Ecological Intelligence Building Through History Learning Based on Local Wisdom of the Tinggihari Site

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Abstract: Protecting and preserving the environment is the responsibility of every human being who inhabits it. As the relay holder of the future, ecological intelligence is something that must be instilled within every student. With ecological intelligence in the younger generation, understanding and awareness about the importance of protecting and preserving the environment will emerge. History subjects are one way to build ecological intelligence in students. This article aims to find ways to build ecological intelligence through historical learning based on the Tinggihari Site's Local Wisdom. The method used in this article is Literature Study. The results found that the local wisdom involved in the Tinggihari site contains values related to ecological quality. In this context, Teachers can implement history learning by contextualizing learning materials. By implementing historical learning based on the local wisdom of the Tinggihari, students can be actively involved in exploring the value of ecological wisdom contained in the Tinggihari site. Thus, it creates a transfer of value process that inspires the ecological intelligence of students.

Keywords: History Learning, Ecological Intelligence, Local Wisdom

Introduction

Humans and the environment are inseparable units because humans fulfill their needs with what is provided by the surrounding environment. However, many human behaviors are not in harmony with nature nowadays, harming the environment (Yunansah and Herlambang, 2017). This behavior results from the emergence of various environmental problems such as flooding, imbalance of specific flora and fauna ecosystems, fauna migration, pests and diseases. Therefore, preventing further damage and protecting the environment is the duty of every human being.

Every individual should have awareness and understand that every behaviour and action will not only have an impact on himself but will also have an impact on the natural environment in which he lives. This concept of awareness is known as ecological intelligence (Supriatna, 2017, p. 24), where a person realizes that the earth as a place to live must be preserved so that its resources can be sustainable and enjoyed continuously in the future. By having ecological intelligence, a person will understand and be aware of the importance of maintaining and preserving the environment so that behaviors that lead to the preservation of the natural environment arise. Therefore, based on this, it is crucial to instill ecological intelligence in students.

Instilling awareness of environmental conditions must be done to the younger generation who will be the holders of the next life relay. This act can be applied in the school setting as educational institutions. Schools are required to be parties that have a significant role in building awareness of the environment (Prabwati, et al 2021). However, ecological awareness cannot be built only through conventional education, where teachers transfer rote knowledge to students (Muhaimin, 2015). Building this ecological intelligence must go through an educational process that places students as active subjects during the learning process (Yunansah and Herlambang, 2017).

History is one of the subjects in secondary education oriented towards the transfer of value compared to the transfer of knowledge. This subject can be a



means to develop ecological intelligence (Maghfiroh, et al 2021; Supriatna, 2017, p. 79). This article will describe how historical learning based on local wisdom at the Tinggihari site can be a forum for developing students' ecological intelligence.

Methods

The method used in this article is a literature study. A literature study is an activity to collect and synthesize previous studies relevant to a particular topic. The Literature Study answers research questions by integrating findings and perspectives from related findings (Snyder, 2019). Unlike other methods, literature studies do not connect researchers with what is being studied directly, but researchers are connected through various literature (Lin, 2009). A welldone literature study method can be a solid foundation for creating a theory development and facilitating theory development if done well (Webster & Watson, 2002). In this article, the author collects and synthesizes relevant books and relevant articles (Ramdhani & Amin, 2014) with ecological intelligence, the life of the pre-literate community in Indonesia, learning history in schools, and various discussions relevant to this article. Library sources are found in libraries and journals published online.

Results and Discussion

Ecological Value in the Local Wisdom of the Tinggihari Site

Human life will never be separated from its relationship with the natural environment. The natural environment and its resources will affect human activities. It can be concluded that environmental conditions will affect the pattern of human life and culture (Simanjuntak et al., 2004), and natural conditions will shape the quality of life and human culture that inhabits it (Ahmad et al., 2022). Humans' use of the environment and nature has always been identified through their cultural heritage. In the pre-literacy period, humans fully utilized the surrounding natural environment to support their lives (Ahmad, 2021).

One of the pre-history periods is the Megalithic era. The relationship between humans who support megalithic culture and their environment can be seen from past findings of human cultural remains (Yondri, L., 2009, p.2). This conception of how humans in the past used their natural surroundings can be seen in how cultural relics formed monumental buildings made of stones that they obtained from nature (Hudaidah, 2021). The Pasemah plateau is one of the areas where many megalithic cultural heritages are found. Various kinds of megalithic cultural relics in the Pasemah plateau are statues, stone mortars, stone troughs, menhirs, tetralith, dolmens, new graves, terraced graves, hollow stones, and roads with expanses of stone (Munandar, 2017, p. 15-16). These relics are

scattered in various sites in the Pasemah Highlands area. One of which is the Tinggihari Site which is located in Tinggihari Village in the Gumay Ulu

District, Lahat Regency, South Sumatra Province.

The Tinggihari site has relief menhirs, menhirs, dolmens, stone mortars, human statues, and animal statues. The Tinggihari site consists of three sites: Tinggihari I, II, and III. The division of three in this location is because there are distances that seem to form the three locations in groups (Susanti, 1995, p. 64). When viewed from the findings of single stones around the Pasemah area whose volume is insufficient to describe the proportions of the statues that are perfectly erect, so the position of the statues found is kneeling or hugging the knees (Suryanegara et al., 2007, p. 142). The use of monoliths to support belief is also a form of how the Pasemah megalithic support community utilizes its environment, including the people who support the Tinggihari Site culture.

The Tinggihari site was found on the plateau. The ancient community's mystical religious conception is that a high place is sacred. This is indicated by many findings of archaeological sites in the highlands (Munandar, 2017, p. 13-14). In addition to the plateau (hills, mountains), water sources, namely upstream or downstream rivers, are also strongly related place to the rites of belief of prehistoric people (Poesponogoro & Notosusanto, 2010, p. 247). At the Tinggihari Site, the conception can be seen from the statue orientation toward other megalithic buildings (Indiriastuti, 2015, p. 18). The cosmological concept of a holy place or a clean world and the world as a place where ancestral spirits

reside (Suryanegara, et al., 2017) will give birth to a strong belief that these places should not be damaged and their beauty must be preserved.

Apart from being a symbol for religious rites (Magersari, 2016, p. 137) at the Tinggihari Site, were also found relics which indicated to assisted the agricultural process carried out by the community at that time. The remains are like mortar and stone mortar. Some findings show how the community at that time also carried out natural utilization activities. An interesting fact is that the Tinggihari area until now was an agricultural and plantation area.

Ecological Intelligence Building Through Learning History Based on Local Wisdom at Tinggihari Sites

Ecological intelligence is an awareness that nature and the environment must be preserved so that the sustainability of the resources in them can be continuously enjoyed in the future (Supriatna, 2017, p. 24). Given the increasingly severe environmental damage, the younger generation needs ecological intelligence to preserve the environment (Ahmad, 2013). Schools can be parties that have a significant role in building awareness of the environment (Prabwati, et al 2021). However, it must be understood that this ecological awareness cannot be built only through conventional education, namely, where teachers transfer rote knowledge to students (Muhaimin, 2015). Building this ecological intelligence must go through an educational process that places students as active subjects during the learning process (Yunansah and Herlambang, 2017).

The history lesson is a subject in secondary education that can be a means to develop ecological intelligence (Maghfiroh, et al 2021; Supriatna, 2017, p. 79). However, to embed ecological intelligence in students, history learning must first be free from various negative stigmas as a conventional learning process (Afwan et al., 2020, p. 98) which is only rote.

In order to be free from the old habits and stigma of conventional and boring history learning, history teachers must find ways to create meaningful learning for students. Thus, it will transfer value and knowledge in the learning process

(Evitasari, et al. al., 2022) as the purpose of learning history itself. One way teachers can do this is by bringing history learning materials close to the context of students' daily lives, known as material contextualization. Contextual learning can be a way to create meaningful learning (Amboro, 2019). In addition, contextualization in learning materials allows students to recognize and love culture and the surrounding environment (Ministry of Education and Culture, 2016).

Historical learning materials can be contextualized by bringing local history materials into the learning process so that students can directly learn material that is close and can be seen in everyday life (Vinco, 2018, p. 169). Local history itself is understood as history whose object of study is about people's lives in an environment and the dynamics of development in aspects of their lives. Local history has a particular scope which becomes the limit of the discussion, namely in the form of geographical boundaries, then groups or ethnicities or administrative areas such as cities and even villages (Bunari et al., 2022). Teachers can use local history when teaching prehistoric life material. In this context, the material is in the form of historical relics, namely the Tinggihari Site.

The Tinggihari site, based on the previous analysis, was found to store the values held by the people who support the Tinggihari megalithic culture related to the awareness of protecting and preserving nature. Contextualization of history subject lesson that presents the local wisdom of the Tinggihari Site will emerge meaningful learning so that there is a transfer of value to students about the ecological value contained in the local wisdom of the Tinggihari Site. With this learning process, students can accept and internalize these values to form ecological intelligence within themselves.

Summary

Ecological intelligence is an essential aspect of an effort to maintain and preserve the natural environment. History learning as a learning activity in secondary schools can be a place to instil ecological intelligence. However, to

realize this, meaningful historical learning is needed. One way that can be done is by contextualizing the material.

Contextual learning in history learning in Lahat can be done by learning history based on local wisdom at Tinggihari Sites. The Tinggihari site is one of the historical sites originating from the megalithic culture in Lahat Regency. Based on the analysis carried out at the Tinggihari Site, there are wisdom values related to the value of public awareness of the supporters of the Tinggihari Megalithic culture to maintain and preserve the natural environment, which in its belief conception is a sacred place. These values can be used as historical learning materials in the classroom through contextualizing history learning to create a meaningful learning process. With meaningful learning, students can accept and internalize the value of ecological awareness to give birth to ecological intelligence in students.

References

Books:

- Kementerian Pendidikan dan Kebudayaan. (2016). Silabus Mata Pelajaran Sekolah Menengah Atas/Sekolah Menengah Kejuruan/Madrasah Aliyah/Madrasah Aliyah Kejuruan. Silabus, Jakarta.
- Magetsari, N. (2016). *Perspektif arkeologi masa kini dalam konteks Indonesia*. Penerbit Buku Kompas.
- Munandar, A. A. (2017). *Kaladesa: awal sejarah Nusantara*. Wedatama Widya Sastra.
- Narwanti, Sri. (2011). Pendidikan Karakter Pengintegrasian 18 Nilai Pembentuk Karakter dalam Mata Pelajaran. Yogyakarta: Familia.
- Poesponegoro, M. D., & Notosusanto, N. (2010). Sejarah nasional indonesia jilid ii: zaman kuno. Jakarta: Balai Pustaka.
- Simanjuntak, T., Handini, R., & Prasetyo, B. (Eds.). (2004). *Prasejarah Gunung Sewu*. Ikatan ahli arkeologi Indonesia.
- Supriatna, N. (2016). *Ecopedagogy: Membangun kecerdasan ekologis dalam Pembelajaran IPS*. Bandung: PT Remaja Rosdakarya.

- Skripsi, Thesis, Dissertation, Research report:
- Susanti, L.R Retno. (1995). *Peninggalan Megaliti di Situs Tinggihari* (*Pasemah*) Kajian Tentang Fungsi dan Peranannya. Tesis . Jakarta: Universitas Indonesia.

Paper of Conference, workshop, coaching:

- Afwan, B., Suryani, N., & Ardianto, D. T. (2020). Analisis Kebutuhan Pembelajaran Sejarah Di Era Digital. *Prosiding Literasi Dalam Pendidikan Di Era Digital Untuk Generasi Milenial*, 9.
- Ahmad, T. A. (2021). Identifying environmental issues on the prehistoric societies in history learning. *IOP Conference Series: Earth and Environmental Science*, 747(1). https://doi.org/10.1088/1755-1315/747/1/012071.
- Bunari, A. F., Al Fiqri, Y., Zakaria, N. B., & Jali, J. M. (2022, January). Development of HOTS (Higher Order Thinking Skills) Test Instrumen in the Maritime History Course based on Riau Local History. In ICOME 2021: Proceedings of the 1st International Conference on Maritime Education, ICOME 2021, 3-5 November 2021, Tanjungpinang, Riau Islands, Indonesia (p. 121). European Alliance for Innovation.
- Hudaidah, H. (2021, March). Learning Local Wisdom on Pasemah Megalithic Relics in Lahat Regency, Efforts to Anticipate the Negative Impact of the Industrial Era 4.0. *In Proceedings of the 2nd International Conference on Progressive Education*, ICOPE 2020, 16-17 October 2020, Universitas Lampung, Bandar Lampung, Indonesia.

Article in the journal:

- Ahmad, H., Soeprabowati, T. R., & Purnaweni, H. (2022). Kearifan Tradisi Budaya Sebagai Sarana Pelestaraian Lingkungan Serta Potensi Ekowisata Pada Komunitas Masyarakat Di Sekitar Hutan Lindung Petungkriyono (Studi Kasus Nyadran Gebyog). *Pringgitan*, *3*(2), 68-81.
- Ahmad, T. A. (2013). Pembelajaran Sejarah berwawasan lingkungan. *Indonesian journal of conservation*, 2(1).
- Amboro, K. (2019). Kontekstualisasi Pandemi Covid-19 dalam Pembelajaran Sejarah. *Yupa: Historical Studies Journal*, *3*(2), 90-106.



- Evitasari, O., & Santosa, Y. B. P. (2022). Ragam Metode Pembelajaran Kontekstual untuk Pembelajaran Sejarah. Estoria: Journal of Social Science and Humanities, 3(1), 398-413.
- Lin, G. (2009). Higher Education Research Methodology-Literature Method. International Education Studies, 2(4), 179-181.
- Maghfiroh, A. M., Suprapta, B., & Sulistyo, W. D. (2021). Urgensi Mobile Learning Berbasis Situs Jejak Gerilya Jenderal Soedirman di Pakisbaru Pacitan sebagai Media Pembelajaran Sejarah Generasi Z. J-PIPS (Jurnal Pendidikan Ilmu Pengetahuan Sosia), 7(2), 103-115.
- Muhaimin. (2015). Implementasi Model Pembelajaran Berbasis Masalah Lokal dalam mengembangkan kompetensi ekologis pada Pembelajaran IPS. Sosio didaktika. Social science educational journal. 1(2).
- Prabawati, L. (2021). Analisis Kepekaan Lingkungan Siswa Smp Pada Pembelajaran Ipa Topik Pemanasan Global. IMPROVEMENT Jurnal *Ilmiah untuk peningkatan mutu manajemen pendidikan, 8(02), 36-46.*
- Ramdhani, A., Ramdhani, M. A., & Amin, A. S. (2014). Writing a Literature Review Research Paper: A step-by-step approach. International Journal of Basic and Applied Science, 3(1), 47-56.
- Simanjuntak, T., Handini, R., & Prasetyo, B. (2004). Prasejarah Gunung Sewu. Ikatan Arkeologi Indonesia.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. Journal of business research, 104, 333-339.
- Suryanegara, E., Damayanti, N., & Yudoseputro, W. (2007). Artifak Purba Pasemah: Analisis Ungkap Rupa Patung Megalitik di Pasemah. ITB *Journal of Visual Art and Design, 1*(1), 128-151.
- Vinco, M. S. M. (2018). Kontekstualisasi Kehidupan Masa Praaksara di Indonesia: Analisis Buku Teks Pembelajaran Sejarah. Historia: Jurnal Pendidik Dan Peneliti Sejarah, 1(2), 105-114.
- Yunansah, H., & Herlambang, Y. T. (2017). Pendidikan berbasis ekopedagogik dalam menumbuhkan kesadaran ekologis dan mengembangkan karakter siswa sekolah dasar. EduHumaniora Jurnal Pendidikan Dasar Kampus Cibiru, 9(1), 27-34.