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#### Article Title

# Tondo Lino Ngata Toro Nature School: An Innovative Educational Model for Sustainable Cultural Transformation

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#### **ABSTRACT**

This research aims to delve deeper into the process of cultural transformation through the educational system of Tondo Lino Ngata Toro Nature School. This research uses an inductive qualitative analysis. Inductive analysis is an approach that begins with field facts, analyzes them based on relevant theories and arguments, and ultimately yields a conclusion. The results show that the Tondo Lino Ngata Toro Nature School is an educational innovation that combines local wisdom values with interactive and experiential learning methods. Arising from the Ngata Toro indigenous people's need to preserve their culture amidst modernization, this school adopts a holistic approach to education, enriching the curriculum with traditional values and local wisdom practices. The outdoor learning process, designed to involve students through a learn-through-play method actively, ensures that they acquire knowledge and develop deep connections with their environment and community. This initiative demonstrates that education rooted in local wisdom and implemented through direct experiences in the outdoors can be an effective tool for sustainable cultural transformation. Therefore, it is recommended that the Village Government, Traditional Institutions, Community Leaders, and the Ngata Toro indigenous people continue to support and develop the Tondo Lino Ngata Toro Nature School. Strengthening collaboration among various parties is necessary to enrich learning resources and ensure the sustainability of this program. Ideally, the local natural resources and wisdom should be utilized as significant assets in the curriculum by providing more outdoor learning opportunities and incorporating more aspects of local culture into the learning process. Additionally, developing training for facilitators and teachers on experiential learning methods and learn-through-play will enhance the quality of education and the learning experience for students. Finally, encouraging active community participation in the school program will strengthen the relationship between the school and the community and support transmitting cultural values to the younger generation.

Keywords: Cultural Transformation; Innovative Education; Nature School.

#### INTRODUCTION

Families are the primary foundation in shaping a child's character and personality (Firdaus et al., 2022). From early life, family interactions provide the basis for children to learn various aspects of life, ranging from values and morals to good habits (Rahmah, 2023). As integral parts of the family, parents play a significant role in teaching and instilling these values in their children. Children are expected to grow into individuals with strong character and morals through education and guidance provided at home (Sasmita et al., 2022).

Family culture, comprising everything that shapes the way of thinking, behaving, and acting within a family, plays a crucial role in forming a child's identity (Munro, 2018). Each family has its unique culture, reflecting the values and norms they consider important. This culture is passed down through generations and refers to family members' interactions within and outside the home (Appannagari et al., 2020). Therefore, understanding and implementing a positive family culture by all family members is essential for shaping character and behavior.

Education involves the development of a person in all aspects, emphasizing the importance of holistic individual growth—physically, intellectually, and emotionally (Thumar & Raval, 2018). This learning process extends beyond formal schooling to

include non-formal education from the surrounding environment, including the family. From an early age, children learn basic skills, such as language and religious practices, through examples and teaching from parents and other family members. This process of enculturation, occurring both consciously and unconsciously, plays a vital role in forming the foundations of a child's personality and social skills (Shahzad, 2023).

In cultural transformation through education, nature schools emerge as a revolutionary concept (Gress & Hall, 2017). This approach offers a unique alternative to conventional indoor education methods. Nature schools, set amid natural beauty, allow students to explore and internalize life values directly from their source. Enculturation in this context includes adapting to societal customs and norms and learning to align with the universal laws of nature (Sahrakhiz et al., 2017).

Learning at nature schools aims for knowledge transfer and a holistic learning experience covering students' physical, psychological, social, and spiritual aspects (Romar et al., 2019). This approach is based on the understanding that human development is a continuous journey that cannot be forced. Therefore, learning in the open air is thought to provide a more natural and relevant stimulus for students' developmental stages. Direct interaction with nature and other living beings offers rich lessons in life values and ethics, strengthening the internalization of culture and norms through daily practice (Wagner, 2018).

The concept of enculturation in nature school education introduces a new dimension in the learning process, where the natural environment serves as a living laboratory, providing real contexts for students to learn and internalize life values (Sobri et al., 2021). The learning process becomes more dynamic and interactive, emphasizing experience-based learning that allows students to actively imitate, observe, and participate in various activities, ultimately shaping behavioral patterns and attitudes.

Moreover, Toro Village in Sigi Regency exemplifies the cultural transformation through nature school education. The Ngata Toro indigenous people have long upheld customs and traditions passed down through generations as a vital foundation in maintaining their cultural identity. Teaching traditional manners and customs to the younger generation is considered an inseparable daily life responsibility. However, challenges arise with the intrusion of modern life and technology, such as gadget usage, threatening to erode these long-standing cultural values (Supriyatno et al., 2021).

In response to these challenges, the Ngata Toro indigenous people took an innovative step by establishing the Tondo Lino Nature School. This institution serves not only as an educational institution but also as a fortress in preserving culture. The curriculum taught includes essential basic knowledge about relationships with God, fellow humans, and the environment. It reflects the community's effort to blend traditional values with contemporary educational approaches. The school also

emphasizes communication ethics and knowledge of local flora used as medicine, showing the harmonization of traditional knowledge with modern science.

The social phenomenon in Ngata Toro, indigenous people demonstrates that cultural transformation through nature school education is possible and can effectively solve contemporary challenges. Through a holistic and integrative approach, the Tondo Lino Ngata Toro Nature School actively preserves local culture while providing education relevant to contemporary developments. This initiative offers a valuable model for other communities striving to maintain their cultural identity amidst rapid globalization and modernization (Sayful, 2020).

Based on the description above, this research aims to delve deeper into the process of cultural transformation through the educational system of Tondo Lino Ngata Toro Nature School, focusing on how the school integrates local cultural values into its curriculum and learning activities in response to modernization challenges. The findings of this research are expected to provide new insights into cultural preservation strategies within the educational context, offering guidance for other communities in designing educational systems that blend traditional and modern values to strengthen cultural identity and develop life skills relevant to current and future needs.

# **METHOD**

This research uses a qualitative approach to understand groups of people, objects, situations, conditions, ongoing events, and even thought systems (Whitney, 1960). This research was conducted in Toro Village, Sigi Regency. This research utilized both primary and secondary data sources. Data was collected through interviews with key informants, field observations, literature study techniques, and document analysis concerning the cultural transformation through the nature school education system. The acquired data was then analyzed using inductive qualitative analysis. Inductive analysis is an approach that begins with field facts, analyzes them based on relevant theories and arguments, and ultimately yields a conclusion (Neuman, 2003).

#### **RESULTS AND DISCUSSION**

# A. The History of the Formation of the Tondo Lino Ngata Toro Nature School

The Tondo Lino Ngata Toro Nature School embodies a concrete manifestation of cultural preservation efforts in the face of modernity's challenges encroaching upon the Ngata Toro indigenous people. The shift in children's attitudes and behaviors, which tend to adopt foreign cultures and disregard their cultural heritage, underscores the urgency of an educational intervention that blends traditional and modern values (Akhirun & Septiady, 2022). The nature school concept, championed by Mr. Said Tolawo, known as Tondo Ngata or Forest Guardian, demonstrates a holistic approach to educating the young generation. By

directly introducing students to the natural environment and local customs, the school aims to instill a love and responsibility for their ancestral heritage and the environment (Tzima et al., 2020).

Establishing the Tondo Lino Ngata Toro Nature School resulted from collaborative efforts involving various stakeholders. Mr. Said Tolawo's initiative in designing and realizing the nature school concept received support from multiple community elements, including cooperation with Runnyati Tahir, a forestry student who contributed to the master plan. This process reflects the community of practice theory emphasizing active community participation in the educational process. Communities encourage the creation of meaningful knowledge through social interaction and shared practices (Muis, 2022). In the Tondo Lino Ngata Toro Nature School context, learning occurs in the classroom and through interaction with nature and local wisdom, integral parts of the curriculum.

The inauguration of the Nature School in 2016, coinciding with Education Day, symbolized a collective commitment to educating the young generation. Starting with only eight students, the school has grown into a symbol of hope for preserving the cultural identity of the Ngata Toro indigenous people. The donation of land by Mr. Said Tolawo and support from traditional institutions and community leaders demonstrate strong collaboration between environmental conservation, culture, and education. This initiative aligns with the eco-pedagogy theory, which emphasizes sustainable education and respects the relationship between humans and their environment (Asfeldt et al., 2022). Thus, the Tondo Lino Ngata Toro Nature School is not just a place of learning in the conventional sense but a space where students can experience and practice life in harmony with nature and their cultural heritage.

#### **B.** Local Wisdom-Based Learning Concepts

The Tondo Lino Ngata Toro Nature School presents an innovative approach to education by applying learning concepts rooted in local wisdom. Introducing non-timber plants such as betel nut and rattan to students and methods for planting and caring for them reflects an integration of traditional knowledge and contemporary learning practices (Adhikary et al., 2023). This approach demonstrates respect and preservation for the natural resources available in their environment while educating students about the importance of sustainability and conservation.

Learning about sustainable natural resource collection sites and implementing specific restrictions teaches students the importance of responsible resource management (Arafat et al., 2022). This method conveys that every action towards nature must consider its impact on the environment and the surrounding community (Anggariani et al., 2020). The skills in calculating the planting to harvest time given to students hone their mathematical abilities in a real context

and reinforce the understanding of natural cycles and the importance of planning in natural resource management.

The community-based learning theory, emphasizes learning through active participation in activities related to daily life and the community (Maung, 2017). In the Tondo Lino Ngata Toro Nature School context, education extends beyond knowledge transfer to character building and the instillation of values that support sustainable living. This local wisdom-based learning delivers lessons rich in values and practices relevant to the student's environment and forms a foundation for character development and social responsibility.

# C. The Learning Process at the Tondo Lino Ngata Toro Nature School

The learning process at the Tondo Lino Ngata Toro Nature School reflects a deep understanding of the values held by the Ngata Toro indigenous people, particularly those encapsulated in the concept of Taluhi Katuvua or Hearth of Life. This concept forms the foundation of education at the school, emphasizing three important aspects of life: the harmonious relationships between humans and God, fellow humans, and the environment (Thompson & Xu, 2023). In an educational context, this approach integrates spiritual, social, and ecological aspects into the curriculum, thus focusing not only on academic knowledge, character development, and life values.

The relationship between humans and God is expressed through religious practices taught by parents to their children, which also form part of the learning process at the nature school. Respect for others is embodied through the adab and tabe culture, which teaches students to behave politely and maintain good relationships with everyone, not limited to family but to the broader community. The principle which promotes mutual respect, teaches students to understand boundaries and ethics in interaction (Ross & Parks, 2018), as reflected in the guest culture where men do not enter a house if only women are inside and vice versa.

Furthermore, the relationship between humans and nature is taught as an essential part of life. Learning at the Nature School emphasizes the importance of maintaining ecosystems and respecting nature as a source of life, aligning with the living practices of the Ngata Toro indigenous people. The cultural ecology theory, suggests that human adaptation to their environment involves developing technologies and behavioral patterns that enable survival within a particular ecosystem (Irmayani et al., 2023). In the context of the Tondo Lino Ngata Toro Nature School, this is reflected through learning based on local wisdom in natural resource management, promoting sustainability and ecological balance.

Thus, the learning process at the Tondo Lino Ngata Toro Nature School adopts a holistic approach that combines spiritual, social, and ecological aspects. This approach enriches students' knowledge about their environment and culture

and fosters attitudes and values that support sustainable cultural transformation. Learning rooted in traditional values and local wisdom is a potential model for other educational systems striving to maintain cultural identity in the face of globalization challenges.

## **D. Outdoor Learning Processes**

The outdoor learning process implemented by the Tondo Lino Ngata Toro Nature School introduces a new dimension to education. Direct natural experiences allow students to delve into learning materials interactively and tangibly. Observing plants and animals in their natural habitats offers a rich context for understanding scientific and ecological concepts while enhancing environmental sensitivity.

This approach supports the experimental learning theory, which posits that the best learning occurs through experience (Neville et al., 2023). Students gain knowledge and develop skills in observation, analysis, and critical reflection on natural phenomena through direct interaction with the environment. These experiences enrich academic understanding and foster an emotional connection with nature, which is crucial for effective environmental education (Sari & Sudarti, 2021).

Moreover, learning in the outdoors allows students to learn in a broader and more dynamic context compared to the confined classroom environment. In this setting, facilitators are crucial in guiding inquiries and explaining natural phenomena encountered by students (Cosarba & Torkos, 2023), ensuring that each learning experience is meaningful and relevant to the curriculum. Active involvement in this learning process strengthens conceptual and practical understanding, encouraging curiosity and a love for learning.

# E. The Learning-through-Play Process

The learn-through-play concept adopted by the Tondo Lino Ngata Toro Nature School offers a unique and effective approach to education. The learning process in the river near the school creates a conducive environment for active and dynamic learning (Harper & Obee, 2021). This activity allows students to engage directly in the learning process, where the river serves as a playground and a rich natural laboratory.

This approach aligns with the constructivist learning theory, which asserts that knowledge is constructed through experience (Ahmad et al., 2023). Developmental psychologist theory, suggests that children learn best through direct environmental interaction (Thielking et al., 2018). In this context, the river and its surrounding natural riches serve as abundant learning resources, enabling students to observe, question, and explore concepts they have learned theoretically in the classroom.

River-based learning activities facilitate a deeper learning experience and enhance students' understanding of the material presented. This method strengthens the link between theory and practice and boosts motivation and enjoyment in learning. Direct experiences in the natural environment teach students the importance of conservation and respect for the environment while enriching their knowledge of river ecosystems and sustainability.

# **CONCLUSIONS AND SUGGESTIONS**

Based on the results and discussion, the Tondo Lino Ngata Toro Nature School is an educational innovation that combines local wisdom values with interactive and experiential learning methods. Arising from the Ngata Toro indigenous people's need to preserve their culture amidst modernization, this school adopts a holistic approach to education, enriching the curriculum with traditional values and local wisdom practices. The outdoor learning process, designed to involve students through a learn-through-play method actively, ensures that they acquire knowledge and develop deep connections with their environment and community. This initiative demonstrates that education rooted in local wisdom and implemented through direct experiences in the outdoors can be an effective tool for sustainable cultural transformation.

Based on the above conclusion, it is recommended that the Village Government, Traditional Institutions, Community Leaders, and the Ngata Toro indigenous people continue to support and develop the Tondo Lino Ngata Toro Nature School. Strengthening collaboration among various parties is necessary to enrich learning resources and ensure the sustainability of this program. Ideally, the local natural resources and wisdom should be utilized as significant assets in the curriculum by providing more outdoor learning opportunities and incorporating more aspects of local culture into the learning process. Additionally, developing training for facilitators and teachers on experiential learning methods and learn-through-play will enhance the quality of education and the learning experience for students. Finally, encouraging active community participation in the school program will strengthen the relationship between the school and the community and support transmitting cultural values to the younger generation.

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