Volume 13 (3) 2025, 163-169

Jurnal Pelita Pendidikan

Journal of Biology Education

https://jurnal.unimed.ac.id/2012/index.php/pelita/index

eISSN: 2502-3217 pISSN: 2338-3003

DEVELOPMENT OF SAIQU TEACHING MATERIALS BASED ON PROBLEM-BASED LEARNING ON THE TOPIC "BEHAVIOR HONEST, TRUSTWORTHY, AND CONSISTENT" AT SMP-IT PELITA DOKTORA

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ARTICLE INFO:

Article History:

Received: May, 20th 2025
Revised : August, 25th 2025
Accepted: September, 30th 2025

Keywords:

SAIQU Teaching Materials, Integration of Islamic Education and Science, Junior High School

ABSTRACT

This research focuses on the development of SAIQU (Science and Quran) teaching materials for the topic of "Behaving honestly, trustworthy, and consistently" in Islamic Religious Education and Character Education subjects at the Junior High School (SMP) level. The Research and Development (R&D) method is used with the ADDIE model, which includes the stages of analysis, design, development, implementation, and evaluation. The teaching materials were validated by three experts in Islamic religious education, natural sciences, and language. The validation results show that the SAIQU teaching materials meet excellent eligibility standards regarding content, language, integration of Islamic values with scientific concepts, and presentation appearance. This material successfully combines scientific and spiritual elements harmoniously. This material can also stimulate active student involvement through experimental activities, observation, and contemplation of *kauniyah* verses. Through this approach, students gain a deeper understanding of concepts and develop religious character and the critical, reflective, and collaborative thinking skills needed to face the challenges of the 21st century. Therefore, SAIQU teaching materials are considered appropriate as contextual learning media to support the implementation of the Independent Curriculum in Islamic educational settings.

How to Cite:

Sukarno., & Wati, S.M. (2025). Development Of SAIQU Teaching Materials Based On Problem-Based Learning On The Topic "Behavior Honest, Trustworthy, And Consistent" At SMP-It Pelita Doktora, 13(3): 163-169

Introduction

Knowledge and religious values are inseparable in Islamic education, as they shape intellectually intelligent and spiritually strong human beings. Islamic Religious Education (PAI) plays a strategic role in instilling the values of monotheism, noble morals, and spiritual awareness, including fostering honest, trustworthy, and consistent behavior. These values should not only be taught through religious instruction but also integrated throughout the learning process, including in Natural Sciences (IPA), so that science can become a means of strengthening students' faith and morals (Rosita & Prabowo, 2025).

Islam views studying nature as part of worship and a form of contemplation of the verses of the Quran. Allah SWT states in Surah Ali Imran, verses 190–191, that scientific thinking is part of worship. Through understanding natural phenomena, students are guided to acknowledge Allah SWT's greatness and practice noble morals such as honesty, trustworthiness, and steadfastness in their daily lives. These values are crucial for the younger generation to face the moral and social challenges of the modern era (Rahmadhar & Meilana, 2022).

The reality shows that most science learning in Islamic schools still occurs separately from the religious context. The teaching materials used are generally textual, memorization-oriented, and not fully contextualized, thus depriving students of the opportunity to understand science as a means of knowing Allah SWT. Consequently, strengthening the character traits of honesty, trustworthiness, and steadfastness is suboptimal. Previous research has shown that science learning without integrating religious values tends to be spiritually draining and less motivating for students (Ramadhani et al., 2023).

To address this issue, teaching materials are needed that can harmoniously and practically integrate scientific concepts with Islamic values . One practical approach is Problem-Based Learning (PBL), which encourages students to think critically, solve real-life problems, and reflect on moral values in everyday life. PBL-based SAIQU (Science and Quran) teaching materials have been shown to improve conceptual understanding, strengthen religious character, and develop 21st-century skills such as critical, creative, and collaborative thinking (Azhari, 2024).

Based on this background, this study aims to develop PBL-based SAIQU teaching materials on "Behaving Honestly, Trustworthy, and *Istiqomah*" for junior high school students. The development was conducted using a Research and Development (R&D) approach using the ADDIE model to ensure that the resulting product is systematic, valid, and meets the needs of Islamic schools. These teaching materials will improve scientific understanding and foster honesty, trustworthiness, and consistency in students, thus enabling science learning to become a holistic process connecting knowledge and faith, in order to create an intelligent and noble Quranic generation.

Method

This research uses a Research and Development (R&D) approach with the ADDIE model, which consists of five systematic stages: Analysis, Design, Development, Implementation, and Evaluation. This research aims to develop SAIQU (Science and Quran) teaching materials based on Problem-Based Learning on "Behaving Honestly, Trustworthy, and *Isiqomah*" for Islamic Religious Education and Character Education at the junior high school level. The ADDIE model was chosen because it provides a structured framework for producing learning products that are contextual, integrative, and aligned with the needs of students in the Independent Curriculum era.

Researchers identified the need for teaching materials that integrate science concepts and Islamic values in the analysis stage. This stage involved a curriculum review, an analysis of junior high school student characteristics, and teachers' needs for teaching media that foster 21st-century skills such as critical thinking, collaboration, and religiousness.

The design stage involved designing the structure of teaching materials that integrate the Problem-Based Learning approach and the values of the Asmaul Husana (the Beautiful Names of Allah). The learning activity flow, competency mapping, media selection, and validation instruments are developed in this phase.

The development phase involves drafting complete teaching materials, including narrative material, Kauniyah verses, simple experimental activities, spiritual reflection, and learning evaluations. These teaching materials are then validated by three experts: (1) an Islamic Religious Education expert, (2) a Science Education expert, and (3) an Indonesian Language expert.

The validation instruments are developed based on four assessment aspects: language, content, content integration (Science and Quranic), and presentation. Each indicator is scored within the following range:

Table 1. Range of Score

Range of scores	category
4,01-5,00	Very Good
3,01-4,00	Good
2,01-3,00	Fair
1,01-2,00	Poor
0,00-1,00	Very Poor

Each validator conducted the assessment independently. The average score for each aspect was calculated to determine the teaching materials' feasibility. The implementation phase was conducted on a limited basis at SMP-IT Pelita Doktora through guided trials in several learning sessions. Students were actively involved in problematic discussions about natural phenomena and *Asmaul Husana*'s values.

The evaluation phase was conducted formatively and summatively, through validator responses, observations of student engagement, and reviews of the developed materials. This evaluation also considered qualitative comments from validators as input for revising the teaching materials. Data analysis in this study used a qualitative descriptive analysis approach and descriptive statistics. Qualitative analysis was used to process notes and comments from validators, while statistical analysis was used to interpret scores from the validation sheet.

Results and Discussion

The validation results for the SAIQU Problem-Based Learning teaching materials on the topic "Behaving Honestly, Trustworthy, and *istiqomah*" were obtained through an assessment by three expert validators with complementary academic backgrounds. The validation process focused on four main aspects: language suitability, material suitability, content suitability (integration of Islamic Religious Education and Science), and presentation suitability. These assessment results are the basis for evaluating the suitability of the developed SAIQU teaching materials for use in Islamic Religious Education (PAI) learning at SMP-IT Pelita Doktora.

One important aspect validated in the development process of these teaching materials is linguistic suitability, which reflects the extent to which the language used in the teaching materials conforms to good and correct Indonesian language rules and is relevant to the cognitive development level of junior high school students. Assessment of this aspect includes indicators such as sentence structure, spelling and punctuation accuracy, appropriate use of terms, and the effectiveness of the language in fostering motivation and facilitating understanding of religious concepts. The following is a summary of the validation results for the linguistic aspects provided by the three expert validators:

Table 2. Feasibility of SAIQU Teaching Materials for Linguistic Aspects

No	Assessment Aspects	Validator			Average	Category
		I	II	III		
1	Sentence structure accuracy	15	13	15	4,7	Very good
2	Sentence effectiveness	15	15	15	5	Very good
3	Terminology standardization	15	13	15	4,7	Very good
4	Comprehension of the message or information	15	15	14	4,8	Very good
5	Ability to motivate students	15	13	15	4,7	Very good
6	Suitability for students' intellectual development	15	12	15	4,6	Very good
7	Suitability for students' emotional development level	15	14	14	4,7	Very good
8	Grammatical accuracy	15	12	15	4,6	Very good
9	Spelling accuracy	15	14	15	4,8	Very good

Based on the validation results conducted by three expert validators, the linguistic aspects of the

SAIQU Problem-Based Learning teaching materials received a "Very Good" rating across all assessment indicators. The average score for each indicator indicates that the language used meets the eligibility criteria, including accuracy of sentence structure, effectiveness, standardized terminology, and suitability for the students' intellectual and emotional development levels. Each sentence is delivered concisely, clearly, and to the point, making it easy for students to understand the message.

These results also align with the views of M. Amin Abdullah, who emphasized that scientific communication in Islamic education needs to integrate *bayani* (text), *burhani* (empirical logic), and *irfani* (spiritual intuition) in delivering material. According to him, effective language bridges revealed values and scientific concepts within a theoanthropocentric-integralistic framework, thereby avoiding a dichotomy between religion and science (Holid et al., 2024).

The integration of Islamic Religious Education (PAI) and science must be presented in communicative, contextual, and applicable language so that students can connect scientific knowledge with Islamic values. According to Qolbiyah et al. (2024), interactive learning supported by appropriate language can increase active student participation and deepen conceptual understanding.

Therefore, the high linguistic appropriateness of SAIQU teaching materials supports the technical aspects of material delivery and serves as a foundation for providing holistic, integrative, and inspiring learning, where knowledge and faith can go hand in hand in shaping students' character and intelligence.

The quality of the developed SAIQU teaching materials can also be seen in the content aspect. The general validation results for this aspect are shown in Table 3.

Table 3. Feasibility of SAIQU Teaching Materials in the Content Aspect

No	Assessment Aspects	Validators			Average	category
		I	II	III		
1	Completeness of Material	15	15	15	5	Very Good
2	Breadth of Material	15	14	15	4,8	Very Good
3	Depth of Material	15	14	15	4,8	Very Good
4	Accuracy of Concepts and Definitions	15	12	15	4,6	Very Good
5	Accuracy of facts and data	15	14	14	4,7	Very good
6	Accuracy of examples and cases	15	15	15	5	Very good
7	Accuracy of images and illustrations	15	14	15	4,8	Very good
8	Accuracy of terms	15	12	15	4,6	Very good
9	Images, diagrams, and illustrations in everyday life	15	14	14	4,7	Very good
10	Using examples and cases from everyday life	15	15	15	5	Very good
11	Encouraging curiosity	15	12	15	4,6	Very good
12	Creating the ability to ask questions	15	14	14	4,7	Very good

The expert validation results for the content suitability of the SAIQU teaching materials indicated a very suitable category. This aligns with Adawiah's (2023) view, which asserts that integrating science and religion in Islamic education can produce students with *ulul albab* character, namely knowledge, faith, and morals, because both mutually reinforce and provide moral direction for knowledge development. This view is reinforced by Chanifudin and Nuriyati (2020), who state that integrating Islamic values with science in learning makes the material more meaningful and understandable for students, thus facilitating the internalization of spiritual values alongside scientific concepts.

Sulaiman (2020) also emphasized that this integration enables students to understand the relationship between revelation and natural phenomena and encourages them to develop scientific skills, creativity, and mutual respect. Similarly, Hatija (2024) highlighted that integrative learning planning can foster holistic understanding, critical thinking, and the relevance of science to real-life situations, which are important indicators

in assessing the appropriateness of the material. Furthermore, Irsahwandi et al (2024) demonstrated that learning tools combining Islamic Religious Education (PAI) and science are not only content-appropriate but also practical and effective in improving learning outcomes. This demonstrates that content rich in Islamic values and scientific concepts can be effectively implemented in the classroom, aligning with the validation results obtained in this study. Thus, these findings confirm that the content of SAIQU's teaching materials meets academic standards and aligns with previous research that emphasizes the importance of integrating religious and scientific values in education.

Their presentation can further assess the quality of SAIQU's teaching materials. The appropriateness of presentation is crucial in evaluating teaching materials, significantly influencing the effectiveness of delivering material in an engaging, interactive, and easily understood manner for students. A good presentation is characterized not only by visual appeal but also by a logical and systematic presentation structure and the ability to actively engage students in the learning process. The general validation results for the presentation aspect can be seen in Table 4.

Table 4. Feasibility of SAIQU Teaching Materials in the Presentation Aspect

No	Assessment Aspects	Validators			Average	Category
		I	II	III		
1	Examples of exercises in each learning activity	15	14	15	4,8	Very Good
2	Student involvement	15	14	15	4,8	Very Good
3	Integrity of meaning in learning activities	15	15	15	5	Very Good

Validation results for the presentation aspect indicate that the SAIQU Problem-Based Learning (PBL) teaching materials on the topic "Behaving Honestly, Trustworthy, and Istiqomah" received a "Very Good" rating across all assessment indicators. This demonstrates that the material presentation is systematically designed, communicative, and aligned with learning objectives in terms of conceptual delivery and internalization of character values.

The example exercises were rated very well because they included contextual activities relevant to everyday life. Each exercise is designed to encourage students to apply the values of honesty, trustworthiness, and consistency in practice. For example, in observing natural phenomena, students are trained to report measurement results honestly without manipulating data, maintain trustworthiness in completing group assignments, and consistently follow established experimental procedures. This approach aligns with the findings of Surya et al. (2021), who stated that internalizing the value of honesty in learning is more effective when accompanied by concrete examples of its application in the classroom.

In terms of student engagement, this teaching material successfully encourages students to be active in every stage of learning. Discussions, simple experiments, and collaborative reflections enable students to understand scientific concepts and hone their understanding of mutual trust, respect for opinions, and uphold the mandates of their roles. Dwiyana et al. (2025) emphasize that learning that integrates character values through collaborative activities can strengthen students' sense of responsibility, discipline, and active participation.

The integrity of meaning indicator demonstrates that the material's structure and learning activities form a cohesive whole, where science concepts, Islamic values, and character development are harmoniously connected. This integrated learning flow facilitates students' understanding that science is inseparable from moral and spiritual values. Rohmaniah et al. (2025) explain that the thematic integration of science and Islamic values in the Independent Curriculum significantly contributes to forming a consistent religious character.

Thus, the excellent presentation adequacy indicates that the SAIQU teaching materials on the topic of "Behaving Honestly, Trustworthy, and Istiqomah" not only meet the technical delivery standards but are also effective as a learning medium that instills noble moral values. The

systematic, interactive, and meaningful preparation of the materials makes science learning an integrative tool that is able to connect knowledge and faith in a complete way.

SAIQU teaching materials based on Problem-Based Learning on the topic of "Behaving Honestly, Trustworthy, and *Istiqamah*" were declared very suitable for use based on the validation results of three experts on the aspects of language, material content, and presentation. This material harmonizes Islamic values and scientific concepts, facilitates active student involvement, and fosters religious character and 21st-century skills. This study's results align with the findings of Herawati et al. (2025), who developed teaching materials based on Problem-Based Learning (PBL) in English subjects at the junior high school level. The teaching materials were validated by material, media, and language experts, with the results of the "outstanding" category. They were proven to increase student learning interest from 67.93% to 84.32% and the average score of learning outcomes from 7.46 to 10.84, with a standard gain of 0.65 (moderate category). This success is due to presenting the material in real-life problems relevant to students' lives, thus encouraging intrinsic motivation, active engagement, and deeper conceptual understanding.

Furthermore, the relevance of the development of SAIQU teaching materials is further strengthened by the perspective of Azmi & Dewantoro (2024), who emphasize that Islamic education in the era of the 5.0 Industrial Revolution must harmoniously integrate modern technology and science with Islamic values. The integration-interconnection paradigm they propose combines cognitive, affective, and psychomotor aspects, so that students not only master knowledge but also develop morals and skills consistent with Islamic teachings. This demonstrates that the development of PBL-based SAIQU teaching materials has a strong methodological and philosophical foundation, as it is capable of producing knowledgeable students with noble character and ready to face the challenges of the 21st century.

Conclusion

The SAIQU problem-based learning teaching material on the topic "Behaving Honestly, Trustworthy, and *istiqomah*" was declared highly suitable for use based on validation by three experts on language, content, and presentation. This material harmoniously integrates Islamic values and scientific concepts, facilitates active student engagement, and fosters religious character and 21st-century skills.

Recommendations

The developed SAIQU teaching material should continue to be disseminated and used sustainably so that teachers and students can widely feel its benefits. Applying a problem-based learning model integrated with Islamic values can be an alternative learning strategy in various subjects, not just science and Islamic Religious Education. Future similar research is expected to test the effectiveness of this teaching material on a larger scale, involving various educational levels, and incorporating more interactive learning media innovations. Schools and education policymakers are expected to support developing and implementing integrative teaching materials such as SAIQU to achieve holistic, contextual, and character-based learning.

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