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Philosophy Of Education In The Perspective Of Ecophenomenology: A New Approach To Sustainable Education

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Abstract

This study explores the contribution of ecophenomenology in the philosophy of education to support sustainable education. By integrating the principle of the interconnectedness of humans and nature, direct experience through environmental- based learning, and critical reflection, this approach is able to increase students' ecological awareness and ethical responsibility. The results of the study indicate that ecophenomenology-based education can be an important tool in social transformation, although it still faces obstacles such as limited resources and policies. However, opportunities through green technology and environmentally friendly policies provide hope for building an education system that is more relevant and responsive to ecological challenges. This study emphasizes the importance of synergy between education, policy, and innovation to create a generation that is able to face global sustainability challenges holistically and sustainably.

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1. INTRODUCTION

Sustainability education plays a critical role in addressing the global environmental crisis by equipping individuals with the knowledge, skills and values necessary to understand and engage in complex ecological challenges. The integration of sustainability into educational frameworks fosters environmental awareness and encourages responsible citizenship, which is essential for mitigating the adverse impacts of environmental degradation.

One of the main functions of continuing education is to raise awareness about environmental issues and promote environmentally friendly practices. According to Saleh and Saifudin, environmental education aims to improve public understanding of ecological functions and the importance of sustainable management practices (Saleh & Saifudin, 2017). This is in line with Gunansyah's findings, which emphasize that a comprehensive understanding of ecological issues requires a social-ecological perspective, which is often lacking in traditional educational materials (Gunansyah, 2022). By addressing this gap, sustainable education can empower students to become informed advocates of environmental management.

In addition, educational institutions serve as an important platform to foster a culture of sustainability. Rahman highlights that integrating education for sustainable development into higher education can inspire students to become change agents in sustainability efforts (Rahman, 2023). This sentiment is echoed by Puche, who argues that transformative pedagogy is needed to equip students with critical thinking skills and competencies to address

socio-environmental challenges (Puche, 2024). Such an educational approach not only enhances individual knowledge but also fosters collective responsibility towards environmental conservation.

The urgency of the global environmental crisis necessitates a paradigm shift in education. Flori argues that education and public awareness are fundamental to implementing a sustainable model for environmental crisis management (Flori, 2023). This perspective is supported by Wals and Benavot, who discuss the role of lifelong learning in addressing sustainability challenges, emphasizing that education must evolve to meet the demands of a rapidly changing world (Wals & Benavot, 2017). The need for innovative educational strategies is further emphasized by the work of Kopnina, who advocates for ecopedagogy as a means to re-engage democratic practices and address the ecological crisis through education (Kopnina, 2015).

In addition to fostering awareness and critical thinking, sustainable education also emphasizes the importance of an interdisciplinary approach. Huang notes that environmental literacy education is essential for developing a comprehensive understanding of sustainability issues across different levels of education (Huang, 2023). This interdisciplinary focus is essential to prepare future generations for the complexity of environmental challenges, as highlighted by Ansori, who calls for a comprehensive strategy that balances development with environmental preservation (Ansori, 2023).

Furthermore, the gap between traditional educational approaches and the urgent need for environmental conservation is increasingly apparent as global environmental challenges increase. Traditional educational frameworks often prioritize standardized curriculum and rote learning, which can lead to a lack of engagement with real-world environmental issues. In contrast, contemporary educational paradigms emphasize the need to integrate environmental education into the curriculum to foster awareness, critical thinking, and proactive behavior regarding environmental conservation.

One significant limitation of traditional education is its focus on theoretical knowledge rather than practical application. Offord-Woolley et al. highlight that while environmental education programs can effectively promote conservation, they require substantial investment and time to produce meaningful results Offord-Woolley et al. (2016). This suggests that traditional education methods may not adequately prepare students to engage with pressing environmental issues. In contrast, innovative approaches, such as integrating environmental awareness into arts education, have been shown to catalyze transformation among young learners, fostering a deeper understanding of environmental issues and their implications (Zhongbin, 2024).

Moreover, the effectiveness of wildlife education programs illustrates the shortcomings of conventional education methods. Freund et al. show that environmental education can produce significant positive conservation outcomes, including behavior change and improved policies (Freund et al., 2019). However, traditional education often fails to provide the experiential learning opportunities necessary for students to personally understand these issues. This gap can result in a lack of motivation to engage in conservation efforts, as evidenced by the indifferent attitude towards environmental conservation observed in some student populations (Guadalupe-Zevallos, 2024).

The need for a more integrated approach to environmental education is further emphasized by the findings of Han et al. who argue that beliefs about climate change significantly influence young people's engagement in energy conservation behaviors (Han et al., 2022). This suggests that education should not only impart knowledge but also foster a sense of responsibility and accountability among students. Traditional education often neglects this aspect, focusing instead on delivering content without encouraging critical thinking or personal investment in environmental issues.

Moreover, the role of teacher training in conservation education is crucial to bridge the gap between traditional approaches and the need for effective environmental education. Lukas et al. assert that conservation education should foster decision-making and critical thinking skills to encourage environmentally friendly behavior (Lukas et al., 2017). This highlights the need for educators to be equipped with the tools and knowledge to inspire students to adopt sustainable practices, a goal often overlooked by traditional education.

Subsequently, ecophenomenology emerged as a significant philosophical framework for understanding the complex relationship between humans and nature. This approach blends phenomenological insights with ecological concerns, emphasizing the embodied experiences of individuals within their natural environment. By foregrounding the human corporeality, ecophenomenology argues that humans are not separate from nature but essentially intertwined with it, which suggests that our self- understanding should include our ecological existence as "the nature that is ourselves" (Meyer, 2023). This perspective challenges anthropocentric views and promotes a more ecocentric understanding of human-nature interactions, which is important in addressing the contemporary environmental crisis.

The relationship between humans and nature is often characterized by a complex interplay of cultural, psychological and social factors. Research shows that individuals who engage more deeply with nature tend to show greater concern for environmental issues, highlighting the bidirectional relationship between human well-being and ecological health (Foley et al., 2023). This is in line with findings that emphasize the importance of place attachment and social capital in fostering positive relationships between people and nature, which in turn contribute to overall well-being (Yoshida et al., 2022). Such insights underscore the need to recognize the intangible aspects of this relationship, which are often overlooked in traditional environmental discourse.

In addition, diverse relationships between humans and nature are essential for fostering empathy and social learning, as different cultural backgrounds and experiences shape individuals' interactions with the environment (Armatas et al., 2022). This diversity can be seen in various contexts, such as the local agricultural practices of the Bugis people, who view pests not as enemies but as integral components of their ecological system (Rahmatia & Christomy, 2020). Such perspectives challenge dominant narratives that often portray nature as an exploitable resource, instead promoting a view of nature as a partner in shared life.

Ecophenomenology also has normative implications for environmental ethics. Ecophenomenology advocates a deeper understanding of our moral obligations towards nature, suggesting that ethical considerations should emerge from our experiences of and relationships with nature (Moorthy & Akwen, 2020). This perspective aligns with the principles of deep ecology, which call for a fundamental shift in how we perceive our place in ecological networks (Bhandari, 2023). By fostering a sense of connectedness and responsibility, ecophenomenology encourages individuals and communities to rethink their values and behaviors in relation to the environment.

In short, ecophenomenology offers a solid philosophical basis for understanding the human-nature relationship by emphasizing the embodied, experiential, and ethical dimensions of this relationship. Ecophenomenology calls for a re-evaluation of our interactions with nature, advocating a more integrated and empathic approach that recognizes the intrinsic value of nature and our role in it. This framework not only enriches our understanding of environmental ethics but also provides practical insights to encourage sustainable practices and policies that respect the complex interdependence between humans and the natural environment.

Based on the description above, the researcher discusses several issues, namely:

Ecophenomenology can be applied in the philosophy of education (2) Its implications

for sustainable education. In addition, the purpose of this study is to explore the contribution of ecophenomenology in the formation of the concept of sustainable education and develop implementation strategies in the context of formal and non-formal education.

2. LITERATURE REVIEW

1. Philosophy of Education

Philosophy of education plays a fundamental role in shaping curricula and educational goals, guiding pedagogical practices, instructional design, and assessment strategies. According to Kunjumuhammed (2023), it determines the goals of educational programs, teaching methods, and evaluation tools. Aslan (2018) emphasized the importance of philosophical orientation in structuring teaching content and approaches.

Different schools of educational philosophy, such as perennialism, essentialism, progressivism and reconstructionism, create different curriculum frameworks (Börekci & Uyangör, 2021). Teachers' philosophies influence their decision-making regarding curriculum and teaching strategies (Karaduman & Uçar, 2020; Şahan, 2020). Ardalan (2008) highlighted how certain schools support specific teaching methods to achieve educational goals.

Philosophy of education also impacts the education system at large, providing guidance for developing a socially and culturally relevant curriculum (Tamang, 2023). By understanding philosophical foundations, educators can create meaningful learning experiences that meet the needs of students.

Educational philosophy has a close relationship with sustainability, guiding curriculum development and pedagogical practices to support sustainability goals. Wang and Lu (2022) show how educational philosophy in China's Belt and Road Initiative supports the *Sustainable Development Goals* (SDGs) by encouraging a culture of responsibility and innovation. Crawford and Cifuentes-Faura (2022) underscore the importance of Education for Sustainability (EfS) in equipping students with the values and competencies to address global sustainability challenges.

Other approaches, such as those implemented in Malaysia, emphasize the integration of environmental education into the national educational philosophy, in order to increase ecological awareness (Embong et al., 2013). In addition, Cajete (2020) emphasizes the importance of integrating indigenous knowledge systems to enrich educational experiences and support cultural sustainability.

As such, the philosophy of education contributes to sustainability through the inculcation of values, the development of environmentally-based curricula, and innovative learning methods that prepare students for future challenges.

2. Ecophenomenology

Ecophenomenology is a philosophical approach that combines *phenomenology* with ecological awareness, highlighting the deep connection between humans and the environment. Manen (2017) defines phenomenology as the study of lived experience, which in the context of ecophenomenology means understanding how humans feel connected to nature and recognizing the role of non-human entities in shaping that experience (Meyer, 2023).

Havik et al. (2015) support this view by showing how individuals in spiritual practices perceive the environment as a unity of energy. Rodrigues (2023) introduced the concept of ecomotoricity, which emphasizes physical interaction as the basis of environmental awareness. Iared et al. (2022) added aesthetic, ethical and political dimensions, calling for a holistic approach in understanding the human-nature relationship. Together, these ideas create a philosophical framework for enhancing human understanding of and responsibility for the environment.

3. Continuing Education

Continuing education is a lifelong process that includes formal, non-formal and

informal learning for personal, social and professional development. Its main dimensions include individual skill development, professional advancement for competitiveness in the job market, and social participation through active citizenship.

Amin (2023) highlights the importance of environmental education in the curriculum to support sustainable development, while Ossiannilsson (2023) shows how Open Educational Resources (OER) can improve access to quality education. This approach supports inclusion, equity and broader social goals, making sustainable education an important cornerstone for global development.

Continuing education in Indonesia is recognized as an essential element for personal development, upskilling the workforce and promoting social equality. Sulasari (2023) highlights the role of online training in overcoming geographical barriers, which expands access to lifelong learning for individuals from diverse backgrounds. Barasa (2024) emphasized the importance of integrating industry feedback into education programs to create a workforce that is relevant to the needs of the economy.

Furthermore, Thwe and Kálmán (2023) highlight lifelong learning as a strategy to deal with the complexities of modern society. In addition, community-based initiatives, such as Majelis Taklim, as outlined by Suherdi et al. (2017), demonstrate the importance of informal education in supporting culturally and spiritually relevant learning. With a focus on inclusivity and sustainability, continuing education plays a key role in preparing Indonesians for global challenges.

3. RESEARCH METHODOLOGY

This research uses a qualitative approach based on philosophical and literature analysis. This approach aims to deeply understand the relationship between philosophy of education and happiness through conceptual exploration and literature review. This research focuses on the philosophical analysis method, which allows the researcher to explore in-depth ideas related to the purpose of education and its relation to human happiness. This process involves extracting meaning from core concepts, understanding their implications, and identifying the logical and normative relationship between philosophy of education and happiness.

The analysis technique is *conceptual* analysis, which is used to examine the philosophical meaning of various concepts related to the philosophy of education, such as value, purpose and happiness. This approach helps identify how these concepts are interrelated in shaping educational policies that support individual well-being.

This literature study was conducted on various educational policies and philosophical works that discuss the purpose of education. This involved reviewing primary and secondary sources to understand how educational philosophy concepts are applied in the context of educational policy and practice.

4. RESULTS AND DISCUSSION

1. Ecophenomenology's Contribution to the Philosophy of Education

The ecophenomenological approach in educational philosophy offers a deep and holistic understanding of humans as an integral part of the ecosystem. This perspective departs from the idea that humans are not only individual entities separated from their environment, but exist in interconnectedness with all elements of the ecosystem. This holistic understanding emphasizes the awareness of human existence as inseparable from natural, cultural, and social systems, all of which form a harmonious whole in which all elements of the ecosystem are interconnected.

In ecophenomenology, humans are understood as *homo ecologicus*. For example, a traditional farmer whose life depends on soil and weather understands the ecosystem cycle deeply. He sees himself as part of the cycle, not as the ruler or conqueror of nature. This perspective reflects the harmony between humans and ecosystems, where human needs are met without destroying the balance of nature.

Within the framework of phenomenology, people are invited to think about ecology and understand their life experiences in context. This phenomenological awareness includes the ability to see, feel, and understand the connection between humans and nature deeply. Through this approach, humans not only understand nature as a resource that can be exploited, but as an entity that has intrinsic values.

For example, one's experience in the middle of the forest is not only seen as a recreational trip, but as a moment to realize that the surrounding trees, animals, and soil have equally important lives and roles in maintaining daily life. Philosophy of education in the perspective of ecophenomenology places education as an important tool to instill this holistic understanding. Education not only aims to build human intellect, but also form ecological awareness. Ecophenomenological education emphasizes direct experience and critical reflection on the relationship between human and environment.

In practice, this approach can be applied through activities such as *outdoor learning*, where students are invited to observe, experience and imagine natural phenomena directly. In this way, students not only understand ecological concepts theoretically, but also build a sense of empathy and responsibility.

A holistic understanding also includes the integration of moral and spiritual values in human relationships with nature. In many cultural and religious traditions, nature is often considered sacred and needs to be respected. Ecophenomenology rejects dualistic views that separate humans from nature. Instead, humans are seen as part of an interconnected system. Every human action impacts the ecosystem, and vice versa. This understanding is important in the context of sustainable education, where humans are invited to see the long-term impact of their actions on the environment.

For example, single-use plastic may seem simple and practical to individuals, but on a larger scale, it contributes to ocean pollution that damages marine life. A holistic understanding helps people realize these interconnections and encourage more responsible behavior.

Thus, a holistic understanding of humans as part of the ecosystem demands a deep awareness of the interconnectedness between humans and nature. In an ecophenomenological perspective, humans are invited to reflect on their ecological experiences, respect the intrinsic values of nature, and act ethically to maintain ecosystem balance. Education serves as the main medium to instill this awareness, so that humans can live in harmony with nature and realize wishes for future generations.

Furthermore, sustainability-oriented education has significant implications in shaping educational goals, especially in promoting ecological awareness and harmony with nature. This approach emphasizes the importance of integrating sustainability concepts into the education curriculum at all levels. It aims to equip learners with the ability to understand and respond to various global environmental challenges in a critical and solutive manner. By instilling sustainability values, education can become a tool for social transformation that supports changes in mindset and behavior for the survival of humans and ecosystems as a whole.

Through this approach, education becomes more than just the delivery of academic knowledge. The learning process includes the development of practical skills to promote ecologically responsible lifestyles. This includes the ability to sustainably manage natural resources, reduce negative environmental impacts and promote innovation for sustainability. Moreover, the integration of sustainability into education enables the establishment of a deep-rooted culture of social and ecological responsibility, making the younger generation agents of change committed to sustainability.

Harmony with nature is also an important component in the goal of education that prioritizes sustainability. This approach teaches humans to live in harmony with the ecosystem, not only to fulfill material needs, but also to maintain ecological balance. In this context, education can utilize creative learning methods, such as hands-on experience

through project-based activities, environmental exploration, and creative arts approaches that instill an appreciation for the intrinsic value of nature. These approaches strengthen learners' understanding of the deep connection between humans and nature and the importance of conserving resources for future generations.

In addition, education for sustainability also promotes critical reflection and ethical awareness in human relationships with the environment. The learning process encourages learners to consider the impact of their actions on ecosystems, develop analytical skills, and evaluate options that support sustainability. Such education not only increases environmental awareness, but also builds capacity for ethical and responsible decision-making, both in personal and professional life.

In conclusion, education goals oriented towards sustainability and harmony with nature require a holistic and interdisciplinary approach to education. By integrating sustainability values in the curriculum, education can produce a generation capable of facing global challenges with a deep understanding of the relationship between humans and nature. This approach ensures that education is not only relevant for current needs but also contributes to the creation of a more sustainable and harmonious future.

2. Ecophenomenology-based Education Model

An experiential learning approach is a learning method that places real-life experiences at the center of the educational process. In this approach, students are actively involved in direct interaction with the natural environment, allowing them to gain in-depth understanding through observation, exploration and reflection. This approach not only emphasizes cognitive aspects, but also includes affective and practical dimensions, thus promoting holistic learning.

Through hands-on experience, students are invited to get to know and understand nature on a more personal level, which helps build emotional and intellectual connections with the environment. Activities such as exploration of local ecosystems, observation of flora and fauna, or participation in nature conservation projects can provide richer insights than theoretical learning alone. This approach allows students to witness first-hand the impact of human activities on the environment, thus increasing ecological awareness and a sense of responsibility towards nature conservation.

In addition, nature-based experiential learning also develops critical thinking and problem-solving skills. When students are faced with real challenges, such as identifying solutions to environmental problems around them, they learn to analyze situations, make decisions based on data, and develop effective strategies. This process not only supports academic learning but also prepares students to become individuals who are responsive to sustainability issues in the future.

Direct interaction with nature also has significant psychological and emotional benefits. Research shows that engagement in nature activities can reduce stress, improve concentration, and strengthen a sense of connection with the surrounding environment. As such, experiential learning serves not only as an educational tool but also as a means to improve an individual's overall well-being.

This approach is in line with the goal of education for sustainability, as it teaches students ecological values through real-life experiences. By engaging them in activities that foster appreciation for biodiversity and understanding the importance of maintaining ecosystem balance, experiential education encourages students to become proactive agents of change in creating a more sustainable future.

Furthermore, integrating environmental issues into the curriculum is a strategic step to create ecological awareness and build a generation that cares about sustainability. This process involves a systematic effort to make environmental issues an integral part of various subjects, not just an add-on or optional element. With this approach, students not only learn theories about the environment but also understand the practical impacts of

human actions on nature.

In this integration, the curriculum is designed to reflect the importance of maintaining a balanced ecosystem through learning that is relevant to the local and global context. This includes understanding climate change, natural resource conservation, waste management, as well as human influence on biodiversity. By including these topics, students are invited to see the connection between human activities and their impact on the environment, aiming to foster their sense of responsibility towards the planet.

This integration also includes a cross-disciplinary approach, where environmental issues are linked to various fields of study, such as science, geography, economics and even art. For example, through science, students can study the impact of pollution on marine life, while through economics, they can analyze the relationship between overconsumption and resource scarcity. This cross-disciplinary approach ensures that students gain a comprehensive perspective on the complexity of environmental issues.

In addition, integrating environmental issues also involves using active learning methods that motivate students to participate in real projects. Examples include planting trees, cleaning rivers, or developing sustainability action plans in their communities. Such activities not only enhance students' understanding but also give them hands-on experience relevant to their daily lives.

On the institutional side, integrating environmental issues into the curriculum requires commitment from all education stakeholders. This includes training teachers so that they are able to deliver environmental materials effectively, providing relevant learning resources, as well as policy support that enables the implementation of an environment-based curriculum. Thus, this approach not only educates students intellectually but also prepares them to become individuals capable of taking an active role in facing sustainability challenges.

Thus, according to the researcher, with this step, education not only functions as a means of knowledge transfer, but also as a tool of social transformation that prepares students for a future that is more harmonious with nature.

3. Challenges and Opportunities

Structural barriers to the implementation of ecophenomenology-based education include challenges related to the education system, policies and institutional practices. One of the main obstacles is the lack of explicit policy support for ecophenomenological approaches in education. Many current curricula are designed with a focus on academic achievement and technical competence, so aspects of direct experience with nature are often neglected. Rigid curricula can also limit teachers' flexibility in integrating ecophenomenological approaches into learning.

In addition, resource constraints are a significant barrier. Many schools lack adequate facilities, such as access to open spaces or natural resources that can support experiential learning. Furthermore, limited education budgets are often directed towards basic infrastructure needs, so efforts to implement ecophenomenology-based education are not prioritized.

Teachers' capacity and competence are also obstacles that are often found. Not all educators have an adequate understanding of ecophenomenological concepts or the skills to apply them in learning activities. Training and professional development to support teachers in understanding and adopting this approach is often inadequate, resulting in a gap between vision and implementation on the ground.

Another structural barrier relates to the public and education stakeholders' perception of the value of this approach. Some still view experiential learning with nature as less relevant than technology-based learning or traditional academic subjects. This narrow view may hinder support for curriculum change or more ecological educational practices.

In addition, the pressure to meet outcome-based evaluation standards and exams

often leaves approaches such as ecophenomenology out. These approaches require time and space for in-depth exploration, which often conflicts with the demands of uniform, outcome-centered evaluation systems.

Thus, while ecophenomenology-based education offers great potential for building ecological awareness and a deeper connection with nature, these structural barriers require serious attention. A holistic approach and commitment from various stakeholders is needed to overcome these challenges, including the formulation of supportive policies, adequate teacher training, and recognition of the importance of human relationships with nature in modern educational frameworks.

Furthermore, opportunities for innovation through green technologies and green policies offer significant prospects for integrating sustainability into educational practices and wider society. Green technology, which involves the use of technology to reduce environmental impact, creates opportunities to transform the way natural resources are managed in education systems. Through the implementation of technological solutions such as solar panels, efficient wastewater management systems or sustainable building infrastructure in educational institutions, students can be directly exposed to the benefits of these technologies, while raising awareness of the importance of responsible resource management.

On the other hand, green policies serve as a framework that enables such innovations to be effectively implemented. These policies can include incentives for renewable energy use, sustainability standards in the procurement of educational goods and services, and programs that encourage the use of green technology in learning. With supportive policies in place, educational institutions can prioritize investments in green technologies, while creating a learning environment that encourages students to understand sustainability concepts in a practical way.

In addition, combining green technology with green education policies provides an opportunity to create a more dynamic and relevant curriculum. Learning programs that utilize green technology-based tools, such as renewable energy simulations or environmental monitoring tools, can increase student engagement and broaden their understanding of the importance of sustainability. This innovation also enables cross-disciplinary collaboration, where science, technology and civic education work together to create a generation that is more aware of global ecological challenges.

Thus, opportunities for innovation through green technologies and green policies provide a foundation for building education that is not only academically relevant but also responsive to future ecological challenges. This synergy between technology and policy can accelerate the transition to a sustainable education system, creating positive long-term impacts for students, society and the global environment.

5. CONCLUSIONS

This research shows that ecophenomenology-based educational philosophy plays an important role in creating a sustainable approach to education. Through integrating the concept of sustainability, direct experience with nature, and reflective methods, this approach is able to foster ecological awareness, ethical responsibility, and a holistic understanding of the relationship between humans and nature. Despite structural barriers, such as limited resources and policies, ecophenomenology-based education provides great opportunities through green technologies and environmentally friendly policies to support the creation of a more relevant and ecologically responsible education system.

Ecophenomenology-based education not only increases environmental knowledge but also shapes mindsets and behaviors that support sustainability, making it a crucial tool of social transformation amid the global environmental crisis. This approach prepares future generations to face ecological challenges with innovative and sustainable solutions.

Suggestions in this research on the philosophy of education in the perspective of ecophenomenology: a new approach to sustainable education are as follows:

1. Policy Development: The government needs to strengthen policies that support the integration of ecophenomenology-based education in formal and non-formal curricula.
2. Teacher Training: It is recommended to organize intensive training for educators to effectively apply the ecophenomenological approach in the classroom.
3. Infrastructure upgrades: Schools need to be equipped with facilities that support hands-on experiences with nature, such as green spaces and green technology-based learning tools.
4. Cross-sector collaboration: Educational institutions can partner with local communities, environmental organizations, and the private sector to support the implementation of sustainability-based education.
5. Further Research: More in-depth studies are needed to evaluate the effectiveness of ecophenomenology-based education and its effect on students' behavior in the long run.

6. LITERATURE

Amin, R. (2023). Environmental justice and education: bridging the gap between ecology, equity, and access. Journal of Advanced Zoology, 44(S-3), 1075-1082. https://doi.org/10.17762/jaz.v44is-3.1061

Ansori, S. (2023). Addressing the global environmental crisis: strategies for sustainable development. WSSHS, 1(02), 63-75. https://doi.org/10.58812/wsshs.v1i02.190

Ardalan, K. (2008). The philosophical foundation of the lecture-versus-case controversy. International Journal of Social Economics, 35(1/2), 15-34. https://doi.org/10.1108/03068290810843819

Armatas, C., Borrie, W., & Watson, A. (2022). Human-nature relationships for the flathead wild and scenic river system: analyzing diversity, synergies, and tensions in a mountainous region of montana, usa., 141-153. https://doi.org/10.1007/978-3-031-01980-7_12

Aslan, S. (2018). Investigating the relation between educational philosophies adopted by prospective teachers and their teaching-learning conceptions. Pegem Eğitim Ve Öğretim Dergisi, 8(2), 307-326. https://doi.org/10.14527/pegegog.2018.013

Barasa, L. (2024). Evaluating multimodal transportation education in Indonesia. IJETS, 1(2), 01-10. https://doi.org/10.61132/ijets.v1i2.22

Bhandari, R. (2023). Deep ecological consciousness and interconnectedness between humans and nature in thoreau's poems. KMC Journal, 5(1), 102-114. https://doi.org/10.3126/kmcj.v5i1.52453

Cajete, G. (2020). Indigenous science, climate change, and indigenous community building: a framework of foundational perspectives for indigenous community resilience and revitalization. Sustainability, 12(22), 9569. https://doi.org/10.3390/su12229569

Christomy, T. (2020). Eco-phenomenology in the local concept of buginese agriculture basedon kutika manuscript. E3s Web of Conferences, 211, 01008.https://doi.org/10.1051/e3sconf/202021101008

Crawford, J. and Cifuentes-Faura, J. (2022). Sustainability in higher education during the covid-19 pandemic: a systematic review. Sustainability, 14(3), 1879. https://doi.org/10.3390/su14031879

Embong, A., Hashim, H., Noor, A., Yaacob, R., Seng, L., & Malik, N. (2013). Assessing the understanding and practices of 3r's among the secondary school students.. https://doi.org/10.1109/eeeic-2.2013.6737873

Flori, M. (2023). Approaching a sustainable vector model for environmental crisis management.. https://doi.org/10.21203/rs.3.rs-2899066/v1

Foley, H., Leach, M., Feng, X., Astell-Burt, T., & Brymer, E. (2023). Towards key principles

for the design and implementation of nature prescription programs. Sustainability, 15(12), 9530. https://doi.org/10.3390/su15129530

Freund, C., Achmad, M., Kanisius, P., Naruri, R., Tang, E., & Knott, C. (2019). Conserving orangutans one classroom at a time: evaluating the effectiveness of a wildlife education program for school-aged children in Indonesia. Animal Conservation, 23(1), 18-27. https://doi.org/10.1111/acv.12513

Guadalupe-Zevallos, O. (2024). Conservation of the environment and ecological habits in environmental awareness among adolescents in the peruvian jungle. AI, 51(1), 1-8. https://doi.org/10.62441/actainnovations.51.1

Gunansyah, G. (2022). Between the sustainable development narrative and the environmental crisis. Bioculture,11(1), 28-44. https://doi.org/10.20473/bk.v11i1.37109

Han, P., Tong, Z., Sun, Y., & Chen, X. (2022). Impact of climate change beliefs on youths' engagement in energy-conservation behavior: the mediating mechanism of environmental concerns. International Journal of Environmental Research and Public Health, 19(12), 7222. https://doi.org/10.3390/ijerph19127222

Havik, G., Elands, B., & Koppen, C. (2015). An encounter with one's deeper self and energy: a phenomenological study among spiritually engaged individuals in the netherlands. Ecopsychology, 7(2), 75-83. https://doi.org/10.1089/eco.2015.0007

Huang, H. (2023). Environmental literacy education and sustainable development in schools based on teaching effectiveness. International Journal of Sustainable Development and Planning, 18(5),1639-1648. https://doi.org/10.18280/ijsdp.180535

Iared, V., Ferreira, A., & Hofstatter, L. (2022). For more aesthetic experiences of nature in public primary and secondary education schools. Educar Em Revista, 38. https://doi.org/10.1590/0104-4060.78109-t karadu

Karaduman, B. and Uçar, S. (2020). Öğretmen adaylarının eğitim felsefeleri ve program yönelimleri üzerine bir ı˙nceleme. Necatibey Eğitim Fakültesi Elektronik Fen Ve Matematik Eğitimi Dergisi, 14(2), 1343-1380. https://doi.org/10.17522/balikesirnef.755701

Kopnina, H. (2015). If a tree falls and everybody hears the sound: teaching deep ecology to business students. Journal of Education for Sustainable Development, 9(1), 101-116. https://doi.org/10.1177/0973408215569119

Kunjumuhammed, S. (2023). "hugging the middle" on selection of educational philosophy: empirical evidence from higher education in sultanate of oman. Arab Gulf Journal of Scientific Research, 42(3), 534-550. https://doi.org/10.1108/agjsr-12-2022-0313

Lukas, K., Leeds, A., Slavin, M., Tinka, J., & Kendall, C. (2017). Impact of teacher training in conservation education on student learning in primary schools adjacent to kibale national park, uganda. Oryx, 53(3), 497-504. https://doi.org/10.1017/s0030605317000965

Manen, M. (2017). Phenomenology in its original sense. Qualitative Health Research, 27(6), 810-825. https://doi.org/10.1177/1049732317699381

Meyer, K. (2023). Normative implications of ecophenomenology. towards a deep anthropo-related environmental ethics. Environmental Values, 33(3), 279-295. https://doi.org/10.1177/09632719231174086

Moorthy, R. and Akwen, G. (2020). Environmental ethics through value-based education. Bangladesh Journal of Bioethics, 11(2), 1-9. https://doi.org/10.3329/bioethics.v11i2.49257

Offord-Woolley, S., Bamford, P., & Desforges, R. (2016). Developing an environmental-education program using black rhinoceros diceros bicornis in zambia as a case study. International Zoo Yearbook, 50(1), 84-95. https://doi.org/10.1111/izy.12117

Ossiannilsson, E. (2023). Open educational resources (oer) and some of the united nations

sustainable development goals. International Journal of Information and Learning Technology, 40(5), 548-561. https://doi.org/10.1108/ijilt-01-2023-0002

Puche, C. (2024). Transformative pedagogies from innovation in times of planetary crisis. a systematic review of the literature. Salud Ciencia Y Tecnología, 4, 1146. https://doi.org/10.56294/saludcyt20241146

Rahman, H. (2023). Effects of an environmental education intervention on environmental sustainability among youth in malaysia. Peuradeun Scientific Journal, 11(3), 873. https://doi.org/10.26811/peuradeun.v11i3.1036

Rodrigues, C. (2023). Ecomotricity of planting and caring: a decolonial and ecophenomenological pedagogical framework. Motricidades Revista Da Sociedade De Pesquisa Qualitativa Em Motricidade Humana, 7(2), 92-104. https://doi.org/10.29181/2594-6463-2023-v7-n2-p92-104

Şahan, H. (2020). The relationship of prospective teachers' educational philosophy and life-long learning tendencies to their teaching-learning process competencies. Pegem Eğitim Ve Öğretim Dergisi, 10(4), 1325-1367. https://doi.org/10.14527/pegegog.2020.040

Saleh, M. and Saifudin, M. (2017). Media and environmental non-governmental organizations (engos) roles in environmental sustainability communication in malaysia. Discourse and Communication for Sustainable Education, 8(1), 90-101. https://doi.org/10.1515/dcse-2017-0007

Suherdi, D., Hidayat, D., & Abdurrahman, M. (2017). The role of majelis taklims and Arabic literacy in sustaining lifelong learning in Indonesia.. https://doi.org/10.2991/nfe-16.2017.41

Sulasari, A. (2023). Assessing the impact of online training platforms on continuing education in science and technology fields. JTEST, 19-24. https://doi.org/10.51629/jtest.v1i1.171

Tamang, Y. (2023). Philosophical perspectives towards curriculum. Innovative Research Journal, 2(2), 147-152. https://doi.org/10.3126/irj.v2i2.56165

Thwe, W. and Kálmán, A. (2023). Lifelong learning in the educational setting: a systematic literature review. The Asia-Pacific Education Researcher, 33(2), 407-417. https://doi.org/10.1007/s40299-023-00738-w

Wals, A. and Benavot, A. (2017). Can we meet the sustainability challenges? the role of education and lifelong learning. European Journal of Education, 52(4), 404-413. https://doi.org/10.1111/ejed.12250

Wang, H. and Lu, Q. (2022). Understanding philosophies of higher education between countries in china's belt and road initiative: analysis of university mottos based on natural language processing technology. Sage Open, 12(4). https://doi.org/10.1177/21582440221141867

Yoshida, Y., Matsuda, H., Fukushi, K., Takeuchi, K., & Watanabe, R. (2022). The missing intangibles: nature's contributions to human wellbeing through place attachment and social capital. Sustainability Science, 17(3), 809-822. https://doi.org/10.1007/s11625-021-01067-x

Zhongbin, Z. (2024). Innovative approaches to art education by integrating environmental awareness in art curriculum in Beijing. International Journal of Academic Research in Progressive Education and Development, 13(1). https://doi.org/10.6007/ijarped/v13-i1/20657