



Eco pedagogic Based on Local Wisdom as an Effort to Grow Students' Ecological Awareness

Fawziah Zahrawati B

Institut Agama Islam Negeri Parepare

fawziahzahrawatib@iainpare.ac.id

Abstract

Ecological awareness is an awareness that is important for someone to have as an effort to solve the problem of environmental crisis. This study aims to determine the portrait of students' ecological awareness, the use of eco-pedagogy based on local wisdom to foster students' ecological awareness, and the challenges faced by teachers in growing students' ecological awareness. This research is a qualitative research conducted at SDN 16 Sayawang. Informants are school principals, teachers, staff, and students selected by purposive sampling. To obtain data conducted interview, observation, and documentation. The validity of the data is obtained through triangulation of theories, methods, and sources. Next, the data is analyzed. This study found that the portrait of students' ecological awareness can be seen from the ability to distinguish between organic and inorganic waste. Using local wisdom-based eco-pedagogy is carried out by utilizing school culture and through the learning process. The teacher takes as an example the traditions carried out by the local community and are related to the value of loving the environment, such as the *appadekko* tradition. To raise ecological awareness, it cannot be separated from the challenges faced by teachers, namely students who have diverse family backgrounds, students who have a diversity of characteristics and learning styles, as well as the influence of student association in society. The findings of this study can be an example of the use of local wisdom in instilling the value of loving the environment in students.

Keywords: *care for the environment, eco pedagogic, ecological awareness, local wisdom*

Abstrak

Kesadaran ekologis merupakan kesadaran yang penting untuk dimiliki seseorang sebagai salah satu upaya untuk menyelesaikan masalah krisis lingkungan. Penelitian ini bertujuan untuk mengetahui potret kesadaran ekologis siswa, pemanfaatan ekopedagogik berbasis kearifan lokal untuk menumbuhkan kesadaran ekologis siswa, dan tantangan yang dihadapi guru dalam menumbuhkan kesadaran ekologis siswa. Penelitian ini merupakan penelitian kualitatif yang dilaksanakan di SDN 16 Sayawang. Informan adalah kepala sekolah, guru, staf, dan siswa yang dipilih secara purposive sampling. Untuk memperoleh data dilakukan wawancara, observasi, dan dokumentasi. Keabsahan data diperoleh melalui triangulasi teori, metode, dan sumber. Selanjutnya, data dianalisis. Penelitian ini menemukan bahwa potret kesadaran ekologis siswa dapat dilihat dari kemampuan membedakan sampah organik dan sampah anorganik. Selanjutnya, pemanfaatan ekopedagogik berbasis kearifan lokal dilakukan dengan memanfaatkan budaya sekolah dan melalui proses pembelajaran. Guru mengambil contoh tradisi yang dilakukan masyarakat setempat dan berkaitan dengan nilai peduli lingkungan, seperti tradisi *appadekko*. Dalam upaya menumbuhkan kesadaran ekologis tidak lepas dari tantangan yang dihadapi guru yakni siswa yang memiliki keberagaman latar belakang keluarga, siswa yang memiliki keberagaman karakteristik dan gaya belajar, serta pengaruh pergaulan siswa di

masyarakat. Temuan penelitian ini dapat menjadi contoh dalam pemanfaatan kearifan lokal dalam menanamkan nilai cinta lingkungan terhadap siswa.

Kata Kunci: *ekopedagogik, kearifan lokal, kesadaran ekologis, peduli lingkungan*

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Institut Agama Islam Negeri Madura, Indonesia



Introduction

Polluted environment is often encountered in everyday life. This is the negligence of irresponsible people in maintaining cleanliness, causing a lot of damage and pollution in the environment. The decline in environmental quality is one of the negative affects of today's very rapid technological advances. The environment is a state of nature that is close to everyday life (Zahrawati, 2021).

There are two types of environment, namely biotic environment and abiotic environment (Subianto, 2013). In harmony with the cosmic beings and others, the balance of the cosmos will develop. Space for human needs can only be sustainable if it is balanced with a common interest in preserving nature. Recognizing, realizing, and developing character to protect nature is the first step in the formula for loving nature. The carrying capacity of nature is its ability to withstand environmental challenges. Limited natural carrying capacity. In order for humans to influence nature, the limitations of nature's carrying capacity must be considered. Among the many qualities that exist in the public, one of them is the climate value.

So that the survival of the next generation is not threatened by irresponsible human behavior, such as littering, an unclean lifestyle, and extravagant attitudes, awareness of the importance of protecting the environment must begin (Herdiansyah et al., 2019). The goal of eco pedagogy is to educate students on various values and concepts, so that they can gain the behavior and skills to think comprehensively in taking action by considering the relationship between humans and nature which leads to students' habits to think long-term and on a broad scale (Subianto, 2013; Finali et al., 2022).

In this regard, Indonesian society is rich in local wisdom, which can become social capital and a source of value that can be instilled in students at school. Indonesianof local wisdom in the learning process will also make it easier for students to understand a knowledge because local local wisdom is closer to student life. At least the teacher will have no difficulty in providing illustrations because this has been experienced by students in their daily lives.

It is difficult to establish and implement an environmental education program. The habit of littering is the most difficult obstacle to overcome. This hostile life behavior will continue into the next life if it is not changed early on. Development of ecological awareness can only be achieved if accustomed to an early age. Local wisdom-based eco-pedagogy can be used as a strategy to instill ecological awareness among students (Jufri et al., 2018).

As happened at SDN 16 Sayawang, school residents have built a culture of love for the environment. Garbage has been sorted. Organic waste is processed into fertilizer, while other waste is recycled into items that can be used in the learning process as learning media. Teachers and students have recognized the waste problems that occur in schools. Schools are well supported efforts to prevent environmental pollution. Every school member has an awareness of the responsibility to protect the environment. They know that activities carried out at school produce a lot of waste, so they made a movement to overcome this (Observation at SDN 16 Sayawang, December 5-9 2022).

Awareness of the school's concern for processing the waste will certainly help minimize environmental pollution. For example, the SDN 16 Sayawang school can manage the waste in the school environment properly. Waste management is carried out through 3R, namely reuse, reduce, and recycle. The application of the 3R system (reuse, reduce, and recycle) is carried out by giving assignments to students as handicrafts from waste. For example, used cardboard is used as decorative flowers and waste plastic cups are used as bags. This is one way to reduce waste while protecting the environment. In addition, everyone can implement 3R in their daily activities. To process both organic and inorganic waste from schools, a strategy based on the three R's is very helpful. Besides improving environmental health, processing according to the 3R model has the potential to boost school income if products with high selling prices can be produced (Interview with a teacher at SDN 16 Sayawang, December 7, 2022).

The inculcation of a culture of love for the environment does not just happen, it goes through a long internalization process and involves all school members by utilizing the local wisdom around them. On this basis, this study aims to find out the portrait of students' ecological awareness, the use of eco pedagogy based on local wisdom to foster ecological awareness, and the challenges faced by teachers in fostering ecological awareness of SDN 16 Sayawang students.

Method

This research is a qualitative research that aims to describe eco pedagogic phenomena based on local wisdom as an effort to foster students' ecological awareness. The following is a picture of the research framework.

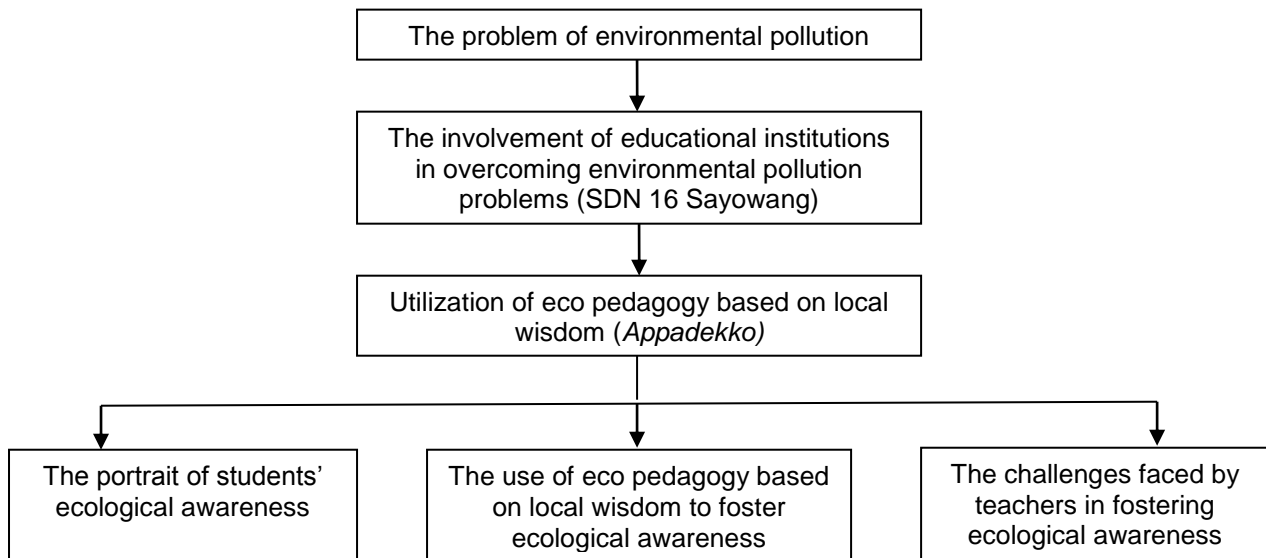


Figure 1. Research Framework

This research started with environmental damage. Educational institutions, such as schools, have a role in efforts to overcome these problems. SDN 16 Sayowang is an elementary school that utilizes eco pedagogy based on local wisdom to instill ecological awareness in students. One of the local wisdom is *Appadekko*. This research looks at student ecological awareness, eco-pedagogy, and teacher challenges.

The location of this research is SDN 16 Sayowang, Pa'bundukang Village, Polongbangkeng Selatan District, Takalar Regency, South Sulawesi Province, Indonesia. Informants in this study were school principals, teachers, staff, and students who were selected by purposive sampling. Data collection techniques are in-depth interviews, observation, and documentation. To obtain the data, instruments were used as interview guides, observation guidelines, and documentation guidelines. The validity of the collected data was tested through triangulation of theories, methods, and sources. Then the data is analyzed (Creswell, 2013).

Result and Discussion

Portrait of student ecological awareness

Ecological awareness is awareness of the importance of protecting the environment. Someone who has ecological awareness will think comprehensively and

long-term before taking an action (Bouley, 2012). The portrait of the ecological awareness of the students at SDN 16 Sayawang can be seen starting from the ability of the students to distinguish between organic waste and inorganic waste. The school facilitates three types of trash cans by giving them different colors to make it easier for early grade students who cannot read. The teacher gave an explanation and gave an example of how to sort waste, namely organic waste as food scraps, leaves or twigs is put in a green trash can. Meanwhile, reusable waste such as glass, cans, or plastic is put in a yellow bin. Then recyclable waste such as paper, cardboard, or newspapers is put into a blue bin.

In addition, school residents routinely carry out clean Friday. They clean the school together and take care of the plants around the school. In this clean Friday activity, students are invited to use the garbage that has been collected. Garbage that is in the yellow bin is reused. Like cans and glass, changed into flower pots. The waste that is in the blue trash bin will be recycled into learning media, such as paper being processed into maps which are used as learning media for geography material.

Building pro-environmental habits from an early age is difficult (Kos et al., 2016), but if all parties are committed to it, then it is not impossible (Palupi & Sawitri, 2018). At SDN 16 Sayawang, pro-environmental commitment can also be seen from the students' habit of keeping clean. The responsibility for maintaining cleanliness is not borne by the janitor alone, but students are educated as early as possible to keep their class clean. Students are divided into six groups and given cleaning up the classroom before the material begins.

Ecological awareness can be seen from three indicators, namely knowledge, attitudes, and behavior. The knowledge indicators include knowing the classification of waste, knowing things that can pollute the environment, knowing the protected animals, and knowing about the function of greenery. The attitude indicators include: reminding not to litter, reminding to always protect the environment from pollution, reminding not to catch or even kill protected animals, and reminding to always replant after cutting trees. Finally, behavioral indicators include: Disposing of waste by sorting it according to its classification, implementing government regulations so as not to pollute the environment (Kencanasari et al., 2019).

Humans will have the habit of caring for, protecting the environment, and the character of caring for the environment will be formed from the habit of caring for the environment (Putri et al., 2021). Schools are expected to provide awareness and character that can maintain the school environment properly and correctly from understanding and

awareness to preserve this environment. In addition, schools must be able to cultivate students with a strong sense of concern for the school environment, which will have a positive impact on student achievement and creativity and their comfort with school work. Because character education is carried out in schools. Character education will involve everyone in the classroom, including family members, schools, the school environment, and society. Also, this will not work assuming there is no coherence and suitability with the educational climate (Chan et al., 2019).

Utilization of eco-pedagogy based on local wisdom to raise ecological awareness

Eco pedagogy aims to sharpen ecological sensitivity and increase awareness of the existence of the environment as part of an ecosystem that influences human life. In harmonious through ecological education, everyone is led to get used to the mentality of ecological life, which is always aware that its existence can only be meaningful if it coexists with other creations. This has implications for understanding how valuable and valuable nature is for human life, and how important it is to maintain and preserve a harmonious life (Yasida, 2020).

Ecological awareness should be the most important part of educational goals. Education must be able to produce educators who are characterized and have awareness of nature/environment and are not oriented towards efforts to produce educators who are pragmatic-materialistic in spirit and impact the construction of a 'paradigm trapped in the wilderness of bad development which only sees nature as an object, mechanistic, fragmented, separate from humans so that it is easy to master and exploit (Yasida, 2020).

Using eco-pedagogy based on local wisdom is nothing new. One of them is research of Kariadi et al., (2019) on the use of *awik-awik* as an eco-pedagogy in learning social sciences. His research found that *awik-awik* as an eco pedagogic model is an approach that is oriented towards efforts to develop students' multi-domains meaningfully. This means that learning is not developed based on the orientation of achieving the cognitive domain alone, but must cover multi-domains which include cognitive, affective and psychomotor. Based on the principle of development, eco pedagogic-based learning emphasizes the development of material that is not only limited to something that is textual, but needs to be developed through a contextual approach. This means that learning must be developed using sources and media that are in students' lives, so that students can construct knowledge meaningfully. Based on this, learning must be based on an interdisciplinary approach in order to comprehensively enrich the knowledge and

understanding of students. Apart from that, eco pedagogic-based education is oriented towards achieving a complete understanding of humans and nature which have essential relationships, so that this has implications for the growth of critical awareness and the development of the character of students.

At SDN 16 Sayawang, implementing eco-pedagogy based on local wisdom is carried out by utilizing the school's culture. The local wisdom used is as an introduction to local traditions associated with environmental preservation efforts. In addition, students are also taught about the values that are gripped by the local community, most which are Makassar.

One of the community's traditions related to the environment is the *appadekko* tradition. The *appadekko* tradition is an activity carried out by farmers as an expression of gratitude for the abundant rice harvest (Amir & Marzuki, 2021). This gratitude is also accompanied by efforts to preserve nature. The *appadekko* tradition aims to build public awareness of the importance of protecting nature, which is a source of human livelihood.

The *Appadekko* tradition describes a ceremony of expressing gratitude for a successful harvest in the area, and functions as a performing art that is entertainment in nature. One aim of this tradition is to hold a prayer together for their success in all aspects of their daily activities, especially the needs of their lives.

Ase lolo (young rice) is a type of rice that has not yet turned yellow but is still green but is full. This rice is treated specifically for how to harvest it, how to bring it, where to store it, and how to store it, especially how to pound it. Young rice is harvested specifically for those who master the spell of cutting rice, usually done by an *anre guru* (elderly role model), after this *anre guru* cuts the first rice from the stalks then followed by others with the condition that they have their own shrewdness in using *kandao* (scythe) in harvesting paddy. After a lot of paddies have been collected, these paddies are carefully tied up. After being tied up, they are carried to the place where they are said carefully. When they are carried, they try not to let a single grain fall off and fall to the ground. A grain of rice that falls is taboo or *pamali*. This contains a message to respect rice by not letting it fall and be wasted. Appreciation for rice is a representation of human efforts to protect the environment.

The tools used in *Appaddeko* activities comprise *Assung* or called *Lesung* and Pestle, which is a tool for pounding rice made of wood which is about two meters long. *Apaddekkko* activities are carried out by: (1) *Adengka*, which is the activity of pounding rice

in a mortar carried out by 4-6 people, (2) *Apadudu*, which is an activity carried out by 1 person at the end of the mortar whose work is to hit the end of the mortar using a stick, and (3) *Ammeppe*, namely activities carried out by 1 person by hitting the right and left sides of the mortar with a certain rhythm. *Appaddekkko* activities can be played alternately without having to stop the activity. If the people who are *appaddeko* or called *pa paddekkko* are tired and want to be replaced by another player, then the substitutes immediately come in to replace the other players after being given a code from the perpetrator or *pa paddekkko* wants to be replaced (Amir & Marzuki, 2021).

It was further stated that this tradition is not only filled with the value of love for the environment but also contains other values such as togetherness, cohesiveness, responsibility, enthusiasm for hard work, cooperation, creativity, innovation, harmony, unity, and a sense of pride in regional culture (Amir & Marzuki, 2021).

Of course, learning about environmental education can be started with straightforward topics that are always relevant to students' lives. Creative students will undoubtedly be able to identify problems in students' lives and try to solve them through creativity. Guided inquiry activities can teach students how to solve problems they already have and how to create new ideas with teacher guidance.

Participation in environment-based activities by school principals, staff, teachers, employees, students, and all school members is an indicator of high environmental awareness. While the level of education and the social environment of the students themselves affect the factors increasing students' awareness of environmental protection.

Using eco pedagogy based on local wisdom can be one effort in growing students' ecological awareness. By raising local themes in learning, it will be easier for students to understand the material because it is in direct contact with everyday life. Likewise, the *appaddekkko* tradition which is used as a learning resource for students to present their love for the environment.

Challenges faced by teachers in cultivating ecological awareness

Efforts to increase students' ecological awareness through the use of eco-pedagogy based on local wisdom cannot be separated from challenges. It is undeniable that in order to create pro-environmental habits among students, education about loving the environment is needed in the family, school and community.

The challenges faced by teachers in cultivating students' ecological awareness, namely the diversity of students' family backgrounds, the diversity of learning styles and student characteristics, as well as the influence of association in society.

Families have a role in growing children's ecological awareness. The diversity of students' family backgrounds is one challenge for teachers in instilling a pro-environmental attitude in students. Not a few parents are apathetic towards instilling the value of loving the environment in their children from an early age. Even though the family is the first environment where values are planted for children. The family plays a very important role in the ongoing process of education and the formation of children's behavior under the character values that exist in society. Family education, especially children's education, certainly requires a very large role of parents. Children who are between the ages of 0 to 12 years really need direction, guidance and guidance from their parents in growing a basic personality that is balanced, whole and in harmony with life values, so that children not only know the value of character in society, but can also apply it in everyday life (Setiardi, 2017).

In addition, the diversity of student characteristics and student learning styles is also a challenge for teachers in cultivating ecological awareness. Teachers must be more creative in choosing to learn media and models that can insert pro-environmental values by considering the diversity of these students. Eco pedagogy is very appropriate to be discussed and realized amid rampant cases of environmental damage in this era of globalization. Considering is demanded to be more creative in teaching environmental care to children. The pedagogic content can be amid through green school, digital-based teaching materials, creative dance, field trip and outbound activities and through storytelling. All eco-pedagogic content through these methods or activities has proven to be very effective in applying to children in this era of globalization related to instilling environmental care in early childhood, so that ecological awareness will be formed and instilled in children as early as possible (Wati & Listiana, 2020).

The last challenge is the influence of student association in the community. The wider community clearly has a major influence on the success of cultivating aesthetic and ethical values for character building. Community participation in education is closely related to changing the perspective of society towards education. This is, of course, not an easy thing to do. However, if it is not started and carried out from now on, when will a sense of belonging, concern, involvement, and active participation of the community at the maximum level be obtained by the world of education (Subianto, 2013).

The benefits of ecological awareness for social life

The disruption of the natural habitat leads to an imbalance in the ecosystem. The destruction of the natural environment is causing a series of disasters, like floods, landslides, fires, deforestation, and pollution, making the earth's condition worse (Gabriella & Sugiarto, 2020).

It is essential that the community recognize the importance of ecological awareness. Having a knowledge of ecology can help the community create environmentally friendly habits. All sectors of society must come together to create a sustainable environment. In order to protect the planet, cooperation between the government, the business world, and society is essential. Consumers should be motivated to conserve energy, keep their environment clean, and live an environmentally friendly lifestyle. Government policy and regulation are essential for this. Companies in the business industry require instructions for the production of eco-friendly goods, such as a beverage provider which has utilized single-use plastic containers to package its products. Many measures have been implemented by the community for environmental conservation, both within the business and non-business sectors, as well as in non-business entities, such as educational establishments or organizations, such as schools and universities. To properly meet the needs of humanity, it is essential to take purposeful action to manage the environment by keeping or improving the standard of the environment (Gabriella & Sugiarto, 2020).

Communities that understand the importance of ecology can cultivate ecological awareness and promote recognition of the natural environment and its impact on human life. Ecological education guides individuals to develop a mentality that recognizes the importance of coexisting with other creations in order to truly exist. This has implications for understanding how valuable and valuable nature is for human life, so how important it is to maintain and preserve a harmonious life. In addition, people who have character and awareness about nature/environment will not be pragmatic-materialist in spirit and impact building a paradigm that is trapped in the jungle of wrong development (maldevelopment) which only sees nature as an object, mechanistic, fragmented, separate. From humans so easily dominated and exploited. With ecological awareness, people will understand their nature as human beings who have a relationship with nature and manifest this awareness through wise behavior towards nature (Yunansah & Herlambang, 2017).

Raising consciousness about ecology will make all parties aware of the human exploitation of nature and the mistreatment of weaker groups by those with power. This knowledge creates a collective understanding of the importance of being actively involved in preserving and nurturing the Earth, as nature is a source of life and inspiration, not just a habitat (Yunansah & Herlambang, 2017).

Conclusion

Ecological awareness is not possessed by someone just like that, but through internalizing values in the family, school and community environment. The portrait of the students' ecological awareness at SDN 16 Sayawang can be seen from the students' ability to distinguish between organic waste and inorganic waste. With this initial ability, students can dispose of waste according to its type. In addition, the school facilitates various garbage disposal sites according to the type of waste and organizes clean Friday activities to familiarize its citizens with protecting the surrounding environment. Using local wisdom-based eco-pedagogy to raise students' ecological awareness is carried out by utilizing the school's culture. The teacher inserts the value of loving the environment through the learning process by utilizing the local wisdom of the local community, such as the appadekko tradition, which in its implementation contains the value of loving the environment. In cultivating students' ecological awareness, teachers face several challenges, namely students who come from diverse family backgrounds will naturally have different habits. Likewise, the diversity of learning styles and student characteristics is also a challenge for teachers in instilling the value of love for the environment. Finally, the influence of student association in the community environment is also one challenge for teachers in growing students' ecological awareness.

Suggestion

Based on the findings of this study, it is hoped that educational practitioners and academics will use local wisdom to foster students' ecological awareness. This will make it easier for students to understand the behavior of loving the environment because it is closer to student life. Suggestions for future researchers are to examine more deeply eco pedagogic based on local wisdom. Researchers can use different approaches or types of research, such as design research, to produce eco pedagogic learning trajectories based on local wisdom so that they can be implemented in the learning process.

References

- Amir, R., & Marzuki, K. (2021). Membangun karakter bangsa melalui kegiatan tradisi appadekko. *INOVASI: Jurnal Hasil Pengabdian Masyarakat*, 1(1), 17–25. https://scholar.google.com/citations?view_op=view_citation&hl=en&user=7Jr6ZXEEAAAJ&pagesize=100&citation_for_view=7Jr6ZXEEAAAJ:W7OEmFMy1HYC
- Bouley, T. M. (2012). Ecological intelligence and environmental education: My journey. *Science Education Review*, 11(1), 18–24. <https://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ977378&%0AAlang=fr&site=ehost-live%0Ahttp://www.scienceeducationreview.com/>
- Chan, F., Rimba Kurniawan, A., Oktavia, A., Citra Dewi, L., Sari, A., Putri Khairadi, A., & Piolita, S. (2019). Gerakan Peduli Lingkungan Di Sekolah Dasar. *Adi Widya: Jurnal Pendidikan Dasar*, 4(2), 190. <https://doi.org/10.25078/aw.v4i2.1126>
- Creswell, J. W. (2013). *Qualitative inquiry and research design*. SAGE Publication.
- Finali, Z., Putu, L., & Budyawati, I. (2022). *Ekopedagogik dalam pembelajaran di sekolah dasar sebagai pendukung penguatan pendidikan karakter bangsa*. 16, 243–249. <https://doi.org/10.19184/jpe.v16i2.33922>
- Gabriella, D. A., & Sugiarto, A. (2020). Kesadaran dan perilaku ramah lingkungan mahasiswa di kampus. *Jurnal Ilmu Sosial Dan Humaniora*, 9(2), 260. <https://doi.org/10.23887/jish-undiksha.v9i2.21061>
- Herdiansyah, H., Sukmana, H., & Lestarini, R. (2019). Eco-Pesantren as A Basic Forming of Environmental Moral and Theology. *Kalam*, 12(2), 303–326. <https://doi.org/10.24042/klm.v12i2.2834>
- Jufri, Fua, J. La, & Nurlia, R. U. (2018). Pendidikan lingkungan di sekolah dasar negeri 1 baruga kota kendari. *Jurnal At-Ta'dib*, 11(2), 164–181.
- Kariadi, D., Maryani, E., Sjamsuddin, H., & Ruhimat, M. (2019). Penggunaan awik-awik sebagai model ecopedagogy dalam pembelajaran ips. *Jurnal PIPSI (Jurnal Pendidikan IPS Indonesia)*, 4(2), 37. <https://doi.org/10.26737/jpipsi.v4i2.1285>
- Kencanasari, R. A. V., Surahman, U., & Permana, A. Y. (2019). The instrumental framework to measuring environmental awareness. *Innovation of Vocational Technology Education*, 15(2), 101. <https://doi.org/10.17509/invotec.v15i2.19638>
- Kos, M., Jerman, J., Anžlovar, U., & Torkar, G. (2016). Preschool children's understanding of pro-environmental behaviours: Is it too hard for them? *International Journal of Environmental and Science Education*, 11(12), 5554–5571.
- Palupi, T., & Sawitri, D. R. (2018). The importance of pro-environmental behavior in adolescent. *E3S Web of Conferences*, 31, 2–5. <https://doi.org/10.1051/e3sconf/20183109031>
- Putri, D. K., Setiawan, I., & Astari, A. J. (2021). *Environmental care behavior from knowledge and social environment factors in Pasaman Barat District*. 2020, 23575–23584.
- Setiardi, D. (2017). Keluarga sebagai sumber pendidikan karakter bagi anak. *Tarbawi: Jurnal Pendidikan Islam*, 14(2). <https://doi.org/10.34001/tarbawi.v14i2.619>
- Subianto, J. (2013). Peran keluarga, sekolah, dan masyarakat dalam pembentukan karakter yang berkualitas. *Edukasia: Jurnal Penelitian Pendidikan Islam*, 8(2), 331–354. <https://doi.org/10.21043/edukasia.v8i2.757>
- Wati, E. S., & Listiana, A. (2020). Ecopedagogics: What is the appropriate content in teaching children about environmental care in the globalization era. *Jurnal Lentera, Kajian Keagamaan, Keilmuwan Dan Teknologi*, 5(1), 1–16.
- Yasida, K. S. (2020). Eco- Pedagogy. *Historika*, 23(1), 70–79.
- 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.
<https://doi.org/10.17509/eh.v9i1.6153>

Zahrawati, F. (2021). *Ekologi sosial berbasis riset: Upaya membangun kesadaran ekologis*. IAIN Parepare Nusantara Press.

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