

DEVELOPMENT OF AN ISLAMIC EDUCATION MODULE BASED ON THE LOCAL WISDOM OF THE EMBUHANGA COAST TO STRENGTHEN ENVIRONMENTALLY CONSCIOUS MORAL CHARACTER AMONG STUDENTS AT MI MUHAMMADIYAH EMBUHANGA

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Abstract :

This study aims to develop an Islamic Religious Education (PAI) module based on the local wisdom of the Embuhanga coast to strengthen environmentally conscious moral character among students at MI Muhammadiyah Embuhanga. The research employed the Research and Development (R&D) method using the ADDIE model, which consists of analysis, design, development, implementation, and evaluation stages. The participants of the limited trial consisted of 11 students. Data were collected through observation, expert validation sheets, practicality questionnaires, and pretest-posttest assessments. The validation process involved a material expert and a media expert. The results showed that the module obtained feasibility scores of 30% for content, 40% for language, 60% for presentation, and 50% for graphics, with an overall average of 45%, categorized as adequate but requiring revision. The practicality results ranged from 50%–70%, indicating that the module was fairly practical for classroom use. Furthermore, the effectiveness test demonstrated an increase in students' environmental ethics scores from 50 in the pretest to 70 in the posttest. The findings indicate that the developed module has the potential to become contextual teaching material in coastal madrasahs by integrating Islamic values with environmental awareness through local wisdom.

Keywords : PAI Module, Local wisdom, Coastal Environment, Environmental Ethics, ADDIE.

Abstrak :

Penelitian ini bertujuan untuk mengembangkan modul Pendidikan Agama Islam (PAI) berbasis kearifan lokal pesisir Embuhanga untuk memperkuat karakter peduli lingkungan pada siswa MI Muhammadiyah Embuhanga. Penelitian ini menggunakan metode Research and Development (R&D) dengan model ADDIE yang meliputi tahap analisis, desain, pengembangan, implementasi, dan evaluasi. Subjek uji coba terbatas terdiri dari 11 siswa. Teknik pengumpulan data dilakukan melalui observasi, lembar validasi ahli, angket kepraktisan, dan tes pretest-posttest. Validasi dilakukan oleh ahli materi dan ahli media. Hasil penelitian menunjukkan bahwa modul memperoleh persentase kelayakan sebesar 30% pada aspek isi, 40% bahasa, 60% penyajian, dan 50% grafika dengan rata-rata keseluruhan 45% yang termasuk kategori cukup namun masih memerlukan revisi. Hasil kepraktisan berada pada rentang 50%–70% yang menunjukkan bahwa modul cukup praktis digunakan dalam pembelajaran. Selain itu, hasil efektivitas menunjukkan peningkatan skor etika peduli lingkungan siswa dari 50 pada pretest menjadi 70 pada posttest. Temuan penelitian menunjukkan bahwa modul yang dikembangkan berpotensi menjadi bahan ajar kontekstual di madrasah pesisir dengan mengintegrasikan nilai-nilai Islam dan kepedulian lingkungan berbasis kearifan lokal.

Kata Kunci: Modul PAI, Kearifan lokal, Lingkungan Pesisir, Etika lingkungan, ADDIE.



INTRODUCTION

Islamic Religious Education (PAI) has an important role in shaping students who are faithful, pious, and possess noble character. PAI learning is not only oriented toward cognitive mastery but also emphasizes the internalization of Islamic values in daily life, including responsibility toward environmental preservation (Muhaimin, 2012). Therefore, Islamic education at the madrasah ibtidaiyah level should not merely transfer religious knowledge but also build students' moral awareness and behavior (Majid, 2013).

However, Islamic Religious Education in elementary madrasahs is often implemented conventionally and tends to be teacher-centered. Learning materials are frequently presented abstractly and are less connected to students' real-life experiences (Sanjaya, 2016). As a result, students find it difficult to relate Islamic teachings to their social and environmental realities. This condition weakens the affective dimension of learning, particularly in fostering environmentally conscious character (Rusman, 2017).

Students at MI Muhammadiyah Embuhanga live in a coastal environment that faces various environmental challenges, such as waste management problems, beach pollution, and low environmental awareness. Such environmental conditions can actually become contextual learning resources in Islamic Religious Education. Learning activities connected to students' surroundings can help them understand and practice Islamic values more concretely (Hamalik, 2011).

One strategy to address this issue is the development of contextual teaching materials. Learning modules are considered effective because they enable students to study independently through systematic materials, activities, reflections, and evaluations that are adapted to learners' needs (Prastowo, 2015). Furthermore, modules based on local wisdom are aligned with contextual learning approaches because they place students' experiences and environments at the center of learning (Mulyasa, 2017).

In the context of Islamic Religious Education, integrating coastal local wisdom into learning materials can strengthen students' practical understanding of Islamic values related to environmental ethics. Values such as cleanliness, responsibility, trustworthiness, and the prohibition against environmental destruction can be linked directly to students' daily experiences in coastal areas (Muhaimin, 2012; Majid, 2013). Therefore, Islamic teachings are not only understood theoretically but also practiced in everyday environmental behavior.

Several previous studies have discussed contextual Islamic education modules. Aziz et al. (2024) developed an edutainment-based Islamic education module that improved student engagement, while Astuti et al. (2023) examined local-context learning strategies in Islamic education. However, these studies did not specifically focus on coastal local wisdom and environmental ethics. Therefore, this research offers novelty by developing an Islamic Religious Education module based on the local wisdom of the Embuhanga coast to strengthen environmentally conscious moral character among students at MI

Muhammadiyah Embuhanga.

RESEARCH METHOD

This study employed the Research and Development (R&D) method to develop an Islamic Religious Education (PAI) module based on the local wisdom of the Embuhanga coast. The development process used the ADDIE model proposed by Branch (2009), consisting of five stages: Analyze, Design, Develop, Implement, and Evaluate.

The research was conducted at MI Muhammadiyah Embuhanga, located in a coastal area. The study took place from December 9 to January 9. The subjects of the limited trial consisted of 11 students. Data collection techniques included observation, interviews, validation sheets, questionnaires, and pretest-posttest assessments.

At the analysis stage, the researcher identified learning problems, students' characteristics, and environmental issues related to environmental awareness through observation and interviews with teachers. In the design stage, the researcher prepared learning objectives, module structure, learning activities, evaluation instruments, and contextual materials based on coastal local wisdom.

During the development stage, the module was compiled and validated by two validators consisting of a material expert and a media expert. The validation focused on aspects of content feasibility, language, presentation, and graphics. The implementation stage involved limited classroom trials using the developed module. Finally, the evaluation stage analyzed the practicality and effectiveness of the module based on questionnaires and students' environmental ethics scores.

Data analysis was conducted descriptively using percentages to determine the feasibility, practicality, and effectiveness of the developed module.

FINDINGS AND DISCUSSION

Research Findings

This study aimed to develop an Islamic Religious Education module based on the local wisdom of the Embuhanga coastal area to strengthen students' environmentally conscious moral character. The findings were obtained through expert validation, practicality questionnaires, and effectiveness testing.

Table 1. Module Validation Results by Aspect

Validation Aspect	Percentage	Category
Content Feasibility	30%	Low
Language	40%	Low
Presentation	60%	Satisfactory
Graphics	50%	Satisfactory
Average	45%	Adequate (Needs Revision)

The validation results indicate that the presentation and graphic aspects

were relatively adequate, while the content and language aspects still required improvement. The validators suggested revising the module by adding more systematic materials, simplifying language, and strengthening the relationship between Islamic values and coastal environmental issues.

Table 2. Practicality of the Module

Respondents	Percentage	Category
Teachers and Students	50%-70%	Fair - Good
Average	60%	Fairly Practical

The practicality results demonstrate that the module was sufficiently practical for classroom implementation. However, some learning instructions and activities needed simplification to improve usability for students.

Table 3. Environmental Ethics Scores

Measurement	Average Score
Pretest	50
Posttest	70
Improvement	+20

The effectiveness test showed a significant improvement in students' environmental ethics after using the module. The increase of 20 points indicates that integrating Islamic values with local coastal wisdom can positively influence students' environmental awareness.

Discussion

The findings demonstrate that the developed module has potential as contextual teaching material for coastal madrasahs. The integration of Islamic values with environmental issues helped students better understand the practical implementation of religious teachings in daily life. This finding supports Fauzi and Jasiah (2025), who argued that contextual learning based on local culture can improve students' moral understanding.

The module also encouraged active student participation through contextual and interactive learning activities. This is consistent with Homaidi (2025), who emphasized that engaging learning experiences can increase students' motivation and involvement. By relating learning materials to students' real-life experiences, the module created meaningful learning that strengthened environmental ethics.

Despite its strengths, the module still requires revisions in content organization and language clarity. Improvements are necessary before broader implementation in other madrasahs or educational settings.

CONCLUSION

The development of the Islamic Religious Education module based on the local wisdom of the Embuhanga coast demonstrates its potential as contextual teaching material for strengthening environmentally conscious moral character among students. The module achieved adequate results in presentation and graphics, although improvements are still required in content and language

aspects. The practicality results showed that the module was fairly practical for classroom use, while the effectiveness test indicated an increase in students' environmental ethics scores from 50 to 70 after implementation.

These findings confirm that integrating Islamic values with coastal environmental contexts can help students understand and practice environmental ethics more effectively. Therefore, the developed module can contribute to contextual Islamic education in coastal madrasahs. Future studies are recommended to revise the module further and conduct broader trials involving larger populations and different schools.

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