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Karampuang Ecopedagogy Model: Local Wisdom and Ecological Education in Indigenous Communities in Sinjai, South Sulawesi

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Abstract: This study aims to describe the Karampuang Ecopedagogy model as a form of ecological education grounded in local wisdom within the indigenous community of Tompobulu Village, Sinjai Regency, South Sulawesi. The model is rooted in the ecological-spiritual philosophy of Sulapa Eppa, which emphasizes balance among fire, earth, water, and wind as the foundation of harmony between humans and nature. This research employs a qualitative ethnographic approach within a critical ethnopedagogy framework to examine the values, norms, and social practices that shape ecological awareness. Data were collected through in-depth interviews with traditional leaders (Tomatoa, Gella, Guru, Sanro), the village head, community figures, and indigenous youth. They were supplemented by participatory observation and document analysis. Findings reveal that Karampuang Ecopedagogy is embedded in the Sulapa Eppa worldview and institutionalized through the Ade' Eppae social system, Paseng ri Ade customary rules, and collective rituals such as Mappogau Sihanua, which function as intergenerational ecological learning media. The model integrates tradition, education, and modern technology to foster critical ecological consciousness and social resilience. This study confirms that local wisdom-based ecological education is an effective strategy for community empowerment and the development of contextual ecopedagogy in Indonesia.

Keywords: ecopedagogy, critical ethnopedagogy, karampuang, paseng ri Ade, community empowerment

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INTRODUCTION

The ecological crisis currently affecting the world reveals how fragile the relationship between humans and nature is. Climate change, deforestation, and the degradation of biological resources are symptoms of the modern development paradigm that places humans at the center of life (anthropocentrism) (De Lima & De Lima, 2023). This perspective separates humans from nature and views the environment merely as an object of economic exploitation. In the context of education, such a paradigm gives rise to cognitive and technical approaches—teaching how to care for nature but rarely fostering ecological awareness and moral responsibility toward the earth (Gadotti, 2021).

In response to these conditions, the idea of ecopedagogy emerged as an educational approach oriented toward ecological and social liberation (Hung, 2021). This concept is rooted

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in Paulo Freire's ideas on the pedagogy of liberation, which positions education as a process of cultivating critical awareness of social and ecological realities (Beckett, 2013; Peruzzo, 2020). Ecopedagogy not only emphasizes mastery of environmental knowledge but also encourages reflection and praxis that liberate people from exploitative cultural structures. Its goal is to build ecological literacy—the ability to understand the interconnectedness between social and natural systems (Dentith et al., 2022; Ribó, 2024). However, current environmental education is often trapped in what Freire calls a "banking system," where students merely memorize environmental facts without developing the critical agency needed for real ecological transformation. In the Indonesian context, this formalistic approach fails to foster an emancipatory awareness, creating a void that indigenous pedagogical models could potentially fill.

In the Indonesian context, environmental education has been integrated into national policies and curriculum. However, its implementation is often formalistic, focusing on symbolic activities such as tree planting or cleanliness competitions, without fostering critical and emancipatory awareness. In fact, various indigenous communities across the archipelago have long possessed living systems of ecological knowledge and education deeply rooted in their cultures (Enkin Asrawijaya, 2024). Their local wisdom not only teaches respect for nature but also provides a moral, spiritual, and social framework for maintaining the balance of life. For example, *Pasang Ri Kajang* (Arumningtyas et al., 2023), *Muro* practice in Lembata Island (Ramadani et al., 2023), The wisdom of Bakelam, the sea tribe people in Riau (Suhardiman et al., 2025), The wisdom *Paseng Ri Ade'* in Karampuang Sinjai (Awaliyah et al., 2020), dll. However, most of these studies primarily focus on documenting traditional ecological knowledge as static cultural artifacts or spiritual myths. There is a significant lack of critical analysis regarding how these indigenous values are systematically institutionalized into a dynamic non-formal educational model that can foster critical consciousness in the context of a globalized era. Moreover, research on Karampuang has yet to frame its social structure and rituals as a coherent ecopedagogical system capable of effectively navigating modern socio-environmental challenges.

This is where the relevance of community-based indigenous education becomes important. Such education not only serves to transfer knowledge, but also shapes values, attitudes, and ecological behaviors through direct experience (Zakharova et al., 2021). This kind of approach is called ethnopedagogy, education rooted in local culture and community value systems (Sugiarto et al., 2025a). When interpreted reflectively and critically, ethnopedagogy serves as a form of emancipatory learning that fosters awareness of power relations, the environment, and cultural identity. Thus, critical ethnopedagogy becomes a bridge between traditional knowledge and modern reflection on sustainability (Soto-Molina, 2025). Several studies show that indigenous communities possess ecological ethics that align with modern principles of sustainability (Barger et al., 2025; Datta, 2024; Gauer et al., 2021; McGregor et al., 2020; Muammar Saudi & Muallim Saudi, 2023; Vogel et al., 2022; Widianingsih, 2023). They protect the forests, water, and land not because of government regulations, but because of a moral and spiritual conviction that nature is part of human existence. This kind of value system can be described as a form of community ecopedagogy—an ecological education that grows from collective experience and is practiced across generations. In such societies, social activities, religious rituals, and customary deliberations serve as platforms for collective learning about how to live in harmony with nature.

One of the indigenous communities that still practices such an ecological education system is the Karampuang indigenous community in Sinjai Regency, South Sulawesi. This community is known for its strong customary social structure and spiritual traditions that regulate a balanced relationship between humans and nature. The ecological values, social ethics, and spiritual principles they uphold form a unique system of ecological learning. Through customary values, annual rituals, and cosmological symbols, the Karampuang people instill the awareness that protecting nature is not just a moral obligation, but also a form of respect for

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their ancestors and the Creator. In modern situations, such a value system faces serious challenges. Globalization, technological flows, and changing lifestyles are reshaping how the younger generation understands tradition and the environment (Buribayev et al., 2025). However, in many indigenous communities, including Karampuang, the process of adaptation is underway: local values strive to engage in dialogue with new knowledge without losing their cultural substance. This phenomenon makes Karampuang not only a cultural heritage but also a social laboratory, demonstrating how indigenous communities maintain ecological balance while adapting to changing times. Therefore, studies on ecological education models in indigenous communities such as Karampuang become important, both academically and practically. Academically, it enriches understanding of ecopedagogy as a practice that is born not only from the Western academic world but also from the life experiences of local communities. Practically, such models inspire the development of value- and culture-based environmental education in Indonesia.

Despite the extensive literature on indigenous environmental ethics, there is a notable absence of empirical research that systematically frames these practices as a coherent and critical ecopedagogical model within the non-formal education sector. Most studies merely document local myths without analyzing the power dynamics and educational mechanisms that sustain them. This research addresses this gap by conceptualizing the "Karampuang Ecopedagogy Model." It transcends descriptive ethnography to provide a critical interpretation of how a structured indigenous leadership and an oral lived curriculum foster ecological agency and social resilience. Consequently, this study serves as a crucial reference for decolonizing environmental education in Indonesia and beyond.

METHOD

Type of Research

This study uses a qualitative-ethnographic approach with a critical ethnopedagogical framework. This approach was chosen because the aim of the research is not to test hypotheses, but to understand the meaning and value of ecological education embedded in the cultural practices of the Karampuang indigenous community. According to (Creswell, 2009)Ethnographic research focuses on exploring the meanings and social structures of a community through the researcher's direct engagement in the field. In this context, critical ethnopedagogy serves as the analytical foundation for interpreting how value systems, symbols, and customary practices function as forms of ecological learning and means of community empowerment. Through this approach, researchers seek to understand Karampuang not merely as a cultural community, but as an ecological learning space where people acquire, transmit, and reflect upon knowledge about the balance between humans and nature.

Research Location

The research was conducted in the Karampuang Indigenous Community, which is administratively located in Tompobulu Village, Bulupoddo Subdistrict, Sinjai Regency, South Sulawesi. This area is situated in hilly terrain, surrounded by forests and agricultural land, with a social system still centered on the Ade' Eppae traditional institution (the four traditional leaders), who hold spiritual and social roles within the community. This location was chosen purposefully because its people still uphold an indigenous system oriented toward ecological balance. Karampuang is also widely recognized as a community that has successfully preserved its environment while strengthening social solidarity through cultural values and annual rituals. This area serves as an important representation of community ecopedagogy practices in eastern Indonesia.

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Research Subjects

The research subjects were purposively selected, comprising individuals who hold strategic roles within the Karampuang social and educational ecosystem. This selection ensures a holistic representation of the transmission of ecological knowledge, from traditional spiritual leaders to the modern youth generation. Detailed profiles of the seven primary informants are presented in Table 1.

Table 1. Profile of Primary Informants in the Karampuang Ecopedagogy Study

No	Informant Code	Gender	Age Range	Ecological Education's Role and Philosophical Representation
1	TMT	Male	70-75	The highest traditional leader represents the element of fire, symbolizing steadfastness and moral responsibility in ecological law.
2	GL	Male	65-70	The Prime Minister represents the element of earth, acting as the guardian of honesty, social balance, and land management.
3	GR	Male	60-65	The teacher represents the element of water, serving as the primary educator of traditional spiritual values and ecological "cooling".
4	SRO	Female	60-65	Shaman represents the element of wind, leading healing rituals, promoting environmental conservation, and embodying the "breath of life".
5	VH	Male	50-60	Formal government liaison; bridges the gap between state policies and traditional ecological institutions.
6	BS	Male	45–55	Practitioner of customary traditions and a grassroots promoter of community-based environmental education.
7	ASR	Male	30-35	Representative of the younger generation; focuses on preserving traditions while mediating adaptation to modern technology.

Data Collection Procedures

The fieldwork was conducted over a period of six months, from April to September 2025, covering the full cycle of the traditional ecological calendar from the preparation of agricultural land to the post-harvest rituals. This prolonged engagement allowed the researchers to move beyond superficial observations and develop a deep rapport with the community. Data collection followed a structured three-phase ethnographic journey: The Orientation Phase (Month 1): Building trust with the Ade' Eppae and observing daily social interactions. The In-depth Inquiry Phase (Months 2-5): Conducting semi-structured interviews and participating in key ecological events, such as the Mabbissa Lompo and Mappogau Sihanua rituals. The Validation Phase (Month 6): Carrying out member-checking sessions and thematic synthesis to ensure the findings resonated with the community's lived reality.

Data Collection Techniques

Data was collected using four main techniques:

1. In-depth interviews: Interviews were conducted in a semi-structured manner to explore the community leaders' interpretations of customary values, ecological practices, and ongoing learning processes within the society. The questions focused on the role of Ade' Eppae, the meaning of *paseng ri ade* (customary regulations), the functions of traditional rituals, and forms of collaboration between customary systems and modern education.

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2. Participant observation: The researcher was directly involved in community activities, such as customary deliberations and the annual *Mappogau Sihanua* (traditional thanksgiving ceremony). This observation aimed to understand the social context and the dynamics of ecological learning in the daily lives of the Karampuang community.
3. Documentary study: Data was obtained from customary documents, village records, event photos, video archives, and a reference book titled Ekopedagogi Karampuang, which contains the results of mapping customary values and practices. These documents served as secondary sources to strengthen the validity of field data.
4. Community discussions: After the interview and observation process, meetings were held with customary leaders and the community to verify preliminary findings. This process was carried out in the spirit of member checking to ensure that the researcher's interpretations did not deviate from the community's perspectives.

Ethical Protocol and Indigenous Sovereignty

Ethical considerations prioritized reciprocity and respect for Karampuang knowledge systems. Considering the community's oral tradition, a culturally sensitive protocol was implemented. First, Community-Level Permission: To ensure alignment with community values, research objectives were formally presented to and approved by the Ade' Eppae (the four traditional leaders). Second, Verbal Informed Consent: Recognizing the cultural inappropriateness of written forms for elders, verbal consent was obtained and recorded for each participant. This emphasized voluntary participation and the right to withdraw. Third, Protection of Sacred Knowledge: Researchers consulted with the Guru and Sanro to define boundaries for shareable data. Elements identified as 'sacred' remained confidential to preserve spiritual integrity. Fourth, Anonymity and Coding: Standardized codes (e.g., TMT) protected informant privacy while maintaining their institutional authority. Fifth, Reciprocity through Member-Checking: Preliminary findings were returned to the community leaders for critique. This ensured that the model accurately reflects their lived reality and avoids outsider romanticization.

Data Analysis

Data analysis in this study was carried out using a thematic-narrative approach according to the procedure by (Matthew B. Miles et al., 2014), emphasizing an interactive and reflective process. The analysis was specifically designed to bridge indigenous narratives with critical ecopedagogical theory through three streams of activity. First, Data Condensation: We categorized raw field notes and interview transcripts into thematic codes, specifically identifying ecological values (*Paseng ri Ade*), social leadership roles (*Ade' Eppae*), and spiritual-environmental rituals (*Mappogau Sihanua*). This phase involved writing analytic memos that connected the social context of Karampuang to the critical ethnopedagogy framework. Second, Data Presentation: Results were organized into thematic matrices and narratives, showcasing representative quotations from traditional leaders to provide empirical depth. We developed a conceptual map to illustrate how philosophical elements (e.g., fire, earth) translate into specific educational practices. Third, Conclusion Drawing and Verification: Interpretations were validated through source and method triangulation, cross-referencing interviews with participatory observations. To prevent researcher bias and romanticization, member-checking sessions were held with traditional leaders to verify that our conceptual model of Karampuang Ecopedagogy truly represents their lived indigenous sovereignty.

RESULT AND DISCUSSION

Result

The findings of this study demonstrate that the Karampuang Ecopedagogy model is not a collection of isolated traditions, but rather a highly integrated system of values and practices.

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Through the thematic analysis process outlined in the methodology, we identified a direct correlation between the philosophical elements of Sulapa Eppa and the concrete ecological education practices within the community. Table 2 presents a thematic matrix that synthesizes these relationships and serves as the foundation for the subsequent detailed analysis.

Table 2. Thematic Matrix of Karampuang Ecopedagogical Dimensions

Philosophical Element (Sulapa Eppa)	Pedagogical Actor	Educational Instrument (Paseng)	Real Ecological Practice
Fire	Tomatoa	*Aja muala aju fura pasanre…* (Honesty/Responsibility)	Prohibition of cutting trees without permission from traditional leaders.
Earth	Gella	Values of social balance and land fertility	Regulation of planting seasons and fair distribution of harvest yields.
Water	Guru	Values of spirituality and calmness (coolness)	Rituals for cleaning water sources and communal prayers.
Wind	Sanro	Values of health and conservation of medicinal plants	Practice of replanting seedlings after harvesting.

Fundamental Ecological and Spiritual Values in the Sulapa Eppa Philosophy

The fundamental values of ecological education within the Karampuang indigenous community are rooted in the Sulapa Eppa philosophy, which encompasses the four primary elements of nature: fire, earth, water, and wind. These elements not only serve as cosmological symbols but also act as moral guidelines that shape how individuals perceive, behave, and interact with the natural world—the traditional leadership structure known as Ade' Eppae embodies this philosophy. Tomatoa (king) symbolizes fire, representing steadfastness and moral integrity; Gella (prime minister) embodies earth, symbolizing honesty and fertility; Guru (teacher) represents water, embodying knowledge, tranquility, and wisdom; while Sanro (shaman) represents wind, serving as the guide of life and maintaining spiritual equilibrium. As articulated by Gella (GL), "api tettong, tanah tudang, angin roko', air suju'." This translates to fire standing, earth sitting, wind bowing, and water prostrating. These four movements of life symbolize the balance between humans and their Creator. Consequently, the Sulapa Eppa philosophy forms the basis for ecological awareness within the Karampuang community: nature is not a commodity to be acquired, but a living entity with a spirit and inherent dignity. Sulapa Eppa, the philosophical foundation of Karampuang ecopedagogy, emphasizes that preserving nature is intrinsically linked to maintaining spiritual, social, and moral harmony. This philosophy serves as a guiding framework for educating the younger generation, fostering environmental sensitivity and adaptability to social changes, while preserving their cultural heritage.

This spiritual alignment implies that ecopedagogy in Karampuang goes beyond merely imparting environmental knowledge; it is a ritualized process of internalizing cosmic order. By equating ecological care with spiritual prostration (suju'), the community eliminates the anthropocentric divide between the "self" and "nature," fostering an emancipatory awareness that transcends modern technical rationality. In this context, Karampuang's ecopedagogy serves as a transformative practice in which environmental protection is intrinsically linked to the preservation of spiritual and cultural sovereignty.

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Paseng ri Ade: The Socio-Ecological Curriculum of the Karampuang Community

The tangible form of Karampuang's ecological values is manifested in a system of customary rules and proverbs known as Paseng ri Ade. Paseng is not merely a set of prohibitions, but rather a moral and ecological text passed down through generations via oral traditions, rituals, and social practices. Some of the most well-known paseng include:

> "*Aja muala aju fura pasanre ko tania iko pasanrekki*" (do not take wood that is not the one you have leaned against); "*Aja muala lefu fura pasappe ko tania iko pasappei*" (do not take fruit that is not the one you have made fall); "*Aja muala cani fura pello ko tania iko fura pellokki*" (do not take honey that does not belong to you).

These paseng contain principles of ecological ethics: responsibility, honesty, and awareness of boundaries. According to *Tomatoa* (TMT), such rules prevent the community from being greedy when harvesting nature's bounty. At the same time, Gella adds that "paseng is not just a prohibition, but a protector of life." In practice, Paseng ri Ade serves as a social curriculum that guides human interaction with nature. Children learn from their parents through direct experience in the fields and forests. Values such as simplicity, cooperation, and respect for the land are passed down without the need for written texts. Thus, paseng becomes a pedagogical mechanism that cultivates critical ecological awareness in everyday life.

From a critical ethnopedagogical standpoint, Paseng ri Ade embodies an indigenous literacy of life that challenges the neoliberal commodification of nature. Unlike modern legal systems that rely on external surveillance, Paseng cultivates an internal ethical perspective in which nature is accorded inherent dignity. By emphasizing the act of leaning or causing something to fall as a prerequisite for possession, this oral curriculum internalizes the concept of labor-based justice and ecological boundaries. This implies that Karampuang's ecopedagogy is essentially a counter-hegemonic practice; it empowers the community with moral autonomy to resist exploitative development paradigms while preserving their cultural and environmental sovereignty.

Ritual Mappogau Sihanua: An Ecological Learning Platform Across Generations

The annual Mappogau Sihanua ritual stands as the most profound expression of the ecological learning process within the Karampuang community. This ritual, held annually, typically follows the harvest season, serving as a heartfelt expression of gratitude to the divine and a profound respect for nature. The ritual unfolds through several distinct stages, each imbued with profound educational significance:

1. *Mabbahang:* Deliberation among traditional leaders, the community, and the village government to determine the implementation of the ritual.
2. *Mappaota:* Requesting permission and blessings from the ancestors and God.
3. *Mabbaja-baja:* Collective activities to clean the environment, market, school, and traditional houses.
4. *Menre Bulu:* The main event featuring prayers and offerings on the sacred mountain.
5. *Mabbali Sumange':* The closing stage, which focuses on strengthening the spirit of togetherness and solidarity.

According to Guru (GR), this ritual is not only a spiritual event but also a medium for collective learning: *"The ritual teaches physical and spiritual cleanliness as well as social responsibility"*. Meanwhile, Gella (GL) emphasizes that the *mabbaja-baja* activity instills concrete values of communal cooperation and environmental awareness. Thus, *Mappogau Sihanua* serves as an intergenerational ecopedagogical platform that unites indigenous knowledge, religion, and social practice, functioning as a laboratory for ecological education grounded in real-life experience.

Mappogau Sihanua serves as a "pedagogy of the earth," transforming abstract indigenous values into collective environmental action. For instance, the Mabbahang stage functions as a democratic learning space where power dynamics are negotiated between traditional authority

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and formal village governance, ensuring that ecological decisions remain participatory. Moreover, the Mabbaja-baja activity goes beyond symbolic cleaning; it prompts critical reflection on human impact, where the community confronts its physical relationship with its habitat. This ritual suggests that Karampuang's ecopedagogy is essentially performative and experiential, avoiding the pitfalls of formal environmental education that often separates students from their subjects. By involving all generations in the ritual cycle, Karampuang maintains a continuous resistance against the alienating effects of modern development, reaffirming their collective identity as planetary citizens deeply connected to their local ecology.

The Role of Women in Social and Spiritual Ecology

In the Ade' Eppae system, women play an important role through the Sanro position. She is the guardian of balance between the physical and spiritual worlds, as well as the protector of the community's health and the environment. *Sanro* explains that the wind is the "breath of the world," a symbol of life and sensitivity to change. She teaches children to replant seeds whenever they harvest medicinal plants from the forest. According to *Sanro* (SRO), "Taking from nature must be accompanied by giving back." In addition to healing, women also lead the mabbissa lompo ritual, a major purification ceremony that marks the planting season. In this activity, women bring offerings, pray, and teach the values of gratitude and respect for the land. A community leader (BS) emphasizes that "women in Karampuang are the first teachers for children about nature." The role of women in this system reflects a dimension of local eco-feminism: namely, that ecological balance cannot be achieved without women's spiritual and social roles.

This finding challenges the commonly held belief that indigenous leadership is exclusively patriarchal. From an eco-feminist perspective, the Sanro's role embodies an ethics of care that serves as a crucial pedagogical counterbalance to dominant extractive mindsets. While the male leaders, including Tomatoa, Gella, and Guru, focus on law, politics, and spirituality, the Sanro manages the crucial relationship between human health and ecological sustainability. However, a critical examination reveals that this authority is often confined to the spiritual and domestic spheres, raising questions about women's influence in formal customary deliberations (Mabbahang). Despite these limitations, the Sanro's pedagogical influence remains transformative. She ensures that ecological awareness begins at the most intimate level of the family, positioning women not only as participants but as the primary architects of Karampuang's social and ecological resilience.

Integration of Tradition, Education, and Modern Technology

Field findings show that the Karampuang community is open to modern knowledge as long as it does not change the substance of their traditions. The head of Tompobulu Village (VH) explained that the schools in his area have begun incorporating traditional values into learning activities, such as introducing paseng ri ade and involving students in traditional rituals. The younger generation also acts as a bridge between tradition and technology. A youth leader (ASR) mentioned that social media has become an effective means to introduce Karampuang culture to the wider public. "Culture needs to be presented in an engaging and relevant way," he said, while emphasizing the importance of maintaining the authenticity of traditional messages in the digital space. This adaptation shows that Karampuang's ecopedagogy is not rigid or exclusive, but rather dynamic and participatory. Local knowledge engages in dialogue with modern science, creating synergy between local wisdom and scientific understanding in preserving environmental sustainability.

This adaptation process embodies what can be called 'critical digital ethnopedagogy.' By leveraging digital tools to amplify indigenous voices, the Karampuang youth are not merely consuming technology; they are creatively repurposing it for cultural preservation and ecological advocacy. However, this integration is not devoid of challenges. A critical reflection reveals a

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potential risk of digital romanticization, where the aesthetic appeal of a ritual might overshadow its profound ecological significance for external audiences. Additionally, the reliance on formal schools to teach Paseng raises concerns about the possible formalization of what was once a lived, organic community experience. Despite these obstacles, the Karampuang model demonstrates a transformative synergy; it proves that indigenous ecopedagogy is a dynamic praxis that engages in dialogue with global science and technology while maintaining its ontological roots.

Karampuang Ecopedagogy Conceptual Model

Based on the synthesis of field data and thematic analysis, the Karampuang Ecopedagogy model is formulated as a community-based ecological education system. This model is not a static set of rules, but a dynamic and integrated system consisting of five core elements. First, Value Philosophy: The foundation of the system is the Sulapa Eppa philosophy, which establishes a relational ontology between humans and nature. This philosophy emphasizes balance across the four main elements. Second, Educational Instruments: Paseng ri Ade serves as a "living curriculum." It consists of moral and ecological proverbs that guide social behavior and ethical decision-making within the community's daily life. Third, Learning Media: Traditional rituals, such as Mappogau Sihanua, and ecological practices, such as Mabbissa Lompo, act as experiential laboratories. These activities allow individuals to perform and internalize ecological values. Fourth, Educational Actors: The system operates through a collaborative structure involving the Ade' Eppae (pedagogical authority), women/Sanro (custodians of health and care), and the younger generation (digital-cultural mediators). Fifth, Educational Outcomes: The system aims to foster critical ecological awareness, social solidarity, and a resilient identity. This identity will enable individuals to navigate modern socio-environmental changes effectively.

This conceptual model illustrates how the Karampuang indigenous community constructs and sustains a culturally embedded learning system that transcends the conventional dichotomy between spirituality and social action. Within this system, spirituality serves not merely as a foundation for religious beliefs and customary rituals but also as an epistemological and ethical framework that shapes knowledge transmission, social relationships, ecological responsibilities, and collective learning practices. From a critical ethnopedagogical perspective, this interconnected system can be understood as a form of counter-pedagogy that challenges dominant modern educational paradigms characterized by standardization, individualism, and the marginalization of indigenous knowledge. Through the integration of ancestral wisdom, customary institutions, intergenerational participation, and everyday experiences, the community maintains its authority to define legitimate knowledge and determine culturally meaningful educational practices. This process reflects an assertion of indigenous epistemic sovereignty, in which learning is understood not simply as individual knowledge acquisition but as a collective endeavor to preserve cultural identity, strengthen social solidarity, and sustain harmonious relationships between humans, nature, and spiritual values. Furthermore, the model demonstrates that indigenous education is neither static nor exclusively oriented toward cultural preservation; rather, it constitutes a dynamic process through which inherited knowledge is continuously interpreted, negotiated, and adapted to changing social conditions without necessarily compromising the community's cultural autonomy. In this sense, the Karampuang learning system contributes to broader discourses on decolonial education, culturally sustaining pedagogy, and community-based learning by emphasizing the transformative potential of indigenous epistemologies in fostering collective agency, ethical responsibility, and culturally grounded social development. The interconnectedness of these spiritual, cultural, ecological, and pedagogical dimensions is illustrated in Figure 1.

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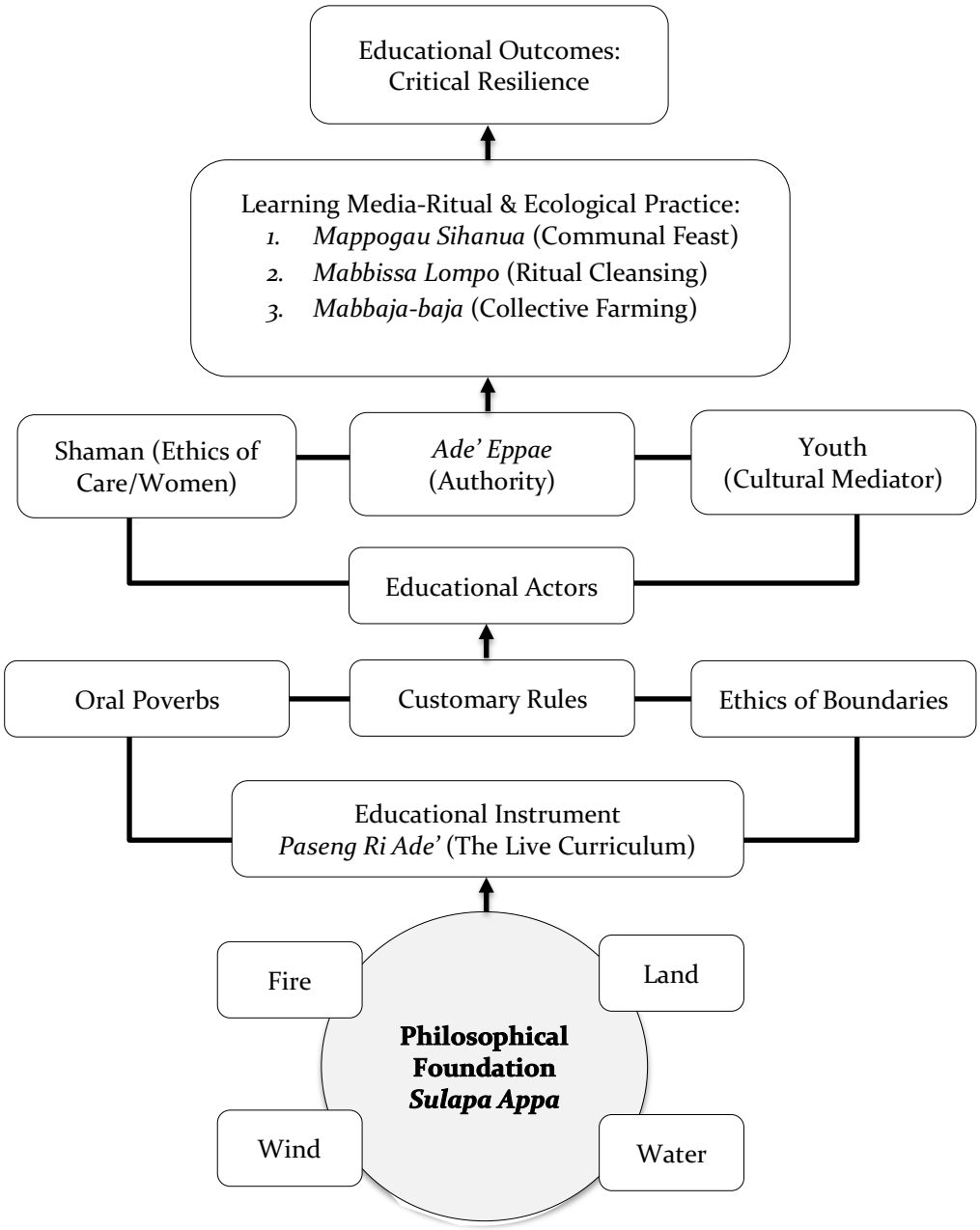


Figure 1. The Karampuang Ecopedagogy Conceptual Model

Figure 1 demonstrates that Karampuang ecopedagogy operates as a vertically integrated system in which the Sulapa Eppa ontology serves as the gravitational center of all pedagogical activities. The model highlights a critical transition from "knowing" (*Paseng*) to "performing" (Rituals), mediated by diverse social actors who ensure cultural continuity. By equating ecological care with spiritual prostration (*suju'*), the community removes the anthropocentric divide, creating an emancipatory awareness. In this context, the resulting "Critical Resilience" is not merely an individual trait but a collective outcome of a sustained, ritualized, and community-led educational praxis.

Discussion

Ecopedagogy as the Praxis of Ecological Awareness

The concept of ecopedagogy arises from a critique of the modern education system, which places too much emphasis on technical rationality and positions humans as the center of the

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universe (Hung, 2021). This paradigm gives rise to an anthropocentric way of thinking, in which nature is reduced to an object of study or a resource rather than being seen as part of a web of life with intrinsic value (Butchvarov, 2015; Gansmo Jakobsen, 2017). Education that focuses solely on mastering ecological knowledge without transforming social awareness will fail to create meaningful change (Oe et al., 2022; Wan & Du, 2022). For many people, nature may be recognized but not loved; nature may be studied, but not respected.

In contrast to that paradigm, the Karampuang indigenous community views education and nature as inseparable. Nature is not taught, but rather internalized. Ecological knowledge is not transferred through books or formal instruction, but through life experiences rich in spiritual meaning (Bell et al., 2025; Maliao et al., 2023). When the community cleans the environment, performs harvest rituals, or offers prayers before cutting down trees, they are actually engaging in a reflective praxis that combines knowledge, values, and experience. (Dale & Hyslop-Margison, 2010; Freire, 1970). Within this framework, learning is no longer understood as a cognitive process, but rather as an existential process that transforms human consciousness of the world and of oneself.

In the context of Karampuang, ecopedagogy becomes a practice of ecological awareness, manifested through recurring social and spiritual actions in daily life. Values such as the prohibition of cutting down trees without permission, the obligation to share harvests, and environmental cleansing rituals are not merely cultural traditions, but rather methods for fostering collective ecological consciousness. Every action contains an element of reflection, a relationship between humans, nature, and the Creator, shaping the understanding that protecting nature means maintaining moral and spiritual balance. The Sulapa Eppa philosophy reinforces this awareness through teachings about the balance between the elements of fire, earth, water, and wind. These four elements symbolize the interconnectedness and mutual dependence between humans and nature. When Gella explains that "fire stands, earth sits, wind bows, water prostrates" in harmony with the movements of prayer—standing, bowing, sitting, prostrating—he is, in fact, presenting a worldview in which spirituality and ecology are a unified and holistic pedagogical entity.

The relationship with nature is a form of worship; ecological awareness is divine awareness (Heba Hasan, 2022; Sinha, 2025). This is in line with the view that asserts true sustainable education must be transformative, meaning it changes the way people understand the world, not just adapt to environmental crises (Sterling, 2025). Transformative education invites humans to move beyond a paradigm of domination and toward relational awareness. We must realize that humans are part of a complex and interdependent system of life. Karampuang has practiced this principle long before the concept of sustainability education emerged: they do not study nature from the outside but live within it. Thus, Karampuang's ecopedagogy does not position the community as objects to be taught, but as subjects of learning who learn together with nature. This learning process is dialogical, where every element of life—humans, animals, plants, soil, water, even the wind—becomes a teacher that imparts order, patience, and balance (Topa, 2022). Nature is not presented as a laboratory, but as a spiritual and social space that educates humans to live in harmony.

The strength of this model lies in its ability to go beyond conventional, behavior-oriented environmental education toward an education that transforms consciousness. In Karampuang's ecopedagogy, spirituality and morality serve as the foundation of ecological education, not just as complementary additions. Karampuang's ecopedagogy not only fosters environmentally friendly behavior, but also builds an inner awareness that sustainability is part of human identity. Ecological consciousness in the Karampuang community is a form of critical awareness that arises from lived practice rather than from theoretical discourse. It rejects the separation between knowledge and wisdom, between science and spirituality. Ecological education in Karampuang teaches that true knowledge is born of respect for nature, fellow human beings, and the cosmic order that sustains all.

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Comparative Ecopedagogy: Karampuang in a Global Context

Sulapa Eppa stresses the importance of fostering a harmonious relationship with nature, aligning with global indigenous philosophies like Buen Vivir and Ubuntu. These philosophies prioritize collective well-being and ecological harmony over individualism and capitalism. The Karampuang community exemplifies this through Mapakalebbi ale hanua (respect for the forest), which includes Mappatau ale (humanizing the forest) and De'namakkasolang ale (not destroying the forest) (Syarif et al., 2023; Yusuf et al., 2019). These practices ensure sustainable forest conservation and reflect a deep connection with nature. Logging in customary forests requires permission from customary leaders and tenfold replanting, with violations resulting in the loss of customary privileges and ensuring accountability and ecological sustainability (Sampebua & Dirawan, 2015).

Buen Vivir, a worldview of Andean indigenous peoples, emphasizes harmony with nature, relational coexistence, and diverse worldviews. It critiques Western anthropocentrism and advocates decolonized, community-driven sustainability (Hoinle, 2025; Villalba-Eguiluz & Carranza-Barona, 2025). Practices like agroecology and territorial autonomy align with its principles, promoting collective well-being and ecological stewardship. Ubuntu, an African practice, emphasizes human interconnectedness and community (Seehawer et al., 2022). It advocates mutual respect and understanding, as reflected in communal living, resource sharing, and the prioritization of community well-being. Ubuntu challenges Western individualism, promoting a worldview where humans are inseparable from their environment.

The Karampuang model and global indigenous philosophy reject Western nature-culture dualism, advocating an ecocentric worldview where humans are integral to larger ecological systems. They emphasize decolonizing knowledge systems and integrating Indigenous epistemologies into global sustainability frameworks. These frameworks encourage intercultural dialogue and mutual respect, prioritize collective well-being and ecological harmony, and reject anthropocentric worldviews. (Coombe & Jefferson, 2021; Syarif et al., 2023; Washington et al., 2022). They offer valuable insights for addressing the global environmental crisis and promoting sustainable, relationship-based ways of life.

However, a critical ethnopedagogical perspective reveals that the Karampuang model is uniquely characterized by its dialogical resilience. Unlike some indigenous education models in other parts of the world that primarily focus on preserving static ancestral knowledge as a form of resistance, the Karampuang community engages in what can be interpreted as a "dynamic synthesis." By involving the younger generation as cultural mediators, the community ensures that Paseng ri Ade remains a functional tool for navigating modern socio-environmental shifts, rather than becoming a relic of the past.

Furthermore, this study transcends a celebratory tone by recognizing that indigenous ecopedagogy is a contested domain. Similar to the struggles faced by the Maori in New Zealand regarding the formalization of Matauranga Maori (indigenous knowledge) within state-led curricula, they risk their sacred rituals being perceived merely as aesthetic performances by external observers. (Finn et al., 2026; L. T. Smith et al., 2016; Trinick & Heaton, 2021). Therefore, the Karampuang model should not be understood as a perfect, harmonious fact, but as an ongoing, critical praxis of ontological sovereignty—a continuous struggle to define and defend their relationship with the earth against the encroaching logic of neoliberal exploitation.

Critical Ethnopedagogy and Local Values-Based Learning

Critical ethnopedagogy is a form of education that not only presents local culture as an ornament or an object of learning but also positions local knowledge as a reflective and transformative resource. From this perspective, culture is not something to be taught as static knowledge, but as a way of life that is continually renewed through reflection, dialogue, and action (Richelle, 2018; Soto-Molina, 2025; Sugiarto et al., 2025b). Local knowledge serves as a critical lens for understanding power relations and social inequality, as well as for discovering

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liberation strategies rooted in the cultural context of society (Choudhury et al., 2021; Nygren, 1999; Yanou et al., 2023). This concept takes tangible form in the lives of the Karampuang indigenous community. There, a value system known as *Paseng ri Ade'* serves as a life curriculum that regulates the community's ecological, social, and spiritual behavior (Datta et al., 2024). Each paseng contains a moral message that guides people not to overstep boundaries in their relationships with nature and others. Values such as take only what you need are not merely consumption ethics, but represent an ecological mindset rooted in the principle of environmental justice: that every human action must take into account the balance and sustainability of natural systems.

Within the framework of critical ethnopedagogy, Paseng ri Ade can be understood as a form of epistemological resistance against the exploitative worldview of modernity. Rather than merely a set of cultural rules, *Paseng ri Ade'* functions as a counter-hegemonic curriculum that challenges the neoliberal commodification of nature. It creates a frontier of resistance in which the community reclaims its right to define ecological limits, an act of ontological sovereignty that formal education systems often fail to provide. It serves as a means of reflection for the community to understand their place within the ecosystem of life, while also functioning as a contextual medium for character education. This type of education is emancipatory because it connects lived experience with critical awareness. (Giroux et al., 1989; McLaren, 1995). The Karampuang community's educational model emphasizes participatory, contextual learning through daily activities, fostering values of cooperation, ecological responsibility, and respect for nature. However, this ethnopedagogical model is not without its internal contradictions. External economic pressures constantly test the transition from lived experience to critical awareness. While children learn through rituals, the encroaching influence of consumerist lifestyles creates a 'pedagogical tension' between ancestral simplicity and modern aspirations. Acknowledging this struggle is essential to avoid the trap of romanticizing indigenous life and instead highlights the community's agency in a contested ecological landscape.

This learning pattern aligns with the concept of experiential learning (Holbrook & Chen, 2017), in which knowledge is acquired through a cycle of experience, reflection, conceptualization, and action. The laboratory of nature in Karampuang represents a radical departure from the anthropocentric classroom. When the community processes agricultural products, they are not just performing a task; they are engaging in a dialogical praxis with the non-human world. In this critical framework, nature is interpreted not as a passive resource but as a co-teacher that demands order and patience. It is also consistent with the concept of situated learning from Lave & Wenger (2003), which emphasizes that learning occurs in a social context through active participation in a community of practice. In the context of Karampuang, children learn not from instructions but from direct involvement in social practices and rituals. They do not simply listen to the paseng, but bring it to life through action. Paseng ri Ade-based education also reflects the principle of ethnopedagogy, that culturally relevant learning should be able to foster academic competence, cultural awareness, and critical consciousness simultaneously. In Karampuang, these three things manifest naturally: the community practices ecological skills (competence), maintains traditional identity (cultural awareness), and understands the interconnectedness between humans and nature in a spiritual context (critical consciousness).

Karampuang ethnopedagogy presents an educational face that is collective, reflective, and ecological. Knowledge is passed down through social interactions filled with spiritual meaning and deep empathy for nature. Values such as simplicity, honesty, and responsibility for the environment are not only learned but lived. Every individual has a pedagogical role, whether as a parent, a customary elder, a youth, or even nature itself. The community becomes the school, life becomes the learning space, and nature becomes the teacher. Furthermore, this form of critical ethnopedagogy possesses transformative power because it bridges local knowledge and global challenges. In the context of the modern ecological crisis, Paseng Ri Ade serves as a moral

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device that restores the relationship between humans and nature, while also providing an alternative educational model that rejects the separation between cognition and spirituality. This demonstrates that education grounded in local values does not conflict with scientific principles but, in fact, enriches the ethical and humanitarian dimensions of education. (Andi Hasdiansyah et al., 2025).

Thus, the Karampuang indigenous community has in fact established a form of ecological education that embodies critical awareness and social praxis. They do not require textbooks or formal curricula because all aspects of life have become dynamic learning spaces. Through values, rituals, and shared experiences, the Karampuang community has developed an educational model that not only preserves tradition but also fosters critical ecological awareness relevant to the future of this planet.

Karampuang as a Space for Community Ecopedagogy

The Karampuang community demonstrates a concrete form of community-based ecopedagogy, which is ecological education that grows from, by, and for the community. The learning system here is rooted in the traditional structure of Ade' Eppae, which functions as a non-formal social educational institution. This structure has functional similarities to the modern education system: a curriculum (Paseng ri Ade), educators (customary leaders), students (the community), and a learning space (the living environment). The difference is that the entire process takes place within the reality of daily life, not in classrooms or formal institutions. Within the framework of community-based education, Karampuang showcases what (Freire, 1970) referred to as the pedagogy of praxis, education that grows out of reflective awareness and social action. A community learns not because it is taught, but because they live within a value system that guides every action. Paseng ri Ade serves as normative knowledge that guides behavior, while customary practices provide concrete means of instilling values. Education here is not oriented toward the individual, but toward collective consciousness (Prasetyo & Kusumawardani, 2025). Its success is measured not by cognitive achievement, but by the harmony between humans, communities, and nature. By positioning Ade' Eppae as a non-formal social educational institution, Karampuang effectively decentralizes knowledge authority. This structure serves as a strategic alternative to state-led formal education, which often alienates indigenous children from their ecological roots. Here, communities learn not only about the environment but also through ancestral governance systems that enforce accountability to the non-human world.

The annual Mappogau Sihanua ritual is the clearest example of such ecopedagogical praxis. This ritual is not merely a ceremonial activity, but rather a form of collective ecological learning that unites spiritual, social, and ecological dimensions. Through various stages such as mabbahang (deliberation), mabbaja-baja (environmental cleansing), and menre bulu (ascending the mountain), the community learns about ecological responsibility, solidarity, and awareness of humanity's limitations in the face of nature. In the mabbaja-baja activity, for instance, the people of Karampuang collectively clean the village, water sources, and traditional houses. This act has a deeper meaning than simply maintaining physical cleanliness. It is a symbol of inner purification, restoration of social relations, and a spiritual reminder of the importance of balance in nature. This activity illustrates a way to educate communities so they do not forget the source of life. From an ecopedagogical perspective, such actions constitute environmental praxis—education through reflective action that transforms ecological awareness within individuals and communities. This argument can be interpreted as a form of restoration pedagogy, in the context of the global ecological crisis, where environmental action is often reduced to technical solutions. Karampuang praxis demonstrates that environmental restoration must begin with the restoration of social and spiritual relationships. This is not simply a tradition, but a sophisticated educational mechanism to prevent the "tragedy of the commons" through collective moral stewardship.

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Education in the Karampuang community is not limited by age or social role. Children, adults, and the elderly are all involved in a learning process that unfolds organically. This concept is known as a community of practice, a community that learns through shared participation in meaningful activities (Anne Cafer et al., 2022; McDonald & Mercieca, 2021; D. E. K. Smith, 2022). Within this framework, Karampuang is a tangible example of an ecological community of practice in which ecological knowledge is acquired through direct involvement in rituals, deliberations, and social activities. This process forms a social learning system that continually reproduces ecological values across generations (Wenger, 2000). Furthermore, this kind of educational practice also demonstrates the principle of ecological citizenship, that ecological responsibility is not just an individual matter, but a moral and social responsibility of all community members (Machin & Tan, 2024). In the context of Karampuang, ecological awareness is manifested not through modern activism but through everyday actions—protecting water sources, replanting trees after cutting them down, or sharing harvests with neighbors. This kind of education produces ecological citizens who understand the connection between personal actions, community sustainability, and the preservation of nature. This community of practice ensures that ecological citizenship is not an abstract civic duty, but a lived identity. However, this participatory learning also reveals the community's resilience in the face of external developmental pressures (Bartkienė et al., 2018). By involving children in every stage of deliberation, Karampuang is essentially preparing a generation of ecological defenders who possess the ontological security to resist extractive paradigms that threaten their ancestral lands (Christodoulou & Grace, 2025).

Interestingly, the learning spaces within Karampuang's ecopedagogy are not limited by physical location, but rather by the context of meaning. Rice fields, forests, mountains, and rivers serve as classrooms that teach the ethics of sustainability. Rituals, from harvest celebrations to purification prayers, become laboratories of values, where the community internalizes ecological awareness through symbolic and spiritual acts. This learning is multisensory and emotional, bringing together the rational, moral, and aesthetic dimensions of humans with direct experiences of nature. Such an educational process demonstrates the continuity of ecological knowledge that grows from within the community. Ecological values are not passed down in the form of texts, but through narratives, practices, and role models (Sakti et al., 2024). Children learn from how adults treat the land; the younger generation learns social responsibility from rituals performed with elders. This is the most authentic form of ecological education—learning by living (Chen et al., 2022) — which affirms that true knowledge is measured not only by the ability to understand but also by the ability to sustain life itself. Thus, Karampuang can be understood as a space for community ecopedagogy that integrates spirituality, sociality, and ecology within a single, dynamic system of knowledge. This educational model rejects the separation between learning and living, between nature and humans, between knowledge and wisdom. Karampuang's unique ecopedagogy demonstrates that true education happens when humans live in mutually respectful relationships with nature. From this, a critical ecological awareness is born—one not built by theory but through lived experience and collective inheritance.

Socio-Ecological Transformation through Customary and Gender Roles

The Ekopedagogy of Karampuang also contains dimensions of social and gender equality. The role of the Puang Sanro, a female customary leader, demonstrates that environmental management and spirituality are inseparable from women's role as guardians of balance. In every *mabbissa lompo* purification ceremony, women are the main actors who teach values of gratitude and ecological responsibility. The pedagogical centrality of the Puang Sanro suggests that ecological knowledge in Karampuang is not merely an intellectual asset but an embodied authority held by women. This challenges the conventional patriarchal bias often found in formal environmental management, where women's spiritual labor is frequently overlooked. In

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this context, the purification rituals act as a pedagogy of care that re-centers female agency as a primary force in ecological preservation (Ameridyani et al., 2025). This is in line with the idea of eco-feminism (Shiva, 2004, 2008) which highlights that the exploitation of nature often goes hand in hand with the subordination of women. In the Karampuang community, the position of women is not subordinate, but participatory and central. They play a role in children's education, traditional medicine, and the management of natural resources.

However, a critical ethnopedagogical inquiry requires acknowledging the potential tensions within this gendered structure. While women possess immense spiritual and educational authority, their direct influence in the formal political-legal deliberations of the Ade' Eppae (specifically during the Mabbahang) often remains indirect. This reflects a complex negotiation between domestic-spiritual power and public-political authority (Hakim, 2023). The social role of women also shows that ecological awareness in Karampuang is relational, built through empathy, cooperation, and gratitude rather than through a hierarchy of power. This is in line with the concept of ethics of care (Maggie FitzGerald, 2025). Women's nurturing nature and sensitivity towards life constitute a unique ecological pedagogy rooted in love and moral responsibility for all living beings. This value subtly critiques the modern education system, which often relegates affective and spiritual aspects of environmental education to secondary importance, despite being the foundation of genuine ecological awareness (Kakade et al., 2023; Laotan-Brown, 2024).

Karampuang presents a radical counter-pedagogy by prioritizing affection and moral responsibility over technical rationality. This approach exposes the shortcomings of modern education systems in addressing the emotional and spiritual voids that enable environmental exploitation to persist (Dahlström, 2016; Skelton, 2024; Taplin & Parahakaran, 2021). Ecological awareness is not something to be learned; it is a relational identity to be embraced and lived.

Dialogue between Tradition, Science, and Technology

One of the most significant findings from Karampuang is its openness to modern knowledge. The head of Tompobulu Village emphasized that schools in the traditional area have now begun incorporating traditional values into learning activities. This phenomenon demonstrates that indigenous communities do not reject science, but rather select it ethically. Essentially, emancipatory education must indeed open a space for dialogue between local knowledge and scientific knowledge. (Peruzzo, 2020). The people of Karampuang have naturally implemented this principle; technology is used not to replace tradition but to strengthen its existence. Young people use social media to document rituals and introduce local wisdom to the outside world.

This phenomenon represents more than just a digital adaptation; it is a strategic re-territorialization of indigenous identity. By digitizing their ecological praxis, the youth in Karampuang are transforming social media from a tool of global consumerism into a space for cultural and ecological resistance. This ensures that traditional knowledge is not merely documented but remains an active, living force in the global digital landscape (Novianti et al., 2025; Roturier & Beau, 2022). This is a form of digital pedagogy (Väätäjä & Ruokamo, 2021) that is culture-based, in which traditional knowledge is adapted to the digital space without losing its substance. This practice indicates that the Karampuang ecopedagogy model is transformative and adaptive, in accordance with the principles of critical ecopedagogy (Misiaszek, 2016), which emphasizes the importance of reflective awareness toward globalization. Local values are not confined to the romanticism of the past but are projected as an active contribution to modern civilization.

However, this dialogue between tradition and modernity is not without significant risks. A critical observation reveals the threat of epistemic dilution, where the profound, sacred, and communal essence of Paseng ri Ade may be reduced to mere cultural ornaments or aesthetic content for digital consumption. When traditional ecological knowledge is integrated into

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formal curricula or social media platforms, there is a danger that the efficiency-driven logic of modern science might overshadow the spiritual-ethical foundation of the Karampuang worldview (Companion, 2025; Kimmerer, 2012; McCarter & Gavin, 2011). Acknowledging this potential dilution is essential to ensure that the adaptation of technology does not lead to the loss of ontological depth, but remains a site of continuous, critical negotiation for the community's sovereignty.

Theoretical and Practical Implications of the Karampuang Ecopedagogy Model

The Karampuang Ecopedagogy model, in theory, broadens understanding of ecopedagogy, which has been predominantly influenced by Western approaches. It challenges the dominance of Western ecopedagogy by demonstrating that critical ecological awareness can arise from spiritually rooted practices rather than solely from political ideologies (Iftekhar et al., 2026; Misiaszek, 2015, 2023; William Misiaszek, 2020). Furthermore, it provides a moral foundation for science, suggesting that true sustainability necessitates an ontological shift from perceiving nature as a resource to viewing it as a sacred teacher—a concept often absent in mainstream environmental education. The educational patterns in Karampuang actually show that critical ecological awareness can grow from cultural practices rooted in spirituality—not solely from political or environmental ideologies. This model demonstrates a synthesis between ecology, education, and local cosmology, in which spiritual values are not the antithesis of science but rather its moral foundation (Widiyanto et al., 2026). Practically, this model inspires the development of community-based environmental education in Indonesia. Three important implications can be drawn:

1. Methodological Reform through Place-Based Pedagogy: The integration of local values such as *Paseng ri Ade* and *Sulapa Eppa* (Ade' Eppae Cosmology) into formal and non-formal curricula should not be limited to additional subject matter. This implies a shift toward place-based pedagogy, where these values serve as an epistemological framework for students to critically analyze and respond to the ecological crisis in their own environment.
2. Reciprocal Partnerships and Decolonization of Educational Authority: Strengthening the role of indigenous communities as educational partners requires decolonization of knowledge authority. Higher education institutions must build reciprocal collaborations in which indigenous communities are no longer merely objects of research but rather equal subjects of education. This is crucial to ensure that formal educational institutions contribute to protecting ecological and community rights, rather than simply exploiting their knowledge.
3. Knowledge Sovereignty through Digital Cultural Literacy: The development of digital culture-based learning media by the younger generation must be interpreted as an effort to maintain knowledge sovereignty (digital knowledge sovereignty). Documenting traditional activities through digital platforms is not simply a passive preservation strategy, but rather a form of resistance to hegemonic development narratives that often ignore local perspectives. This creates a space where local knowledge remains a vibrant, active force in the global digital landscape.

The Karampuang Ecopedagogy Model ultimately demonstrates that education rooted in local wisdom can create sustainable social and ecological transformation. It is able to bridge the past and the future, tradition and modernity, and spirituality and science within a unified, living educational praxis. As the Karampuang community believes, protecting nature also means protecting life—not only for humans but for all of creation. At this point, the Karampuang ecopedagogy stands as an example. True knowledge is not merely for understanding the world, but for caring for it.

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CONCLUSION

This study affirms that the Karampuang Ecopedagogy model is a living, evolving, and generational practice of ecological education. It is built upon the Sulapa Eppa philosophy (fire, earth, water, and wind), which serves as a spiritual-ecological anchor for the community. These values are reflected in the Ade' Eppae social structure and the Paseng ri Ade moral system, where learning is not just a theoretical exercise but a lived experience through collective rituals like Mappogau Sihanua and Mabbissa Lompo.

Substantively, Karampuang demonstrates that critical ecological awareness can thrive without relying solely on formal or technocratic interventions. By reinterpreting customary values through critical ethnopedagogy, the community proves that indigenous wisdom is a dynamic and reflective system capable of engaging with modern science and technology. The involvement of the younger generation as digital mediators further illustrates a strategic re-territorialization of indigenous identity in the global digital landscape, transforming technology into a tool for cultural and ecological resistance.

Theoretically, this research makes a significant contribution by presenting a relational ontology as a foundation for ecopedagogy—one that views nature as a "sacred teacher" rather than a resource. This challenges the dominance of Western-centric ecological education and affirms that indigenous communities are legitimate sources of knowledge. In practical terms, this study provides a roadmap for place-based and culturally responsive education, advocating a shift from top-down empowerment to reciprocal partnerships that respect the community's knowledge sovereignty. While the risk of epistemic dilution persists amid modern efficiency, the Karampuang model offers a hopeful paradigm for building global ecological resilience rooted in local spiritual integrity.

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