



Eco-Theology-Based Deep Learning as a Paradigm for Environmentally Conscious Islamic Religious Education Learning

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ABSTRACT

The The escalating global environmental crisis reflected in climate change, ecological degradation, and declining environmental awareness poses serious challenges for educational institutions, including Islamic Religious Education. This study examines the integration of eco-theology-based deep learning as a transformative pedagogical paradigm for cultivating environmental consciousness within Islamic Religious Education. The primary issue addressed is the limited integration of ecological values in prevailing instructional practices, which tend to prioritize cognitive achievement while insufficiently fostering ethical awareness and practical responsibility toward environmental stewardship. This research employs a qualitative descriptive approach through systematic literature review and conceptual analysis of educational theories, Islamic teachings, and eco-theological perspectives. The study formulates an integrative instructional framework that synthesizes deep learning principles such as critical inquiry, reflective engagement, collaborative learning, and experiential activities with Islamic environmental ethics grounded in the concepts of *khalīfah*, *amānah*, *mīzān*, avoidance of *fasād*, and *wasatiyyah*. The findings indicate that eco-theology-based deep learning promotes holistic student development encompassing cognitive understanding, affective awareness, and behavioral commitment to environmental care. Learners develop an enhanced perception of their role as *khalīfah* (stewards of the Earth), integrating spiritual consciousness, moral responsibility, and ecological literacy within real-life practices. The study concludes that eco-theology-based deep learning offers a viable and transformative model for reorienting Islamic Religious Education toward sustainability, character formation, and active engagement in addressing contemporary environmental challenges.

Keywords: eco-theology, deep learning, environmental awareness, ecological ethics

INTRODUCTION

The global environmental crisis has reached an alarming stage, characterized by climate change, ecosystem degradation, biodiversity loss, and escalating ecological disasters. These phenomena are not merely scientific or economic concerns but also ethical and spiritual challenges that demand a holistic response across all sectors of society, including education. Educational institutions hold a strategic responsibility not only to transmit knowledge but also to cultivate values, attitudes, and behaviors that foster environmental stewardship [1], [2]. Within this context, Islamic Religious Education plays a vital role in shaping learners' moral consciousness, spiritual sensitivity, and ethical commitment to caring for the natural world.

Islamic teachings emphasize the harmonious relationship between humans, nature, and the Creator. The Qur'an positions humanity as *khalīfah fī al-ard* (stewards of the Earth) entrusted with maintaining ecological balance (*mīzān*) and preventing environmental destruction (*fasād*). Numerous Prophetic traditions reinforce this mandate through principles of

moderation, compassion for living beings, and responsible natural resource management. Despite this strong theological foundation, the integration of environmental ethics into learning practices within Islamic Religious Education remains limited. Instruction commonly prioritizes doctrinal understanding and ritual correctness, while experiential engagement with ecological challenges often remains marginal [3], [4], [5], [6].

Contemporary educational discourse underscores the importance of *deep learning* as a pedagogical paradigm that moves beyond surface memorization toward critical inquiry, reflective understanding, contextual reasoning, and the application of knowledge to real-life problems [7], [8]. Deep learning emphasizes student-centered learning, interdisciplinary integration, experiential engagement, and metacognitive reflection—approaches that correspond closely with the objectives of eco-theological education [9], [10]. The synergy between deep learning pedagogy and eco-theology offers a transformative framework capable of internalizing

environmental values as lived ethical commitments rather than abstract moral doctrines [11], [12], [13].

Several recent studies have addressed the intersection between environmental consciousness and Islamic education. Karman, Anwar, and Hakim examined Qur'anic learning based on eco-theological perspectives in pesantren contexts, demonstrating that integrating environmental themes into Qur'anic instruction significantly strengthened students' ecological awareness and stewardship attitudes [14]. Although their findings underscore the effectiveness of content-based approaches, the study still centers primarily on curricular enrichment rather than elaborating pedagogical models that foster deep and transformative learning experiences.

In a broader theoretical exploration, Qosim, Jailani, and A'yun proposed the eco-critical paradigm within Islamic Religious Education, advocating for critical engagement with environmental degradation through reinterpretation of Islamic texts and socio-religious practices [15]. Their work highlights the necessity of embedding environmental perspectives in religious learning. However, it remains largely conceptual and does not delineate concrete learner-centered instructional strategies capable of cultivating sustained ethical and behavioral change.

Furthermore, Taisir, Fitriani, and Quddus investigated the integration of environmental sustainability into Islamic Religious Education curriculum development [16]. Their research confirms the importance of incorporating sustainability goals across learning outcomes, teaching materials, and assessment frameworks. Yet, the study predominantly addresses curriculum-level design and policy aspects, offering limited insight into classroom pedagogies that operationalize sustainability through transformative learning processes.

Building upon these prior studies, the present research addresses a critical gap by integrating eco-theological principles with deep learning pedagogy as a comprehensive instructional paradigm for Islamic Religious Education. Rather than focusing solely on curriculum content or theoretical perspectives, this study emphasizes the nature of learning processes that engage students cognitively, ethically, spiritually, and experientially in addressing ecological challenges. By conceptualizing eco-theology-based deep learning, this research proposes a pedagogical model that promotes reflective inquiry, faith-based ethical reasoning, and active participation in environmental problem-solving.

Accordingly, this study seeks to explore how eco-theology-based deep learning functions as a paradigm for environmentally conscious Islamic Religious Education learning. It aims to construct an integrative educational framework that harmonizes Islamic environmental ethics with deep learning methodologies to cultivate spiritual awareness, moral responsibility, and ecological literacy among learners. Ultimately, this research contributes to the advancement of sustainable, values-oriented educational practices capable of preparing students to fulfill their role as *khalifah* in

preserving the integrity of the natural environment for present and future generations.

RESEARCH METHODS

This study employs a qualitative descriptive research design with a conceptual-analytical approach aimed at developing and articulating an eco-theology-based deep learning paradigm within Islamic Religious Education [17], [18]. The research focuses on exploring, interpreting, and synthesizing theoretical constructs from three main domains: Islamic eco-theology, deep learning pedagogy, and contemporary Islamic religious education studies. Data were gathered through an extensive literature review of classical Islamic sources, including Qur'anic exegesis (*tafsir*), prophetic traditions (*hadith*), and selected works of Islamic jurisprudence and ethics, as well as contemporary academic articles, books, and research reports addressing environmental ethics, sustainability education, and deep learning methodologies. Peer-reviewed empirical studies relevant to environmental education in Islamic contexts were also examined to identify emerging themes, best practices, and conceptual gaps [19], [20], [21].

The analytical process involved systematic content analysis and thematic coding to categorize key concepts, values, pedagogical principles, and methodological strategies across the collected sources [22], [23], [24]. These themes were then comparatively interpreted to uncover points of convergence between Islamic ecological ethics—such as stewardship (*khilāfah*), balance (*mizān*), trust (*amānah*), prohibition of environmental destruction (*fasād*), and moderation (*wasatiyyah*)—and the core characteristics of deep learning, including critical inquiry, reflective thinking, student-centered engagement, experiential learning, and problem-based activities. Through iterative synthesis, the study constructed an integrative pedagogical framework that aligns theological values with learning processes designed to foster meaningful understanding and transformative environmental action [25], [26], [27].

To ensure the credibility of the findings, triangulation was applied across multiple data sources and disciplinary perspectives, integrating religious texts, educational theory, and sustainability scholarship. Interpretive validation was further strengthened through peer debriefing with scholars in Islamic education and educational methodology to refine thematic categorizations and ensure analytical consistency [28], [29], [30]. The results of this methodological process are presented narratively to offer a coherent conceptual model illustrating how eco-theological principles can be operationalized through deep learning strategies within Islamic Religious Education classrooms [31].

Ultimately, this methodological approach allows the study to move beyond descriptive textual synthesis toward a conceptual reconstruction of an instructional paradigm that is both theologically grounded and pedagogically robust, providing practical implications for curriculum design, teaching strategies, and learning

assessment oriented toward environmental consciousness and moral character formation.

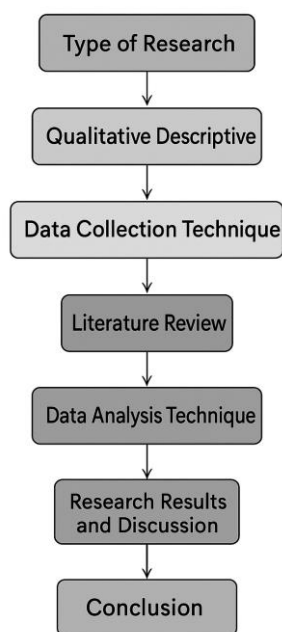


Figure 1. Research Flowchart of Eco-Theology-Based Deep Learning Paradigm in Islamic Religious Education

Figure 1 illustrates the systematic stages of this study, beginning with the identification of a qualitative descriptive research design, followed by data collection through literature review of classical Islamic sources and contemporary academic studies. The data were then analyzed using content and thematic analysis techniques to synthesize eco-theological principles with deep learning pedagogy. The results of the analysis informed the discussion on the development of an integrative instructional paradigm, culminating in conclusions that propose eco-theology-based deep learning as a transformative model for fostering environmental consciousness within Islamic Religious Education.

RESULT AND DISCUSSION

Building upon the qualitative analysis of Islamic eco-theological literature, deep learning pedagogical frameworks, and contemporary studies on environmental education, this section presents the synthesized findings of the research. The results are organized thematically to illustrate how eco-theological principles and deep learning strategies converge into an integrative educational paradigm within Islamic Religious Education. Each sub-theme reflects a key dimension of this paradigm and is followed by analytical discussion that interprets the findings in relation to existing scholarly perspectives and educational practices. To further enrich the analysis, each theme is also complemented by the researcher's reflective commentary highlighting practical implications, strengths, and potential challenges in implementing this pedagogical model. Through this structure, the findings are not only described but critically examined to provide a comprehensive understanding of eco-

theology-based deep learning as a transformative approach to environmentally conscious religious education.

1. Integration of Islamic Eco-Theological Values in Learning Content

The integration of eco-theological values into the learning content of Islamic Religious Education is manifested through the systematic embedding of concepts such as *khilāfah* (stewardship), *amānah* (moral responsibility), *mīzān* (cosmic balance), the prohibition of *fasād* (environmental destruction), and *wasatiyyah* (moderation). These theological constructs were not merely presented as doctrinal knowledge but were contextualized with real environmental issues to demonstrate their contemporary relevance. Qur'anic verses and prophetic traditions discussing nature, balance, water conservation, tree planting, and moderation in consumption were linked to topics such as climate change, waste management, biodiversity loss, and pollution. Through this integration, students began to perceive environmental responsibility as an inseparable component of religious devotion rather than as a secular or optional concern [32], [33].

The researcher views this integration as a crucial foundation for transforming environmental education in Islamic contexts. Eco-theological embedding prevents the fragmentation between religious instruction and environmental ethics. However, the effectiveness of this integration depends on educators' interpretive competence; without sufficient mastery of eco-theological discourse, learning risks becoming symbolic and repetitive rather than transformative.

2. Student-Centered Inquiry and Reflective Theological Learning

Learning activities shifted from teacher-centered lectures toward inquiry-based and reflective processes. Students were encouraged to engage critically with theological texts and environmental realities through guided discussions, problem analysis, reflective journaling, and collaborative interpretation sessions. By questioning how Islamic ethics respond to local environmental crises, learners developed deeper cognitive connections between belief and social responsibility. This approach facilitated moral reasoning and self-reflection, enabling students to internalize environmental stewardship as a personal ethical stance rooted in faith rather than merely an institutional mandate [34], [35].

According to the researcher, student-centered inquiry is central to deep learning and highly compatible with eco-theological aims. Reflection allows students to move beyond scriptural memorization toward personal ethical appropriation. Yet this method requires teachers to function as facilitators rather than authoritative transmitters of knowledge—a transition that may present challenges in conventional classroom cultures.

3. Experiential and Problem-Based Ecological Activities

Experiential learning became a key mechanism linking theological understanding with practical action. Students participated in environmental projects such as clean-up programs, recycling initiatives, conservation campaigns, and tree-planting activities. These tasks positioned learners as active stewards of their environments while fostering teamwork and social responsibility [36], [37], [38]. Real-life ecological engagement strengthened the spiritual dimension of learning by framing environmental care as a form of *ʿibādah* (worship) and ethical obedience. Experiential activities thus reinforced the internal consistency between faith teachings and daily behavior [39], [40].

The researcher regards experiential learning as the most impactful element of this paradigm because it translates theological values into concrete behavior. However, its sustainability depends on institutional commitment and community collaboration. Without structured support, experiential activities risk becoming occasional symbolic events rather than sustained educational practices.

4. Holistic Learning Outcomes: Cognitive, Affective, and Behavioral Development

The eco-theology-based deep learning paradigm generated outcomes across cognitive, affective, and behavioral domains. Cognitively, students demonstrated improved understanding of Islamic environmental ethics and demonstrated enhanced critical thinking in relating faith teachings to ecological problems. Affectively, learners exhibited strengthened empathy toward nature, increased environmental sensitivity, and heightened moral awareness [4], [41], [42], [43]. Behaviorally, they practiced observable ecological actions, including waste reduction, energy conservation, and participation in environmental community initiatives. These multidimensional achievements confirm that the paradigm supports moral education that cultivates knowledge, emotional engagement, and ethical conduct simultaneously [44], [45].

From the researcher's perspective, the holistic nature of these outcomes validates the effectiveness of deep learning within ethical education frameworks. Genuine transformation occurs when learning touches all three domains. However, sustained behavioral change requires consistent reinforcement at home, school, and community levels. Classroom-based learning alone may not suffice to maintain long-term habitual environmental responsibility.

5. Transformation of Religious Learning Orientation

The eco-theology-based deep learning paradigm contributed to a fundamental shift in the orientation of Islamic Religious Education—from the emphasis on doctrinal transmission toward

transformative character education. Learning was reframed as a process of moral awakening and social engagement rather than merely content mastery. Students increasingly viewed religious practice as inseparable from ecological responsibility, thereby positioning faith as an ethical force capable of responding to contemporary environmental challenges [46], [47], [48].

The researcher considers this transformation the most significant outcome of the study. It demonstrates the potential of Islamic Religious Education to function as a driver of social change rather than remaining confined to ritualistic instruction. Nevertheless, realizing this transformation on a broader scale will require curriculum reform, teacher training, and institutional policy support. Without systemic alignment, the paradigm risks remaining confined to limited experimental contexts rather than evolving into mainstream educational practice.

CONCLUSION

This study concludes that eco-theology-based deep learning constitutes a transformative pedagogical paradigm for strengthening environmental consciousness within Islamic Religious Education. The integration of Islamic ecological ethics—particularly the principles of *khilāfah* (stewardship), *amānah* (responsibility), *mīzān* (balance), avoidance of *fasād* (destruction), and *wasatiyyah* (moderation)—with the core components of deep learning—namely inquiry-based learning, reflective dialogue, experiential engagement, and problem-solving activities—creates a holistic instructional framework that connects faith, knowledge, moral sensitivity, and ethical action.

The findings demonstrate that this paradigm contributes to multidimensional learning outcomes encompassing cognitive understanding of environmental teachings within Islam, affective development of ecological empathy and spiritual sensitivity, and behavioral transformation expressed through environmentally responsible practices. Eco-theology-based deep learning also reorients Islamic Religious Education from predominantly doctrinal instruction toward transformative character formation, positioning religious education as an active agent in addressing contemporary environmental challenges through faith-based stewardship.

Ultimately, this study affirms that eco-theology-based deep learning is not merely an integrative teaching model but a moral-educational approach capable of nurturing learners as environmentally conscious stewards who embody Islamic values in safeguarding the natural world for the sustainability of present and future generations.

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REFERENCES

- [1] T. Taufikin and Y. YUSDANI, 'Ecological Literacy in Islamic Education: Strengthening Environmental Awareness Through Tauhid-Based Learning', *mdn*, vol. 29, no. 1, p. 187, July 2025, doi: 10.29300/madania.v29i1.7741.
- [2] E. Asmanto, 'Revitalisasi Spiritualitas Ekologi Perspektif Pendidikan Islam', *TSAQAFAH*, vol. 11, no. 2, p. 333, Nov. 2015, doi: 10.21111/tsaqafah.v11i2.272.
- [3] H. Hermawansyah, 'Eco-Pesantren-Based Islamic Education Management', *ft*, vol. 16, no. 1, pp. 102–114, June 2025, doi: 10.47625/fitrah.v16i1.982.
- [4] W. Binti Abdul Rahman, 'Al Qur'an dan Wawasan Ekologi Perspektif Maqashid Syari'ah', *TSYR*, vol. 2, no. 1, pp. 119–139, Jan. 2023, doi: 10.53038/tsyr.v2i1.71.
- [5] F. H. Mukhlis, 'PARADIGMA EKOLOGIS DALAM TAFSIR AL-QUR'AN: Kajian Tematik-Kontekstual', *qof*, vol. 6, no. 1, pp. 89–108, June 2022, doi: 10.30762/qof.v6i1.396.
- [6] Y. Al-Qaradawi, *Ri'ayat al-Bi'ah fi Shari'at al-Islam*. Cairo: Dar al-Shuruq, 2001.
- [7] N. Shlezinger and Y. C. Eldar, 'Model-Based Deep Learning', 2023, *arXiv*. doi: 10.48550/ARXIV.2306.04469.
- [8] G. Mei, 'Research on Big Data Artificial Intelligence Technology Based on Deep Learning', in *Proceedings of the World Conference on Intelligent and 3-D Technologies (WC3DT 2022)*, vol. 323, R. Kountchev, K. Nakamatsu, W. Wang, and R. Kountcheva, Eds, in Smart Innovation, Systems and Technologies, vol. 323. , Singapore: Springer Nature Singapore, 2023, pp. 243–250. doi: 10.1007/978-981-19-7184-6_21.
- [9] J. Zhou, F. Ran, G. Li, J. Peng, K. Li, and Z. Wang, 'Classroom Learning Status Assessment Based on Deep Learning', *Mathematical Problems in Engineering*, vol. 2022, pp. 1–9, Apr. 2022, doi: 10.1155/2022/7049458.
- [10] Ö. F. Nasip and K. Zengin, 'Deep Learning Based Bacteria Classification', in *2018 2nd International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT)*, Ankara, Turkey: IEEE, Oct. 2018, pp. 1–5. doi: 10.1109/ISMSIT.2018.8566685.
- [11] N. Nasirin, T. A. Julianto, M. Hidayat, and U. Nasri, 'A Critical Discourse Analysis of Qur'anic Exegesis: Bhinneka Tunggal Ika (Unity in Diversity)', *Tanzil j. stud. Al-Quran*, vol. 8, no. 1, pp. 1–24, Oct. 2025, doi: 10.20871/tjsq.v8i1.457.
- [12] U. Nasri *et al.*, 'Integrating classical islamic texts and digital technology revitalization of kutub al-turats in ma'had dār al-qur'ān wa al-ḥadīth NW Anjani Lombok', *Al-MISBAH (Jurnal Islamic Studies)*, vol. 13, no. 1, pp. 45–57, 2025, doi: <https://doi.org/10.26555/almisbah.v13i1.13029>.
- [13] M. Thohri, F. Fahrurrozi, L. F. Haryadi, and U. Nasri, 'Integrating Thurats in Brunei's curriculum: Strengthening Islamic education', in *Towards Resilient Societies: The Synergy of Religion, Education, Health, Science, and Technology*, 1st edn, London: CRC Press, 2025, pp. 452–457. doi: 10.1201/9781003645542-72.
- [14] K. Karman, R. Anwar, and L. Hakim, 'The Qur'anic Learning Based on Islamic Eco-Theology at Pesantren', *Jurn. Pend. Islam*, vol. 9, no. 2, pp. 169–186, Dec. 2023, doi: 10.15575/jpi.v9i2.24933.
- [15] N. Qosim, Jailani, and N. A'yun, 'Paradigma Ekokritik dalam Pendidikan Agama Islam', *alibrah*, vol. 10, no. 1, pp. 125–144, July 2025, doi: 10.61815/alibrah.v10i1.658.
- [16] M. T. Taisir, Mohamad Iwan Fitriani, and Abdul Quddus, 'Integrating Environmental Sustainability into Islamic Religious Education Curriculum Development', *jpk*, vol. 20, no. 2, pp. 157–169, Dec. 2024, doi: 10.20414/jpk.v20i2.11777.
- [17] J. W. Creswell and J. D. Creswell, *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publications. Thousand Oaks, CA: Sage Publications., 2014.
- [18] P. Mihas, 'Qualitative research methods: approaches to qualitative data analysis', in *International Encyclopedia of Education (Fourth Edition)*, Elsevier, 2023, pp. 302–313. doi: 10.1016/B978-0-12-818630-5.11029-2.
- [19] M. Zed, *Metode Penelitian Kepustakaan*. Jakarta: Yayasan Obor Indonesia, 2008.
- [20] M. N. Adlini, A. H. Dinda, S. Yulinda, O. Chotimah, and S. J. Merliyana, 'Metode Penelitian Kualitatif Studi Pustaka', *edumaspuljr*, vol. 6, no. 1, pp. 974–980, Mar. 2022, doi: 10.33487/edumaspul.v6i1.3394.
- [21] A. N. Yasmin, I. N. Fadilah, and F. Mutia, 'Reference Services in the library: literature review', *Pedagogi*, vol. 24, no. 2, pp. 150–158, Nov. 2024, doi: 10.24036/pedagogi.v24i2.2051.
- [22] K. Krippendorff, *Content Analysis: An Introduction to Its Methodology*, 4th ed. Thousand Oaks, CA: AGE Publications, 2018.
- [23] D. A. Mackey, 'Content Analysis', in *The Encyclopedia of Criminology and Criminal Justice*, 1st edn, J. S. Albanese, Ed., Wiley, 2013, pp. 1–5. doi: 10.1002/9781118517383.wbecj002.
- [24] J. Baxter, 'Content Analysis', in *International Encyclopedia of Human Geography*, Elsevier, 2009, pp. 275–280. doi: 10.1016/B978-008044910-4.00415-6.
- [25] K. A. Neuendorf and A. Kumar, 'Content Analysis', in *The International Encyclopedia of Political Communication*, 1st edn, G. Mazzoleni, Ed., Wiley, 2016, pp. 1–10. doi: 10.1002/9781118541555.wbiepc065.
- [26] L. L. Price, 'Content Analysis', in *Wiley International Encyclopedia of Marketing*, 1st edn, J. Sheth and N.

- Malhotra, Eds, Wiley, 2010. doi: 10.1002/9781444316568.wiem02062.
- [27] S. Tunison, 'Content Analysis', in *Varieties of Qualitative Research Methods*, J. M. Okoko, S. Tunison, and K. D. Walker, Eds, in Springer Texts in Education. , Cham: Springer International Publishing, 2023, pp. 85–90. doi: 10.1007/978-3-031-04394-9_14.
- [28] B. J. Breitmayer, L. Ayres, and K. A. Knafl, 'Triangulation in Qualitative Research: Evaluation of Completeness and Confirmation Purposes', *Image: the Journal of Nursing Scholarship*, vol. 25, no. 3, pp. 237–243, Sept. 1993, doi: 10.1111/j.1547-5069.1993.tb00788.x.
- [29] M. W. I. Wiyanda Vera Nurfajriani, 'Triangulasi Data Dalam Analisis Data Kualitatif', Sept. 2024, doi: 10.5281/ZENODO.13929272.
- [30] S. F. Turner, L. B. Cardinal, and R. M. Burton, 'Research Design for Mixed Methods: A Triangulation-based Framework and Roadmap', *Organizational Research Methods*, vol. 20, no. 2, pp. 243–267, Apr. 2017, doi: 10.1177/1094428115610808.
- [31] M. P. Martin and M. E. M. Noble, 'Exiting the tunnel of uncertainty: crystal soak to validated hit', *Acta Crystallogr D Struct Biol*, vol. 78, no. 11, pp. 1294–1302, Nov. 2022, doi: 10.1107/S2059798322009986.
- [32] G. L. Chamberlain, 'Ecology and Religious Education', *Religious Education*, vol. 95, no. 2, pp. 134–150, Mar. 2000, doi: 10.1080/0034408000950203.
- [33] J. Tomlinson, 'Ecological religious education: new possibilities for educational practice', *j. relig. educ.*, vol. 67, no. 3, pp. 185–202, Oct. 2019, doi: 10.1007/s40839-019-00087-1.
- [34] M. A. Romdloni, F. K. Fitriyah, M. S. Djazilan, and M. Taufiq, 'Eco-Theology; Habits and Lifestyle of Santri in Indonesian Islamic Boarding Schools', *E3S Web of Conf.*, vol. 482, p. 04030, 2024, doi: 10.1051/e3sconf/202448204030.
- [35] J. Lewis, 'Cultivating Empathy for Earth: Integrating Empathy into Ecological Religious Education', *Religious Education*, vol. 120, no. 2, pp. 146–160, Mar. 2025, doi: 10.1080/00344087.2024.2448389.
- [36] E. Muliadi and U. Nasri, 'Future-Oriented Education: The Contribution of Educational Philosophy in Facing Global Challenges', *JIPP*, vol. 8, no. 4, pp. 2420–2427, Nov. 2023, doi: 10.29303/jipp.v8i4.1807.
- [37] U. Nasri, 'Rethinking Religious Moderation: Revitalisasi Konsep Manusia Perspektif Filsafat Pendidikan Islam dalam Konteks Multikultural', *JIPP*, vol. 9, no. 1, pp. 213–220, Jan. 2024, doi: 10.29303/jipp.v9i1.1655.
- [38] U. Nasri and M. Tabibuddin, 'Paradigma Moderasi Beragama: Revitalisasi Fungsi Pendidikan Islam dalam Konteks Multikultural Perspektif Pemikiran Imam al-Ghazali', *JIPP*, vol. 8, no. 4, pp. 1959–1966, Oct. 2023, doi: 10.29303/jipp.v8i4.1633.
- [39] N. Mohamed, 'Islamic Education, Eco-ethics and Community', *Stud Philos Educ*, vol. 33, no. 3, pp. 315–328, May 2014, doi: 10.1007/s11217-013-9387-y.
- [40] M. K. Kinoti, 'Reimagining Eco-theology for Sustainable Development', *theijhss*, Nov. 2023, doi: 10.24940/theijhss/2023/v11/i8/HS2308-029.
- [41] S. Nasihin, A. A. Hakim, A. Haris, A. H. Rasyidi, and U. Nasri, 'Dulang Penamat in Socio-Religious Practice: Integration of Islamic Religious Education, Multicultural and Local Democracy In The Sasak Community', *Edukasi Islami: Jurnal Pendidikan Islam*, vol. 13, no. 1, pp. 223–240, 2024, doi: 10.30868/ei.v13i01.8363.
- [42] Ach. Syaiful Islam, Suhermanto Ja'far, and Ahmad Sunawari Long, 'Islam and Eco-Theology: Perspectives and Strategies of Muhammadiyah in Addressing the Environmental Crisis', *jf*, vol. 9, no. 2, pp. 170–181, Aug. 2024, doi: 10.25217/jf.v9i2.4821.
- [43] S. A. Hidayah and H. Aulia, 'Wawasan Ekologi Dalam Al-quran: Kajian tematis ayat-ayat biah', *AQWAL*, vol. 3, no. 1, pp. 42–54, June 2022, doi: 10.28918/aqwal.v3i1.5324.
- [44] L. Kearns, 'The Context of Eco-theology', in *The Blackwell Companion to Modern Theology*, G. Jones, Ed., Oxford, UK: Blackwell Publishing Ltd, 2007, pp. 466–484. doi: 10.1002/9780470996768.ch29.
- [45] K. Karman, R. Anwar, and L. Hakim, 'The Qur'anic Learning Based on Islamic Eco-Theology at Pesantren', *Jurn. Pend. Islam*, vol. 9, no. 2, pp. 169–186, Dec. 2023, doi: 10.15575/jpi.v9i2.24933.
- [46] A. Quddus, 'Ecotheology Islam: Teologi Konstruktif Atasi Krisis Lingkungan', *ujis*, vol. 16, no. 2, pp. 311–346, Nov. 2017, doi: 10.20414/ujis.v16i2.181.
- [47] M. M. Murad, 'Islamic Environmental Stewardship: Nature and Science in the Light of Islamic Philosophy', 2010, doi: 10.7916/D8GQ6X2Z.
- [48] A. Susanti, 'Konservasi Air Terpadu: Kerangka Holistik Berbasis Ekoteologi Islam, Kearifan Lokal, dan Sains untuk Keberlanjutan Lingkungan', *Cendekia: Jurnal Ilmu Pengetahuan*, vol. 5, no. 3, pp. 1326–1335, Aug. 2025, doi: 10.51878/cendekia.v5i3.6616.