



Ecopedagogical Capacity Building to Strengthen the Environmentally Caring Character of Youth in Mendalo Indah Village Through Environment Literacy Classes

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ABSTRACT

Environmental problems, including waste, are a continuing issue facing the community. The community service activity was motivated by the fact that many residents still litter, visible trash on the streets, and the lack of trash disposal sites on village streets. The community service activity aims to increase the understanding and skills of youth from the Karang Taruna of Mendalo Indah Village in preserving the environment by training in capacity building through environmental literacy classes and encouraging concrete actions to protect the environment from youth from the Karang Taruna. The activity was carried out through planning, implementation, and evaluation stages. The results of the community service were the implementation of ecopedagogical capacity building activities through environmental literacy classes and concrete actions to clean the environment. The training results through pre-test and post-test showed that 80% of participants understood the environment in religion, socio-culture, and the social environment. In addition, the concrete action activity was attended by youth from Mendalo Indah Village with a cleaning point at the Valencia Housing Complex. Greetings from this activity are expected to develop and strengthen the environmental care character of youth from Mendalo Indah Village so that in the future there will be many programs related to maintaining the village environment free from waste.

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Introduction

The dynamics of global life today have entered a period filled with the implementation of technology in various aspects of life. On the one hand, the existence of technology has become a means to facilitate all human activities. Thanks to technology, distance is no longer a problem. Space and time have become closer and narrower. However, on the other hand, technology can be a source of new problems. One of the emerging impacts is environmental problems. For example, the use of motorized vehicles that assist humans in transportation, on the other hand, also increases the risk of reduced air quality due to pollution from motorbike exhaust (Mustikarini & Feriandi, 2020). The use of environmentally unfriendly technology has contributed to various environmental damages (Adriansyah et al., 2016). Other environmental phenomena that overshadow life include deforestation



for industrial purposes, clean water scarcity, a significant increase in population, and air pollution due to industrial activities. Excessive exploitation of nature without conservation efforts has also led to the extinction of several flora and fauna (Rondli & Khoirinnida, 2017). This condition is not unique to Indonesia. The threat of global warming is also a hot topic of discussion in various countries. Environmental issues have even become multidimensional.

According to Stiglzt, the world must face the reality that global warming has resulted in global warming of approximately 0.6 degrees Celsius at the end of the last century, an unprecedented level of warming; sea level rises of approximately 10-20 cm, which also impacts flooding; and increases in greenhouse gases. This climate change also brings changes in climate parameters such as temperature, wind speed, humidity, and others (Muzadi & Mutholingah, 2019). As a country with extensive biodiversity and forests, Indonesia also faces various serious environmental issues. Some of the environmental problems occurring in Indonesia include (Silfiana & Samsuri, 2019): flooding continues to increase annually, with waste being the primary cause; people's consumption patterns, which favor fast food, lead to piles of waste (in the form of single-use packaging); The widespread forest fires in Sumatra and Kalimantan for industrial land clearing cause haze that can harm public health and damage the forest ecosystem itself. Furthermore, Indonesia's vast amount of plastic waste, not only causes flooding but also kills aquatic wildlife. For example, in 2018, a whale was found stranded in Watobi with a large amount of waste in its stomach. Other environmental issues threatening life include clean water scarcity, a significant population increase, and air pollution from industrial activity. Excessive exploitation of nature without conservation efforts has also led to the extinction of several flora and fauna. Furthermore, the abundance of littered waste poses a major environmental problem. The phenomenon of littering throughout the community has become a cause for concern recently, including in Mendalo Indah Village.

Mendalo Indah Village, located in Muaro Jambi Regency, is one of the villages facing environmental cleanliness challenges. The village consists of 879 families living in 17 neighborhood associations (RT). Students dominate the employment status in Mendalo Darat Village, with 1,115 people. With a large number of students (teenagers) and accommodated in the village youth organization, Mendalo Indah Village has the potential for many young generations who can be prepared to develop the village, including addressing village problems, one of which is the environment. However, the results of observations and interviews show that many residents still litter, garbage is visible on the streets, and there is a lack of garbage disposal sites on village streets. The main problems faced are: 1) lack of public awareness in protecting the environment, evidenced by the large amount of garbage scattered around; 2) the absence of training or socialization activities related to how to protect the environment and realize ecological citizenship; 3) the absence of activities that encourage teenagers (students) as the dominant community group in Mendalo Indah Village to preserve the environment. The existing condition of partners shows that the lack of awareness and literacy about the surrounding environment makes it necessary to carry out an activity to overcome the problems and challenges faced.



Indonesia is a country that fully recognizes the environment as a gift from God Almighty, intended for the Indonesian people. Article 28H, paragraph 1 of the 1945 Constitution of the Republic of Indonesia, states that "Everyone has the right to live in physical and spiritual prosperity, to have a home, and to enjoy a good and healthy environment, and to receive health services." Based on the Constitution, a good and healthy environment is the right of every citizen. To provide environmental protection and management as a basic human need that will provide the greatest benefit to Indonesian citizens, the government issued Law Number 32 of 2009 concerning Environmental Protection and Management. This law states that environmental protection and management aim to ensure human safety, health, and life, as well as to ensure the fulfillment and protection of the right to the environment as part of human rights (Fatmalasari et al., 2019).

The facts about the environment outlined certainly require the attention of all parties. Therefore, a commitment is needed that encompasses not only physical changes but also psychological and mental changes to make environmental awareness a habit. Environmental awareness is a reflection of humankind's concern and responsibility for protecting the environment (Nurfarida et al., 2022). Having an environmentally conscious character means contributing to a balance between nature and humans, thus fostering a healthy and prosperous life (Wandari & Darma, 2021). According to Prasetyo & Ahmad (2021), achieving a healthy environment can be achieved through several supports. First, through formal education. In this pathway, the younger generation needs to be provided with understanding through environmental-based education that integrates various environmental concepts into learning. Second, strengthening environmental awareness through school-based understanding, community-based environmental protection and law enforcement, and massive environmental campaigns through various platforms. The younger generation needs to understand the environment and the balance of nature so they can protect it. The better the living environment, the better the quality of human life. Conversely, the worse the living environment, the lower the quality of human life (Nurdiansyah & Komalasari, 2023). Based on the problems in the field, to address these challenges, the solution offered is capacity building activities through the Environment Literacy Class.

The Environment Literacy Class is seen as a concrete solution because through this activity, teenagers are given training aimed at instilling awareness of the importance of protecting the environment and behaving in an environmentally conscious manner. In addition, this activity also develops their abilities and skills so they can manage the environment well. This training activity with an ecopedagogical approach is expected to make teenagers become drivers of environmental management awareness in Mendalo Indah Village. The training provided covers various fields and materials that integrate the values of character, citizenship, religion and of course science. The scope of the training material is as follows: 1) Rights and Obligations Towards the Environment; 2) Review of Law Number 32 of 2009 concerning Environmental Protection and Management; 3) Environmental Management; and 4) the Mendalo Indah Green movement (real efforts to protect the environment in the Mendalo Indah Village area). Based on the explanation above, the objectives of this community



service activity are to: 1) increase the capacity of understanding and skills of youth from Karang Taruna Mendalo Indah Village in preserving the environment; 2) provide capacity building training through environmental literacy classes; 3) encourage real actions to protect the environment from youth from Karang Taruna.

Methods

Community service activities are conducted using an Asset-Based Community Development (ABCD) approach. These activities integrate environmental literacy with concrete community actions, ensuring participants not only understand theory but also contribute to solutions to public problems (Bringle & Clayton, 2020). Through the ABCD approach, Karang Taruna youth are positioned not as objects but as social assets with the capacity to drive change in Mendalo Indah Village. The capacity building activities were carried out using the following steps:

1. Preparation

Preparation is the first step in an activity (Hendra et al., 2024). In the preparation stage, the team determined the objectives and targets of the community service activities. The next step, the community service team coordinated with the Village Head and the Chairperson of the Mendalo Indah Youth Organization (Karang Taruna) to prepare the necessary activities, such as developing the concept, materials, and determining the participants. The preparation stage also determined the time and location of the community service activities.

2. Implementation

The community service activities were carried out in two forms: capacity building and concrete actions to demonstrate the participants' understanding of the material. The capacity building activities emphasized understanding and internalizing legal, religious, and socio-cultural aspects of environmental conservation to strengthen the environmental stewardship of the youth of the Mendalo Indah Village Youth Organization. These activities were designed to be interactive, facilitating discussion and sharing of experiences in environmental preservation in Mendalo Indah. The capacity building activities also included pre- and post-tests to gauge the youth of Mendalo Indah's understanding of the environment. The second activity involved concrete actions in the form of a mutual cooperation waste cleanup activity. This mutual cooperation activity involved identifying several areas deemed most contaminated by waste and then cleaning them.

3. Evaluation

The evaluation was conducted by reviewing the results of pre- and post-tests to gauge participants' understanding of the environment. The evaluation also focused on concrete actions taken to improve the program in the future. Furthermore, at this stage, the team also discussed the program's sustainability with the youth organization leaders.

Results



An ecopedagogical capacity building activity to strengthen environmental stewardship through an environmental literacy class was conducted in Mendalo Indah Village. Thirty youth from the Mendalo Indah Village youth organization participated in the event from November 7-9, 2025. The activity was motivated by the community service team's initial survey, which found a large amount of trash strewn on the streets of Mendalo Indah Village. Initial findings also indicated that the lack of trash bins was one of the causes of the widespread littering. The large number of potential youth members should provide Mendalo Indah with a strong foundation for maintaining and creating a clean, litter-free environment. Based on the field findings, the community service team provided capacity building training to strengthen the environmental stewardship of the Mendalo Indah Village youth organization. Capacity building is generally considered a process by which individuals develop their abilities to achieve goals. This activity serves as training to improve knowledge, skills, and behavior (Setyorini, 2022). The community service activities are outlined in the following stages:

Preparation

In the preparation stage, the activities include analyzing problems encountered in the field. The results of the problem analysis are summarized in the form of activity objectives and targets. The objective of this activity was to increase the understanding and skills of youth from the Karang Taruna (Youth Organization) of Mendalo Indah Village in environmental conservation. This included providing capacity building training through environmental literacy classes, and encouraging concrete actions to protect the environment. The goal of this activity was to increase the understanding of the younger generation of Mendalo Darat regarding the importance of developing an environmentally conscious character.

To this end, the team coordinated with the village head and the Karang Taruna chairman to address the needs and challenges that could be addressed. The discussions resulted in an agreement on the activity format, time, and location, participants, and the concept for the capacity building program to ensure optimal implementation. During the preparation phase, the team prepared training materials and pre- and post-test questions to measure the environmental awareness of youth from Mendalo Darat Village. Prior to the event, the team prepared the venue by preparing seating in the village office hall and displaying banners and materials to be distributed to capacity building participants.

Implementation

The community service activities were implemented in two forms: capacity building and concrete actions to demonstrate participants' understanding of the material. The capacity building activities emphasized understanding and internalizing legal, religious, and socio-cultural aspects of



environmental conservation to strengthen the environmentally conscious character of youth from the Karang Taruna of Mendalo Indah Village. This interactive activity was designed to facilitate discussion and sharing of experiences in environmental preservation in Mendalo Indah. The capacity building program also included pre- and post-tests to gauge the environmental awareness of Mendalo Indah youth. The event was opened by Mendalo Indah Village Secretary, Mr. Prian Susilo, S.Pd.I., and continued with a presentation of training materials.



Figure 1. Capacity building training activities

The event took place in two sessions, with Ustad Salman Jufri and Ustad Salman Hasani as speakers. The material was delivered in parallel, each covering environmental topics from a religious, socio-cultural, and legal perspective, as well as waste management practices. Following the presentations, participants were invited to discuss and share their experiences in waste management. Participants were encouraged to reflect on how they managed their waste independently, thus providing insights into developing an environmentally conscious attitude.

The second activity, a collaborative waste cleanup activity, took place on November 9, 2025. The collaborative activity involved identifying several locations deemed the most polluted by waste and then cleaning them. Based on analysis, two locations were identified in the Valencia housing complex in Mendalo Indah Village. These two locations were then cleaned collaboratively, involving youth and members of the Mendalo Indah community. Village officials, including the village head of the government, were also present. The collaborative activity resulted in the collection of 12 large bags of waste. The waste was separated into organic and inorganic types to facilitate processing at the final disposal site. The collected waste is then disposed of in a landfill.



Figure 2. Mutual cooperation with youth from the youth organization



Figure 3. The process of transferring waste to a car to be delivered to the landfill.

Evaluasi

Evaluations were conducted on two types of activities: training and concrete waste cleanup activities. The training activities were evaluated using pre- and post-tests. Based on the pre-test results, 46.67% of participants were still unfamiliar with environmental perspectives within religion, socio-cultural, and the social environment. Meanwhile, 53.34% demonstrated an understanding of the environment, particularly waste issues. After completing the training, post-test results showed an increase, with 80% of participants understanding the environment within religion, socio-cultural, and the social environment. This improvement not only demonstrated participants' understanding of the material but also encouraged them to demonstrate environmental awareness through concrete actions. The post-test results are expected to strengthen the environmental awareness of youth in Mendalo Indah Village, enabling them to contribute to maintaining a beautiful and litter-free environment.

The next evaluation was conducted on the concrete waste cleanup activities that had been carried out. Based on field analysis and evaluation, several supporting factors determine waste cleanliness in Mendalo Indah Village. First, the potential of many youth in Mendalo Indah, who are at the forefront of maintaining environmental cleanliness. Second, the trash cleanup needs to be followed



up as a program, considering that it won't be possible to clean up the entire area in a single day. Third, the community service activities are expected to spark other environmental cleanup activities. Furthermore, several factors hinder environmental cleanliness. First, the lack of waste disposal sites leads to widespread litter and accumulation on the streets. Second, strong support from the village government is essential for all levels of society to ensure Mendalo Indah Village is free from waste.

Discussion

Thirty youth from Mendalo Indah participated in a capacity-building activity through an environmental literacy class. This activity provided youth with the importance of maintaining a clean, comfortable, and waste-free environment. The activity took two forms: an environmental literacy class and a concrete environmental cleanup activity. In the environmental literacy class, youth were provided with environmental concepts as a foundation for understanding and maintaining a waste-free environment. Posttest results showed an increase in youth understanding of the environment. The increase in participants' comprehension scores from 53.34% to 80% through the environmental literacy class demonstrated the effectiveness of the ecopedagogical approach in transforming youth awareness. Environmental literacy, in this context, is not merely data mastery, but rather the individual's capacity to be sensitive and responsible for ecosystem sustainability (Napitupulu et al., 2025). These results align with the findings of Susanti et al. (2025), who stated that intensive outreach within youth communities can increase waste management awareness by up to 80% through a literacy approach relevant to local needs. In this context, environmental literacy acts as a foundation for the formation of ecological citizenship (Lestari et al., 2025).

The integration of religious, socio-cultural, and legal aspects in this training is a key factor. Material that integrates religious and legal values is crucial, because the character of environmental care in Indonesia grows more optimally when connected with spiritual empathy and social responsibility (Rahmatiani & Repelita, 2025). By linking environmental preservation as a moral and social obligation, youth from Karang Taruna (Taruna Youth Organization) not only act as conscious consumers but also transform into active environmental citizens who feel a collective responsibility for their region.

The activity was followed by concrete environmental cleanup actions. These concrete actions took the form of collective work to clean areas considered to be the most littered. The garbage cleanup activities aimed to create a clean environment and shape youth's mindset about the importance of environmental cleanliness (Leimena et al., 2025). The concrete action of mutual cooperation and sorting 12 large trash bags in the Valencia Housing Complex demonstrates the transition from cognitive knowledge to pro-environmental behavior. This supports the argument that environmental education solely focused on cognitive aspects is less effective without field experience and peer



interaction. Through direct action, youth practice their cognitive and affective skills in systematically solving waste problems.

Community empowerment through the concept of ecological citizenship must touch on aspects of direct practice to foster a sense of ownership of the village environment (Rahmayanti et al., 2025). The active involvement of youth in Karang Taruna (Youth Organization) demonstrates the use of social capital to create behavioral change. Setyorini (2022) emphasized that capacity building in village youth groups serves as a key driver in the sustainability of environmental programs at the grassroots level. Practical experience in sorting organic and inorganic waste strengthens their long-term commitment, as emotional involvement in environmental protection is a strong predictor of future civic participation.

Conclusion

Capacity building activities were carried out to improve the understanding and skills of youth from the Mendalo Indah Village Youth Organization in preserving the environment, through environmental literacy classes and encouraging real actions to protect the environment. The activities were carried out in several stages. First, implementation, by determining the objectives and targets of community service activities and coordinating with the village head and the head of the Mendalo Indah Village Youth Organization. Second, implementation by presenting training materials and carrying out real actions. Third, evaluation of activities. The results of the training activities showed that 80% of participants understood the environment in religion, socio-culture and the social environment. In addition, the activity continued with training with real actions to clean up Mendalo Indah Village with the Valencia housing point. In general, ecopedagogic capacity building activities can strengthen the environmental care character of youth from Mendalo Indah Village in protecting the environment. This training is expected to develop and strengthen the environmental care character of youth from Mendalo Indah Village so that in the future there will be many programs related to maintaining the village environment to be free from waste.

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Bibliography

- Adriansyah, M. A., Sofia, L., Rifayanti, R., Ilmu, F., Politik, I., & Samarinda, U. M. (2016). Pengaruh Pelatihan Pendidikan Lingkungan Hidup Terhadap Sikap Peduli Anak Akan Kelestarian Lingkungan. *Psikostudia Universitas Mulawarman*, 5(2).
- Bringle, R. G., & Clayton, P. H. (2020). Integrating Service Learning and Digital Technologies : Examining the Challenge and the Promise. *RIED. Revista Iberoamericana de Educación a Distancia*, 23(1), 43–65.
- Fatmalasari, H., Yuliandari, E., & Gunawati, D. (2019). Penguatan Ecological Citizenship Sebagai Upaya Mengubah Perilaku Masyarakat Sadar Akan Lingkungan Melalui Program Kampung Selo Beraksi. *PKn Progresif*, 14, 45–59.
- Hendra, Hajri, P., Dewi, N., Sariyani, D., & Ekaputra, F. (2024). Penguatan Konsep Pendidikan Politik Generasi MudaPemilih Pemula Jambi Melalui Kuliah Umum Pendidikan Politik. *Jurnal Dedikasia: Jurnal Pengabdian Masyarakat*, 4(01), 1–10.
- Leimena, H. E. P., Tuhumury, F. D. A., Patty, A. D., Patty, Z., Patty, E. S., & Tupamahu, B. (2025). Gerakan Bersih Lingkungan : Aksi Nyata Pembersihan Sampah Dalam Memperingati Hari Peduli Sampah Nasional Di Negeri Latu , Kecamatan Amalatu , Kabupaten Seram Bagian Barat. *J-PKM Jurnal Pengabdian Kepada Masyarakat*, 1(4).
- Lestari, A., Afandi, & Ariyati, E. (2025). Literature Studies : Integration of Ecological Citizenship in Education and Public Awareness. *PENDIPA: Journal of Science Education*, 9(3), 672–681.
- Mustikarini, I. D., & Feriandi, Y. A. (2020). Konfigurasi Pendidikan Kewarganegaraan Ekologi Perspektif sosio-kultural (Gagasan Pembentukan Pendidikan Kewarganegaraan Kontium Maksimal di Indonesia). *Jurnal Pancasila Dan Kewarganegaraan*, 5(2), 54–64. <https://doi.org/10.24269/jpk.v5.n2.2020.pp54-64>
- Muzadi, A., & Mutholingah, S. (2019). Integrasi Pendidikan Berwawasan Lingkungan Hidup (Green School) Melalui Pembelajaran PAI Di Sekolah. *Ta'limuna*, 9(05), 53–71.
- Napitupulu, N. D., Novianti, I., & Selmi, K. (2025). Environmental Literacy in Middle School : Ecological Knowledge , Cognitive Skills , Environmental Affect , and Pro-Environmental Behavior. *Jurnal Eduscience (JES)*, 12(2), 281–296.
- Nurdiansyah, E., & Komalasari, K. (2023). Membentuk Kewarganegaraan Ekologis melalui Pendidikan Lingkungan berbasis Kegiatan Masyarakat. *Jurnal Pendidikan Lingkungan Dan Pembangunan Berkelanjutan*, 24. <https://doi.org/10.21009/plpb.v>
- Nurfarida, R., Pandue, & Hasanah, A. (2022). Perilaku Green Behaviour Dengan Pembelajaran Ekoliterasi Pendidikan Karakter Anak Usia Dini. *CBJIS : Cross-Border Journal of Islamic Studies*, 3(2), 86–94. <https://doi.org/10.37567/cbjis.v3i2.1011>
- Prasetyo, D., & Ahmad, H. (2021). Memperkuat Karakter Ecology Citizenship Masyarakat Melalui Aktivitas Ecotourism. *Integralistik*, 32, 89–99.
- Rahmatiani, L., & Repelita, T. (2025). Jurnal Pengabdian Kepada Masyarakat Pentingnya Kesadaran Karakter Peduli Lingkungan Pada Generasi Muda. *Jurnal Pengabdian Kepada Masyarakat*, 5(1), 34–44.
- Rahmayanti, E., Haryanto, E. S., Eko, D., Cahyo, N., Ramadhansyah, I., & Ron, R. (2025). Pemberdayaan Masyarakat Dalam Pengelolaan Sampah Berdasarkan Konsep Kewarganegaraan Ekologis (Ecological Citizenship) Melalui Media Film Untuk Menumbuhkan Karakter Peduli Lingkungan Community Empowerment in Waste Management Based on the Concept of Ecolo.



Indonesia Berdaya, 6(4), 903–916.

- Rondli, W. S., & Khoirinnida, Y. (2017). Pembelajaran Pendidikan Kewarganegaraan Berbasis Ecoliteracy: Upaya Rekonstruksi Kewarganegaraan Ekologis. *Prosiding Seminar Nasional*, 114–122.
- Setyorini, E. (2022). Efektivitas Capacity Building Dalam Meningkatkan Kinerja Pegawai PPPPTK Penjas Dan BK. *TEACHER : Jurnal Inovasi Karya Ilmiah Guru*, 2(1), 7–14.
- Silfiana, L., & Samsuri. (2019). Keterlibatan Warga Negara Muda Dalam Gerakan Kewarganegaraan Ekologis Untuk Mewujudkan Pembangunan Berkelanjutan Berwawasan Lingkungan. *Jurnal Studi Pemuda*, 8, 127–139.
- Susanti, W. A., Prawira, M. A. D., & Rizqullah, R. B. (2025). Kegiatan Sosialisasi Pemuda Karang Taruna Simo Kalangan Terhadap Pentingnya Menjaga Kebersihan Agar Terhindar dari Bencana Alam. *Jurnal GEMBIRA (Pengabdian Kepada Masyarakat)*, 3(3), 877–886.
- Wandari, N. K. M. A., & Darma, G. S. (2021). Pengelolaan Karakter Green-Behavior Pada Generasi Milenial Dalam Meningkatkan Minat Penggunaan Green-Product. *Jurnal Nusantara Aplikasi Manajemen Bisnis*, 6(1), 49–61.