



FOSTERING ECOLOGICAL AWARENESS: THE ROLE OF ECOTHEOLOGY-BASED ISLAMIC EDUCATION IN HIGHER EDUCATION

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Abstract. This study aims to explore the integration of ecotheology into Islamic Religious Education in higher education and its impact on strengthening students' ecological awareness. In Indonesia, the environmental crisis, driven by unchecked exploitation of natural resources, has become a pressing issue, and Islamic Religious Education plays a key role in shaping students' attitudes toward environmental responsibility. A qualitative interpretive approach was adopted, employing a multisite design at universities. The research findings reveal that the curriculum integrates ecotheological values, with a focus on human dignity, ethical responsibility, and environmental stewardship. The learning process emphasizes active learning strategies, such as project- and problem-based learning, encouraging students to apply Islamic values to real-world environmental issues. The evaluation methods include diagnostic, formative, and summative assessments to measure students' ecological knowledge and behavior. The study contributes to bridging religious education and ecological sustainability, proposing the need for more comprehensive curriculum reforms, faculty training, and policy support. Future research should expand to include more institutions and assess long-term behavioral impacts.

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INTRODUCTION

Education plays a crucial role in developing character and enhancing the quality of human resources (HR) in society. In Indonesia, education aims to produce individuals who are not only intellectually intelligent but also have noble morals, faith in God, and care for the environment (Begum et al., 2022; Kamil, 2024). Islamic Religious Education in Indonesia plays an important role in creating a generation that has a balance between science and good morals. However, amid rapid technological developments and social changes, the problem of environmental damage is increasingly real and must be a shared concern. This is where this research becomes relevant. By integrating ecotheological values into

Islamic religious education in higher education, it is hoped that students will become agents of change who not only believe but also care about environmental sustainability (Khoirurrijal et al., 2025; Nugroho et al., 2025). Ecotheology-based education will foster students' ecological awareness and enable them to play an active role in protecting the environment.

The Indonesian people are facing an increasingly worrying problem of environmental damage. Natural disasters such as floods, landslides, and forest fires often result from uncontrolled exploitation of natural resources. One of the main causes is the public's low awareness, especially among the younger generation, of maintaining the balance of nature. In higher education, although Islamic religious education has been taught, its implementation often does not include an understanding of the importance of protecting the environment. This shows that Islamic religious education in higher education is not effective enough in building the character of students who care about ecology. Therefore, there is a need for innovation in Islamic religious education grounded in ecotheology, integrating religious teachings with ecological awareness (Marshall, 2025; Nugroho et al., 2025).

The environmental damage in Indonesia is increasingly troubling, driven by uncontrolled exploitation. Although Islamic religious education at universities has been in place, many students are more interested in participating in religious activities organized by student organizations than in taking Islamic Religious Education courses. This shows that the approach to Islamic religious education in higher education is still very much centered on theoretical and normative teaching, without linking it to the social and environmental issues that occur in society. In addition, the lack of integration between Islamic religious values and ecological awareness in learning makes religious education in higher education unable to prepare students to face increasingly complex environmental challenges (Imron et al., 2025; Rahman et al., 2025).

Previous research has made a major contribution to the development of ecotheology within Islamic religious education. (Irawan, 2022; Maslani, 2023) emphasizes the importance of environmental transformation through the application of ecotheology in Islamic boarding schools, which involves community dialogue, the study of sacred texts, and environmental conservation actions. This shows how ecotheology can be applied to address environmental and social crises by empowering communities through faith-based education. Meanwhile, (Khoirurrijal et al., 2025; Nugroho et al., 2025) highlight the importance of *wasathiyyah* values in higher education, which combines an ecotheological perspective with a moderate, inclusive, and environmentally responsible attitude. This study shows that students' attitudes shift toward greater environmental awareness after the application of *wasathiyyah*-based scientific approaches. (Mustofa et al., 2025; Rahman et al., 2025) went on to explain the integration of ecotheology values in the Islamic Religious Education curriculum in secondary schools, focusing on the application of ecological ethics and concrete actions to address environmental problems. However, they also identified challenges, including limited resources and underutilized policy support. On the

other hand, Darraz, (2025) and Lohlker, (2024) offer a new epistemological approach grounded in the concept of *wahdat al-wujūd* (unity of being) that can address the problem of anthropocentrism in ecotheology. Lohlker associates sophisticated thought with modern science, providing a relevant epistemological framework for addressing ecological crises. This research aligns with efforts to strengthen ecological awareness among higher education students by emphasizing the importance of integrating ecotheology into Islamic-based higher education.

This research offers novelty by combining the concept of ecotheology in Islamic religious education in higher education, especially in shaping students' ecological awareness. In contrast to previous studies that focused on pesantren (Maslani, 2023) or secondary schools (Mustofa et al., 2025) This research is more oriented towards the context of higher education and the integration of ecotheology into universities' existing curricula. By introducing ecotheology from a scientific perspective, this research seeks to develop a more holistic model of education that combines Islamic religious values with ecological awareness. This research, therefore, addresses a gap by exploring how ecotheology can be integrated into the curricula of higher education institutions. This research also highlights challenges in universities, including weaknesses in religion-based ecological literacy, a lack of faculty policy support, and limitations in training for lecturers (Nugroho et al., 2025). By strengthening the curriculum and empowering teaching capacity, this research aims to make a significant contribution to Islamic religious education that focuses not only on morals and spirituality but also on environmental sustainability. Thus, this research has the potential to enrich an ecotheology-based approach in higher education in Indonesia and to provide more applicable solutions for addressing ecological and social challenges in the future.

This research aims to answer the main question: first, how can ecotheology-based Islamic religious education be implemented in universities to increase students' ecological awareness? Second, what is the impact of the application of ecotheology-based Islamic religious education on student behavior in maintaining and preserving the environment? The argument of this research is that integrating Islamic religious values with ecotheological principles enables students to gain a deeper understanding of the importance of protecting the environment and of actively participating in nature conservation. This research will also develop curriculum models and learning methods that are relevant to current needs, and will help shape the character of students who care about the sustainability of nature.

This research is expected to make a major contribution to the development of Islamic religious education in higher education by integrating ecotheological values into efforts to preserve the environment. With ecotheology-based education, students can be prepared to become agents of change who care about the environment and actively protect the earth. Islamic religious education that combines religious and ecological aspects will have a positive impact on the

development of the young generation, who are not only believers but also concerned about the sustainability of nature.

RESEARCH METHOD

This study adopts a qualitative interpretive approach to explore Islamic Religious Education grounded in Ecotheology and to enhance ecological awareness among students at general universities in East Kalimantan (Thompson Burdine et al., 2021; Wiesner, 2022). A multisite design was chosen to examine the natural phenomena across two research sites: Balikpapan University (UNIBA) and Widyagama University (Widyagama). The qualitative paradigm is particularly appropriate for this research as it allows for an in-depth understanding of meaning, context, and processes within natural settings. By using flexible, sensitive instruments, this approach enables the researcher to capture participants' perspectives on the subject matter. In line with Creswell's view of qualitative inquiry, this study adopts an interpretivist orientation, offering an opportunity to understand social realities constructed through interaction and lived experiences within the university environment (Cuthbertson et al., 2020; Subrahmanyam, 2025). The multisite design further strengthens the study by enabling comparisons across the two sites, thereby providing a broader, more comprehensive understanding of the phenomena.

The research was conducted at two universities in East Kalimantan: Balikpapan University (UNIBA) and Widyagama University (Widyagama). These locations were chosen purposefully for their relevance to the study's objectives. Both universities offer Islamic Religious Education programs that incorporate elements of ecotheology into their curricula and engage in environmental awareness initiatives. These universities also represent a diverse cross-section of higher education institutions in the region, providing insights into how Islamic values, particularly ecotheology, are implemented in varying institutional settings. The selection of these institutions enables a comparative analysis of how different environments and institutional characteristics shape the integration of ecological awareness within the Islamic religious education framework (Drobnič, 2024; Kumar et al., 2020).

Data were collected through a combination of non-participatory observations, in-depth semi-structured interviews, and document analysis, which are typical qualitative research methods (Barrios et al., 2024; Tischer, 2022). Observations were conducted in natural settings at both universities, focusing on recording behaviors, activities, and patterns related to the implementation of Islamic religious education and ecotheology. These observations allowed the researcher to capture a holistic view of the environment without intervening in the ongoing processes. Semi-structured interviews were conducted with key stakeholders, including the rector, administrators, teachers, and students. These interviews provided detailed insights into their experiences, perspectives, and strategies for integrating ecotheology into Islamic religious education. The interviews were audio-recorded, transcribed verbatim, and analyzed for key themes. Document analysis was also employed to examine institutional records,

meeting notes, strategic plans, promotional materials, photographs, and other relevant documents, offering further context and supporting evidence for the research.

Data analysis followed the interactive model proposed by Miles and Huberman, which consists of four stages: data collection, data reduction, data display, and conclusion drawing (Jellema et al., 2023; Mbanaso et al., 2023). The analysis began before fieldwork and continued throughout data collection, with ongoing refinement after leaving the field. The initial stage of data reduction involved organizing and categorizing the data to identify emerging patterns and themes. Data display enabled visualization of key findings, which were then interpreted and analyzed for deeper meanings and connections. Triangulation, using multiple data sources and techniques, was applied to enhance the credibility of the findings. Interviews, observations, and documents were cross-referenced to validate the results (Kawar et al., 2024; Schlunegger et al., 2024). The final stage involved drawing conclusions, which not only addressed the research questions but also provided broader theoretical insights into the integration of ecotheology in Islamic religious education and its role in strengthening ecological awareness among students in general universities in East Kalimantan.

RESULT AND DISCUSSION

Result

The results of the research include the learning concept of Islamic religious education based on ecotheology and strengthening students' ecological awareness, the learning process of Islamic religious education based on ecotheology and strengthening students' ecological awareness, the evaluation of learning Islamic religious education based on ecotheology and strengthening the ecological awareness of students at universities.

Learning Concept

Based on the findings from both universities, it is evident that the concept of ecotheology-based Islamic Religious Education and the enhancement of students' ecological awareness prioritize the learning objectives of ecotheology. These objectives must align with the graduate learning outcomes defined in the Indonesian National Qualifications Framework (INQF). The development of the INQF curriculum includes components such as identity, Competency-Based Learning (CPL), indicators, criteria, assessment weights, and references. Both universities have adhered to the INQF's management guidelines when implementing this curriculum. The integration of ecotheology into the Islamic Religious Education curriculum emphasizes fundamental values, including respect for human dignity, ethics, responsibility towards the nation, appreciation of cultural diversity, and the internalization of ethical values.

The curriculum at both universities integrates the following key ecotheological values: 1) Upholding human dignity and moral integrity based on religion and ethics; 2) Taking on the role of a proud citizen who loves their country and is responsible for the nation; 3) Respecting cultural, religious, and ideological

diversity, as well as the opinions and discoveries of others; 4) Internalizing values, norms, and ethics; 5) Promoting independence, struggle, and entrepreneurial spirit; 6) Adapting, collaborating, and innovating in applying knowledge to society with a global perspective; and 7) Presenting oneself as a stable, mature, wise, and authoritative individual with the capacity for adaptation, flexibility, self-direction, and initiative. These competencies are developed concurrently and integrated into the learning process, creating a comprehensive and cohesive Islamic Religious Education program.

Based on the research findings, the ecotheology-based Islamic Religious Education policy is reflected in the strategic plans of both universities. Figure 1 below illustrates the policy for Ecotheology.

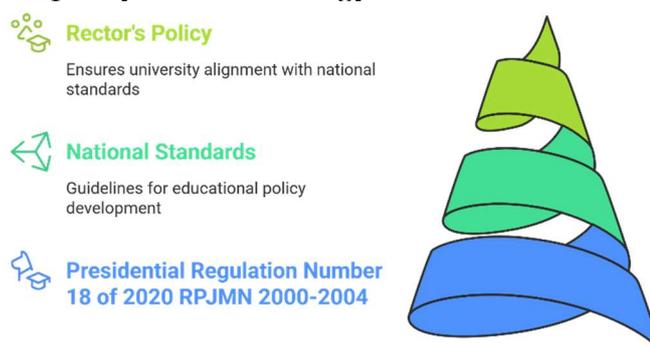


Figure 1. Higher Education Policy Framework

As shown in the figure above, there are slight differences between the policies at both universities. At Widyagama Mahakam University, the policy aligns with the Ministry of Religious Affairs (*Kemenag*), whereas at Balikpapan University, the policy does not explicitly follow the Ministry's guidelines. The policy at Balikpapan University is more technical, covering aspects such as curriculum development and course scheduling. Both universities, however, follow their respective strategic plans in implementing ecotheology within the Islamic Religious Education curriculum.

In general, the ecotheology policy in public universities is less developed than in religious institutions. In religious universities, ecotheology is explicitly outlined as a goal in the strategic plan, such as in the Strategic Plan for Religious Education (*Renstra Pendis 2020-2024*) set by the Directorate General of Islamic Education. This demonstrates a more formal integration of ecotheology into the curriculum than in public universities, where its application remains underdeveloped.



Figure 2. Learning Objectives Concept

As depicted in Figure 2, there are both differences and similarities in the learning objectives between Widyagama Mahakam University and Balikpapan University. These differences reflect varying emphases on Islamic values and ecological awareness. The learning objectives at both universities aim to equip students with an understanding of theology, human rights, ethics, morality, Islamic culture, and Islam's role in global and national politics, with particular emphasis on environmental consciousness.

The curricula at both universities include topics on the relationship between religion, ecology, and social harmony. These include discussions on living harmoniously with nature, respecting differences in religion, culture, and language, and fostering environmental responsibility. This aligns with the findings that the curriculum includes themes addressing the nation's natural environment, social-religious aspects in the community, and multiculturalism, as emphasized by research indicating that Indonesia's diverse culture, race, and religion require inclusive education on these topics.

Moreover, the learning content at both universities is designed to foster an ecological mindset among students. The material encourages students to live in harmony with nature, respect diversity, and understand the significance of environmental stewardship. This approach is integral to the ecotheology curriculum, reflecting the broader objective of developing socially responsible citizens who can contribute to environmental sustainability.

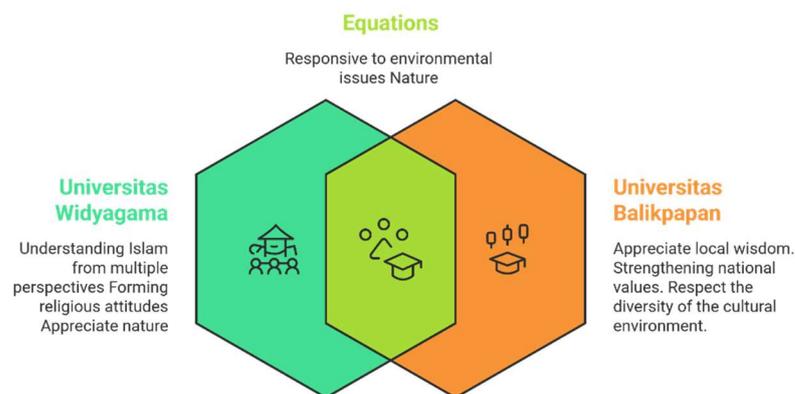


Figure 3. Differences and Similarities in Learning Objectives

Figure 3 illustrates the similarities and differences in the learning objectives at the two universities. Substantively, the findings indicate that Islamic Religious Education at both universities aligns with the core values of ecotheology, integrating ecological concerns into the broader objectives of religious education.

The teaching strategies and methods employed at both universities have been identified as crucial to the success of Islamic Religious Education. Active, innovative, and effective learning strategies are used to engage students and ensure that the principles of ecotheology are understood and applied. As noted in the research, problem-solving methods grounded in ecotheological values are particularly effective in encouraging students to think critically about their role in environmental conservation.

The use of media and learning resources is also an important aspect of the teaching process at both universities. These resources are tailored to the course material, ensuring that students receive a comprehensive education on ecotheology. Media, such as videos and digital platforms, are used to enhance students' understanding of ecological issues, and the use of diverse learning materials aligns with the development of students' ecological awareness. This approach reflects the importance of adapting to technological advancements and to students' changing needs in higher education.

The integration of Islamic Religious Education with ecotheology at both universities provides a valuable foundation for developing environmentally conscious students. However, further improvements are necessary, particularly in enhancing resources, training, and policy support, to ensure the successful implementation of ecotheology in the curriculum. This research contributes to the broader goal of integrating religious education with environmental sustainability, preparing students to be responsible citizens in a globalized world.

The learning process of Islamic religious education based on ecotheology

The research findings at both universities reveal that the process of Islamic Religious Education is well-organized and aligned with the goals of higher education. The process is designed with clear objectives that focus on developing students' cognitive, affective, and psychomotor skills. These goals are incorporated into every aspect of the curriculum, ensuring that the learning process is aligned with the desired outcomes and educational goals. The curriculum is developed systematically, with attention to both theoretical understanding and practical application in real-world contexts.

The learning process at both universities emphasizes the values of ecotheology, integrating ecological awareness and responsibility with Islamic teachings. Students are encouraged to reflect critically on the environmental issues that are relevant to their lives and are guided in understanding how Islamic teachings can provide solutions to ecological challenges. This student-centered approach encourages active participation, critical thinking, and the development of practical skills related to environmental conservation.

The teaching strategies employed at both universities include problem- and project-based learning, reflective discussions, and collaborative learning. These

strategies are designed to engage students in the learning process and help them apply the principles of ecotheology in real-life situations. By incorporating these active learning methods, students are not only expected to understand ecological concepts but also to develop the ability to apply them in their daily lives, thereby contributing to environmental sustainability.

As shown in the table below, the evaluation process at both universities is designed to assess students' understanding of the concepts and their attitudes and behaviors regarding ecological responsibility. The evaluation consists of diagnostic, formative, and summative assessments, which are integrated into the learning process to track students' progress over time. These assessments are designed to measure students' cognitive, affective, and psychomotor skills related to their ecological awareness and responsibility. The comprehensive evaluation approach ensures that students' learning is continuously monitored and that they receive constructive feedback to improve their understanding and practice of ecotheology.

Table 1. The Concept of Ecotheology-Based Islamic Religious Education and the Strengthening of Ecological Awareness

No	Concept	Learning Process	Evaluation
1	The Graduate Learning Outcomes (CPL), CPMK, and Sub-CPMK based on INQF are designed in an integrative manner by emphasizing students' ability to understand the concept of Islam as <i>rahmatan lil 'alamin</i> in an ecological context, internalize the value of trust as a <i>Khalifah fil ardh</i> , and show an attitude of ecological responsibility. The material is responsive to environmental damage, global and local ecological crises, and to strengthening the value of love for the homeland as part of national faith and responsibility.	The learning process is oriented toward achieving CPL, CPMK, and Sub-CPMK through systematic, context-based learning activities. Lecturers relate teaching materials to the ecological realities in the student environment, such as deforestation, environmental pollution, and climate change, so that students can understand the relevance of Islamic teachings to ecological responsibility. Students are encouraged to develop reflective, critical, and transformative awareness of environmental issues.	Diagnostic evaluations are conducted at the beginning of learning to identify students' initial level of understanding and ecological awareness. Formative evaluation is carried out on an ongoing basis through participant observation, critical reflection, discussion, and environmental project-based assignments. Summative evaluation is conducted through final exams, ecotheology projects, and presentations that assess students' cognitive, affective, and psychomotor skills related to ecological awareness and responsibility.
2	Active learning-based learning strategies and methods are applied through student-centered learning approaches, such as problem-	The implementation of active learning involves students in identifying, analyzing, and reflecting on environmental problems from an Islamic	Formative evaluation is carried out through process assessment, including student engagement in

	<p>based learning, project-based learning, reflective discussion, and collaborative learning. This strategy aims to build students' ecological awareness in a participatory and transformative manner, so that students not only understand concepts but also implement ecotheological values in real life.</p>	<p>perspective. Students engage in critical discussions, case studies, and environment-based projects, so that there is a process of deep internalization of ecotheological values. Lecturers act as facilitators, guiding students in developing ecological awareness grounded in Islamic values.</p>	<p>discussions, critical analysis of environmental issues, and the ability to integrate Islamic values into ecological solutions. Summative evaluation is carried out through the assessment of project results, reflection reports, and scientific presentations that demonstrate the extent of students' internalization of ecotheological values.</p>
3	<p>Environmental and nature-based learning media and resources are used as contextual learning facilities, such as observing the environment around campus, conducting field studies, utilizing local ecosystems, and using learning resources from the Qur'an, Hadith, and Islamic ecotheology literature. This approach aims to connect theological understanding directly with ecological realities.</p>	<p>Students are invited to make direct observations of environmental conditions and to study ecological issues from an Islamic perspective. This process strengthens the link between conceptual understanding and students' empirical experiences, fostering authentic, contextual ecological awareness. Learning becomes more meaningful when students experience firsthand the ecological reality they learn about.</p>	<p>Evaluation is carried out authentically through experience-based assessments, field observation reports, reflection journals, and environmental action projects. This evaluation aims to assess students' ability to integrate knowledge, attitudes, and ecological skills grounded in Islamic values.</p>
4	<p>The concept of continuous assessment is designed comprehensively to include cognitive, affective, and psychomotor aspects of students. The evaluation does not only focus on mastery of concepts, but also on changes in students' ecological attitudes and behaviors as indicators of the success of ecotheology-based learning.</p>	<p>The evaluation process is carried out systematically throughout the learning process, allowing lecturers to gradually monitor students' ecological awareness. Students receive constructive feedback that helps them improve their understanding, attitudes, and ecological practices in their daily lives.</p>	<p>Continuous evaluation includes diagnostic evaluations to identify learning needs, formative evaluations to monitor the process of internalizing grades, and summative evaluations to assess the final learning outcomes. This evaluation shows that the learning of Islamic Religious Education based on ecotheology contributes significantly to strengthening students' ecological awareness.</p>

This table makes clear how both universities have designed their Islamic Religious Education programs to incorporate ecotheological principles and

strengthen students' ecological awareness. The table also illustrates how the evaluation process aligns with the goals of ecotheology-based learning, ensuring that students not only learn concepts but are also encouraged to apply these principles in their actions toward the environment.

Ecotheology-based Islamic Religious Education is conducted using diverse strategies and methods that encourage creativity and critical thinking among students. These methods aim to foster students' ability to apply knowledge to real-world situations, with a focus on collaboration, innovation, and adaptability. The learning environment is designed to be scientific, contextual, and student-centered, ensuring that students develop not only their intellectual abilities but also their character. Instructors align their teaching strategies with the specific learning objectives, setting clear criteria for success that ensure the effectiveness of the learning process.

Both universities develop their curricula based on syllabi and semester learning plans (SLP), which outline the learning objectives and expected graduate outcomes. These documents serve as the foundation for the teaching process, ensuring that the curriculum is aligned with the values of ecotheology. The learning objectives aim to integrate environmental awareness with religious education, reflecting the broader goals of the institutions. This approach reflects the shift in Islamic Religious Education education from a normative-doctrinal framework to a historical-contextual paradigm, emphasizing student-centered learning and active participation in real-world issues.

Evaluation of Ecotheology-Based Islamic Religious Education

In the evaluation process of Islamic Religious Education at both universities, the first step is to establish clear evaluation objectives. These objectives are tailored to the type of evaluation being conducted, whether general or specific. For effective evaluation, it is necessary to break down the general goals into specific, measurable objectives that guide the instructor in developing evaluation tools. This process ensures that both cognitive and affective aspects of student development, including ecological awareness, are thoroughly assessed. The instructors utilize diagnostic, formative, and summative evaluations throughout the learning process to monitor progress and achievement.

The evaluation of Islamic Religious Education related to ecotheological values at both universities requires considerable time to analyze the effectiveness of the learning process. Since the course does not focus solely on ecological values, the evaluation process assesses not only students' knowledge but also their attitudes and social behaviors related to the environment. The assessment tools need to be precise and comprehensive, ensuring that the evaluation captures the depth of students' understanding and application of ecotheology in both religious and ecological contexts.

Evaluation is conducted through mid-term exams and final exams, typically held around the eighth or ninth and the sixteenth session, respectively. These assessments are intended to measure whether the learning objectives have been achieved. In addition to these exams, students are given assignments relevant to

the course material, though their effectiveness and satisfaction may vary. Another form of evaluation involves problem-solving tasks, where students are required to write papers and give presentations. These assignments allow instructors to assess students' understanding of ecotheology and their participation and engagement in class activities.

Moreover, the evaluation process includes authentic assessment techniques, such as essay questions and performance-based tasks that measure the students' ability to apply their knowledge of ecotheology in real-life situations. These assessments focus on students' skills and understanding, including their ability to complete tasks related to environmental issues, demonstrating practical competence. In addition, both universities employ reflective evaluation at the end of each course, allowing students to review their learning experiences and providing instructors with feedback for future improvements in the learning process.

The implementation of reflective evaluation (*muhasabah*) has proven to be beneficial for both students and instructors. It encourages introspection, helping students to better understand their progress and motivating them to engage more actively in the learning process. Reflective practices also contribute positively to the internalization of ecotheological values and the development of students' character. This approach enables continuous improvement and ensures the teaching process is responsive to students' needs, ultimately enhancing the overall educational experience and ecological awareness.

Discussion

The research findings from universities align closely with the existing literature on ecotheology-based Islamic Religious Education in higher education, particularly in fostering ecological awareness among students. The study reveals that integrating ecotheology into the curriculum aligns well with prior research emphasizing the need for Islamic education to address environmental issues. (Begum et al., 2021; Marshall, 2025) underscore the importance of incorporating ecological values into religious education, as seen in the emphasis on ecological awareness and responsibility in the learning objectives of both universities. This integration is essential to preparing students to address the environmental challenges society currently faces. However, the study also points to challenges arising from the lack of explicit policy guidelines in public universities, which contrast with the more formalized approach in religious institutions, as outlined in the Strategic Plan for Islamic Education (*Renstra Pendis*). This policy gap reflects the broader issue of inconsistent implementation of ecotheological principles in Islamic education across different educational settings (Itmam & Aouich, 2024; Morrow et al., 2024).

While the findings are consistent with the literature on the role of ecotheology in Islamic education, they also highlight important differences. Unlike earlier studies that primarily focus on pesantrens or secondary schools (Maslani, 2023; Mustofa et al., 2025), this research explores the integration of ecotheology at the higher education level, which presents both opportunities and

challenges. At universities, where curricula are more complex and diverse, incorporating ecotheology into Islamic Religious Education requires a shift in pedagogical strategies. The emphasis on active learning methods such as problem-based, project-based, and collaborative learning aligns with contemporary educational theory (Nagamalla et al., 2025; Sukacké et al., 2022), yet there are significant gaps in their implementation in public universities, particularly due to a lack of support for lecturers and the underutilization of available resources. This indicates a need for more robust training and institutional policy support to fully integrate ecotheology into the curriculum (Marshall, 2025; Mustofa et al., 2025).

From a theoretical perspective, integrating ecotheology into Islamic education offers a new lens through which students can engage with both their religious values and their environmental responsibilities. The findings support (Marshall, 2025; Öhlmann & Swart, 2022) theoretical assertion that religious education should not only focus on doctrinal teachings but also on the practical application of values to address contemporary global issues, such as climate change and ecological degradation. By adopting an ecotheological approach, Islamic education can help bridge the gap between faith and action, encouraging students to apply their religious beliefs to real-world ecological problems (Mufid et al., 2024; Rekan & Mokhtar, 2025). The theoretical contribution of this research lies in its ability to link Islamic religious education with ecological sustainability, thereby providing a framework for future studies on integrating environmental ethics into religious curricula (Marshall, 2025; Nugroho et al., 2025).

In practice, this study highlights the need for universities to develop more comprehensive, interdisciplinary curricula that incorporate environmental studies alongside religious teachings (Liu et al., 2022; Marshall, 2025). The findings emphasize the importance of not only integrating ecotheology into the curriculum but also ensuring that teaching methods are student-centered and participatory. This approach is crucial for fostering critical thinking and ecological responsibility among students. Universities should also consider employing authentic assessment methods that go beyond traditional exams, incorporating field-based activities and reflective practices, as these have been found to be effective in promoting deeper learning and awareness (Linga et al., 2025; Suhartono et al., 2025). The practical implications for policymakers include the need to invest in curriculum development, faculty training, and resources to support the integration of ecotheology into Islamic Religious Education programs.

In conclusion, this research contributes to the ongoing conversation on the role of religious education in promoting ecological awareness. It provides a framework for adapting Islamic Religious Education to address the urgent environmental challenges of our time while enriching students' spiritual lives. However, the findings also reveal significant challenges in implementing ecotheology-based education at public universities, particularly due to a lack of formal policy support and insufficient resources. To fully realize the potential of ecotheology-based Islamic Religious Education, universities must adopt a more holistic approach that includes curriculum reform, faculty development, and the use of innovative teaching methods. By doing so, they can prepare students to

become responsible citizens who are both faithful to their religious principles and committed to preserving the natural environment.

CONCLUSION

The most important finding of this research is the significant role of integrating ecotheology into Islamic Religious Education in fostering students' ecological awareness. This study highlights that incorporating ecological values into religious curricula equips students not only with theological knowledge but also encourages them to take an active role in environmental conservation. The research also revealed the importance of student-centered, active learning strategies such as project-based and problem-based learning, which enhance students' critical thinking and practical engagement with environmental issues. A major lesson from this study is that integrating ecotheology must go beyond theoretical knowledge and include real-world applications to be effective in raising students' ecological consciousness.

The strength of this paper lies in its contribution to the academic discourse by bridging the gap between religious education and environmental sustainability. It offers a comprehensive framework for incorporating ecotheology into Islamic education at higher education institutions, filling a gap in the literature that primarily focused on pesantren and secondary education. This research offers a fresh perspective on how universities can prepare students to be responsible citizens who are both spiritually grounded and environmentally conscious. However, this study also has limitations, particularly in its scope, as it only involves two universities in East Kalimantan. Future research could explore a broader range of institutions and further investigate the long-term impact of ecotheology-based education on students' behaviors and attitudes towards environmental conservation.

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