Edutec
Journal of Education And Technology
2597-9221 (Online)
Volume 9 Number 1 September 2025

Development of Project-Based Islamic Education Teaching Materials to Foster Values of Trustworthiness and Collaboration in Grade IV Students at Cidadap State Elementary School.

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Article History	Received : July 13th 2025
	Revision : August 17th 2025
	Publication : Sep 30th 2025

Abstract

This study aims to develop Islamic Religious Education (PAI) teaching materials based on Project-Based Learning (PBL) to foster the values of trustworthiness and collaboration among fourth-grade students at Cidadap Elementary School, West Pagaden District, Subang Regency. Employing a Research and Development (R&D) approach, the study adopts the ADDIE development model, which includes five stages: Analysis, Design, Development, Implementation, and Evaluation. The analysis stage was conducted to identify students' learning needs and existing conditions. The design and development phases produced project-based thematic modules, which were validated by experts in content, media, and instructional design. The implementation results demonstrate that the developed materials effectively enhance students' active participation in learning and promote a sense of responsibility (trustworthiness) and teamwork (collaboration). Evaluation was conducted using observations, questionnaires, and pre- and post-tests, all of which indicated a significant improvement in students' comprehension and character development. The study recommends the integration of PjBL-based PAI teaching materials as an innovative approach to support contextual and applicable character education in elementary schools.

Keywords: trust, teaching materials, character, collaborative, Islamic religious education, project-based learning.

INTRODUCTION

Character education, particularly the values of trustworthiness and collaboration, serves as a fundamental pillar in building a morally upright future generation. In Indonesia, character education has become a central focus in efforts to produce responsible individuals who are capable of working together in harmony. However, at Cidadap Elementary School as is the case in many other schools there are significant challenges in effectively instilling these values. The Islamic Religious Education (PAI) teaching materials currently in use are often insufficient in encouraging students to fully understand and apply the values of trustworthiness and collaboration in their daily lives. Therefore, there is an urgent need for innovative and effective learning approaches. Project-Based Learning (PjBL) has been identified as a suitable method because it encourages students to learn actively, creatively, and collaboratively while solving real-world problems.

Through this process, character values can be internalized through engaging and meaningful learning experiences.

Trustworthiness, which entails honesty and responsibility in fulfilling tasks or promises, is essential in shaping students' moral integrity. Meanwhile, collaboration the ability to work effectively with others is a crucial social skill needed in both school and community life. These two values are not only vital for personal religious development but also serve as soft skills that support success in broader social contexts. The key challenge lies in how these values can be meaningfully internalized. One promising strategy is the implementation of Project-Based Learning (PjBL). This model offers students ample opportunities to engage in hands-on, structured project work, where they can deepen their understanding of religious concepts while simultaneously developing skills such as teamwork, problem-solving, and personal responsibility.

Zainal (2022) found that the implementation of PjBL in Islamic Religious Education has significantly improved student engagement, strengthened their understanding of religious principles, and fostered key social competencies like cooperation and responsibility. However, many schools continue to face difficulties in fully implementing PjBL due to the limited availability of suitable teaching materials that align with this approach. Similarly, Abdurahman, Maslani, and Ismail (2024) emphasize the importance of developing PAI teaching materials that are relevant to contemporary educational needs. Such materials should be contextual, applicable, and tailored to the characteristics of today's students. Unfortunately, much of the currently available PAI content remains traditional and does not sufficiently support student-centered or collaborative learning strategies.

In light of these challenges, this research employs the Research and Development (R&D) method with the ADDIE model to create innovative PAI teaching materials. The ADDIE stages were implemented as follows:

1. Analysis: This initial stage involved diagnosing the learning needs and challenges at Cidadap Elementary School. Through observations and interviews, it was confirmed that the existing PAI materials were ineffective in fostering trustworthiness and collaboration, necessitating a project-based approach.
2. Design: In this stage, a blueprint for the project-based thematic modules was created. The design focused on integrating learning activities that explicitly require students to demonstrate responsibility (e.g., managing a group task) and collaborate (e.g., creating a joint project on Islamic values).
3. Development: Here, the actual teaching materials were developed based on the design. The drafted modules were then subjected to rigorous validation by experts in content, media, and instructional design to ensure their feasibility, accuracy, and effectiveness in instilling the target character values.
4. Implementation: The validated modules were piloted in the fourth-grade classroom. This stage was crucial for observing how the materials operated in

a real learning setting and how they influenced student engagement, trustworthiness, and collaborative skills.

5. Evaluation: This final, ongoing process was conducted at every stage to refine the product. The effectiveness of the final materials was evaluated using observations, questionnaires, and pre- and post-tests to measure their impact on student comprehension and character development.

This research was conducted to develop project-based PAI teaching materials specifically designed for fourth-grade students at Cidadap Elementary School. The goal is to produce materials that are both pedagogically engaging and effective in instilling key character values necessary for students' religious and social development.

Based on the background described above, this study seeks to answer the following research questions:

1. What are the stages involved in developing project-based Islamic Religious Education (PAI) teaching materials designed to instill the values of trustworthiness and collaboration in fourth-grade students at Cidadap Elementary School, West Pagaden District, Subang Regency?
2. How effective is the use of project-based Islamic Religious Education (PAI) teaching materials in promoting trustworthiness and collaboration among fourth-grade students at Cidadap Elementary School, West Pagaden District, Subang Regency?

By addressing these research questions, this study aims to contribute meaningfully to the development of innovative, character-based Islamic education teaching materials. The findings are expected to serve as a practical reference for educators in implementing more contextual, engaging, and values-oriented learning.

METHOD

This study employed the Research and Development (R&D) approach, aimed at producing effective and validated teaching products based on real-world educational needs. The research adopted the systematic ADDIE model, which consists of five key stages. The process began with the Analysis stage, where the researcher identified learning needs through observations and interviews with teachers and students to understand the shortcomings of the existing Islamic Religious Education (PAI) teaching materials in fostering the values of trustworthiness and collaboration. This was followed by the Design stage, which involved creating a blueprint for the modules, formulating learning objectives, selecting contextual project themes, and developing research instruments. Subsequently, the Development stage was carried out, where a draft of the project-based modules was created and then validated by experts in content, media, and instructional design to assess their feasibility, accuracy, and effectiveness before being revised and tested on a limited scale. The Implementation stage followed, where the revised modules were applied in an actual fourth-grade classroom at

Cidadap Elementary School to evaluate their practical use and impact on student participation. Finally, the Evaluation stage was conducted formatively at each phase for continuous improvement and summarively at the end to measure the effectiveness of the final product. According to Branch (2009), the ADDIE model assists researchers in organizing the instructional development process in a structured manner to produce valid, practical, and effective teaching materials.

Data collection techniques included observation, interviews, and documentation. Passive participatory observation was applied to directly monitor the learning process. Semi-structured interviews were conducted with the school principal, teachers, and students to gain an in-depth understanding of the challenges and outcomes of the implementation. Meanwhile, documentation studies were used to collect secondary data such as school profiles and lesson plans. The collected data were analyzed qualitatively using the interactive model of Miles and Huberman, which includes data reduction, data display, and conclusion drawing (Qomaruddin & Sa'diyah, 2024). Descriptive quantitative analysis was also used to process data from questionnaires and tests to measure the improvement in students' understanding and character development. The integration of these two analytical techniques ensured that the developed teaching materials were not only of high quality but also relevant and effective in instilling the targeted character values.

Research Schedule

Schedule at CIDADAP STATE ELEMENTARY SCHOOL (ADDIE Model)

No	ADDIE Stages	Main Activities	1	2	3	4	5
1	Analysis	Identification of student needs, curriculum, learning problems in elementary schools	√				
2	Design	Designing learning devices/media/instruments for elementary school students		√			
3	Development	Creating teaching materials, learning media, and trial instruments			√		
4	Implementation	Trial of media or learning strategies in elementary school classes				√	
5	Evaluation	Collect data, assess effectiveness, revise learning products					√

RESULTS AND DISCUSSION

This study produced Islamic Religious Education (PAI) teaching materials

based on the Project-Based Learning (PjBL) model, which were proven effective in fostering trustworthiness and collaborative values among fourth-grade students at Cidadap Elementary School, West Pagaden District, Subang Regency. The findings are presented according to the stages of the ADDIE development model:

1. Stage Analysis
   a. Teachers were still relying on conventional teaching approaches that limited active student engagement.
   b. Students showed low levels of responsibility and limited ability to collaborate during Islamic Religious Education learning activities.
   c. Teachers expressed the need for contextual teaching materials that could integrate character values into the learning process effectively.

2. Design Stage

At this stage, the research team designed contextual, project-based teaching materials that integrated character values—specifically trustworthiness and collaboration—into the learning process. The materials were structured to support the development of both cognitive and affective aspects of student learning.

a. Prophetic Story Based Project
   - In this project, students work collaboratively in groups to create an interactive storybook about a selected prophet (e.g., Prophet Muhammad or Prophet Yusuf/ Joseph). The storybook may include illustrations, narrative text, and simple interactive elements such as quizzes or games designed to reinforce students' understanding of the values exemplified by the chosen prophet. The value of *trustworthiness* is fostered through students' responsibility in completing their assigned tasks and their honesty in accurately conveying information. Meanwhile, *collaboration* is developed through teamwork and shared decision-making throughout the process of designing and assembling the storybook.
   - In this project, students collaborate to write a script and perform a short play based on the story of a selected prophet. Each student is assigned a specific role—whether as a character, narrator, or part of the production team—and is expected to take responsibility for their contribution. This process fosters *trustworthiness* through accountability and commitment to the group task, and promotes *collaboration* through teamwork and mutual support. The performance highlights key prophetic values such as honesty, patience, and resilience, allowing students to internalize these character traits through creative expression and experiential learning.

b. Worship-Based Projects
   - In this project, students work in groups to produce a clear and accurate tutorial video on how to perform prayer correctly. The video is designed to be understandable and accessible to their peers, emphasizing clarity, accuracy, and instructional value. The value of *trustworthiness* is

demonstrated through the students' responsibility in ensuring the correctness of religious content and their honesty in delivering the information. *Collaboration* is cultivated throughout the production process, including planning, filming, and editing, as students must coordinate roles and contribute to the final product.

- In this project, students collaboratively create a simple and informative worship guide that outlines the procedures for ablution (*wudhu*), prayer (*shalat*), and selected daily supplications (*doa*). To enhance clarity and engagement, students may include illustrations, diagrams, or relevant images. The value of *trustworthiness* is reflected in the accuracy of the religious content and the students' sense of responsibility in compiling the guide. *Collaboration* emerges through group discussions, decision-making, and the shared effort in producing a comprehensive and accessible guide for peers.

c. Islamic Values Based Projects:

- In this project, students design a poster or infographic that highlights the importance of *trustworthiness* and *cooperation* in daily life, both at school and at home. The visual materials may include definitions, examples of trustworthy behavior, and explanations of the positive impact such values have on individuals and the community. The value of *trustworthiness* is emphasized through the students' responsibility in conveying accurate and meaningful information. *Collaboration* is developed as students work together to conceptualize, design, and finalize the visual product.
- In this project, students collaborate to design and implement a campaign promoting cleanliness and order within the school environment. Activities may include creating posters, banners, and conducting outreach to encourage their peers to maintain a clean and organized learning space. This project fosters *trustworthiness* through students' responsibility in promoting and practicing environmental hygiene. It also strengthens *collaboration*, as the campaign requires collective planning, coordination, and execution among group members.

3. Stage Development

The development phase began with the creation of draft teaching materials based on the outcomes of the design stage. These materials were structured as learning modules that incorporate project-based activities, guided reflections on character values (particularly trustworthiness and collaboration), and appropriate learning assessments. Each module was developed to ensure alignment with the curriculum, age-appropriate content, and the integration of Islamic values through engaging and meaningful learning experiences.

Next, the draft teaching materials were reviewed by classroom teacher practitioners and subject matter experts in Islamic Religious Education. The feedback

focused on several key aspects, including the accuracy of the religious content, the suitability of the project-based approach, and the appropriateness of the language and illustrations in relation to the students' developmental stages. The validation results indicated that the teaching materials met the necessary standards for classroom use. However, several improvements were recommended, such as simplifying complex religious terminology and modifying certain project activities to enhance their practical applicability. Following these revisions, the modules were finalized and deemed ready for implementation in the pilot phase.

4. Stage Implementation

The developed teaching materials were piloted with fourth-grade students at Cidadap Elementary School over the course of five classroom sessions. Observations during the implementation revealed several positive outcomes:

a. Students demonstrated increased engagement, particularly in group discussions and the completion of project tasks.
b. The value of *trustworthiness* was evident in students' timely completion of assignments and honesty in reporting their work.
c. *Collaboration* improved noticeably, as reflected in the equitable distribution of tasks and effective communication among group members.

5. Evaluation Stage

Student questionnaire results indicated that 87% of students reported feeling more enthusiastic and found the material easier to understand when using the project-based teaching materials. This suggests that the integration of contextual and collaborative learning approaches had a positive impact on student engagement and comprehension.

a. Teacher questionnaires revealed that the teaching materials were highly effective in practically instilling character values, particularly in facilitating the integration of trustworthiness and collaboration within the learning process.
b. The results of the learning outcome test showed a significant improvement, with the average student score increasing from 68 (pre-test) to 84 (post-test), indicating enhanced understanding of the subject matter.
c. Character observation data demonstrated an increase of more than 30% in the indicators of trustworthiness and collaboration compared to prior to the implementation of the teaching materials, confirming their effectiveness in character development.

DISCUSSION

Based on the results above, it can be concluded that the development of Islamic Education teaching materials based on Project-Based Learning (PjBL) has a significant positive impact on both the learning process and student character development. The findings from the pilot implementation revealed several key benefits:

a. Increased Students' Active Participation, the PjBL-based materials successfully

increased students' engagement during lessons. Compared to conventional methods, students were more involved in discussions, decision-making, and project execution. This aligns with the core principle of PjBL, which positions students as active participants in constructing their own knowledge, as noted by Hasibuan (2024). The hands-on, inquiry-driven approach appeared to foster greater enthusiasm and motivation to learn.

b. Internalization of Trustworthiness through Individual Responsibility, By assigning individual responsibilities within group projects, students developed a sense of accountability and honesty in completing tasks. This process encouraged students not only to complete their duties on time but also to be truthful in reporting and evaluating their progress. These findings corroborate with Saomah et al. (2024), who argued that PjBL provides an authentic context for practicing moral values through real-life tasks.
c. Improved Collaboration and Social Empathy, The structured group activities in each module promoted meaningful interaction and cooperative learning. Students had to communicate, negotiate roles, and solve problems together—an experience that nurtures empathy, mutual respect, and teamwork. This confirms the assertion by Qomaruddin and Sa'diyah (2024) that character values such as collaboration are best cultivated through active participation in collective learning experiences.
d. Support for Contextual and Enjoyable Learning for Teachers, Teachers reported that the teaching materials provided concrete tools to link Islamic values with everyday life, making lessons more contextual and enjoyable. The modules reduced abstractness in religious instruction and allowed character education to occur naturally within project tasks. As such, the materials serve not only to meet curriculum goals but also to equip teachers with an effective medium for character education.

These findings reinforce previous research that highlights the potential of PjBL in religious education contexts. The development of PjBL-based Islamic Education materials offers a practical and impactful strategy to integrate academic content with moral and spiritual formation. It underscores the relevance of instructional design that not only transfers knowledge but also cultivates values, especially in elementary education where foundational character traits are formed.

CONCLUSION

The development of Islamic Religious Education (PAI) teaching materials based on Project-Based Learning (PjBL) has proven to be an effective strategy for fostering the values of trustworthiness and collaboration among fourth-grade students at Cidadap Elementary School. The implementation of these materials successfully transformed the learning environment into a more dynamic and student-centered space, leading to a marked increase in active participation. Students demonstrated greater responsibility in managing their individual tasks and exhibited

enhanced cooperation during group projects, directly embodying the targeted character values. These observations are strongly supported by both quantitative data, which showed significant improvements in learning outcomes and character indicators, and qualitative feedback from teachers who found the materials to be highly practical and instrumental in seamlessly integrating character education into PAI instruction. The findings affirm that the project-based approach provides a contextual and meaningful framework for character building, making religious values more applicable to students' daily lives. Therefore, PjBL-based PAI teaching materials are highly recommended as an innovative and effective alternative to enhance the quality of character education in primary schools. For future impact, it is recommended that these materials be systematically disseminated and that teacher training programs be conducted to support their broader implementation across different educational contexts

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