



Internalizing Tawhid, Khalifah, and Amanah as the Foundations of Eco-Theology in Elementary Education

Bangkit Adi Saputra

Universitas Islam Negeri Sunan Kalijaga Yogyakarta, Indonesia

Corresponding author e-mail: bangkitadisaputra000@gmail.com

Keywords:	Abstract
Eco-Theology; Tawhid; Khalifah; Amanah; Elementary Education	<i>The global environmental crisis necessitates a fundamental reorientation of humanity's relationship with nature. Islamic education harbors profound ecological wisdom within three core values, tawhid (divine unity), khalifah (vicegerency), and amanah (sacred trust). Which together form a robust theo-ecological framework. Yet their systematic integration into elementary education remains underexplored. Using a qualitative descriptive library research approach, this study reviewed primary Islamic sources, classical and contemporary scholarship, and scientific literature on eco-theology and environmental education. Findings reveal that tawhid grounds ecological responsibility in divine unity; khalifah positions humans as stewards rather than exploiters of the earth; and amanah frames environmental care as a sacred obligation. Collectively, these values cultivate ecologically conscious, spiritually grounded, and ethically responsible students. The study proposes an integrative framework mapping cognitive, affective, and psychomotor domains against each value, offering a practical blueprint for embedding sustainable ecological stewardship into elementary curricula and school culture from an early age.</i>

INTRODUCTION

Background of the Study

The ecological crisis confronting the contemporary world is not merely a technical or policy problem; it is, at its root, a crisis of values and spirituality embedded in humanity's dominant worldview toward the natural universe. A wide range of authoritative global scientific reports, including the Intergovernmental Panel on Climate Change Sixth Assessment Report (Calvin et al., 2023), document an ongoing and dramatic acceleration of environmental degradation, encompassing climate change that threatens the survival of millions of species, the erosion of biodiversity, the large-scale contamination of oceans with microplastics, and a freshwater crisis projected to affect more than half of the world's population by 2050. The World Wildlife Fund's (WWF) in Living Planet Report 2022 (WWF, 2022) recorded an average vertebrate population decline of 69% since 1970-an acceleration of crisis unprecedented in the entire history of human civilization.



These phenomena have compelled scholars across multiple disciplines to seek more fundamental remedies, extending beyond the domains of technology and law into the dimensions of theology and education. Historian (White, 1967), in his seminal essay “The Historical Roots of Our Ecologic Crisis,” advanced the influential thesis that the deepest roots of the modern ecological crisis reside in the legacy of Western Christian theology, which positioned humanity as the sovereign master of nature. Although that thesis has attracted considerable critique and revision, it catalyzed far-reaching discussions about how religious traditions can contribute meaningfully to the environmental crisis. Responses from various religious communities (including Islam) have since emerged, excavating authentic theological resources to formulate comprehensive environmental ethics (Gottlieb, 2006; Jenkins, 2008).

Eco-theology has arisen as a paradigm that bridges theological discourse with environmental concerns. Etymologically, eco-theology combines “ecology” and “theology,” understood broadly as the endeavor to construct theological foundations for ecological responsibility (Khalid & O’Brien, 1992; Vella & Ahmad Rizal, 2024). Eco-theology is not merely a theology about the environment; it represents a theological reorientation that fundamentally reappraises the tripartite relationship between humanity, God, and nature. In its subsequent development, eco-theology has generated diverse derivative frameworks (including contextual, liberation, and feminist eco-theologies) each offering critical perspectives on how religious traditions have conceived of and related to the natural world (Deane-Drummond, 2008).

Within the Islamic context, Islamic eco-theology has expanded rapidly since the 1990s, drawing on the riches of the Quran and Hadith to articulate a comprehensive environmental ethic. The intellectual tradition of Islam in fact harbors a wealth of discourse on the relationship between humanity and nature that remains substantially underexplored. Values such as *tawhid* (the oneness of God), *khalifah* (vicegerency and stewardship of the earth), and *amanah* (sacred trust) are widely regarded as the principal pillars upon which an authentic Islamic eco-theology can be constructed (Foltz, 2003). Beyond these central concepts, principles such as *mizan* (cosmic balance), *hifz al-bi’ah* (environmental preservation), and *fiqh al-bi’ah* (Islamic environmental jurisprudence) further enrich the intellectual arsenal of Islamic eco-theology (Mappanyompa et al., 2023).

Elementary education constitutes the foundational stage for the formation of character, values, and a child’s worldview toward the self, others, and the surrounding environment. During this phase, children inhabit the concrete operational stage of cognitive development (ages 7–11) as delineated by (Piaget, 1964), in which the internalization of values through direct experience, meaningful narrative, and behavioral modeling is most effectively accomplished. Contemporary educational neuroscience corroborates that emotionally and spiritually significant experiences during childhood leave neurological traces that substantially influence the long-term formation of values and character (Immordino-Yang, 2015). For these reasons, the cultivation of eco-theological values at the elementary education level is widely regarded as the most strategically important long-term investment for the future of the earth (Chawla, 1999; Sobel, 2004).

In Indonesia, elementary education grounded in Islamic values holds substantial potential for integrating eco-theology into curricula and school cultures. According to data from the Ministry of Religious Affairs of the Republic of Indonesia (2023), more than 80,000 Madrasah Ibtidaiyah (MI) and over 30,000 Integrated Islamic Elementary Schools (SDIT) are distributed throughout the country, collectively serving millions of students between the ages of 6 and 12. These institutions operate curricula that integrate Islamic religious education with general subjects, and are therefore structurally positioned to embed eco-theological values. Nevertheless, systematic scholarly inquiry into how *tawhid*, *khalifah*, and *amanah* can serve as concrete foundations for ecological education at the elementary level remains markedly limited (Muhaimin, 2011).

The Problem of The Study

Although the concept of Islamic eco-theology has been extensively discussed at the level of theory and high-level academic discourse, its implementation within the context of elementary education continues to encounter several critical challenges. First, no comprehensive and systematic conceptual framework yet exists to guide the concrete internalization of *tawhid*, *khalifah*, and *amanah* within the actual practice of elementary education. Existing frameworks tend to be partial, addressing only a single value or a single dimension of education, and therefore fail to offer the comprehensive guidance required for curriculum development and school culture transformation. Second, there is a significant gap between the richness of the Islamic eco-theological heritage on one hand and the scarcity of pedagogical resources available to guide teachers in integrating it into their daily instruction on the other.

Third, the current elementary education curriculum (including the Merdeka Curriculum (Kurikulum Merdeka) introduced in 2022) does not yet explicitly map the relationship between Islamic values and environmental consciousness as an integral dimension of forming the “Pancasila Student Profile” (Profil Pelajar Pancasila) characterized by faith in and devotion to God Almighty. Yet it is precisely the spiritual dimension that may serve as the most powerful engine for cultivating a sustainable ecological character. Fourth, a phenomenon of “greenwashing” in school-based environmental education has been observed, in which environmentally friendly programs are implemented ceremonially without a firm value foundation, and consequently fail to produce genuine and lasting changes in the ecological behavior of students (Kopnina, 2020).

These challenges are rendered increasingly urgent by the fact that the current generation of students (Generation Z and Generation Alpha) will inherit the consequences of an intensifying environmental crisis over the coming decades. Without a strong ecological value foundation established at an early age, school-based environmental education programs tend to remain instrumental and unsustainable. There is therefore a pressing need for in-depth scholarly inquiry capable of articulating the contribution of *tawhid*, *khalifah*, and *amanah* as a basis for eco-theology in elementary education in a manner that is comprehensive, systematic, and operationally actionable.

Research's State of the Art

Scholarship on Islamic eco-theology has been advanced by a number of leading scholars whose contributions form the foundational architecture of the present study. (Naşr, 1996), in his landmark work *Religion and the Order of Nature*, argues that the root cause of the ecological crisis is a crisis of modern spirituality, and that religious traditions (including Islam) harbor rich theological resources for addressing it through what he terms "sacred science." (Khalid & O'Brien, 1992), in *Islam and Ecology*, foreground the centrality of tawhid as the fundamental principle binding humanity to all of Allah's creation. (Matin, 2010), in *Green Deen*, elaborates six Islam-derived principles in support of environmental protection and translates them into practical daily guidance. Maulana Wahiduddin Khan, in various writings, has similarly emphasized that the Quran functions as a "book of nature" that invites humanity to read, contemplate, and honor the created world.

In the field of education, several studies have examined the integration of Islamic values with environmental education. Muhaimin (2015) explored the concept of an "Islamic green school" in Indonesia, finding that emphasis on the dimensions of amanah and khalifah is more effective in forming sustainable ecological behaviors than approaches relying primarily on environmental information. (Nurochman et al., 2026) investigated the implementation of eco-theology-informed environmental education in madrasah, documenting significant gains in students' ecological awareness and behavior. (Muflihini, 2026) examined the relevance of the khalifah concept in the Islamic Religious Education (PAI) curriculum at the elementary school level. (al-Dīn, 2000) offers a comprehensive analysis of tawhid, khilafah, and amanah in the context of the global ecological crisis. (Naess, 2008) identify the challenges and prospects of integrating Islamic ecological ethics into primary school curricula in South Asia. (Deane-Drummond, 2008) investigate the relationship between Islamic values and ecological consciousness in faith-based education.

At the international level, inquiry into the integration of religion and environmental education has also developed considerably. (Chawla, 1999) empirically demonstrated that spiritual and aesthetic experiences with nature during childhood are among the strongest predictors of environmental commitment in adulthood. (Orr, 1991), in *Ecological Literacy*, argues that the environmental crisis is fundamentally an educational crisis requiring a paradigmatic transformation in how children are educated. (Sobel, 2004) developed the concept of place-based education (grounded in the local environment) which has proven effective in cultivating children's sense of belonging to and responsibility for their immediate surroundings. This approach is highly relevant to the internalization of ecological values at the elementary level. (Miller, 2019), in "A Whole System Approach to Education", underscores the importance of an inner connection between learners and nature as the authentic foundation of ecological education

Novelty, Research Gap, & Objective

A review of the existing literature reveals a significant research gap: no study has yet specifically and systematically constructed an integrated framework for internalizing *tawhid*, *khalifah*, and *amanah* as a unified basis for eco-theology in

elementary education. Prior studies have generally examined each value in isolation, or have addressed Islamic eco-theology at the level of discourse without connecting it in a concrete and operational manner to the practice of elementary education. Furthermore, no existing research has explicitly articulated a connection between the Islamic eco-theological framework and the pedagogical theories of elementary education encompassing the cognitive, affective, and psychomotor dimensions simultaneously.

The novelty of the present study rests on three contributions. First, this study constructs a conceptual framework that integrates three fundamental Islamic values (*tawhid*, *khalifah*, and *Amanah*) as a cohesive and hierarchical basis for eco-theology. Second, this study explicitly links that eco-theological framework to the pedagogical principles of elementary education, drawing on Piaget's theory of cognitive development, Lickona's character education model, and Sobel's place-based education. Third, this study yields educational implications that can serve as practical reference points for curriculum development, school culture formation, and the enhancement of teachers' ecological pedagogical competence within Islamic elementary education in Indonesia.

The objectives of this study are: (1) to describe the meaning and ecological dimensions of *tawhid*, *khalifah*, and *amanah* from the perspectives of the Quran, Hadith, and the Islamic intellectual heritage; (2) to analyze the relevance of these three values as a basis for eco-theology in the elementary educational context, both pedagogically and conceptually; and (3) to formulate a comprehensive, systematic, and practically implementable framework for internalizing Islamic eco-theological values within elementary education.

METHOD

Type and Design

This study employs a qualitative descriptive research method with a library research approach. The qualitative descriptive method was selected because the study's purpose is to understand, describe, and analyze phenomena in depth on the basis of textual data drawn from diverse literary sources (Bogdan & Biklen, 2007; Creswell, 2009). The library research approach means that the study relies on documentary and bibliographic materials as its primary data sources, without conducting fieldwork (Zed, 2008). The research design is analytic-interpretive in nature: the researchers undertake critical analysis and synthesis of relevant literature to construct a comprehensive and integrative conceptual framework. This design is considered most appropriate for a study that is conceptual-theoretical, to formulate a framework of thought that can serve as a foundation for subsequent empirical research.

Data and Data Sources

The data sources for this study are of two types. First, primary data sources consist of Quranic texts and Hadith pertaining to ecological values, together with relevant classical and contemporary Quranic commentaries (*tafsir*), including *Tafsir Ibn Kathir*, *Tafsir Al-Qurtubi*, and *Tafsir Al-Misbah* by Quraish Shihab. Primary sources also include the foundational works of leading Islamic eco-theology scholars,

notably (Naşr, 1996), (Khalid & O'Brien, 1992), (Foltz, 2003) and (Matin, 2010). Second, secondary data sources encompass peer-reviewed journal articles indexed in international databases (Scopus, Web of Science) and the national database (SINTA), textbooks on elementary education and environmental education, relevant prior research, and Indonesian elementary education policy documents including the Merdeka Curriculum (2022).

The selection criteria for literature sources include: (1) substantive relevance to the research theme, encompassing theological, pedagogical, and ecological dimensions; (2) verifiable academic quality, as evidenced by publication in reputable academic presses or Q1–Q3 indexed journals; (3) recency of sources, prioritizing literature published within the preceding ten years (2015–2024) to ensure contemporary relevance while retaining foundational classical works (Nasr, White, Piaget, Chawla); and (4) comprehensiveness of perspective coverage, spanning the theological-normative dimension (Quranic and Hadith perspectives), the academic-critical dimension (eco-theology scholarship), and the pedagogical-practical dimension (elementary education perspectives).

Data Collection Technique

Data were collected through the systematic documentation of diverse bibliographic sources. The procedural steps undertaken included: (1) identifying and searching literature through academic databases (including Google Scholar, JSTOR, Scopus, SINTA, and the National Library of Indonesia) using predetermined search terms such as Islamic eco-theology, Islamic environmental education, tawhid ecology, khalifah education, amanah environment, and their combinations in Arabic, Indonesian, and English; (2) selecting literature according to established relevance and quality criteria, using PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) as a guide for inclusion and exclusion; (3) systematically reading and recording notes from selected sources; and (4) organizing data into thematic clusters covering the concept of ecological tawhid, the concept of khalifah and environmental responsibility, the concept of amanah and ecological ethics, and the principles of value-based elementary education.

Data Analysis

Data analysis in this study employed content analysis and conceptual analysis techniques. Content analysis was used to identify, classify, and interpret the meanings embedded in the texts examined (Krippendorff, 2004). Conceptual analysis was conducted to construct logical relationships among concepts identified across various sources, producing an integrative and systematic conceptual framework. The analytical process followed the framework of (Miles et al., 2013): (1) data reduction, selecting data relevant to the research focus and discarding irrelevant material; (2) data display, presenting findings in the form of structured descriptive-analytic narrative organized by thematic cluster; and (3) conclusion drawing and verification through source triangulation; checking the consistency of findings across primary sources (the Quran and Hadith), classical sources (tafsir and classical Islamic scholarship), and contemporary sources (peer-reviewed journals and recent research). The credibility of findings was maintained through a systematic audit trail and confirmation against relevant literature.

RESULTS AND DISCUSSIONS

The Concept of Tawhid and Its Cosmological Dimensions

Tawhid literally means the declaration of the oneness of God (*al-tawhid*) the conviction that only one God holds sovereignty over the entirety of the universe. Yet the implications of tawhid extend far beyond the ritual-devotional dimension alone. Within the framework of Islamic eco-theology, tawhid encodes the principle of cosmic unity (*al-wahda al-kawniyya*), affirming that all entities in the universe (humans, animals, plants, soil, water, air) exist within a single web of interconnected existence under the sovereign will of Allah (al-Dīn, 2000; Naṣr, 1996). This is not monotheism in its narrowest sense; it is a cosmological vision that perceives a fundamental unity underlying the diversity of creation, something that resonates with what contemporary physics describes as the interconnectedness of all things.

Imam al-Ghazali, in his *Ihya' 'Ulum al-Din*, affirms that authentic tawhid (*tawhid al-khawwas*) is not merely verbal affirmation, but an intimate awareness that no being possesses independent existence except Allah, and that all things are manifestations (*tajalli*) of His will. From an ecological perspective, this awareness implies that to damage any part of Allah's creation is to damage the web of divine manifestation itself an act fundamentally at odds with a genuinely tawhid-grounded faith (Naṣr, 1996). This understanding resonates with (Naess, 2008) concept of "deep ecology," yet it is anchored in a far more robust theological foundation and is sustained by a distinctly transcendental motivation.

The most foundational Quranic bases for this understanding encompass several key verses. Q.S. Al-Anbiya' (21):30 declares that all living things were made from water, affirming the ontological unity of all life. Q.S. Al-Hashr (59):24 names Allah as al-Khaliq (the Creator), al-Bari' (the Originator), and al-Musawwir (the Fashioner), affirming that the entire universe is a work of divine artistry deserving of reverence. Q.S. Al-Isra' (17):44 proclaims that all things glorify Allah in praise, though humans do not comprehend their glorifications, thereby affirming that nature possesses intrinsic value and a spiritual relationship with its Creator that is independent of its utility to humanity. Q.S. Ar-Rum (30):41 states explicitly that corruption (*fasad*) in the land and sea has appeared as a consequence of what human hands have wrought a Quranic declaration of human responsibility for the ecological crisis.

Ecological Tawhid in Elementary Education Practice

In the context of elementary education, the internalization of ecological tawhid can be cultivated through a combination of habituating practices and experience-rich thematic learning. Teachers can guide students to "read nature" as signs of Allah's greatness (*ayat kawniyya*) through *tafakkur 'alam* contemplating and expressing gratitude for the beauty and wonder of creation. This vision can be enacted through school environment observation activities, classroom gardening, the observation of simple natural phenomena such as the water cycle and seed germination, and reflective writing in a "nature gratitude journal" in which students record aspects of the natural world for which they are thankful each day. Chawla, 1999 demonstrated empirically that spiritual and aesthetic experiences with nature during childhood are among the strongest predictors of environmental commitment in adulthood. In her

survey of adult environmental activists in England and Norway, Chawla found that the majority identified meaningful direct experiences with nature in childhood (frequently combined with the influence of an environmentally engaged adult figure) as the formative factor in their ecological commitment. This finding is highly relevant: if spiritual experiences with nature, understood as encounters with the ayat (signs) of Allah, can be cultivated intensively at the elementary level, the seeds of tawhid-rooted ecological consciousness will take firm root and endure throughout a lifetime.

Pedagogically, the teaching of ecological tawhid must move beyond doctrinal memorization toward lived experience. Inquiry-based learning is particularly apposite here: students are invited to ask, observe, and discover for themselves the wonders of nature as evidence of Allah's greatness. The sense of awe and wonder that arises from such encounters is the seedbed of what educators describe as ecological literacy an environmentally attuned understanding rooted in transcendental awareness. Ecological tawhid is therefore not merely a theological doctrine to be transmitted verbally, but a motivational force capable of generating ecologically responsible behavior from an early age, delivered through methods that are developmentally appropriate.

The Concept of Khalifah in Islamic Theology

The concept of khalifah (Q.S. Al-Baqarah [2]:30) is one of the most central and, simultaneously, most frequently misunderstood concepts in Islamic eco-theology. Allah declares in the Quran that He will place a khalifah upon the earth. Etymologically, khalifah derives from the verb *khalafa*, meaning "to succeed" or "to act as a deputy," so that khalifah may be rendered as successor, representative, or trustee. Within the eco-theological interpretation, khalifah does not signify a ruler who is free to exploit nature in his own name; rather, it designates the vicegerent of God (*wakil Allah*), who is entrusted with the responsibility of governing the earth in accordance with the will of its true Owner, Allah as al-Khaliq (Foltz, 2003; Khalid & O'Brien, 1992). This interpretation is fundamentally opposed to the dominionist reading that positions humanity as the absolute master of nature, precisely the interpretation that (White, 1967) identified as the theological root of the ecological crisis.

Ibn Kathir, in his tafsir, notes that even the angels initially questioned the appointment of a khalifah who would "cause corruption and shed blood" on earth (Q.S. Al-Baqarah [2]:30), to which Allah responded: "I know what you do not know." Classical commentators interpret this dialogue as a signal that the mandate of vicegerency is not without risk and challenge, and that the responsibility borne by the khalifah is immense. Al-Qurtubi affirms that the exemplary khalifah is one who governs the earth with justice, wisdom, and adherence to the principles of the shari'a, which support ecological balance. This aligns with the foundational maxim of Islamic environmental jurisprudence, "*la dharara wa la dhirara*" (no harm shall be inflicted on oneself or others) which contemporary Muslim jurists have extended to encompass ecological damage.

In its ecological dimension, the khalifah concept implies an ethic of natural resource management characterized by justice, sustainability, and a commitment to maintaining the balance of ecosystems. As khalifah, humanity holds no absolute right

of ownership over nature; it is entrusted only with wise stewardship and must render an account before Allah (Q.S. Al-A'raf [7]:56). In this respect, the khalifah concept is consonant with the idea of "stewardship" in contemporary environmental ethics (the responsible management of shared resources) but it is anchored in a substantially more robust theological foundation, and its accountability is transcendental rather than merely social or legal (Gardner, 2006).

Khalifah in Elementary Education: From Concept to Action

At the elementary education level, the internalization of khalifah values can be designed through activities that genuinely position students as the "managers" and "guardians" of their school environment. Programs such as hygiene duty (*piket kebersihan*) experienced as an act of worship, a school waste bank, a school garden, an organic composting program, and a tree adoption program are concrete examples of how children can be taught that they are "young khalifah" bearing genuine responsibility for their surroundings. Project-based learning (PjBL) is particularly well suited to this context: when students are invited to plan, implement, and evaluate their own environmental projects, they do not merely learn about the environment but experience directly what it means to be a responsible steward.

Muflihin, 2026 demonstrated that when the khalifah value is integrated into the Islamic Religious Education (PAI) curriculum in elementary schools using the project-based learning method, there are statistically significant improvements in students' pro-environmental attitudes, as measured by the New Ecological Paradigm (NEP) instrument adapted for the child context. This is consistent with (Sobel, 2004) contention that children require direct experience with nature and a sense of place toward their local environment as the authentic and sustainable foundation of ecological consciousness. The khalifah concept furnishes a powerful and meaningful narrative for this sense of place: the child is not merely "loving the environment" in the abstract, but understands itself as a representative of Allah bearing concrete and sacred responsibility toward creation. From a moral development perspective, the internalization of the khalifah concept with children at the elementary level (ages 7–12) corresponds to (Kohlberg, 1981) conventional stage of moral development, during which children begin to understand and internalize their social roles. The khalifah concept offers a concrete and meaningful role narrative: "You are the guardian of the earth, entrusted by Allah." Such a narrative is more effective in forming a child's ecological identity than procedural instructions such as "do not litter." An ecological identity established early in life becomes the foundation of pro-environmental character that endures into adulthood.

Amanah in Elementary Education Practice

The ecological dimension of amanah is the understanding that the natural universe constitutes a deposit (*wadi'ah*) of Allah entrusted to humanity not an inheritance to be exploited at will for short-term gain. To damage nature is to betray the trust that was solemnly accepted; to care for it is to fulfill it with wholehearted dedication (Matin, 2010). This concept carries profound ethical implications: no part of nature is "unimportant" or expendable, because everything belongs to an integral whole that has been entrusted. Even an ant on the school grounds, a tree by the

roadside, or a droplet of water at a faucet forms part of the cosmic amanah that must be treated with respect.

Amanah constructs a deeply personal ethical dimension in the human relationship with nature: every act toward the environment is a moral act bearing both a vertical dimension (accountability to Allah) and a horizontal dimension (responsibility to fellow creatures and to future generations). This transcends mere legal obligation or social awareness. This perspective resonates with the concept of “intergenerational equity” in international environmental law developed by (Weiss, 1989), who argues that each generation has an obligation to pass the earth on to the next in no worse a condition than it received. Yet amanah in Islam provides a motivational basis that is far deeper: the obligation is not merely owed to future generations, but to Allah, the ultimate Owner of the trust itself.

In elementary education practice, the internalization of amanah values can be accomplished through the habituation of virtues (habituation of virtues) developed consistently and systematically within the school culture. Ethics-based habituation rooted in amanah is not merely the enforcement of school rules; it is the construction of a profound moral consciousness. For example, accustoming students not to litter is framed not as a hygiene regulation but as the fulfillment of the amanah to care for the earth entrusted by Allah. Switching off unused lights, conserving water, maintaining school facilities, and refraining from picking flowers without permission are ecological amanah practices that can be internalized from an early age through teacher role-modeling, consistent daily routines, and structured moral reflection.

Muhaimin, 2011, in his study of Islam-based green schools, found that emphasizing the amanah dimension (the understanding that the environment is a trust to be cared for) proves more effective in forming sustainable ecological behavior than merely informational approaches that highlight the dangers of environmental damage. This finding is consistent with research in environmental psychology demonstrating that information alone is insufficient to change behavior; deeper changes in values and identity are required (Steg & Vlek, 2009). Amanah provides precisely this robust value framework: when a child genuinely internalizes an identity as a holder of Allah’s trust, ecological behavior is no longer merely a response to external pressure but an expression of her moral-spiritual identity.

The exemplary conduct (*uswah hasanah*) of teachers and parents plays a crucial role in the internalization of amanah values among elementary-age children. (Bandura, 1977), in social learning theory, demonstrated that children learn values and behaviors primarily through observation and emulation of figures they trust and respect. Accordingly, the development of teachers’ ecological professionalism (the capacity of teachers to model ecological amanah in everyday school life) is a prerequisite that cannot be overlooked in the implementation of amanah-based eco-theology in elementary education. A teacher who sorts waste, conserves electricity, and tends plants with care will be far more effective in cultivating ecological amanah values than a teacher who merely delivers lectures on the importance of environmental protection.

The Three Values as a Unified Hierarchical System

The three values discussed above (*tawhid*, *khalifah*, and *amanah*) do not function as isolated concepts; they form an integrative, hierarchical, and mutually reinforcing Islamic eco-theological framework. Tawhid is the foundation: the awareness that Allah alone is the Creator and Owner of the universe instills a profound attitude of reverence and respect toward all of creation. Upon that foundation, *khalifah* furnishes the mandate and role: humanity is Allah's representative, entrusted with governing the earth wisely, justly, and sustainably. *Amanah* completes the framework with its ethical and accountability dimension: every act toward nature constitutes a deposit for which an accounting will be rendered before Allah.

The three values can be analogized to the components of a building: *tawhid* is the foundation, establishing cosmological orientation (how we perceive nature and our relationship to it); *khalifah* is the walls, erecting the structure of responsibility and role (what we must do as stewards of the earth); and *amanah* is the roof, enclosing the entire construction with ethics and accountability (how we answer for every act toward nature). Without *tawhid*, *khalifah* risks devolving into human arrogance. Without *khalifah*, *tawhid* risks becoming passive mysticism that fails to generate concrete action. Without *amanah*, both risk becoming hollow slogans devoid of genuine ethical commitment. The three are mutually dependent and complementary within a coherent systematic whole.

Pedagogical Implications: Three Domains of Learning

The pedagogical implications of this integrative framework for elementary education encompass three inseparable learning domains. In the cognitive domain (moral knowing), students must be equipped with age-appropriate understandings of *tawhid*, *khalifah*, and *amanah* and their ecological implications through integrative thematic learning, ecological stories and narratives, facilitative classroom discussion, and structured environmental visits. Cognitive understanding constitutes the gateway into value internalization, but it is insufficient when it stands alone.

In the affective domain (moral feeling), the internalization of these values requires the development of ecological empathy (the capacity to perceive and respond to the suffering of other creatures and the condition of the environment) as well as love, awe, and gratitude toward nature as an integral expression of love for Allah. This can be cultivated through meaningful direct experiences with nature, guided spiritual reflection, creative expression through nature-based art and literature, and the commemoration of earth and environmental days from an Islamic perspective. (Lickona, 1992) emphasizes that without the affective dimension (moral feeling), moral knowledge (moral knowing) will not consistently produce moral action. In the psychomotor domain (moral action), eco-theological values must be embodied in concrete and meaningful activities. Islam-based environmental extracurricular programs (such as a "Young Khalifah Club"), daily environmentally responsible habits consciously practiced as acts of worship, school environmental projects engaging the entire community (including parents and the surrounding neighborhood), and participation in broader environmental programs (such as the Scout Movement's Environmental Care Initiative) are concrete expressions of this

domain. All three domains must be developed simultaneously and in an integrated fashion in order to produce authentic and sustainable value internalization.

Cross-Curricular Integration

The implementation of a *tawhid*, *khalifah*, and *amanah* based eco-theological framework cannot be confined to the Islamic Religious Education (PAI) subject alone. Indonesia's Merdeka Curriculum (2022) (with its thematic learning approach and the Pancasila Student Profile Strengthening Projects (P5)) provides ample space for cross-curricular integration. In Natural Science (IPA), teachers can integrate ecological *tawhid* when discussing ecosystems, biodiversity, and natural cycles, underscoring that the complexity and beauty of nature constitute evidence of Allah's greatness that must be protected. In Social Studies (IPS), the *khalifah* value can be integrated when addressing natural resources, the environment, and the responsibilities of citizenship.

In Indonesian Language (Bahasa Indonesia), the *amanah* value can be internalized through activities such as writing nature-themed narrative and poetry, reading stories about Muslim environmental stewards, and discussing the role of language in shaping ecological consciousness. In Arts and Culture, students can express their love and gratitude for nature through various artistic media inspired by the beauty of Allah's creation. In Mathematics, concepts of sustainability and the finitude of natural resources can be integrated contextually. (Rahayu & Supriyanti, 2026) emphasize that precisely this kind of cross-curricular integration (which they term "cross-curricular eco-Islamic education") is a prerequisite for the successful implementation of value-based Islamic ecological education.

Table 1. Framework for the Internalization of Islamic Eco-Theological Values in Elementary Education

Value	Ecological Dimension	Pedagogical Domain	Internalization Method	Example Activities
Tawhid	Cosmic unity; all creation interconnected; nature as signs (ayat) of Allah; intrinsic value of creation	Cognitive: cosmological awareness Affective: awe and gratitude Psychomotor: tafakkur alam (nature contemplation)	Integrative thematic learning, inquiry-based learning, tafakkur alam, ecological storytelling, nature journaling	Nature observation, gratitude journals, field visits, seed planting, outdoor prayer of gratitude
Khalifah	Stewardship mandate; sustainable management; accountability to Allah	Cognitive: role understanding Affective: responsibility and sense of place Psychomotor:	Project-based learning, khalifah role-play simulation, place-based education, service learning	School garden, waste bank, tree adoption, composting, recycling project,

Value	Ecological Dimension	Pedagogical Domain	Internalization Method	Example Activities
		concrete environmental management		cleanliness patrol
Amanah	Nature as Allah's deposit; intergenerational responsibility; personal ecological ethics	Cognitive: environmental ethics Affective: ecological empathy Psychomotor: daily ethical habituation	Virtue habituation, teacher role-modeling, moral reflection, habit formation, amanah journal	Water and energy conservation, no littering, facility maintenance, daily amanah journal

Source: Adapted from Nasr (1996), Khalid & O'Brien (1992), Abd al-Matin (2010), Muhaimin (2011).

Synthesis with Global Educational Literature

The *tawhid-khalifah-amanah* integrative framework formulated in this study resonates strongly with several contemporary ecological education approaches at the global level, while simultaneously offering a distinctive contribution rooted in the Islamic intellectual tradition. First, the framework aligns with the transformative environmental education approach advanced by (Sterling, 2024), which emphasizes the necessity of paradigmatic transformation (rather than merely informational change) in ecological education. Islamic eco-theology offers precisely this kind of paradigmatic transformation, grounded in a tawhidic worldview: a fundamental reorientation of how humanity perceives its relationship with nature.

Second, the framework complements the socio-emotional approach in ecological education. (Lickona, 1992) character education model (which underscores the integration of moral knowing, moral feeling, and moral action) aligns seamlessly with the three internalization domains proposed in the present study. Third, the framework extends and deepens (Sobel, 2004) place-based education: while Sobel emphasizes love of local place as the foundation of ecological consciousness, the Islamic eco-theological framework adds a transcendental dimension (love of nature as a manifestation of love for Allah) that provides far deeper roots and far stronger motivation for long-term ecological commitment.

The findings of this study significantly strengthen and extend prior scholarship. (Nurochman et al., 2026) found that an eco-theological approach in madrasah education measurably increased students' ecological awareness, the present study advances further by articulating a conceptual framework that is more integrated, hierarchical, and operationally actionable, one that can be applied directly as a guide for curriculum development and school programming. (Mappanyompa et al., 2023) demonstrated that Islamic values and ecological consciousness are not only compatible but mutually reinforcing; the present study consolidates that finding by

presenting a more specific pedagogical framework grounded in the Indonesian elementary education context.

Implementation Challenges and Strengthening Strategies

The implementation of the *tawhid*, *khalifah*, and *amanah* based eco-theological framework in elementary education is not without challenges that must be anticipated. The first challenge concerns teacher capacity: the majority of elementary school teachers (including Islamic Religious Education teachers) do not yet possess adequate understanding of Islamic eco-theology or the pedagogical competence to integrate it into instruction. The solution lies in the development of a specially designed teacher professional development program encompassing Islamic eco-theology content enrichment, age-appropriate pedagogical development, and experience-based reflective practice.

The second challenge concerns the availability of instructional materials: textbooks, modules, and learning resources grounded in Islamic eco-theology and designed specifically for the elementary level remain extremely scarce. The development of creative, contextually relevant, and curriculum-aligned instructional materials is an urgent need. Collaboration among academics, education practitioners, Islamic scholars (ulama), and curriculum designers is essential for producing high-quality and relevant materials.

The third challenge concerns consistency and sustainability: the internalization of eco-theological values requires consistent long-term engagement, it cannot be achieved through occasional programs or annual environmental observances alone. Strong institutional commitment from school principals, foundations, and education offices is required to embed Islamic eco-theology as an integrated component of a school's vision, mission, and culture as a whole. The fourth challenge concerns assessment: measuring the success of eco-theological value internalization is far more complex than measuring conventional academic achievement. Assessment instruments capable of holistically and authentically measuring changes in students' ecological values, attitudes, and behaviors are needed, including portfolios, behavioral observation, and self-assessment grounded in Islamic values.

CONCLUSION

This study concludes that the Islamic values of *tawhid*, *khalifah*, and *amanah* provide a strong and relevant eco-theological foundation for elementary education in Indonesia. *Tawhid* emphasizes the unity of Allah's creation and encourages respect for nature as part of faith. *Khalifah* defines humans as responsible stewards of the earth, while *amanah* highlights that protecting the environment is a moral and spiritual responsibility. Together, these three values form an integrated framework that can strengthen students' ecological awareness, Islamic identity, and ethical behavior through cognitive, affective, and practical learning experiences.

The findings also suggest that these values should be integrated systematically into Islamic elementary education. This can be achieved by enriching the curriculum, strengthening teachers' eco-theological competencies, developing environmentally responsible school cultures, and fostering collaboration among schools, families, mosques, and communities. In addition, teaching materials and assessment strategies

should be designed to reflect eco-theological principles and suit the developmental needs of elementary students.

This study is limited by its conceptual nature and has not yet been tested in educational practice. Therefore, future research should examine the effectiveness of this framework through empirical studies, including quantitative research on students' environmental attitudes and behaviors and qualitative research on successful eco-theological practices in Islamic elementary schools. Such studies will help validate and refine the proposed framework while supporting the development of students who are both spiritually grounded and environmentally responsible.

REFERENCES

- al-Dīn, M. Y. I. (2000). *The Environmental Dimensions of Islam*. Lutterworth Press. <https://books.google.co.id/books?id=AL5qbA9lytMC>
- Bandura, A. (1977). *Social Learning Theory*. Prentice Hall. <https://books.google.co.id/books?id=IXvuAAAAMAAJ>
- Bogdan, R., & Biklen, S. K. (2007). *Qualitative Research for Education: An Introduction to Theories and Methods*. Pearson A & B. <https://books.google.co.id/books?id=HSMiAQAAIAAJ>
- Calvin, K., Dasgupta, D., Krinner, G., Mukherji, A., Thorne, P. W., Trisos, C., Romero, J., Aldunce, P., Barrett, K., Blanco, G., Cheung, W. W. L., Connors, S., Denton, F., Diongue-Niang, A., Dodman, D., Garschagen, M., Geden, O., Hayward, B., Jones, C., ... Ha, M. (with Lee, H.). (2023). *Climate Change 2023: Synthesis Report* (P. Arias, M. Bustamante, I. Elgizouli, G. Flato, M. Howden, C. Méndez-Vallejo, J. J. Pereira, R. Pichs-Madruga, S. K. Rose, Y. Saheb, R. Sánchez Rodríguez, D. Ürges-Vorsatz, C. Xiao, N. Yassaa, J. Romero, J. Kim, E. F. Haites, Y. Jung, R. Stavins, ... C. Péan, Eds.; First). Intergovernmental Panel on Climate Change (IPCC). <https://doi.org/10.59327/IPCC/AR6-9789291691647>
- Chawla, L. (1999). Life Paths Into Effective Environmental Action. *The Journal of Environmental Education*, 31(1), 15–26. <https://doi.org/https://doi.org/10.1080/00958969909598628>
- Creswell, J. W. (2009). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches: 3rd ed*. SAGE Publications Inc.
- Deane-Drummond, C. (2008). *Eco-Theology* (1 ed). Saint Mary's Press. www.indexing.co.uk
- Foltz, R. C. (2003). *Worldviews, religion, and the environment: A global anthology*. WADSWORTH CENGAGE Learning. <https://archive.org/details/worldviewsreligi0000unse/page/n5/mode/1up>
- Gardner, G. T. (2006). *Inspiring Progress: Religions' Contributions to Sustainable Development*. Norton. <https://books.google.co.id/books?id=lgzFQgAACAAJ>
- Gottlieb, R. S. (2006). *A Greener Faith Religious Environmentalism and Our Planet's Future*. Oxford University Press. <https://global.oup.com/academic/product/a-greener-faith-9780195176483?cc=id&lang=en&>
- Immordino-Yang, M. H. (with Damasio, A., & Gardner, H.). (2015). *Emotions, Learning, and the Brain: Exploring the Educational Implications of Affective Neuroscience*. W. W. Norton. https://books.google.co.id/books?id=_M5PCgAAQBAJ
- Jenkins, W. (2008). *Ecologies of Grace: Environmental Ethics and Christian Theology*. Oxford University Press. <https://books.google.at/books?id=4uio8fCYZw0C>
- Khalid, F. M., & O'Brien, J. (1992). *Islam and Ecology*. Cassell. <https://books.google.co.id/books?id=Kr4lAQAAAMAAJ>

-
- Kohlberg, L. (1981). *The Philosophy of Moral Development: Moral Stages and the Idea of Justice*. Harper & Row. <https://books.google.co.id/books?id=Deh-AAAAMAAJ>
- Kopnina, H. (2020). Education for the future? Critical evaluation of education for sustainable development goals. *The Journal of Environmental Education*, 51(4), 280–291. <https://doi.org/10.1080/00958964.2019.1710444>
- Krippendorff, K. (2004). *Content Analysis: An Introduction to Its Methodology*. Sage. <https://books.google.co.id/books?id=q657o3M3C8cC>
- Lickona, T. (1992). *Educating for Character: How Our Schools Can Teach Respect and Responsibility*. Bantam. <https://books.google.co.id/books?id=Cx0nJf7KZAcC>
- Mappanyompa, Sahwan, Saprun, & Palahuddin. (2023). Eco-Theology Dalam Persepektif Al-Qur'an. *Ibtida'iy: Jurnal Prodi PGMI*, 8(1), 33. <https://doi.org/10.31764/ibtidaiy.v8i1.14904>
- Matin, I. A. (2010). *Green Deen: What Islam Teaches about Protecting the Planet*. Berrett-Koehler Publishers. https://books.google.co.id/books/about/Green_Deen.html?id=7QJz_x0jiGcC&redir_esc=y
- Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative Data Analysis: A Methods Sourcebook*. SAGE Publications. <https://books.google.co.id/books?id=p0wXBAAQBAJ>
- Miller, J. P. (with Cajete, G.). (2019). *The Holistic Curriculum*. University of Toronto Press. <https://books.google.co.id/books?id=HSyCwAEACAAJ>
- Muflihin, Z. (2026). Integrasi Konsep Khalifah Fi Al-Ard Dalam Pendidikan Agama Islam Sebagai Basis Ekopedagogi. *ABDUSSALAM: Jurnal Pendidikan dan Kebudayaan Islam*, 2(1).
- Muhaimin. (2011). *Pemikiran dan aktualisasi pengembangan pendidikan Islam*. Rajawali Pers. <https://books.google.co.id/books?id=2edAtwAACAAJ>
- Naess, A. (2008). The shallow and the deep, long-range ecology movement. A summary. *Inquiry*, 16(1). <https://doi.org/https://doi.org/10.1080/00201747308601682>
- Naşr, Ḥusain. (1996). *Religion & The Order of Nature* (1st ed.). Oxford University Press. <https://traditionalhikma.com/wp-content/uploads/2015/02/Religion-and-the-Order-of-Nature.pdf>
- Nurochman, Ali, M., & Hadi, N. (2026). Implementasi Pendidikan Ekoteologi Melalui Habituaasi di Madrasah Ibtidaiyyah. *Action Research Journal Indonesia (ARJI)*, 8(1), 205–216.
- Orr, D. W. (1991). *Ecological Literacy: Education and the Transition to a Postmodern World*. State University of New York Press. <https://books.google.co.id/books?id=lQRnIlKYm7wC>
- Piaget, J. (1964). Cognitive Development in Children: Development and Learning. *Journal of Research in Science Teaching*, 2, 176–186. <https://doi.org/http://dx.doi.org/10.1002/tea.3660020306>
- Rahayu, P. & Supriyanti. (2026). The Role of Islamic Education in Building Environmental Awareness (Eco-Theology). *JISEI: Journal of Islamic Studies and Educational Innovation*, 2(1), 526–536.
- Sobel, D. (with Orion Society). (2004). *Place-based Education: Connecting Classrooms & Communities* (2 Ed). Orion Society. <https://books.google.co.id/books?id=jm1xAAAACAAJ>
- Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*, 29(3), 309–317. <https://doi.org/https://doi.org/10.1016/j.jenvp.2008.10.004>
-

-
- Sterling, S. (Ed.). (2024). Transformative learning and sustainability: Sketching the conceptual ground (2011). In *Learning and Sustainability in Dangerous Times: The Stephen Sterling Reader* (pp. 149–162). Agenda Publishing. Cambridge Core. <https://doi.org/10.1017/9781788216920.011>
- Vella, N. K. S., & Ahmad Rizal, D. (2024). Ekoteologi dalam Pemikiran Seyyed Hossein Nasr dan Relasi Agama-Masyarakat. *Al-I'timad: Jurnal Dakwah dan Pengembangan Masyarakat Islam*, 2(2), 155–170. <https://doi.org/10.35878/alitimad.v2i2.1320>
- Weiss, E. B. (1989). *In fairness to future generations: International law, common patrimony, and intergenerational equity*. Transnational Publishers.
- White, L. (1967). The Historical Roots of Our Ecologic Crisis. *Science*, 155(3767), 1203–1207. <https://doi.org/10.1126/science.155.3767.1203>
- WWF. (2022). *Living planet report: Building a nature-positive society*. CBS Library.
- Zed, M. (2008). *Metode Penelitian Kepustakaan*. Yayasan Pustaka Obor Indonesia. <https://books.google.co.id/books?id=zG9sDAAAQBAJ>

Conflict of Interest Statement: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be constructed as a potential conflict of interest.

