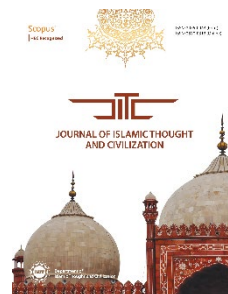
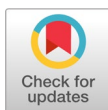


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Eco-Empathy in a Love-Based Curriculum from the Perspective of the Qur'ān

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Abstract

The debate between human and non-human dualism reinforces the anthropocentric bias where non-humans are not considered to have morals, which creates a psychological distance between humans and the natural world. This contributes to the attitude of instrumentalization of the world and its natural resources. This is contrary to the Qur'ān which places nature as a partner of humans in carrying out the function of humans as caliphs or as representatives of God in managing and maintaining environmental sustainability. On the other hand, educational curricula that integrate environmental conservation studies based on divinity are still very rarely found in their ideal format. Using qualitative methods and maudui interpretation methods, this study reveals that eco-empathy in a love-based curriculum describes a form of mutualistic symbiosis between humans and the natural world, to carry out their respective creative functions wrapped in respect, compassion, conservation, and natural resource management as a form of human caliphate responsibility. Eco-empathy can be seen from the teachings of the Qur'ān, including: *istimar* /prospering the Earth, *muḥsin*/behavior of doing better than what is received, *'ibad al-raḥman*/servant of Allah who emphasizes compassion in interactions, *ishlah*/repairing after environmental damage occurs, *thaharah*/maintaining environmental cleanliness, *mata*/happiness for humans and natural resources that are cared for, *shabr*/patience in managing and using natural resources with in-depth environmental impact analysis. These findings contribute as an effort to build environmental awareness and empathy in students at schools and can be a reference for the general public as well.

Keyword: al-Qur'ān, eco-empathy, environment conservation, love-based curriculum

Introduction

The human-nonhuman dualism reinforces the anthropocentric bias in which nonhumans are not considered moral kin. This creates a psychological distance between humans and the natural world, and contributes to the attitude of instrumentalization of the world and its natural resources.¹

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¹Val Plumwood, "The Politics of Reason: Towards a Feminist Logic," *Australasian Journal of Philosophy* (1993): 71, 436–462, <https://doi.org/10.1080/00048409312345432> ; Elise Talgorn and Helle Ullerup, "Invoking 'Empathy for the Planet' through Participatory Ecological Storytelling: From Human-Centered to Planet-Centered Design," *Sustainability* 15, no. 10 (2023): Article e7794, <https://doi.org/10.3390/su15107794>.

Instead, it is essential to develop the ability to think flexibly across the human-nonhuman boundary to recognize the ethical needs of both communities.² In post-humanist studies, the boundaries between the human and the nonhuman become blurred.³ Humans need to appreciate the “realm of otherness” while avoiding sharp demarcations. To quote ecological storyteller Anthony Nanson, there is a way to consider “nature as a whole,” to “reunite the individual and the collective, with the complexity that comprises the intricacies of the senses, behaviors, and relationships of individual entities within the Earth’s ecosystems.”⁴

Understanding interconnectedness helps humans feel a sense of belonging and importance within the web of life, encouraging relational thinking.⁵ The recognition and valuation of relationships among different entities are also fundamental to systems thinking. From this perspective, scientists and policymakers must understand that actors do not operate in isolation: their behaviours, emotions, and experiences are continuously shaped by—and, in turn, shape—the social, institutional, and environmental conditions within the system. Agency must therefore be understood as both individual and collective, emerging through the interactions and interdependencies among multiple actors. Kim Pong-Tam’s research serves as the inspiration for this paper. Kim Pong-Tam conducted the necessary investigation by testing four propositions concerning a new construct—dispositional empathy with nature (DEN), which refers to the dispositional tendency to understand and share emotional experiences toward nature. In five studies involving 817 participants (including college students and working adults from two societies), DEN strongly and uniquely predicted conservation behavior (Proposition 1). Females, respondents who felt close to nature, and participants who viewed nature as a sentient being demonstrated stronger DEN (Propositions 2–4).⁶

Consistent with the findings of Wang et al., who demonstrated that eco-empathy strengthens environmental concern, the present study suggests that cultivating empathy toward nature can promote pro-environmental behaviour and deepen environmental commitment. Wang et al. found that ecological responsibility and behavior were positively influenced by empathy for nature and developed a causal model between empathy for nature and pro-environmental behavior. Wang et al. further investigated the relationships among self-construal (interdependent or independent) empathy for nature (present or absent), and pro-environmental behavior.⁷

The authors of this paper aim to criticize the concept of eco-empathy in the view of Young et al., where, according to them, eco-empathy, at least in the most basic and automatic form of emotional “resonance,” seems to be easier to achieve if the target has physical and social characteristics that

²Heidi Toivonen, and Marco Caracciolo, “Storytalk and Complex Constructions of Nonhuman Agency: An Interview-Based Investigation,” *Narrative Inquiry* 33, no. 1 (2023): 61–90, <https://doi.org/10.1075/ni.21062.toi>.

³Donna J. Haraway, *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991); Laura Forlano, “Posthumanism and Design,” *She Ji: The Journal of Design, Economics, and Innovation* 3, no. 1 (2017): 16–29, <https://doi.org/10.1016/j.sheji.2017.08.001>.

⁴Anthony Nanson, *Storytelling and Ecology: Empathy, Enchantment and Emergence in the Use of Oral Narratives* (London, UK: Bloomsbury Publishing, 2021).

⁵Alida Gersie, Anthony Nanson, and Edward L. Schieffelin, eds., *Storytelling for a Greener World: Environment, Community and Story-Based Learning* (Stroud, UK: Hawthorn Press, 2014), 5.

⁶Kim Pong-Tam, “Dispositional Empathy with Nature,” *Journal on Environmental Psychology* 35, (2013), 92–104, <https://doi.org/10.1016/j.jenvp.2013.05.004>.

⁷Litong Wang, Guanghua Sheng, Shengxiang She, and Jiaqi Xu, “Impact of Empathy with Nature on Pro-Environmental Behaviour,” *International Journal of Consumer Studies* 47, no. 2 (2023): 652–668, <https://doi.org/10.1111/ijcs.12856>.

resemble humans.⁸ This is, of course, contrary to the concept of brotherhood among creatures (*ukhuwah makhluqiyah*) as described in Q. al-An'ām 06: 38. Bannet also points out that it is much more difficult for humans to empathize with invertebrates or plants, for example, which have very different bodies and ways of life. The main argument developed in Bannet's article is that inviting people to create new metaphors for non-human life forms can encourage them to imaginatively embody less-appealing forms of life, thereby fostering empathy that crosses conceptual boundaries and is both emotional and critical.⁹

In the authors' view, empathy for non-human life does not require metaphorical representation. Every creature of God has its own existence and possesses value as part of divine creation. This understanding is reflected in Sūrat al-Fātiḥah, where God is described as the “Lord of all worlds,” the “Most Compassionate,” and the “Most Merciful” (Q. 1:1–3). The universal scope of divine mercy is further illustrated in a Prophetic ḥadīth stating that God divided mercy into one hundred parts and sent one part to Earth. Through this single portion of mercy, creatures show compassion toward one another, even a mare lifts her hoof for fear of harming her foal. This theological emphasis on mercy and care provides an ethical foundation for contemporary educational efforts to cultivate ecological responsibility. In the Indonesian context, the Implementation Guide for the Love-Based Curriculum in Madrasahs situates these values within the Golden Indonesia 2045 vision. The Guide identifies environmental sustainability, alongside economic development, equitable welfare, social justice, technological advancement, and improved quality of life—as a national priority. Education is therefore expected not merely to produce academically capable individuals but also to cultivate integrity, compassion, and readiness to confront future challenges. Within this framework, empathy for non-human creation becomes an essential component of forming an environmentally responsible generation capable of contributing to Indonesia's 2045 vision.¹⁰

2. Method

The research in this manuscript uses qualitative methods. Qualitative methods are used to generate descriptive data, which are presented in qualitative form.¹¹ According to Sugiyono, this method is also often referred to as a constructive method, because through it, scattered data can be identified and then organized into a more meaningful and easier-to-understand theme.¹² The data in this study were obtained through library research. Library research is a method that utilizes literature sources to examine the formulated problems.¹³

⁸Ashley Young, Kathayoon A. Khalil, and Jim Wharton, “Empathy for Animals: A Review of the Existing Literature,” *Curator: The Museum Journal* 61, no. 2 (2018): 327–343, <https://doi.org/10.1111/cura.12257>.

⁹Jill Bennett, *Empathic Vision: Affect, Trauma, and Contemporary Art* (Stanford, CA: Stanford University Press, 2005).

¹⁰Direktorat KSKK Madrasah, Direktorat Jenderal Pendidikan Islam, Kementerian Agama Republik Indonesia, *Panduan Implementasi Kurikulum Berbasis Cinta di Madrasah* [Guidelines for Implementing a Love-Based Curriculum in Madrasahs] (Jakarta: Kementerian Agama Republik Indonesia, 2025), accessed August 12, 2025, <https://kemenag.go.id/informasi/panduan-kurikulum-berbasis-cinta>

¹¹Koentjaraningrat, *Metode-Metode Penelitian Masyarakat* [Methods of Social Research], 4th ed. (Jakarta: PT Gramedia, 1981), 6.

¹²Sugiyono, *Metode Penelitian Kombinasi (Mixed Methods)* [Combined Research Methods] (Bandung: Alfabeta, 2017), 13–16.

¹³Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktek* [Research Procedures: A Practical Approach], 9th ed. (Jakarta: Rineka Cipta, 1993), 10–11.

For the interpretation method, the authors use the *maudu'i* interpretation method.¹⁴ This method was chosen because it can be used to explore the concept of eco-empathy in the Qur'an more comprehensively.¹⁵

2.1. Definition and Theoretical Study of Eco-Empathy

Eco-empathy is a combination of two words: ecology and empathy. According to Koesnadi, the word ecology is etymologically derived from the Greek "*oikos*" (household) and "*logos*" (science), and was first introduced into biology by the German biologist Ernst Haeckel. Consequently, "ecology" developed as the science that studies the relationships between organisms and their environment.¹⁶ Ecology literally means the science of living things in their homes/the science of the household of living things.¹⁷

Ecology is also defined as the science that studies the interactions between species in the universe and the effects of those interactions on the environment in which they live. One concern in ecology is studying how species' extinction occurs.¹⁸

From this definition, one of the ecological concerns is how humans can maintain the sustainability of species. This is because, according to Lawrence B. Slobodkin, various species in nature can survive if humans can help maintain their populations and biodiversity through environmental conservation efforts.¹⁹

From the explanations of the meaning of ecology in Eastern and Western scientific traditions, it can be seen that ecology is a science that studies the patterns and effects of interactions among organisms in the ecosystems in which they live and act.

Furthermore, according to Bennett, the word empathy is "a conjunction of affect and critical awareness" that is grounded "not in affinity (feeling for another insofar as we can imagine being that other) but on a feeling for another that entails an encounter with something irreducible and different, often inaccessible."²⁰

¹⁴Abd al-Hayy al-Farmāwī, *al-Bidāyah fī al-Tafsīr al-Mawḍū'ī: Dirāsah Manhajīyyah Mawḍū'īyyah* [Introduction to Thematic Exegesis: A Methodological Thematic Study] (Egypt: Maktabat al-Jumhūriyyah, n.d.), 42–44.

¹⁵Aḥmad Sa'īd al-Kūmī, *al-Tafsīr al-Mawḍū'ī: Dirāsah Naẓariyyah Taṭbīqīyyah* [Thematic Interpretation: A Theoretical and Applied Study] (Cairo: Dār al-Ma'ārif, 1402 AH/1982 CE), 51. In following the procedures of this method, the author draws on several references such as: Ibrāhīm Madkūr, ed., *Mu'jam Alfāz al-Qur'ān al-Karīm* [A Lexicon of the Words of the Noble Qur'an] (Cairo: Majma' al-Lughah al-'Arabiyyah, al-Idārah al-'Āmmah li-l-Mu'jamāt wa-l-ḥyā' al-Turāth, 1988); Aḥmad Ibrāhīm Mahnā, *Tabwīb Āy al-Qur'ān al-Karīm min al-Nāhiyah al-Mawḍū'īyyah* [The Thematic Classification of the Verses of the Noble Qur'an] (Cairo: Dār al-Sha'b, n.d.).

¹⁶Otto Soemarwoto, *Etika Lingkungan Hidup dan Pembangunan* [Environmental Ethics and Development] (Jakarta: Jambatan, 1989), 14; Koesnadi Harjasoemantri, *Hukum Tata Lingkungan* [Environmental Law], 11th ed. (Yogyakarta: Gadjah Mada University Press, 1994), 2; Jauhar Azizy et al., "The Ecology of the Qur'an: Religion-Based Environmental Preservation Efforts," in *Religion, Education, Science and Technology towards a More Inclusive and Sustainable Future*, ed. Maila D. H. Rahiem (London: Routledge, 2024), 73, <https://doi.org/10.1201/9781003322054>.

¹⁷Robert E. Ricklefs, *Ecology* (New York: Chiron Press, 1973), 11.

¹⁸Lawrence B. Slobodkin, *A Citizen's Guide to Ecology* (New York: Oxford University Press, 2003), 3–5.

¹⁹Slobodkin, *Citizen's Guide to Ecology*, 101–140.

²⁰Bennett, *Empathic Vision*, 10.

Empathy, broadly defined, refers to taking another person's perspective and is viewed as a multidimensional phenomenon, encompassing both cognitive and emotional aspects. This concept has been extensively studied in aesthetics, sociology, and psychology. Empathy is understood as a relationship between individuals and other human beings. It is, thus, associated with human-centrism rather than post-anthropocentrism (in which humans are considered equally important as other entities in the universe).²¹

However, it is essential to remember that the term "empathy" originally referred to an emotional connection with non-human entities. The word, a translation of the Greek phrase *empathia*, meaning "passion, emotional state," was coined in 1858 by the German philosopher Rudolf Lotze to describe the aesthetic appreciation and projection of human feelings toward the natural world and inanimate objects.²²

Elise Talgorn and Helle Ullerup define empathy for the planet as a holistic relationship with human and nonhuman stakeholders.²³ The idea of empathy for the planet is found in the field of compassionate conservation. Chelsea Batavia describes empathy as "the emotional experience of mutual dependence and shared vulnerability."²⁴ This idea also appears in educational studies, where Dolby et al. use the term "new empathy," which includes empathy for humans, animals, and the planet.²⁵

Lauren Marie Lambert argues that sustainability researchers are increasingly interested in human-nature relationships as a lever for societal transformation. Empathy has the potential to reconnect humans with nature by building relationships among more-than-human beings. However, current approaches to empathy with more-than-human beings typically prioritize sympathy and convention. Lambert argues that these approaches limit the potential of empathy when (re)considering human-nature relationships. Lambert uses the established concept of social empathy to construct a new presentation of empathy with more-than-human beings: ecological empathy.

Ecological empathy, according to Lambert, consists of two sub-components: a contextual understanding of human interdependence and inter-human awareness, and taking an earth systems perspective. From this new perspective, Lambert suggests defining ecological empathy as "*a cognitive and affective ability, which allows for internal coherence across bodily separation in humans and their environment.*" By integrating literature from biophilia, deep ecology, embodied cognition, and multispecies ethnography, Lambert outlines an ecological empathy through inspiring practices that can be developed across a variety of decision-making, policy, and design contexts to address the (re)connection between humans and nature.²⁶

Elisabeth El Refaie and Christina Thatcher critique and evaluate the concept of ecological empathy, or "eco-empathy," reconceptualizing it as creative and embodied thinking that embraces the paradoxes between emotion and cognition, body and mind, and human and non-human. Drawing on cognitive linguistics, social and evolutionary psychology, and phenomenology, they argue that

²¹Elise Talgorn, and Helle Ullerup, "Invoking 'Empathy for the Planet'", 4.

²²Jonathan Levy, "A Note on Empathy," *New Ideas in Psychology* 15, No. 2, (1997): 179.

²³Elise Talgorn and Helle Ullerup, "Invoking 'Empathy for the Planet'," 1.

²⁴Chelsea Batavia et al., "Emotion as a Source of Moral Understanding in Conservation," *Conservation Biology* 35, no. 5 (2021): 1380–1387, <https://doi.org/10.1111/cobi.13689>.

²⁵Nadine Dolby, *Rethinking Multicultural Education for the Next Generation: The New Empathy and Social Justice* (New York: Routledge, 2012).

²⁶Lauren Marie Lambert, "Ecological Empathy: Relational Theory and Practice," *Ecosystems and People* 20, no. 1 (2024): Article e2396919.

metaphor plays a crucial role in developing this form of eco-empathy, bridging emotional and cognitive understanding and facilitating the creation of new conceptual connections.²⁷

In Christina Thatcher's work, she explains anthropomorphic poetry during the global climate crisis,²⁸ and how poetry written in this way can teach empathy and a desire to act in those who read it. Thatcher engages in self-reflection, exploring how writing poetry that 'puts a human face' on trees and waterways, or "anthropomorphizes" them, can help readers feel the consequences of climate change and encourage them to take action to conserve the environment.²⁹

2.2. Definition and Theoretical Study of Love-Based Curriculum (Kurikulum Berbasis Cinta/KBC)

Love-Based Curriculum is designed to emphasize character development, experiential learning, and a deep focus on the social and emotional aspects of education. This curriculum aims to produce individuals who are humanistic, nationalistic, naturalistic, and tolerant, and who always prioritize love as a fundamental principle in life.³⁰

In the Love-Based Curriculum, science is viewed not merely as a collection of facts and formulas, but as a path to wisdom and compassion for God's creation. This curriculum aims to address students' apathy toward science by connecting science with humanitarian values, spirituality, and the benefit of others.³¹

According to Robert S. Zais in *Curriculum: Principles and Foundation*, curriculum can be defined from three main perspectives: (1) *course content*, namely the content of subjects that are systematically designed as the core of the substance of education; (2) *planned learning experience*, including learning experiences that are designed to involve students in relevant and meaningful learning actively; and (3) *experiences had under the auspices of the school*, namely the formal and informal experiences of students while in the school environment, including social interactions and extracurricular activities.³²

This paper focuses on the curriculum in its first point: course content, or the systematically designed content or material within subjects. Curriculum as an idea refers to the concept or vision behind curriculum development. This curriculum concept is more directed at the goals, values, and principles to be achieved through the educational process. At this level, the curriculum represents the hopes and desires of society, the government, or academic institutions regarding what students should achieve through education. Curriculum as an idea is abstract and serves as a philosophical foundation for more concrete development.

²⁷Elisabeth El Refaie, and Christina Thatcher, "Becoming Buttercups: Fostering Eco-Empathy through Metaphorical Creative Writing", *Metaphor and Symbol* 40, No. 2 (2025): 99–113, <https://doi.org/10.1080/10926488.2024.2431075>.

²⁸Anthropomorphic refers to an image or object that resembles a human, usually in an abstract or non-realistic form, but still displays elements recognizable as parts of the human body. Badan Pengembangan dan Pembinaan Bahasa, "Antropomorfik," [Anthromorphic] *Kamus Besar Bahasa Indonesia Daring* [Online Indonesian Dictionary], accessed August 24, 2025, <https://kbbi.kemdikbud.go.id/entri/antropomorfik>.

²⁹Christina Thatcher, *Greeting a Ginkgo, How Anthropomorphism in Poetry Can Inspire Eco-Empathy* (New York: Routledge, 2023), 1.

³⁰Direktorat KSKK, *Panduan Implementasi, Kurikulum Berbasis Cinta di Madrasah* [Implementation Guide, Love-Based Curriculum in Madrasah], 5.

³¹Direktorat KSKK *Panduan Implementasi, Kurikulum Berbasis Cinta di Madrasah*, 3.

³²Robert S. Zais, *Curriculum: Principles and Foundations* (New York: Crowell, 1976).

The KBC guidelines are grounded in the K-nine principles: *Keberagaman* (Diversity), *Kebersamaan* (Collective Engagement), *Keluargaan* (Sense of Community), *Kemandirian* (Self-Reliance), *Kesetaraan* (Equality), *Kebermanfaatan* (Usefulness), *Kejujuran* (Integrity), *Keikhlasan* (Sincerity), and *Kesinambungan* (Sustainability). These nine principles are interconnected and inseparable.

- Diversity, meaning that all activities in the madrasah (Islamic schools) are conducted with due respect for differences, creativity, innovation, and local wisdom within the constitutional framework of the Unitary State of the Republic of Indonesia.
- Collective Engagement, meaning that members of the madrasah community collaboratively undertake all activities through cooperation.
- Sense of Community, meaning that all activities in the madrasah constitute a structured process of value transformation within a supportive, inclusive, and psychologically conducive educational environment.
- Self-Reliance, meaning that all activities in the madrasah are initiated by, implemented by, and intended for the madrasah community.
- Equality, meaning that all activities in the madrasah ensure equal and equitable opportunities for all members of the madrasah community.
- Usefulness, meaning that all activities in the madrasah are expected to generate positive and tangible impacts for students, the madrasah institution, and the wider community.
- Integrity, meaning that all activities in the madrasah are conducted transparently, upholding the principles of honesty and anti-corruption.
- Sincerity, meaning that all activities in the madrasah are carried out based on genuine intention, voluntariness, and an orientation toward meaningful benefit for others.
- Sustainability, meaning that all activities in the madrasah are implemented in an integrated, continuous, and long-term manner.³³

The theoretical studies above also overlap with eco-empathy, which will be explored in this article. It is interesting to note that various pieces of Western literatures mentioned above share a common concern with building harmonious relationships between humans and their natural environment.³⁴

3. Results

3.1. Eco-empathy from a Qur'ānic Perspective

Eco-empathy in the Qur'ān is related to the ideal and harmonious relationship pattern between humans and the environment, which is described as follows:

³³Direktorat KSKK, *Panduan Implementasi, Kurikulum Berbasis Cinta di Madrasah*, 7–8.

³⁴Annamaria Di Fabio and Maureen E. Kenny, "Connectedness to Nature, Personality Traits and Empathy from a Sustainability Perspective," *Current Psychology* 40, no. 3 (2021): 1095–1106, <https://doi.org/10.1007/s12144-018-0031-4>.

Table 1. Qur'ānic Teachings on Eco-Empathy

No	Qur'ānic Terms	Lexical Meaning	Eco-empathy Teachings
1	<i>Khalīfah</i> : Q. Sa'ad 38: 26	God's representative on earth to manage natural resources.	Demonstrates human responsibility towards the balance of the ecosystem.
2	<i>Amānah</i> , Q. al-Ahzāb 33: 72	This mandate includes protecting the earth and all its contents.	Considers nature as a gift from God that must be protected, not exploited.
3	<i>Al-'Adl</i> , Q. Al-Hadīd 57: 25	Justice includes the equal distribution of resources.	Ecological justice, so that all creatures can live decently.
4	<i>Mizān</i> , Q. al-Rahmān 55: 7–8	Allah establishes balance and forbids destruction.	Maintaining natural harmony and preventing over-exploitation.
5	<i>Islāh</i> : Q. Hūd 11: 88	Human responsibility for environmental restoration.	Restoring damaged ecological conditions.
6	<i>Rahmah</i> : Q. Al-Anbiya' 21: 107	Divine mercy for All Creation (<i>rahmatan lil 'alamin</i>).	Empathy towards all living creatures without discrimination.
7	<i>'Ibad al-Rahmān</i> : Q. al-Furqan 25: 63-76.	Servants of the Most Merciful, who draw closer to God by showing compassion toward His creation.	Loving nature with spiritual awareness.
8	<i>Isti'mar (fi al-ard)</i> : Q. Hūd 11: 61	Stewardship of the earth.	Stewards of the natural world.
9	<i>Thaharah</i> : Q. al-Baqara 02: 222.	Sanctity.	Maintaining environmental cleanliness.
10	Stewardship as an expression of gratitude: Q. Ibrāhīm 14: 7.	Gratitude to Allah for the abundance of natural resources.	Increased environmental conservation efforts.
11	<i>al-Nafs al-Muthmainnah</i> : Q. al-Fajr 89: 27-30	Spiritual awareness and understanding of life's purpose.	Understanding one's created purpose as Allah's vicegerent on earth.
12	<i>Ih{sa>n</i> : Q. al-Qasas} 28: 77	Contributing beyond what is received.	Demonstrating deeper environmental care by stewarding natural resources beyond what humans receive.
	<i>Muhsin</i> : Q. al-A'raf 07: 56	Practitioners of <i>ihsan</i> .	Human and environmental happiness/well-being are used simultaneously.
13	<i>Matā'</i> : Q. 'Abasa 80: 32	Happiness/well-being.	
14	<i>Al-Shabr</i> : Q. al-Baqara 02: 155	Patience in obtaining sustenance from natural resources.	Earning sustenance through ethical means without damaging the environment.
15	<i>Umam</i> : Q. al-'An'am 06: 38	Every creature of God has its own community whose existence must be respected	using natural resources wisely and maintaining their sustainability
16	<i>Sakhhkhara</i> : Q. al-Hajj 022: 65	Allah created, managed and arranged his creation so that natural resources may be beneficial and usable for human beings.	This is a form of love from God and nature for humans so that humans can fulfill their life needs by using natural resources.

From the table above, it can be seen that the Qur'ān teaches eco-empathy which points, that humans can practice in their interactions with nature, as God's caliphs/representatives on earth, in protecting, prospering, and managing the use of natural resources. In connection with the role of humans as caliphs, they are also commanded to balance the happiness of their lives not only in this

world but also in their future lives in the afterlife,³⁵ as stated in the Qur'ān:

وَابْتَغِ فِيمَا آتَاكَ اللَّهُ الدَّارَ الْآخِرَةَ وَلَا تَنْسَ نَصِيبَكَ مِنَ الدُّنْيَا وَأَحْسِنْ كَمَا أَحْسَنَ اللَّهُ إِلَيْكَ وَلَا تَبْغِ الْفُسَادَ فِي الْأَرْضِ إِنَّ اللَّهَ لَا يُحِبُّ
الْمُفْسِدِينَ ٧٧

But seek, with that (wealth) which Allah has bestowed on you, the home of the Hereafter, and forget not your portion of legal enjoyment in this world, and do good as Allah has been good to you, and seek not mischief in the land. Verily, Allah likes not the *Mufsidun* (those who commit great crimes and sins, oppressors, tyrants, mischief-makers, corrupts).³⁶

In interpreting the verse above, Wahbah al-Zuhaylī summarized four lessons that can be taken from this verse regarding the main teachings for humans in building civilization, namely: 1. Good deeds, 2. Prospering the world through neat management, not being arrogant or exploiting it, 3. Harmonious interaction with fellow humans as a whole, 4. Firmness in upholding justice. If one of these main teachings is not practiced, then a good believer must work together to repair what has been damaged in accordance with the teachings of the Qur'ān.³⁷

Muhammad Quraish Shihab offered a different interpretation. According to him, the above verse tells the story of the Prophet Moses' interaction with Qarūn and his followers. Qarūn, a man who excessively worshipped material things, had apparently crossed the line. His excessive materialism caused him to forget himself, let alone remember to share. In his pursuit of worldly pleasures, this verse teaches us not to abandon our "savings" for the future, meaning we must not forget to fulfill the religious command to share with those in need. This good deed is based on the fact that what we receive is also a form of goodness from Allah.

What's interesting about interpreting this verse is that it reminds humans that in their pursuit of life's necessities, they are prohibited from causing any form of damage. This prohibition applies to actions that damage the environment's natural ecosystem or undermine society's social order. Managing the earth must be done in a way that is good for both the world and humanity.

Quraish Shihab further explains the meaning of the word (أَحْسِنُ) *ahsin*, derived from (حَسَنَ) *hasan*, which literally means "to do good."³⁸ The morphological pattern employed in this verse is imperative and requires an object. However, what is distinctive in the verse is that the object is explicitly mentioned, so this word encompasses everything that can be touched by goodness, beginning from the environment, property, plants, animals, humans, and others, and oneself. Even toward enemies, this principle applies within ethically justified limits. The Prophet (peace be upon him) stated: "Indeed, Allah has prescribed *ihsān* over everything" (Reported by Muslim, and others through Syaddad Ibn Aus). Shihab is more inclined to interpret the particle (كَمَا) as meaning "because," that is, because Allah has bestowed abundant blessings, humans are therefore expected to practice *ihsān* and undertake efforts to improve according to their abilities. If *kamā* in the verse above is interpreted as "just as," then its meaning will be less relevant, because no matter how much effort a person makes to do good, he certainly cannot do it "as" Allah does.³⁹

³⁵al-Qasas 28: 77.

³⁶al-Qasas 28: 77.

³⁷Wahbah al-Zuhaylī, *al-Tafsīr al-Munīr fī al-'Aqīdah wa-al-Shar'ah wa-al-Manhaj* [The Enlightened Exegesis on Creed, Islamic Law, and Methodology] (Beirut: Dār al-Fikr, 1998), 429.

³⁸Elsaid M. Badawi and Muhammad Abdel Haleem, *Arabic-English Dictionary of Qur'anic Usage* (Leiden: Brill, 2008), 208.

³⁹Muhammad Quraish Shihab, *Tafsīr al-Mishbah: Pesan, Kesan dan Keserasian al-Qur'an* [Tafsīr al-Mishbah: Messages, Impressions, and the Harmony of the Qur'ān], 4th ed. (Jakarta: Lentera Hati, 2005); Hamka, *Tafsīr al-Azhar* [Al-Azhar Exegesis] (Jakarta: Pustaka Panjimas, 1982), 127; Aḥmad Muṣṭafā al-Marāghī, *Tafsīr al-Marāghī* [Al-Marāghī's Exegesis] (Beirut: Dār al-Kutub

Therefore, based on the explanation of the verse above, it can be understood that practicing *ihsān*/good deeds is not limited only to human beings. Still, good deeds must be applied continuously to the entire ecosystem in which humans live and carry out their activities.

The Qur'ān also reminds human beings of the various blessings God has bestowed upon them, spread throughout the universe. Among the closest blessings experienced by humans daily are the pleasures of consuming a variety of fruits and vegetables. Interestingly, the Qur'ān states that the well-being of humans, derived from the blessings of natural resources, should ideally be directly aligned with the happiness of both humans and livestock, which we can relate to the well-being of other creatures created by Allah throughout the natural world.⁴⁰ Allah states:

فَلْيَنْظُرِ الْإِنْسَانُ إِلَى طَعَامِهِ ۚ ٢٤ أَنَا صَبَّبْنَا الْمَاءَ صَبًّا ٢٥ ثُمَّ شَقَقْنَا الْأَرْضَ شَقًّا ٢٦ فَأَنْبَتْنَا فِيهَا حَبًّا ٢٧ وَعَيْنًا وَقَضْبًا ٢٨ وَزَيْتُونًا وَنَخْلًا ٢٩ وَحَدائقَ غُلَبًا ٣٠ وَفَاكِهَةً وَأَبًّا ٣١ مَتَاعًا لَكُمْ وَلِأَنْعَامِكُمْ ٣٢

Then let man look at his food. That We pour forth water in abundance. And We split the earth in clefts. And We cause therein the grain to grow, and grapes and clover plants (i.e., green fodder for the cattle), and olives and date-palms, and gardens, dense with many trees, and fruits and Abba (herbage, etc.). (To be) a provision and benefit for you and your cattle.⁴¹

Ibn Kathir interpreted verse 32 by explaining that food derived from grains, vegetables, and various plants in gardens is a support for human and livestock life in this world until the Day of Reckoning.⁴² There is a symbiotic mutualistic relationship in this verse regarding humans' role in maintaining plantation ecosystems and the benefits humans obtain, such as food and livestock. This is for the well-being of human life and for the well-being of livestock.

The verse above explains that human well-being must also be accompanied by human efforts to preserve and sustain natural resources. The Qur'ān states that people who protect the earth from various environmental destruction are *muhsin*.⁴³ Humans are expected to provide more benefits than what they receive, in accordance with the definition of *muhsin*.

Allah also reminds humans that in carrying out their roles on earth, they will be tested by various trials such as fear, hunger, loss of wealth, threats to life and security, and a shortage of fruits. However, Allah also provides solutions for facing and resolving life's problems with patience. Through patience, humans will be able to think clearly, maturely, and firmly in making the best decisions.⁴⁴

From the various verses discussed above, it can be understood that the teachings foster a harmonious relationship between human beings and nature, as a manifestation of eco-empathy within the human heart, and the realization of eco-happiness, or balanced ecological well-being, between humans and nature.

On the other hand, in the authors' research, it is also found that there is a Qur'ānic prohibition for humans not to damage and destroy natural resources. This can be understood as a form of human

al-'Ilmiyyah, 1418 AH/1998 CE); Wahbah al-Zuhaylī, *al-Tafsīr al-Munīr fī al-'Aqīdah wa-al-Sharī'ah wa-al-Manhaj* [The Enlightened Exegesis on Creed, Islamic Law, and Methodology] (Beirut: Dār al-Fikr, 1998), 161.

⁴⁰Al-Qur'an: Abasa 80:24-32.

⁴¹Abasa 80:24-32

⁴²Ismā'īl ibn 'Umar Ibn Kathīr, *Tafsīr al-Qur'ān al-'Aẓīm* [Exegesis of the Great Qur'an], ed. Muḥammad Ḥusayn Shams al-Dīn (Beirut: Dār al-Kutub al-'Ilmiyyah, 1420 AH/1999 CE).

⁴³al-A'rāf 07: 56.

⁴⁴Al-Baqara 02: 155.

eco-empathy by refraining oneself to not causing harm, or even destroying natural resources. The forms of these prohibitions are shown in the following table:

Table 2. Forms of Qur'ānic Prohibitions for the Establishment of *Eco-empathy*

No	Quranic Terms	Lexical Meaning	Eco-Empathy Teachings
1	<i>La Tufsidū fī al-'ard</i> : Q. al-A'rāf 07: 56	Prohibition of natural resource exploitation.	Avoiding behaviors that undermine ecosystem sustainability.
2	<i>Lā tamsyi fī al-ardhi marhan</i> : Q. al-Isrā' 17: 37	Prohibition of arrogant behavior in interactions with the environment.	Not perceiving oneself as the most important element in the universe.
3	<i>Sa 'ā fī al-ardh liyufsidu fihā</i> : Q. al-Baqarah 02: 205.	Activities that damage the earth.	Avoiding activities and types of enterprises that harm the environment.
4	<i>Yuhliku al-harts wa al-nasl</i> : al-Baqara 02: 205.	Destroying flora and fauna.	Using natural resources only as needed and refraining from destroying any community of God's creation.
5	<i>Itrāf (mutrifin)</i> : Q. al-Wāqī'ah 56: 45.	Excessive indulgence leading to deviation from religious teachings.	Not exceeding proper limits in pleasure in ways that lead to destruction, arrogance, and ingratitude toward God's blessings in the natural world.
6	<i>Isrāf</i> : Q. al-A'rāf 07: 31	Not exceeding proper limits.	Teachings on exercising wisdom in the use of natural resources.
7	<i>Tabdzīr</i> : Q. al-Isrā' 17: 27.	Not being excessive.	Not using what has been prohibited by God.
8	<i>Syahwat</i> : Q. Ali Imran 03: 14.	Desire for women, children, and natural resources.	Appropriately loving natural resources.
9	<i>Inkar, kufr</i> (divine blessings): Q. Ibrāhīm 14: 7 and Luqman 31: 12.	Failure to recognize God's blessings as a responsibility to be accounted for.	Being responsible for the mandate of environmental conservation.
10	<i>al-I'tād/lā ta 'adū</i> : Q. al-Mā'idah 05: 87	Transgressing limits, committing injustice, violating rules, or engaging in aggression.	Adhering to God's regulations regarding the use of natural resources.
11	<i>al-Takāsur</i> : Q. al-Takasur 102: 1	Competing in accumulating wealth or possessions for self-glorification, reflecting rivalry.	Not being over-productive or over-consumptive in the use of natural resources.
12	<i>Istaghnā</i> : Q. al-'Alaq 96: 7	Arbitrary human conduct in pursuing desired outcomes.	Cooperative attitudes in environmental conservation and respect for mutualistic symbiotic relationships.
13	<i>Nafs amārah</i> : Q. Yūsuf 12: 53	Selfishness, desire for unilateral dominance, and greed.	Humans utilize natural resources only as needed.
14	<i>Nafs al-lawwāmah</i> : Q. al-Qiyāmah 75: 2.	Destructive toward oneself, involving self-blame, blaming others, and attributing fault to circumstances.	Not blaming oneself or others, but cooperating in environmental conservation.

3.2. A Love-Based Curriculum in the Qur'ān

The theoretical discussion on the meaning of a love-based curriculum has been elaborated above. Based on the definition of a love-based curriculum in the theoretical framework, the authors identified a meaning inspired by the Qur'ān and hadith, which can be summarized as follows:

An educational curriculum that emphasizes the values of love as the basis for character formation in the learning process within the academic ecosystem. This curriculum focuses on forming individuals who have harmonious relationships with themselves (*habl ma'a nafsih*), with fellow human beings (*habl ma'a ikhwānih*), with the natural environment (*habl ma'a bī'atih*), and with Allah (*habl ma'a Khāliqih*).

The principles of a Love-Based Curriculum from the Qur'ānic perspective can be identified in the following points:

- The integration of spiritual, emotional, intellectual intelligence, and human Adversity Quotient.⁴⁵
- The harmonious relationships within the educational ecosystem: between teachers, students, parents, and the broader social environment (supporting the convergence theory).
- The production of graduates who are responsive to global needs and prepared to become members of a global society.

According to the authors' preliminary findings, the integration of eco-empathy into a love-based curriculum can be described as follows:

- Love for Allah, as found in the relevant Qur'ānic terms: al-Rahmān and al-Rahīm,⁴⁶ al-Hamd, all the praises and thanks be to Allah, the Lord of the *'Ālamīn* (humankind, *jinn*s, and all that exists),⁴⁷ al-Wadūd.⁴⁸
- Prophet Muhammad as a mercy to all creation.⁴⁹ The Qur'ān describes the Prophet's love for Muslims/*ukhuwwah islāmiyyah*, the Prophet's love for all humanity/*ukhuwwah insāniyyah*,⁵⁰ the Prophet's love for God's creatures in the universe/*ukhuwwah makhluqiyah*, the Prophet's love for the environment/*ukhuwwah bī'iyah*, and his love for the objects that accompanied his preaching and prophetic mission.
- Love in human interaction, expressed through several Qur'ānic terms: *hubb*,⁵¹ *mawadda*,⁵² *rahma*,⁵³ *Līn*/gentleness,⁵⁴ *Ihsān*,⁵⁵ and *Ikhhlāsh*.⁵⁶

⁴⁵al-Jumu'ah 62: 2.

⁴⁶al-Fatiha 01:1.

⁴⁷al-Fatiha 02: 2.

⁴⁸al-Burūj 85: 14.

⁴⁹al-Anbiyā' 21: 107.

⁵⁰al-Mumtahana 60: 7.

⁵¹al-Baqara 02: 165.

⁵²al-Rum 30: 21; al-Mumtahana 60: 7.

⁵³al-Rūm 30: 21.

⁵⁴Al-i-Imran 03: 153.

⁵⁵al-Qasas 28: 77

⁵⁶al-Bayyina 98: 5.

The Qur'ān also presents an ethics of utilizing natural resources based on love, which can be described as follows:

- The application of the trust of vicegerency (caliphate's mandate, humans as earth conservators).⁵⁷
- Balance between utilization and conservation (*mīzān*).⁵⁸
- Stewardship as proof of the character of gratitude.⁵⁹
- Avoiding excess (*tabdzīr*: excessiveness in matters that are prohibited, for instance: wasting edible food).⁶⁰
- Not transgressing limits (*israf*: excessiveness in permissible matters, for instance: continuously overeating).⁶¹
- Prospering the earth/ *'imārah al-ardh*.⁶²
- Taharah/purity of the self and the environment.⁶³
- Appreciation and love toward creation as one's own kin (*ukhuwah makhluqiyah*)

The points above provide a brief overview of a love-based curriculum integrated with environmental concern within the Qur'ān-based eco-empathy study. These preliminary findings can be further developed into more comprehensive research and introduced as part of the Qur'ān's universal teachings.

4. Discussion

4.1. Storytelling and Practical Methods in Implementing Eco-Empathy within a Love-Based Curriculum

In the authors' analysis, the integration of love values into school subjects can be described as follows:

- Religious education: Introducing love for oneself, fellow human beings, the environment, and God.
- Language education: Composing and reading poetry that expresses love for oneself, fellow human beings, the environment, and the Almighty God.
- Mathematics: Contextual applications such as calculating zakat and distributing aid to cultivate empathy (philanthropic activities).
- Natural sciences: Environmental conservation.
- Social sciences: Explaining or narrating historical accounts about figures who have distinguished themselves in love, cooperation, and social solidarity.

⁵⁷al-Ahzāb 33: 72.

⁵⁸al-Rahmān 55: 7–8.

⁵⁹Ibrāhīm 14: 7.

⁶⁰al-Isrā' 17: 27.

⁶¹al-A'rāf 7: 31.

⁶²Hūd 11: 61.

⁶³al-Baqara 02: 222.

- Arts and cultures: Expressing love through drama, song, and other cultural forms.

In this paper, the authors focus on the storytelling method for integrating teachings on eco-empathy into a love-based curriculum, as illustrated by the story of Lukman al-Hakim, who teaches his son not to be arrogant in his interactions with the environment.⁶⁴

This storytelling method is vital for introducing environmental teachings because, according to Elise Talgorn and Helle Ullerup, appreciation for the earth, as well as for humans and businesses, continues to grow in sustainable ecological design and innovation. To strengthen understanding of and consideration for the earth, Elise Talgorn and Helle Ullerup examined the role of participatory storytelling in stimulating a reassessment of government policies concerning nonhumans through empathetic infrastructure development.⁶⁵ According to Elise Talgorn and Helle Ullerup, through connections, comparisons, values, and motivations, stories stimulate the emergence of social narratives and shared values.⁶⁶ Stories have proven to be carriers of collective imaginations about various futures,⁶⁷ for the development of collective efficacy (the belief that individuals have the capacity to exert impact) and “ecological identity” (ways of relating to the world and to others that are based in memories and emotions connected to the environment).⁶⁸

Participatory dialogues, such as story-making, enable the expression of diverse individual voices while simultaneously linking personal and group actions to a broader understanding of environmental challenges, thereby stimulating interwoven individual and collective responses.⁶⁹ Participatory storytelling connects self-narratives with social narratives; it expresses self-focused values to bring out communal values.⁷⁰ Matthew Reason elaborates that collaborative telling and retelling allow learners to add layers of their own experiences or values to the story, similar to traditional story retelling, thereby contributing to communal and adapted knowledge, which they term ‘story knowledge’.⁷¹

In the Qur’ān, some examples of stories that can be presented to students to foster *eco-empathy* include:

⁶⁴Lukman 31: 18–19.

⁶⁵Elise Talgorn and Helle Ullerup, “Invoking ‘Empathy for the Planet’,” 1.

⁶⁶Candice Howarth, “Informing Decision Making on Climate Change and Low Carbon Futures: Framing Narratives around the United Kingdom’s Fifth Carbon Budget,” *Energy Research & Social Science* 31 (2017): 295–302, <https://doi.org/10.1016/j.erss.2017.06.011>.

⁶⁷Rob Hopkins, *From What Is to What If: Unleashing the Power of Imagination to Create the Future We Want* (White River Junction, VT: Chelsea Green Publishing, 2019).

⁶⁸Mitchell Thomashow, *Ecological Identity: Becoming a Reflective Environmentalist* (Cambridge, MA: MIT Press, 1996).

⁶⁹Karen L. O’Brien, “Climate Change and Social Transformations: Is It Time for a Quantum Leap?” *WIREs Climate Change* 7, no. 5 (2016): 618–626, <https://doi.org/10.1002/wcc.413>.

⁷⁰Corinne Donly, “Toward the Eco-Narrative: Rethinking the Role of Conflict in Storytelling,” *Humanities* 6, no. 2 (2017): Article e17, <https://doi.org/10.3390/h6020017>.

⁷¹Matthew Reason, and Catherine Heinemeyer, “Storytelling, Story-Retelling, Storyknowing: Towards a Participatory Practice of Storytelling,” *Research in Drama Education: The Journal of Applied Theatre and Performance* 21, no. 4 (2016): 558–573, <https://doi.org/10.1080/13569783.2016.1220247>.

Table 3. *Qur'ānic Narratives Containing Teachings on Eco-empathy*

No	Qur'ānic Narratives	Qur'ānic Surah	Eco-empathy Values	Contemporary Context
1	Prophet Noah (Nuh)	Hūd 11: 25–49	Ecosystem balance: water as a symbol of divine mercy and punishment for those who disobey God's teachings.	Awareness of the climate crisis and ecological disasters resulting from human behavior.
2	Prophet Solomon (Sulaiman)	al-Naml 27: 15–44	Ethics of communication with animals and appreciation of natural resources.	Strengthening empathy toward living beings; conservation of biodiversity.
3	Prophet Joseph (Yusuf)	Yūsuf 12: 43–49	Sustainable management of natural resources.	Food planning and mitigation of global environmental crises.
4	The 'Ād and Samūd Peoples	al-A'rāf 07: 65–78	Prohibition of arrogance in the use of technology and resource exploitation.	Critique of excessive industrialization and ecological destruction.
5	Prophet Moses (Musa) and the Children of Israel (Bani Israil)	al-Baqara 02: 57–61	Simplicity in consumption and gratitude for the blessings of nature.	Implementation of an environmentally friendly lifestyle (eco-lifestyle).
6	Dzulqarnain	al-Kahf 18: 83–98	Protection of territories from social and ecological degradation.	Environmental protection through public policy and spatial planning.
7	Luqman	al-Isrā' 17: 37	Demonstrating humility and avoiding arrogance, including in interactions with the environment.	Avoiding activities that pollute or damage the environment.

Apart from the verses above, Allah also commands humans to pay attention to and learn from the creatures that Allah created in the heavens and on the earth, so that humans may feel closer to, and develop a sense of empathy for the environment which serves as a source of knowledge, a source of life, and a means to love God.⁷²

The understanding and application of Qur'ānic eco-empathy are expected to foster a human civilization that is more environmentally friendly. According to Siraj Munir as quoted by Farid bin Masood, civilization emerges from human actions within the context of nature and is shaped by human natural dispositions. Thus, civilization represents a transformation of the concept of reality as it moves from the level of ideas to the level of human action. In this sense civilization can be understood as the result of the metamorphosis of the concept of reality through the lens of human

⁷²Yunus 10: 101.

existence.⁷³ Human civilization itself cannot be separated from the condition of a healthy environment. Education plays a crucial role in this regard.

4.2 Conclusion

From the above explanation, it can be understood that eco-empathy may be interpreted as the human spiritual-ethical capacity to feel, understand, and respond to the existence of nature as a creation of Allah endowed with intrinsic value, thereby fostering attitudes of compassion, responsibility, and environmental non-destruction. Eco-empathy explains the interconnectedness between God's compassion, human beings, and the nature. Eco-empathy in a love-based curriculum illustrates a form of mutualistic symbiosis in which humans carry out their respective creative functions, infused with respect, compassion, conservation, and the sustainable management of natural resources as an expression of responsibility for the human caliphate. Eco-empathy within a love-based curriculum from the Qur'anic perspective also describes Allah's boundless love for humans and all of His creatures. Eco-empathy in the Qur'an can be taught to students in schools to foster harmonious relationships with themselves, with fellow human beings/*ukhuwah insyaniyyah*, with the environment/*ukhuwah makhluqiyyah*, and with God.

Author Contribution

Badru Tamam: conceptualization, methodology, supervision. **Nur Arfiyah Febriani:** original draft, validation, formal analysis, editing. **Kholilurrohman:** validation, formal analysis, data curation, **Suaib Tahir:** writing review, resources & visualization.

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