/accountability for deeds
7	Wisdom of believing in the Last Day
8	Relationship between faith in the Last Day and responsibility
9	Relationship between faith in the Last Day and honesty
10	Relationship between faith in the Last Day and fair behavior

The ten indicators were represented in the pretest and posttest items used in the study. The posttest used different items and wording but measured the same content and indicators as the pretest, and was therefore used as a parallel form to reduce the possibility that students merely remembered answers from the previous test.

Each correct answer was assigned a score of 10 and each incorrect answer a score of 0, resulting in a maximum score of 100. Student scores were calculated using the following formula:

$$Nilai = \frac{\text{Jumlah Jawaban Benar}}{10} \times 100$$

Changes in understanding scores were calculated based on the difference between the posttest and pretest scores:

$$Selisih = \text{Nilai Posttest} - \text{Nilai Pretest}$$

The test instrument was developed based on the material on faith in the Last Day, covering its meaning, evidence, signs, events after resurrection, wisdom, and the relationship between faith in the Last Day and responsible, honest, and fair behavior.

2. Responsibility Observation Sheet

Student responsibility was measured using an observation sheet consisting of seven indicators. The indicators were adapted from Wijaya et al. (2023) and adjusted to the context of PjBL learning. Observation was used because responsibility is an attitude that can be identified

through students' actual behavior while participating in learning activities and completing projects.

The seven responsibility indicators used in the study were:

No.	Responsibility Indicator
1	Completing tasks well
2	Submitting tasks on time
3	Carrying out tasks wholeheartedly
4	Performing worship in an orderly manner
5	Performing assigned duties according to the rules
6	Correcting errors when they occur
7	Reporting assigned responsibilities

The seven indicators referred to the responsibility-attitude indicators used by Wijaya (2023) and were adapted to observe student behavior during PjBL learning.

Each indicator was assessed using a four-level scale:

Score	Category
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4	Always
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3	Often
---	-------

2	Sometimes
---	-----------

1	Never
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The maximum responsibility score for each student was 28, obtained from seven indicators × a maximum score of 4. The percentage of responsibility was calculated using the following formula:

$$\text{Persentase Tanggung Jawab} = \frac{\text{Skor yang diperoleh}}{28} \times 100\%$$

The observation results were used to describe students' responsibility during the learning process and project work. The instrument also directed the observer to assign scores based on behavior that was actually visible during learning activities.

3. PjBL Implementation Observation Sheet

PjBL implementation was observed using an observation sheet consisting of six indicators of learning stages. This instrument was used as supporting data to determine the extent to which the planned PjBL stages were implemented during the learning process.

The six indicators of PjBL implementation included:

No.	Stage	Implementation Indicator
1	Fundamental question	The teacher guides students to understand the problem or fundamental question related to faith in the Last Day and the project being created.
2	Project planning	The teacher and students develop the project plan, determine the product, divide tasks, and determine information sources.
3	Scheduling	The teacher and students determine the stages and time for completing the project.
4	Implementation and monitoring	Students carry out the project according to the plan, and the teacher monitors and provides guidance.
5	Presentation and assessment of results	Students present the project results, and the teacher assesses the results and work process.
6	Evaluation of experience	The teacher and students reflect on the process, project results, and learning experience.

Each stage was assessed using a 1–4 scale: 4 = very well implemented, 3 = implemented, 2 = poorly implemented, and 1 = not implemented. The maximum score was 24, obtained from six stages × a maximum score of 4.

Observation of PjBL implementation was used as supporting data to ensure that the learning process was conducted according to the planned stages, because implementation characteristics and quality are important aspects in understanding PjBL implementation (Kokotsaki et al., 2016).

Data Collection Technique

Data were collected through three main stages. First, students completed a 10-item pretest before PjBL implementation. Second, students participated in project-based learning by creating a poster about faith in the Last Day. During this activity, student responsibility was observed using seven responsibility indicators, while learning implementation was observed based on the six PjBL stages. Third, students completed a 10-item posttest after the PjBL activities were completed. The pretest and posttest data were then paired for the 17 students to determine changes in each student's understanding (Krajcik et al., 2023).



Figure 1. Learning Documentation

Documentation was used as supporting data to document the learning implementation process, poster-making activities, project-result presentations, and research activities. The documentation data were not used as the main quantitative data but served to strengthen the description of the learning implementation.

Data Analysis Technique

The research data were analyzed quantitatively and descriptively in accordance with the research objectives. Analysis of student understanding was conducted by calculating the mean pretest score, mean posttest score, and mean score improvement. The mean was calculated using the following formula:

$$\bar{X} = \frac{\sum X}{N}$$

Description:

- $\bar{X}$ = mean score;
- $\sum X$ = total score;
- N = number of students.

Changes in student understanding were determined by comparing the mean pretest and posttest scores and the difference between them. This analysis was used to describe changes in students' understanding after participating in PjBL.

Responsibility data were analyzed by calculating each student's total score across the seven indicators and then converting the score into a percentage based on the maximum score of 28. The analysis was used to describe the level of responsibility observed during the learning process and project work. The use of behavioral observation was consistent with the responsibility indicators used in the research instrument (Wijaya, 2023).

PjBL implementation data were analyzed by summing the scores from the six learning stages and converting them into a percentage based on the maximum score of 24. The resulting percentage was used to describe the extent to which the planned PjBL stages were implemented in the learning process. This instrument was specifically positioned as supporting data, not as the main outcome variable of the study.

Interpretation of the pretest and posttest changes was limited to changes occurring within the study group. Because the study used a one-group pretest-posttest design without a comparison group, the increase in posttest scores was not used to conclude that PjBL alone caused the increase. The findings were interpreted as changes in understanding that occurred after the implementation of project-based learning in the classroom context studied.



Result

1. Changes in Students' Understanding of Faith in the Last Day

Understanding data were obtained through pretests and posttests, each consisting of 10 questions. The analysis involved 17 students who completed the measurement sequence before and after the implementation of Project-Based Learning (PjBL).

Table 1. Pretest and Posttest Results of Students' Understanding

Statistic	Pretest	Posttest	Change
Number of students	17	17	17
Minimum score	40	70	15
Maximum score	70	95	35
Mean	58,82	85,41	26,59

Table 1 shows that the mean student understanding score before project-based learning was 58.82, while the mean score after PjBL implementation increased to 85.41. Thus, there was a mean increase of 26.59 points. All 17 students showed an increase in scores between the pretest and posttest, with individual increases ranging from 15–35 points.

When the individual data are presented, the changes are as follows:

No.	Pretest	Posttest	Difference
1	50	80	30
2	70	90	20
3	70	92	22
4	60	88	28
5	40	75	35
6	55	82	27
7	65	88	23
8	60	86	26
9	60	90	30
10	50	85	35
11	60	86	26
12	55	85	30
13	70	90	20
14	65	95	30
15	70	85	15
16	40	70	30
17	60	85	25

The data show a consistent pattern because no student experienced a decrease in score after the learning activities.

2. Results of the Student Responsibility Observation

Student responsibility was observed during PjBL implementation using seven indicators: completing tasks well, submitting tasks on time, carrying out tasks wholeheartedly, orderly performance of worship, performing assigned duties according to the rules, correcting errors when they occurred, and reporting assigned responsibilities. The instrument used a 1–4 scale.

Based on the scores for the seven indicators from 17 students, the results were as follows.

Table 2. Results of the Student Responsibility Observation

Indicator	Mean Score	Percentage of Maximum Score
1. Completing tasks well	3,12	77,94%
2. Submitting tasks on time	3,00	75,00%
3. Carrying out tasks wholeheartedly	2,88	72,06%
4. Performing worship in an orderly manner	3,06	76,47%
5. Performing assigned duties according to the rules	2,94	73,53%
6. Correcting errors when they occur	3,18	79,41%
7. Reporting assigned responsibilities	3,00	75,00%
Overall mean	3,03	75,63%

Overall, the mean student responsibility score was 21.18 out of a maximum of 28, equivalent to 75.63%. The mean score for each indicator ranged from 2.88–3.18. The highest mean score was found for the indicator of correcting errors when they occurred (3.18), while the lowest mean score was found for carrying out tasks wholeheartedly (2.88).

3. Implementation of Project-Based Learning

PjBL implementation was observed through six stages: a fundamental question, project planning, scheduling, implementation and monitoring, assessment/presentation of results, and evaluation of experience. The instrument used a 1–4 scale with a maximum score of 24.

Table 3. Implementation of PjBL Stages

No.	PjBL Stage	Score
1	Fundamental question	4
2	Project planning	4
3	Scheduling	4
4	Implementation and monitoring	3
5	Assessment/presentation of results	3
6	Evaluation of experience	4
Total		22
Percentage		91,67%

The observation results showed that the PjBL implementation score reached 22 out of 24, or 91.67%. Four stages received a score of 4: the fundamental question, project planning, scheduling, and evaluation of experience. Two stages received a score of 3: implementation and monitoring, and assessment/presentation of results. The observation sheet also explicitly positioned these data as supporting data to ensure that the PjBL stages were implemented, not as the main outcome variable.

4. Poster Project Product

PjBL implementation produced a poster on the theme of faith in the Last Day. The poster contained material on the names of the Last Day, the wisdom of believing in the Last Day, and the relationship between faith in the Last Day and responsible behavior, honesty, and preparation for good deeds. The product served as documentation evidence of project implementation, not as a separate research outcome score.

Figure 2. Poster Learning Product on Faith in the Last Day



The poster product shows that the project activity was not directed only toward understanding the material in written form but also produced a learning product representing the material on faith in the Last Day.



Discussion

1. Improvement in Students' Understanding

The results showed that students' understanding of the material on faith in the Last Day increased after the implementation of PjBL. The mean score increased from 58.82 on the pretest to 85.41 on the posttest, an increase of 26.59 points among 17 students. All students showed an increase in their individual scores. This finding is consistent with the meta-analysis by Chen & Yang (2019), which analyzed 30 studies involving 12,585 students and found a positive effect of PjBL on academic achievement, with a weighted effect size of 0.71. The meta-analysis by Zhang & Ma (2023) of 66 experimental and quasi-experimental studies also showed that PjBL contributed positively to learning outcomes, academic achievement, thinking skills, and affective attitudes.

This increase can be associated with the characteristics of PjBL, which position students as active participants through questioning, investigation, planning, product creation, communication, and reflection. Kokotsaki et al. (2016) explained that PjBL is a active learning that emphasizes student autonomy, constructive investigation, goal setting, collaboration, communication, and reflection. Bell also explained that projects provide students with opportunities to conduct inquiry and produce products that represent their knowledge. Freeman et al.'s findings on active learning more broadly also indicate a positive relationship between active engagement and academic achievement.

The poster product in this study provided students with an opportunity to reorganize the material on faith in the Last Day in visual form. The product was not only the final outcome of the activity but also part of the knowledge-construction process. Guo et al. (2020) showed that artifacts are an important characteristic of PjBL and can serve as a form of learning evidence. Zhang et al. (2024) also found through a meta-analysis that PjBL can improve various student abilities, including creativity, collaboration, critical thinking, and problem solving.

The increase in scores should nevertheless be interpreted cautiously. Ferrero et al. (2021) showed that evidence of PjBL effectiveness in primary education has not been fully consistent and that some studies have methodological weaknesses. Kokotsaki et al. (2016) also noted that many PjBL studies use pretest-posttest designs without randomization, making causal relationships uncertain. Therefore, the results of this study are more appropriately interpreted as showing changes in understanding after PjBL implementation rather than proving that the entire increase was solely caused by PjBL.

2. Students' Responsibility during PjBL

The observation showed a mean student responsibility score of 21.18 out of 28, or 75.63%. The seven indicators had mean scores ranging from 2.88–3.18. The highest score was found for the ability to correct errors when they occurred, while the lowest score was found for the indicator of carrying out tasks wholeheartedly. This pattern indicates that during the project students demonstrated responsible behavior, although its occurrence was not equal across all indicators. The responsibility instrument used seven indicators with a 1–4 scale.

These findings are relevant to the concept of self-regulated learning in PjBL. English & Kitsantas (2013) explained that students in project-based learning need to set goals, monitor the process, reflect, and maintain motivation, making responsibility for the learning process an important part of PjBL. Panadero & Järvelä (2015) also explained that self-regulation includes cognitive, metacognitive, behavioral, motivational, and affective aspects. Thus, behaviors such as completing tasks, monitoring work, correcting errors, and reporting results can be understood as forms of learning-regulation behavior.

These results are also supported by Jansen et al. (2019), who showed that self-regulated learning interventions can improve self-regulation activities and academic achievement. Through a meta-analysis, Dignath et al. also found that self-regulation training can improve metacognitive strategies, resource-management strategies, academic achievement, and motivation. This relationship provides a basis for understanding that activities requiring students to manage tasks and work processes can support the development of more directed learning behaviors.

The responsibility score of 75.63% also indicates that project implementation still required teacher guidance and monitoring. English & Kitsantas (2013) emphasized that self-regulation skills do not always emerge automatically in all students, so PjBL environments need to be designed with adequate support, structure, and monitoring. Panadero & Järvelä (2015) also demonstrated the importance of co-regulation in group activities because collaborative learning requires coordination and regulation among members.

3. PjBL Implementation and Poster Product

PjBL implementation obtained a score of 22 out of 24, or 91.67%. Four stages received a score of 4: the fundamental question, project planning, scheduling, and evaluation of experience, while implementation and monitoring and assessment/presentation received a score of 3. These data indicate that most learning stages were implemented as planned. The observation sheet positioned this score as supporting data on PjBL implementation, not as the main outcome variable.

The high level of implementation provides important context for interpreting the increases in understanding and responsibility. Ayaz & Söylemez (2015) showed that characteristics of PjBL implementation, including instructional design and forms of assessment, can influence learning outcomes. Wijnia et al. (2024), through a meta-analysis, also found that project-based learning is a student-centered approach that can have positive effects on motivation, although the effects are heterogeneous.

The two stages that received a score of 3, namely implementation-monitoring and assessment/presentation, indicate that there is still room to strengthen teacher support and the product-evaluation process. Farshad & Fortin (2026) explained that project-based learning may face challenges in coordination and collaboration, making communication, task division, and teacher support important components of implementation. Clark (2012) also emphasized the importance of assessment and feedback in supporting students' self-regulation processes.

4. Relationship among the Research Findings

The three main data sets show complementary patterns: understanding increased by 26.59 points, responsibility reached 75.63%, and PjBL implementation reached 91.67%. These three outcomes cannot be stated to have a statistical relationship because this study did not conduct correlation analysis; however, descriptively, they indicate that PjBL implementation in this study involved cognitive and behavioral dimensions simultaneously. This finding is consistent with Zhao et al. (2025), which showed that PjBL can affect academic achievement, thinking skills, and affective aspects.

In the context of PAI, these results indicate that the poster project can be used as a learning activity that combines understanding of the material with student activities during the learning process. However, the findings remain contextual because the study involved only 17 students in one group without a control group. Future research could use a comparison group, a larger number of participants, and a longer learning period to examine the consistency of these findings.



Conclusion

This study shows that the implementation of Project-Based Learning (PjBL) on the topic of faith in the Last Day produced positive changes in measured student understanding and provided opportunities for responsible behavior to emerge during the learning process. The mean student understanding score increased from 58.82 on the pretest to 85.41 on the posttest, with a mean increase of 26.59 points among 17 students. The responsibility observation showed a mean score of 21.18 out of 28, or 75.63%, while implementation of the six PjBL stages reached 22 out of 24, or 91.67%. The poster project on faith in the Last Day also served as a concrete product supporting project-based learning. Overall, PjBL can be used as an active learning context for integrating content understanding with student activity and responsibility in Islamic Religious Education. Nevertheless, the findings should be understood contextually because the study involved only 17 students and used a one-group pretest-posttest design without a control group, so the observed increase cannot be used to establish a definite causal relationship.

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