# Improving students' character of caring for the environment through understanding ecoliteracy in picture stories

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#### **ABSTRACT**

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Ecoliteracy Students' understanding Character Environmental problems caused by human or natural factors are increasing. These natural disasters will get worse if prevention is not done early. Efforts to reduce disasters that occur are to instill the character of caring for the environment from an early age. The way to introduce character education to children is through the storytelling method. The storytelling method is a program or plan that can be used in order to introduce care for the natural environment through the plot, moral messages and emotions of the story told to children. A child who has concern for the environment will have a positive effect on the survival of the surrounding environment and last until he grows up, because it becomes a habit. This research uses the literature research method. The source of reading material used is obtained from other people's research that has been published in the form of books, journals and in the form of articles that can be found in the library. Researchers study literature, writings and sources that have a close relationship regarding the problem being studied, namely about strengthening the character of environmental care in early childhood.

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# INTRODUCTION

Indonesia is a maritime country surrounded by various islands, mountains and has many forests and various natural resources in it. However, currently there is a lot of damage to the environment caused by humans and natural phenomena. One of the obligations that must be carried out and carried out by everyone is about caring for the environment (Suciati et al., 2022). Efforts to care for the environment can be started at school, where students either at the pre-primary or primary level who are in the golden period will easily accept and understand new things related to the character of environmental care. Strengthening the character of environmental care in students is expected to be an effective effort to foster a conscious spirit of its existence as an ecosystem that always coexists between humans and their environment (Kusumaningrum et al., 2024). Environmental care character is an effort or action to care for nature and prevent environmental damage, so that the environment is preserved. Pre-primary level students can learn from something concrete and then they are able to think critically.

Strengthening the character of environmental care for students can be applied in formal education at school. The school environment is expected to provide environmental education and behavior change to become more concerned about the environment. Teaching materials at school are also made more creative and can arouse curiosity in children. Curiosity makes children encouraged

Curiosity makes children encouraged and motivated to learn more. One of the interesting methods for students to learn something is with picture stories. Stories that are unique, interesting and close to the daily environment of children are expected to create children's interest and sensitivity to the environment (Nucifera, 2020). Interesting stories, both in terms of story content and appearance, are one of the determining factors for success in efforts to strengthen the value of students' caring character about the environment and its contents (Kurnia et al., 2021).

Several studies on environmental understanding through picture stories have been conducted (Sari et al., 2024), (Surahman et al., 2023), (Khalisa et al., 2022), from the studies that have been conducted all show the positive impact of using picture media to improve student character in improving ecoliteracy. Picture stories always provide new colors that are in accordance with the age of students at the preprimary and elementary levels to better understand the conditions that exist in the environment around where they live.

Picture stories are not only a visual communication tool, but also an educational tool that can arouse students' imagination and empathy. Through picture stories that contain ecoliteracy values, students can more easily understand the importance of protecting the environment while internalizing character values, such as responsibility, empathy, and social care (Yonanda et al., 2022). The approach taken through the understanding of ecoliteracy in it looks at the ability to understand and appreciate the relationship between humans and their environment. Ecoliteracy is an important aspect of modern education because it teaches students to care about the environment, understand the impact of human actions on ecosystems, and contribute to the preservation of nature.

The focus in this study aims to examine how the understanding of ecoliteracy applied through picture stories can be one of the effective ways to improve student character. This approach is expected to make a real contribution to the development of learning methods that are not only oriented towards cognitive aspects, but also build moral and environmental awareness in the younger generation.

#### **METHOD**

The method used in this research is library research. Library research is a study that studies various reference books and the results of previous research that is similar and useful for obtaining a theoretical basis for the problem to be studied (Pahleviannur et al., 2022). The source of reading material used in this research comes from other people's research that has been published in the form of books, journals or in the form of articles that can be found in libraries and the internet (Hartati et al., 2021). Literature-based research is a form of research that uses literature as an object of study. Researchers study literature, writings and sources related to the problem under study, namely improving student character through understanding ecoliteracy in picture stories.

## FINDINGS AND DISCUSSION

# 1. The Importance of Environmental Care Character Through Ecoliteracy in Students

Character education is an effort to instill character values to students which includes knowledge, awareness, willingness, and action to carry out the values of goodness and virtue, to God Almighty, self, and others, the environment (Tristia et al., 2023). Meanwhile, character values are attitudes and behaviors that refer to the norms and values that apply in society, including spiritual, personal/personality, social, and environmental aspects.

Megawangi explains that character education is defined as an effort to educate children to make wise decisions and practice them in everyday life so that they can make a positive contribution to their environment (Yulianti et al., 2014).

The characters of environmental care and ecoliteracy have a close and complementary relationship. Both are an integral part of efforts to create individuals who are aware of the importance of maintaining the balance of the ecosystem and acting responsibly towards the environment.

Ecoliteracy is the ability to understand, appreciate, and apply ecological principles in life. Ecoliteracy includes understanding the complex relationship between humans and the environment, as well as the ability to think and act sustainably in maintaining the balance of the ecosystem. At least there are important elements in ecoliteracy that must be owned by students in order to be able to act sustainably, namely: (1) students have ecological knowledge, (2) increase environmental awareness and have a sense of responsibility for the environment, (3) implement real actions that support environmental

sustainability, (4) develop values and ethics that encourage respect for nature, and (5) have systemic thinking about ecosystems in maintaining environmental balance.

# 2. Purpose of Understanding Ecoliteracy Based on the Surrounding Environment in Students

Understanding ecoliteracy based on the surrounding environment in students aims to build children's awareness and skills in maintaining the balance of the surrounding ecosystem. Ecoliteracy, which integrates ecological understanding with moral values, has an important role in shaping a generation that cares and is responsible for the environment (Agustina et al., 2024). There are five objectives of understanding environment-based ecoliteracy in children, including:

- a. Increasing a sense of responsibility towards the environment. In this case, children are given an understanding of the relationship between humans and nature, recognize the benefits of the surrounding environment, and become aware of the threats that can damage ecosystems and the environment. Therefore, children can develop a sense of responsibility for environmental conservation from an early age.
- b. Forming students to be able to think critically. Understanding ecoliteracy encourages students to think critically about environmental issues, such as waste management, saving natural resources, and the impact of pollution. Students are trained to find creative solutions and play an active role in protecting the environment.
- c. Strengthening character values. Through ecoliteracy, students learn character values, such as responsibility, caring, cooperation, and discipline. This process helps them internalize good habits in interacting with nature and society.
- d. Invite student involvement in activities related to the environment. Students can actively participate in environment-based activities, such as tree planting, waste recycling, or school gardens. These activities help strengthen students' emotional connection with the environment.
- e. Creating a sustainable generation. With an understanding of ecoliteracy, students are equipped with knowledge and attitudes that support environmental sustainability. They become not only users, but also custodians of the environment who are able to make informed decisions.

Through an approach that focuses on the surrounding environment, students can learn from real experiences, so that their understanding of ecosystems becomes more concrete and applicable. This strategy also provides an opportunity for them to develop social skills and a sense of collective responsibility in preserving the environment for the next generation.

# 3. Picture Story Method in Ecoliteracy Learning

The picture story method is one of the learning techniques that uses illustrations or pictures as the main media to convey stories or information to audiences, especially children (Mahardhani et al., 2021). This method combines visual and narrative elements, making it easier to understand abstract concepts and increasing the attractiveness of learning (Safitri et al., 2024).

Picture stories are usually in the form of books, storyboards, or digital media that present a narrative with the help of attractive color illustrations. This method is often used in early childhood education and primary education because it is suitable for helping children understand complex concepts in a simple and fun way.

Storytelling is another way of communicating. It is done orally or with body language that is used in a unique and interesting way so that the audience's attention is focused on the storyteller as well as interested in the content of the story in applying moral messages. Storytelling activities can not only help in instilling character and morals in children but also develop various aspects of development in children such as vocabulary development, literacy, intellectual development, and social-emotional. The purpose of the storytelling method in early childhood learning is to develop aspects in children such as intellectual abilities, language skills, recognizing emotions and instilling positive values in children (Pudinigsih et al., 2020).

Storytelling techniques are divided into two, namely storytelling using props and without props. Storytelling without props is the most common form of storytelling, teachers must pay attention to gestures and facial expressions. In addition, the teacher's voice must stimulate the child's imagination. When telling stories, it is also adjusted according to the character in the content of the story. While telling stories with props is a form of storytelling using props that help visualize the story according to the content of the story that will be heard by children (Fani et al., 2021).

The use of storytelling methods in student learning must also show the content of the story that is appropriate for their age, storytelling activities intended for pre-primary and basic level students are of course those that can provide a feeling of joy, funny and exciting and provide good and memorable experiences and learning for students. What also needs to be considered is that the delivery of the story must be interactive, namely by creating a dialog between the teacher and the students. Inviting students to interact during the storytelling process can make it easier for students to understand the content of the message of the story being told. In addition, combining the storytelling method with simple experiments in accordance with the activities in the story is a way to introduce environmental care character education to children through the storytelling method (Yulianti et al., 2014).

# 4. Picture Story Method as an Effort to Educate Environmental Care Character in Students

The storytelling method is an effective strategy in achieving educational goals, namely fostering awareness related to the environment in students (Mahardhani et al., 2021) storytelling is one way to provide an insight in the form of literacy to students which includes ecological literacy material.

The storytelling method can instill ethical attitudes in students through characters that make students interested in the story, this can develop a skill in speaking, reading, writing, and listening, and foster the ability to empathize with students, and can vibrate their feelings. besides that students will get some interesting experiences (Wulandari et al., 2021). This component is utilized in the form of introducing the natural environment to students, including the storyline, characters and various emotions contained in the story. Stories told by teachers can stimulate students' imagination and understanding.

The environmental conditions conveyed to students through stories will build an emotional sense of each characterization told. With the storyline conveyed, it will stimulate emotions towards a problem and the natural environment and add insight to students about the relationships that occur in the surrounding nature. Through moral messages conveyed from each story can also foster students' ability to think about the cause and effect of events / problems in the environment and are easily understood by students.

The efforts that educators can make to introduce environmental awareness character education through the storytelling method to students are first at the planning stage, namely the teacher needs to understand students according to their developmental stages and characteristics. The story to be told is also related to environmental awareness which is certainly understood and recognized by students easily and of course must be interesting. Next is the implementation stage This activity can be done through storytelling and dialog guided by the teacher. Storytelling can use props, visual media or no props. Even if using props, the characterization must be in accordance with the content of the story to be conveyed. For the first, of course, the educator prepares the necessary tools such as the story to be told and the props. Furthermore, the teacher first explains the story to be conveyed, conducts a brief question and answer such as "children, does anyone know what a landslide is?" "what causes landslides?". All students have the right to answer because the answer is the understanding of the students. then the teacher starts telling stories about preserving the natural environment, for example in the mountains many people cut down trees carelessly, the result is landslides that harm many people, so the thing to do is to replant trees and be accompanied by watering the trees. The intonation of the story given by the teacher must also be appropriate and interesting so that children indirectly begin to think critically and children feel as if they are experiencing the incident so as to foster a sense of empathy for others and care for the surrounding environment.

Then we can invite children to go directly or take real action as in the story by planting tree seeds and watering them with water.

Next is to monitor the achievement of development in students. In this activity students are asked to retell the activity and express how they feel after doing the activity. The teacher provides motivation, reinforcement, and praise as well as a touch of affection for what students think and do, for example by saying "Thank you for wanting to plant trees with the teacher, hopefully the tree seedlings that you plant and water will grow quickly and be useful for many people". The activity of planting tree seedlings coupled with watering the trees with water can be done regularly which will become a habit in children until they grow up.

Environmental care character education must and needs to be done early because the results of character education cannot happen directly/instantly. The application of character values in students is

done early. To bring up the character of environmental care can either be through the family or through institutions, formal and non-formal. A student who is accustomed to having a strong environmental care character from an early age to adulthood will have an environmental care nature. By getting used to having the nature of environmental care, a person does not easily do things that can damage the preservation of nature and may even guard against things that damage the environment so that ecological disasters can be prevented.

## **CONCLUSION**

Environmental awareness character education needs to be introduced to students. One of the introductions made is through increasing understanding of ecoliteracy. The application of environmental care character is carried out to motivate the habit of managing the environment properly, avoiding the nature of damaging the environment, increasing sensitivity to the environment, fostering a spirit of care and responsibility for the environment. Environmental care character education for students is certainly given in accordance with the learning principles of pre-primary and primary level students, namely playing while learning. The way to introduce the early stages of environmental care to students is through habituation - habituation of environmental care characters at school using the picture story method. Storytelling with pictures is an effective way to introduce the environment to children, because stories are an effective method to increase children's awareness of social relationships and relationships with the surrounding nature.

Environmental awareness character education needs to be introduced to students because stories are an effective method to increase children's awareness of social relationships and relationships with the surrounding nature.

## REFERENCES

- R. D. Suciati, A. J. Mahardani, and D. Kristiana, "Mitigasi Bencana Untuk Menumbuhkan Karakter Peduli Lingkungan Pada Anak Usia Dini," Jurnal Dimensi Pendidikan dan Pembelajaran, vol. 10, no. 2, pp. 123–129, Jul. 2022, doi: 10.24269/DPP.V10I2.4811.
- L. D. Kusumaningrum, A. J. Mahardhani, and M. A. Muttaqin, "Analysis of the Implementation of the Inclusive Early Childhood Education Curriculum Model: Case Study at Bright Kiddie Kindergarten Ponorogo, Indonesia," Jurnal Paedagogy, vol. 11, no. 3, pp. 625–636, Jul. 2024, doi: 10.33394/JP.V11I3.12094.
- F. Nucifera, "Penguatan Kepekaan Lingkungan pada Anak Usia Dini Melalui Cerita Bergambar," Prosiding Seminar Hasil Pengabdian Masyarakat, pp. 168–173, 2020.
- D. S. Kurnia, A. Sastromiharjo, and ..., "Model Pengembangan Cerita Untuk Penguatan Karakter Anak Usia Dini," Jurnal Obor ..., vol. 4, no. 2, 2021.
- S. N. Sari, A. Z. Furi, I. Anjarsari, and K. Kasanah, "Sosialisasi Penanaman Sadar Lingkungan melalui Cerita Bergambar Gejala Alam pada Kelompok B TK Nurul Wathon Kecamatan Gajahmungkur Kota Semarang," Manggali, vol. 4, no. 1, pp. 35–41, Jan. 2024, doi: 10.31331/MANGGALI.V4I1.3037.
- F. Surahman, R. Sanusi, and A. A. Marsela, "Pengembangan Buku Cerita Bergambar Edukasi Kebersihan Diri Dan Lingkungan untuk Siswa Sekolah Dasar," in Prosiding Seminar Nasional Pascasarjana, Semarang: Universitas Negeri Semarang, Jun. 2023, pp. 285–288. Accessed: Jan. 06, 2025. [Online]. Available: https://proceeding.unnes.ac.id/snpasca/article/view/2135
- P. R. Khalisa, E. Andriana, and S. Rokmanah, "Analisis Penggunaan Media Buku Cerita Bergambar Terhadap Keterampilan Membaca Siswa Kelas 3 di SDN Sinaba," Didaktik: Jurnal Ilmiah PGSD STKIP Subang, vol. 8, no. 2, pp. 1279–1295, Dec. 2022, doi: 10.36989/DIDAKTIK.V8I2.359.

- D. A. Yonanda, N. Supriatna, K. A. Hakam, and W. Sopandi, "Kebutuhan Bahan Ajar Berbasis Kearifan Lokal Indramayu Untuk Menumbuhkan Ecoliteracy Siswa Sekolah Dasar," Jurnal Cakrawala Pendas, vol. 8, no. 1, pp. 173–185, Jan. 2022, doi: 10.31949/JCP.V8I1.1927.
- M. R. Pahleviannur, A. D. Grave, D. N. Saputra, D. Mardianto, and A. J. Mahardhani, Metodologi Penelitian Kualitatif. Sukoharjo: Pradina Pustaka, 2022.
- S. Hartati, E. Damayanti, and D. Patiung, "Peran metode bercerita terhadap perkembangan bahasa anak usia dini," vol. 8, no. c, 2021.
- Y. Y. D. Tristia and A. J. Mahardhani, "Etnomatematika untuk meningkatkan kemampuan matematika dan menguatkan karakter cinta tanah air di SDN 2 Gendingan," Journal of Basic Learning and Thematic, vol. 1, no. 2, pp. 48–54, Jul. 2023, Accessed: Feb. 14, 2024. [Online]. Available: https://rumahjurnal.isimupacitan.ac.id/index.php/jurasic/article/view/31
- D. Yulianti, R. S, S. H, and D. Diana, "Pengembangan Karakter Peduli Lingkungan Anak Usia Dini Melalui Buku Cerita Bermuatan Sains Berwawasan Konservasi," Jurnal Penelitian Pendidikan Unnes, vol. 31, no. 1, p. 124422, 2014, doi: 10.15294/jpp.v31i1.5681.
- T. Agustina, E. Maryani, and A. Yani, "Pemahaman Ekoliterasi terhadap Peserta Didik Kelas X IPA 1 di SMAN 2 Majalaya," Sosio-Didaktika: Social Science Education Journal, vol. 10, no. 2, pp. 119–128, Jan. 2024, Accessed: Jan. 07, 2025. [Online]. Available: https://journal.uinjkt.ac.id/index.php/SOSIO-FITK/article/view/35422
- A. J. Mahardhani, H. J. Prayitno, M. Huda, E. Fauziati, N. Aisah, and A. D. Prasetiyo, "Pemberdayaan Siswa SD dalam Literasi Membaca melalui Media Bergambar di Magetan," Buletin KKN Pendidikan, vol. 3, no. 1, pp. 11–22, Jul. 2021, doi: 10.23917/BKKNDIK.V3I1.14664.
- E. D. Safitri, W. Wahyudi, and N. I. Rusdiani, "Pengaruh Media Pembelajaran Digital Terhadap Minat Belajar Anak Usia Dini," Jurnal Kajian Anak (J-Sanak), vol. 5, no. 02, pp. 187–194, Jun. 2024, doi: 10.24127/J-SANAK.V5I02.5294
- S. Purdiningsih, M. Munawar, and M. Karmila, "Analisis karakter peduli lingkungan di taman," pp. 6–13
- N. N. Fani, A. T. Nurtiani, and R. Oktarina, "Analisis Metode Bercerita Dalam Menstimulasi Keterampilan Berbicara Pada Kelompok B Di PAUD Ibnu Sina Aceh Besar," Jurnal Ilmiah Mahasiswa Pendidikan, vol. 2, no. 2, 2021, Accessed: Jan. 07, 2025. [Online]. Available: https://jim.bbg.ac.id/pendidikan/article/view/616
- D. Wulandari, "Analisis Metode Bercerita (Dongeng) Sebagai Pembentukan Karakter Peserta Didik di Kelas IVA SDN 9 Tegineneng Pesawaran Lampung," UIN Raden Intan Lampung, Lampung, 2021.