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ECOLOGICAL LITERACY COMPETENCE OF PRIMARY SCHOOL STUDENTS IN DAGANGAN SUB-DISTRICT

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Abstract

The purpose of this study is to describe efforts to improve the ecological literacy competencies of elementary school students. The type of research is descriptive qualitative. The source of data is storytelling and Javanese singing activities every Friday. Data collection through: observation, interviews, and documentation studies. The results of the study are efforts to improve ecological literacy competencies in elementary school students, namely: 1) implementing ecological literacy development strategies in elementary schools, including: interdisciplinary learning, environmental projects, extracurricular activities on the environment; 2) realizing learning strategies that can be applied to improve ecological literacy in the school environment. The conclusion of the research is the development of knowledge about ecological literacy and implementing it in a real and programmatic way in the school environment.

Keywords: Literacy Competence, Ecology, Elementary School

Introduction

Various forms of environmental problems are currently becoming an endless problem. Various forms of natural exploitation are carried out in many areas without regard to the impacts caused, both local communities and the ecology of the earth (Andalas, 2018: 99). From an educational point of view, ecological intelligence has an important role in achieving educational goals. Education is required to be able to build educated people who have character and awareness of the natural environment (Desfandi et

al., 2017). In fact, one of the factors triggering damage and disasters is caused by the low level of public environmental awareness. Environmental damage is caused by a lack of ecological understanding possessed by each or some individuals in a certain area, causing sensitivity to signs of natural damage, while in essence humans and the environment are interdependent aspects of nature

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The relationship between humans and the environment takes place in three phases. The first phase is called human in nature, which is a phase characterized by humans relying heavily on the environment. The second phase is called human against nature, which is the phase when humans have been able to develop science and technology so that dependence on the environment begins to decrease. Thus, humans begin to damage the environment. The third phase is the phase where humans begin to realize that environmental damage causes harm to humans themselves so that efforts to improve the environment begin to emerge. This phase is called human and nature (Prasetyo, 2017).

One of the efforts to change the young generation's perspective on ecological systems is to develop ecological literacy. Ecological literacy is defined as the ability to understand the natural systems that make life on earth (Nugraha, 2015). Ecological literacy can also be interpreted as the ability of individuals to understand how the environment works and how efforts to preserve the environment. Ecological literacy touches three domains: cognitive, affective and psychomotor. The concept of ecological literacy should be instilled since elementary school age. This is because at that age children are experiencing rapid cognitive, affective and psychomotor growth (Wijaya, 2018). Literasi ekologis peserta didik sekolah dasar dapat dikembangkan dengan memperhatikan perkembangan kognitif, afektif, dan psikomotor peserta didik. Literasi ekologi terdiri dari enam komponen yaitu implikasi, pengetahuan ekologis, pengetahuan sosial politik, pengetahuan tentang masalah lingkungan, kemampuan kognitif, dan perilaku bertanggung jawab terhadap lingkungan. Peningkatan literasi ekologi dapat dikembangkan melalui jalur pendidikan. Terdapat empat indikator literasi ekologi yang menjadi tolak ukur pencapaian literasi lingkungan pada peserta didik yaitu pengetahuan ekologi, keterampilan kognitif, sikap sadar lingkungan, dan perilaku bertanggung jawab terhadap lingkungan. Beberapa strategi yang dapat dilakukan oleh pihak sekolah untuk membangun budaya literasi yang positif di sekolah adalah mengkondisikan lingkungan fisik ramah literasi, memberikan kesempatan untuk mengikuti program pelatihan peningkatan pemahaman tentang program literasi, pelaksanaan, keterlaksanaannya.

Literacy competence is the ability to read and write using the symbol language system (Purwanti, 2022). Meanwhile, according to Ati & Widiyarto (2020) literacy competence is a person's social behavior in accessing, understanding, and using information related to knowledge, language, and culture through various activities, including reading, viewing, listening, writing, and speaking to create a prosperous life. Then Puspasari & Febrina (2021) argue that literacy competence is broadly a language skill that includes listening, speaking, reading, and writing skills as well as the ability to think which is an element in it. Based on the expert opinions above, it can be concluded that literacy competence is a complex ability that a person has, which is related to writing skills, reading, capturing information, understanding an issue, and being able to digest what is obtained comprehensively. Literacy competence consists of several components, Asrijanty (2020) menyatakan bahwa komponen literasi membaca dalam AKM terbagi menjadi tiga, yaitu konten, proses kognitif, dan konteks. Konten, komponen ini berhubungan dengan jenis teks yang digunakan dalam literasi membaca dan numerasi. Dalam literasi membaca, konten meliputi teks informasi dan fiksi, sedangkan dalam numerasi, konten meliputi kemampuan Bilangan, Pengukuran dan Geometri, Data dan Ketidakpastian, serta Aljabar. Tingkat Kognitif, komponen ini berhubungan dengan proses berpikir yang digunakan dalam menyelesaikan masalah. Tingkat kognitif meliputi berbagai tingkat proses berpikir, seperti memahami, menggunakan, mengevaluasi, dan merefleksikan. Komponen yang terakhir adalah konteks, komponen ini berhubungan dengan aspek kehidupan atau situasi pada konten yang digunakan. Dalam literasi membaca dan numerasi, konteks dibagi menjadi tiga, yaitu personal, sosial budaya, dan saintifik.

The word ecology was first introduced by Ernst Haeckel, a German biologist in 1866. According to Ernst Haeckel, ecology is a comprehensive science that studies the relationship between organisms and their environment. In ecology, living things are studied as a unit or system with their environment. Ecology is also closely related to the levels of organization of living things, namely populations, communities, and ecosystems that influence each other and are a system that shows unity. Ecological theory is a theory that emphasizes the influence of the environment in the development of each individual where the development of students is the result of interactions between the surrounding nature and these students (Zubaidillah, M. H. 2020). Ecology is all things related to the principles of the interaction of living things with their environment (Purnami, W. 2020).

Based on the definitions above, it can be synthesized that ecology is a science that studies the reciprocal relationship between organisms or organisms and their environment. Based on its development, ecology can be referred to as a basic environmental science, a science that studies living things in their households or a science that studies the entire pattern of mutual relationships between living things and their surrounding components.

Ideally, the environment is always sustainable considering the high dependence of humans on the environment. But the fact is quite the opposite. Currently, there is an ecological (environmental) crisis or damage. This crisis causes the ecological system to experience instability so that there is a disruption in the exchange of energy and material and of course affects the survival of existing organisms (Wahid, 2016). This ecological crisis cannot be ignored because it will cause a domino effect, namely the food crisis and trigger global-scale social conflicts. This ecological crisis is largely caused by humans. One of the negative impacts is the occurrence of environmental damage, resulting in a decrease in the quality of the environment (Nasution, 2016).

Global environmental problems are one of the things that we hear very often today, a lot of natural damage that affects the balance of ecosystems due to human actions. Humans who have low ecological literacy are generally insensitive that the things they have done can cause damage to nature. Therefore, the younger generation must change their perspective on this ecological system. The process of changing the young generation's perspective on ecological systems can be done through education (Nugroho, Prayitno, & Karyanto, 2018).

Various regulations and measures to prevent and save nature will lose their effectiveness without improvements in individual capabilities and awareness. Environmental quality has a major impact on human life, and human attitudes also have a significant influence on environmental conditions. Especially when humans still view themselves in an anthropocentric manner, assuming that humans are at the top of the natural hierarchy and have the exclusive right to utilize the earth and its natural resources. This view encourages excessive exploitation of natural resources without regard to balanced conservation efforts, which will ultimately exacerbate environmental damage. Therefore, awareness is a key factor in encouraging responsible human behavior towards nature (Rusdina, 2015). This concept is known as ecoliteracy (Keraf, 2015), which emphasizes understanding and awareness of the complex relationship between humans and the natural environment. In the context of education, ecological intelligence plays a significant role.

According to Siregar, M., Meilanie, S. M., & Purwanto, A. (2020: 720), ecoliteracy is an ability to understand the surrounding environment and understand how to preserve the environment around individuals. According to Vioreza, N., Supriatna, N., Hakam, K. A., & Setiawan, W (2022: 148), an environmentally friendly attitude is related to ecological intelligence (ecoliteracy). Ecoliteracy is a skill that a person has to adapt to the surrounding environment based on knowledge, awareness, and skills to live in harmony with nature. According to Yonanda, D. A., Cahyaningsih, U., & Utari, E. (2020: 73), ecoliteracy is an effort to improve and familiarize oneself with caring for the environment. Based on the statements above, it can be concluded that ecoliteracy is a person's ability to adjust and care about the surrounding environment.

In achieving the goals of education. Education must have the ability to form educated individuals with high character and awareness of the natural environment (Desfandi et al., 2017; Suwandi et al., 2016; Yunansah & Herlambang, 2017). The concept of ecological literacy focuses on increasing understanding of the relationship between Earth's natural systems and the role of humans in them (Barnes, 2013). In simple terms, ecological includes knowledge, skills, understanding environmental values and norms, and behaviors that support environmental sustainability. The goal of ecological literacy is to produce individuals who are aware of the importance of caring for nature and the environment (Keraf, 2014). Through ecological literacy, individuals are encouraged to think and act in maintaining and caring for the earth, ecosystems, and the environment as a place where life develops (Stone, 2017). According to Rusmana & Aulia (2017), awareness of the environment is very important to create a harmonious relationship between humans and nature. One of the efforts to raise awareness of ecological literacy is through educational institutions such as schools (Setyaningrum & Gunansyah, 2020).

One of the efforts to change the young generation's perspective on ecological systems is to develop ecological literacy. Ecological literacy is defined as the ability to understand the natural systems that make life on earth (Nugraha, 2015). Ecological literacy can also be defined as knowledge and understanding of nature and how ecological systems work (Berkowitz et al., 2008; Jordan et al., 2008; Martin, 2008; Scholz, 2011; Pitman & Daniels, 2016). Ecological literacy measures a person's knowledge about ecological systems, care for the environment, and actions to reduce negative impacts on environmental problems. Various studies have been conducted on ecological literacy such as examining ecological literacy from the aspect of age (Davidson, 2010, Pitman et al. 2016; Pitman et al., 2017). Another research is linking ecological literacy with attitudes and behaviors towards the environment (Bruyere, 2008). Ecological literacy can also be interpreted as an individual's ability to understand how the environment works and how efforts to preserve the environment. Ecological literacy touches three domains: cognitive, affective and psychomotor. The concept of ecological literacy should be instilled since elementary school age. This is because at that age children are experiencing rapid cognitive, affective and psychomotor growth (Wijaya, 2018).

Based on this, in order to improve ecological literacy competencies through education in schools, there is a strong reason that lies in the characteristics of the education sector. Education has characteristics as a process that will produce changes in the cognitive domain, increase competence (skills), and conscious selection and acceptance of values, attitudes, and willingness to respond to a stimulus (Nugroho, et al., 2018). The advantages of these educational characteristics make education one of the strategies to change people's behavior in interacting with the environment and resources through efforts to direct a positive perspective on the environment (Nugroho et al., 2018).

The importance of ecological literacy needs to be supported by active participation from teachers and parents. Teachers have a very important role in designing and implementing learning activities that are relevant and interesting for students. They can utilize various learning resources, such as videos, educational games and group discussions, to make ecological literacy learning fun and meaningful (Gumansyah, 2020). The utilization of this interesting media will stimulate ecological literacy competencies that can create a pleasant learning environment. Fun learning will have a positive impact both in the cognitive, affective and psychomotor domains.

Ecological literacy competencies are becoming an increasingly important focus for primary education in this modern era, given the urgency of global environmental challenges. Ecological literacy among primary school learners involves a thorough understanding of ecosystems, awareness of environmental issues, and skills to take sustainable action. According to UNESCO (2017), ecological literacy is the ability to understand and interpret the relationship between humans and their environment, and to act consciously and responsibly towards ecosystem sustainability. In their report, UNESCO emphasized the importance of integrating ecological literacy in the basic education curriculum to build a more environmentally conscious generation.

Moore and Pacheco (2019) state that the development of ecological literacy should be based on an interdisciplinary approach that combines science, mathematics and social education. They emphasize that this approach enables learners to understand the complexity of environmental issues and develop innovative and sustainable solutions. Research by Evans (2020) shows that project-based learning that focuses on local environmental issues can significantly improve learners' ecological literacy. They found that direct engagement in environmental projects helps learners develop critical thinking skills and deeper ecological awareness.

Chawla and Cushing (2021) also underline the importance of family and community involvement in the development of ecological literacy. They argue that collaboration between schools, families and local communities can strengthen learners' learning experiences and provide a real context for their understanding of the environment. With good collaboration between school and home, learners will more easily understand and apply ecological concepts in their lives and ecological literacy competencies will follow (Nurlaili, et al., 2018).

According to a report published by the World Wide Fund for Nature (WWF) in 2022, children who have good ecological literacy tend to be more proactive in taking environmentally friendly actions, such as recycling, saving energy, and conserving natural resources. The report emphasizes that primary education plays a key role in instilling these values early on. Thus, developing ecological literacy competencies among primary school learners is an important step towards forming a more environmentally aware and responsible generation. Recent research shows that holistic and collaborative approaches, as well as locally relevant learning, are key to achieving this goal.

Ecoliteracy is our ability to adapt to the ecological niche we are in (Goleman, 2010). Ecoliteracy according to Keraf (2014) is a state where people have understood the principles of ecology and live according to the principles of ecology in organizing and building the common life of mankind on this earth in and to realize a sustainable society. The Center For Ecoliteracy has developed a set of ecoliteracy competencies. Ecoliteracy competencies according to the Center For Ecoliteracy (in Rondli & Khoirinnida, 2013) include aspects of head (cognitive) competencies, heart (emotional) competencies, hands (active) competencies. The head (cognitive) aspect contains a person's competencies that reflect ecoliteracy in terms of understanding the environment or knowledge aspects. The heart aspect contains a person's ecoliteracy competencies that show an empathetic attitude towards living things around him. The hands aspect or ecoliteracy competencies contains the behavior of a person who has applied his ecological knowledge in everyday life. In addition to a good cognitive understanding, habituation of ecoliteracy actions or real behavior is also needed from an early age so that humans begin to get used to living responsibly towards nature.

Knowledge about the environment possessed by students can make students become environmentally friendly, so that they can find effective solutions to environmental problems encountered (Prastiwi et al., 2020). It has also been explained by Supriatna (2017), that ecoliteracy is important to develop in the learning process because students have a role as agents who develop knowledge, insights, attitudes and sustainable behavior in society (agents of change), agents who have awareness of their natural conditions and agents who can apply ecoliteracy in life. As an agent of change, the environmental knowledge that a person has must be realized in real action as an effort to protect the environment.

In order to realize "ecologically literate" behavior (ecoliteracy), various ways need to be taken, especially equipping children at school, especially providing understanding and various practical skills about the basics of ecoliteracy such as experience with the surrounding world, how nature sustains life, maintains public health, knows in depth about the impact and consequences of the food we eat every day, and knows well the places where we live, work and study and so on. To build ecological literacy in learners, educational institutions need to make comprehensive efforts, starting from developing an environmentally sound school policy.

The focus of this research problem lies in the lack of ecological understanding of elementary school students in Dagangan sub-district, Madiun district. So that efforts to improve ecological literacy from an early age are needed to prevent natural damage from getting worse. Based on this explanation, this research aims to describe efforts to improve ecological literacy competencies in elementary school students with the research title: Ecological

Literacy Competencies of Elementary School Learners in Dagangan sub-district.

Research methodology

This type of research is descriptive qualitative. The research time began in July to November 2023. The research subjects were 30 teachers of grades IV to V in public elementary schools in Dagangan sub-district, Madiun district. The main data source was literacy competency improvement activities in primary schools in Dagangan sub-district, Madiun district. The data collection techniques were observation and interviews. The techniques used to test the degree of trust in this research are observation persistence, peer checking, and triangulation. Data analysis used interactive analysis from Miles and Huberman's theory.

Results and Discussion

Research Results

The results of the interview obtained data, namely: The role of the education sector today is highly expected in shaping students' character, one of which is through assessing students' literacy. Literacy mastery is not limited to reading and writing skills alone, but also in the realm of cognitive development, for example: communication, critical thinking skills, application of knowledge sources in various forms of information. The description above emphasizes that literacy is considered an essential basic ability for every individual in their lives. More than just self-development, literacy has an important role in empowering individuals to behave, act and make the right decisions in the context of their lives.

The role of primary schools is not just to convey or transfer knowledge from teachers to learners. Its functions also include shaping critical thinking, teaching skills that make learners independent, and instilling character values to become Pancasila learners. Schools become an important arena in an effort to introduce the concept of ecoliteracy to students, which is conveyed through various elements such as curriculum, policies, facilities, and budget allocations that aim to protect and preserve the environment. The concept of ecoliteracy is a crucial competency for students at the elementary school level because they have hope in preserving the environment on this earth.

Observations revealed that: ecological literacy competencies in primary school students vary, with most students demonstrating a basic understanding of ecological concepts such as the water cycle, food chains and the importance of environmental conservation. However, this understanding tends to be theoretical and less applied in everyday life. Awareness of the importance of protecting the environment is high, but practical application in daily activities still needs to be improved. Environmental problems that occur today are a tangible form of the lack of understanding of the environment or ecological literacy. This understanding is referred to as ecological literacy. The Center for Ecoliteracy has developed a set of ecological literacy competencies consisting of head, heart, and hands aspects. Researchers have conducted interviews and observations in elementary schools to find out the ecological literacy of students.

Table 1. Ecological Literacy Competencies

No.	Set Of Core Competency From The Center For Ecoliteracy	Indicators of success .
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1.	Head (Cognitive) 1. Approach Issues and situations from a systems perspective	Identify the environmental problems of waste in the school area, the source of waste entry, and the behavior of the school community in terms of waste.
	2. Understand fudamental ecological principles	Mention the impact of environmental problems caused by waste, such as: flooding, mosquito nests, strong odors
	3. Think critically, solve problems creatively, and applay knowledge to new situations	List the components of the environmental ecosystem at school, such as: disposal location, decomposition process or waste processing.
	4. Envision the long-term consequences of decisions.	Mentioning efforts to solve environmental problems in the school yard in the form of withered and dead plants, determining the location of piling, utilizing waste.
2.	Heart (Emotional) 1. Feel concern, emphaty, and respect for other people and living things	Differentiate between organic and inorganic waste Show empathy towards plants in the school and formulate main and alternative actions.
	2. See from and appreciate multiple perspective, work with and value others with different backgrounds, motivation, and intentions	Explain the attitude when dealing with friends who do not care about the environment, and continue to mobilize school community to reduce waste accumulation.
	3. Commit to equity, inclusivity, and respect for all people	Learners have a commitment to protect the school environment such as not littering, using sufficient energy sources and having empathy for living things in the school environment.
3.	Hands (Active) 1. Create and use tools, objects, and procedures required by sustainable communities	Using cleaning tools in the school environment properly and correctly, providing trash bins and placing them in strategic places.
	2. Turn conviction into pactical and effective action, and apply ecological knowledge	Demonstrate the habit of bringing food and drinks from home, reducing the accumulation of waste by

to the practice of of ecological design	bringing reusable utensils.
3. Assess and adjust usess of energy and resources	Demonstrate an attitude of saving electricity and water at school, eliminating the accumulation of garbage in the school environment.

Based on this, teachers have an important role in developing learners' ecological literacy, although they face challenges in integrating ecological materials into an already crowded curriculum. Teaching methods used include class discussions, group projects and field activities. However, time and resource constraints often prevent the implementation of more comprehensive and contextualized activities. Teachers also expressed the need for further training to improve their skills in teaching ecological literacy materials effectively. School facilities and support, such as school gardens, organic and inorganic waste bins and recycling programs, play an important role in supporting learners' ecological literacy. However, these facilities still need to be improved to provide more in-depth and practical learning experiences. In addition, parents' involvement varied widely, with some parents actively supporting their children's environmental activities, while others were less involved for various reasons.

Discussion

Ecological literacy competency is the ability to understand and use information about ecosystems to make ecologically responsible decisions. Ecological literacy includes knowledge about ecosystems, skills to analyze and solve environmental problems, and a caring attitude towards the environment. The development of ecological literacy competencies among elementary school students is important in an effort to form a generation that cares and is responsible for the environment.

Ecological literacy is a condition in which a person has good knowledge and attitudes about the environment and is able to act positively towards it. Individuals with ecological literacy understand the importance of maintaining and caring for the environment as a place to live, a source of food, and a place for life to flourish (Wahid, 2016). Ecological literacy consists of six main components: implications, ecological knowledge, socio-political knowledge, knowledge of environmental issues, cognitive abilities, and environmentally responsible behavior (Syukron, 2018).

Ecological literacy is in three stages: nominal, functional and operational. The nominal stage is when individuals have little understanding of the environment and begin to have an interest in issues of environmental damage and participation to solve them. The functional stage is the stage where individuals are able to use their concepts and understanding to strategize in solving environmental problems. The operational stage is the stage where individuals already have a comprehensive understanding based on knowledge about the environment and concern to help solve environmental problems (Rusmawan, 2017).

Ecological literacy can be developed starting from students at the elementary school level. The development of ecological literacy can be done by paying attention to students' cognitive, affective and psychomotor development (Wijaya, et al, 2020). Therefore, not all components and indicators of ecological literacy can be

developed in elementary school students. The development of ecological literacy can not only be done at school, but in all Tri Center of Education, namely family, school and community.

Ecological literacy of elementary school students is very important because the environment is a very important thing to protect and care for. The environment serves as a place to live, a source of food, and the development of life. Therefore, every individual, including elementary school students, must have ecological literacy to preserve the environment.

This study found that the ecological literacy competence of elementary school students still needs to be improved. This finding is based on several indicators, namely: Learners' ecological knowledge still lack understanding of basic ecological concepts, such as the food chain, water cycle, and climate change. Learners' pro-environmental attitudes show varied pro-environmental attitudes. Some learners show concern for the environment, such as throwing garbage in its place and saving energy. However, there are still many learners who have not shown pro-environmental behavior consistently. Learners' ecological skills still lack the skills to solve environmental problems, such as recycling waste and planting trees.

The importance of ecological literacy for primary school learners is to foster awareness and a sense of responsibility for the environment from an early age. With a good understanding of ecology, learners can become agents of change in their communities and help reduce negative impacts on the environment.

The low ecological literacy competence of primary school students is caused by several factors, namely: Lack of curriculum that focuses on ecological literacy. The current primary school curriculum still lacks focus on developing ecological literacy. Lack of learner-centered learning. Learning in primary schools is still dominated by the lecture and assignment method, so students do not have many opportunities to learn actively and experience environmental issues directly. Lack of support from parents and the community. Parents and communities are still not aware of the importance of ecological literacy, so they do not provide enough support for learners to develop this competency.

Based on the findings and discussion that have been described, several steps are recommended to improve the ecological literacy competencies of elementary school students, namely: Develop a curriculum that focuses on ecological literacy. The elementary school curriculum needs to specifically include material on ecological literacy, such as basic ecological concepts, environmental issues, and solutions to overcome environmental problems. Implement learner-centered learning. Learning in primary schools needs to be designed to be more learner-centered, so that they can learn actively and experience environmental issues firsthand. Increase support from parents and the community. Parents and communities need to be educated about the importance of ecological literacy, so they can support learners in developing this competency. By improving ecological literacy competencies, primary school students are expected to become a generation that cares about the environment and is able to live sustainably in the

Ecological Literacy Development Strategies in Elementary Schools, namely: a) Interdisciplinary learning, related to intensive interaction between one or more disciplines, either directly related or not, through research programs, with the aim of integrating concepts, methods, and analysis. Integrating ecological concepts

in various subjects such as science, geography and physical education. For example, discussing the water cycle in science lessons and the importance of forests in geography lessons; b) environmental projects, related to ecological literacy are efforts to increase students' awareness and ability to understand and protect the environment. Here are some examples of environmental projects related to ecological literacy: Involving students in environmental projects such as school gardens, recycling and waste management. These projects can improve students' practical skills and sense of responsibility for the environment; c) Extracurricular Activities, this is related to ecological literacy is an activity carried out outside of regular class hours that focuses on developing students' awareness and ability to protect the environment. Forming environmental clubs or extracurricular activities that focus on environmental conservation. These activities could include tree planting, hygiene campaigns and bird watching.

Learning strategies that can be applied to improve ecological literacy in elementary schools are as follows: a) make rules that are able to foster the character of environmental care, for example prohibiting students from littering; b) involve students in cleaning the school environment; c) provide various learning resources about ecology; d) carry out learning according to the topic with a learner-centered approach; e) give examples to students about ecological and social relationships, for example how the high population of rat pests affects the welfare of farmers; f) give assignments to students to find other examples related to the relationship between ecological situations and human social life; g) provide explanations to students about current environmental problems or issues such as how the presence of electric cars affects the environment; h) provide socialization to students using interesting media about maintaining water, soil and air quality; i) provide various literature on environmental issues; j) assign students to look for existing problems related to the environment in various media and sources; k) train students to recycle waste into more useful objects; l) educate students to sort waste by type.

Conclusion

Efforts to improve ecological literacy competencies in elementary school students, namely: 1) implementing ecological literacy development strategies in elementary schools, including: interdisciplinary learning, environmental projects, extracurricular activities on the environment; 2) realizing teaching strategies that can be applied to improve ecological literacy in the school environment.

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