Cultivating Green Behavior of Eco Literation-Based Elementary School Students during the COVID-19 Pandemic

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Abstract: This study aims to describe how to grow the green behavior of elementary school students based on Eco literacy during the COVID-19 pandemic. The method used is a literature review with a systematic mapping study technique as a library search. Based on the results of the study, Green behavior that is grown in children based on Eco literacy includes 4 components of Eco literacy, namely implications, ecological knowledge, knowledge of environmental problems and environmentally responsible behavior. Through these 4 literacy components children can have a concern for health, personal hygiene and care for the environment, the ability to communicate and apply ecological concepts, an understanding of various problems and issues related to the environment that are influenced by aspects of politics, education, economy, and government institutions and active participation which is aimed at solving and solving problems through selected lifestyle activities. During the COVID 19 pandemic, cultivating Eco literacy-based green behavior can be provided through online learning by utilizing digital technology through modeling, habituation, and repetition in everyday life such as consuming healthy food, exercising diligently, carrying out health protocols (diligently washing hands with soap and running water, wearing masks and keeping your distance), besides teaching people to limit activities that can harm themselves and the environment, which are packaged attractively and conveyed through various digital media such as blogs, websites, podcasts, and other social media.

Keywords: Green Behavior; eco literacy; Pandemic COVID 19; Digital Media

Introduction

Now the entire world community including Indonesia is experiencing the COVID 19 pandemic crisis, where in this condition it teaches and invites people to protect health and the environment so that they can break the chain of transmission of the COVID 19 virus. Prior to the COVID 19 pandemic, the results of a study by the Central Statistics Agency (2018) show that the Healthy Living and Environmental Care Behavior Index is still in the range of 0.49 (from absolute number 1). This shows that people's behavior is not in a good category for healthy living and caring for the environment in carrying out their daily life.

As an effort to prevent the transmission of COVID 19, the application of healthy living and caring for the environment must start from the smallest things in everyday life. The smallest thing that is meant is the effort to cultivate a green lifestyle (Desfandi et al., 2017).

Goleman, & Barlow, (2012) explained that green behavior is human behavior in maintaining health and maintaining the environment in the immediate

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Environmental Green behavior is in the form of actions based on values, norms and compassion for the universe, so it is a reflection of responsibility and concern for the environment that every human being must have and have (Hosseinpour et al., 2014). Sonny (2014) explains that basically humans have a sense of belonging and love themselves by maintaining health and maintaining the environment through knowledge, awareness and responsibility. As explained by Green behavior, it appears due to human awareness to live healthy and love the environment. One's awareness to love the universe must be instilled from an early age in children, one of which is through Eco literacy (Johnson, 2014).

Syaodih & Handayani (2015) in their research explained that green behavior needs to be cultivated from an early age in children so that in the future children will become adults who have green behavior by cultivating healthy, clean and loving lives. The strategy of presenting a healthy and environmentally friendly generation by growing green behavior can be pursued through the education sector, especially basic education (Putri, 2010). The young generation who has green behavior can get used to living healthy and clean and having a caring attitude and caring for the environment is a blessing for sustainable development (Saetyaningrum, 2020).

Fostering green behavior in students in elementary schools can be developed through the learning process. The learning process during the COVID 19 pandemic, in the form of online learning, was done to minimize transmission of the COVID 19 virus to children. But there is no need to worry, growing green behavior through online learning can be done by utilizing technology. Technology in learning is an element that needs to be presented in daily activities at school as a new way of learning knowledge. This is in line with the Government's program as outlined in the Minister of Education and Culture Regulation No. 65 Years. 2013 concerning Basic and Secondary Education Process Standards, which among other things states the use of the learning principle "the use of ICT to increase the efficiency and effectiveness of learning". (Lestari & Siskandar, 2020). The current technology used in the online learning process is digital technology. Digital technology currently makes it easy for educational elements, both teachers and students, to take advantage of various digital learning content to facilitate the learning process (Desfandi et al., 2017).

During the COVID 19 pandemic, cultivating Eco literacy-based green behavior can be provided through online learning by utilizing digital technology through exemplary, habituation, and repetition in everyday life which is packaged attractively and conveyed through various digital media such as blogs, websites, podcasts, to media - Other social media.

Eco literacy is defined as an individual awareness in the care and preservation of nature. This Eco literacy can be embedded in an individual into beliefs, idealism, character, and the ability to manage and care for nature only if through a process of habituation, it occurs throughout his life (Kurniasari et al., 2020). Environmental awareness is a form of mindset created by behavior and interactions with the environment in order to maintain the balance of the ecological world (Mkumbachi et al., 2020). Eco literacy is able to direct humans to be able to live side by side with nature with the habituation of a lifestyle that loves the universe which will then develop into a culture that develops in society and then has a major impact on global life (Rusmana & Akbar, 2017; Maurer et al., 2020).

**Method**

The method used is the literature review method with systematic mapping study technique as a library search. The literature review activity systematic mapping study aims to analyze trends in issues or research topics that have been predetermined and analyzed in accordance with relevant renewable knowledge (Moleong, 2011). There are 3 stages to conduct a literature review systematic mapping study, namely as follows: (1) Textbook, in this first stage, it begins with examining topics through books that are relevant to issues regarding the earth in order to explore science and knowledge on these issues; (2) Related research, in the second stage, a review and analysis of various journals, both national and international, are carried out in physical form and online access. As well as to review and analyze the results of previous research that are relevant to the topic to be studied, it can also be obtained through the results of scientific meetings in the form of proceedings with issues of green behavior, Eco literacy, and also early childhood education; (3) State-of-the-art research, at the last stage, analysis of theories as well as methods obtained from reference books is carried out, research results in the form of journals and proceedings which will then be formed into a synthesis.

**Result and Discussion**

Fostering green behavior in elementary school children can be through habituation, exemplary, and repetition in everyday life. Growing green behavior does not only expect compliance, but in the form of awareness and responsibility to maintain personal health and hygiene as well as care for the surrounding environment.
The process of growing green behavior in children can be through Eco literation-based learning. Eco literacy is described as a form of individual awareness in maintaining health, personal hygiene, and also the surrounding environment. If the individual has been able to instill full awareness of the meaning of personal health, the environment, and the earth as a place for all creatures to live, then the individual has been able to be categorized at the Eco literacy level (R. Kurniasari, 2018). Thus, individuals who are already at the Eco literacy level will be ensured that green behavior is embedded as their lifestyle. Therefore, it should be expected that the green behavior lifestyle that will have a positive impact is expected to be embedded in each individual in the 21st century, not only in the conditions of the Covid-19 pandemic that are rife.

In the world of learning, this Eco literation will color the content which will later become the substance of education. Eco literation consists of various aspects that have attainable characteristics, also in line with the agreed core and basic competencies. In the following, we can examine the components and characteristics of the Eco literation concept.

**Table 1. Eco literation Components and Their Characteristics**

<table>
<thead>
<tr>
<th>Components</th>
<th>Description</th>
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<tr>
<td>1. Implications</td>
<td>Concern for health, personal hygiene and maintaining the environment</td>
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<tr>
<td>2. Ecological Knowledge</td>
<td>Ability to communicate and apply ecological concepts, especially focusing on individuals, species, populations, communities, ecosystems, and biogeochemical cycles.</td>
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<tr>
<td>3. Knowledge of environmental problems</td>
<td>Understanding of various problems and issues related to the environment which are influenced by aspects of politics, education, economy, and government institutions.</td>
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<td>4. Environmentally responsible behavior</td>
<td>Active participation aimed at solving and solving problems through selected lifestyle activities</td>
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(McBride et al., 2013)

During the COVID 19 pandemic, in fostering green behavior based on Eco literation, children were focused on preventing the transmission of COVID 19. In the first and second components of Eco literation, namely the implications and knowledge of ecology, where teachers cultivate this green behavior habit by giving awareness to children that the importance of maintaining personal health and environmental cleanliness by instilling a healthy lifestyle and values of loving the environment through activities that make children interested, one of which is by telling stories related to healthy lifestyles, habituation to health protocols and activities to protect the surrounding environment. According to (Sonny, 2014), the goal to be achieved in storytelling activities is to develop language skills, as well as the ability to instill moral messages contained in the story. Storytelling activities can be packaged into interesting stories by utilizing digital technology such as stories made in the form of animated videos so that children are interested in watching and listening to the stories. So that even though distance learning is enforced, green behavior can be grown in children through multimedia-based learning media.

The third and fourth components of ecolideracy are knowledge of environmental problems and environmentally responsible behavior. Green behavior in children can be grown by getting children to understand various problems and issues related to the environment. Currently, issues related to the environment that affect economic, educational, and political aspects are the COVID 19 pandemic. How to grow green behavior for students can be through activities that teach children to maintain health and personal hygiene during the COVID 19 pandemic, such as washing hands frequently with soap and running water, eat healthy food, exercise diligently, dispose of garbage in its place, help parents plant crops, care for and harvest them, so that the home environment is cleaner. In addition, children can be accustomed to leaving the house using a mask and always keeping a distance from other people.

Cultivating habits through distance learning is indeed more difficult, but by utilizing technology, this habit can be grown while providing stimulus through the use of online learning media such as TV shows that contain education for elementary school children to frequently do these habits, can also use the house Ministry of Education and Culture learning developed by PUSTEKOM the Ministry of Education and Culture (https://belajar.kemdikbud.go.id/).

Cultivating this green behavior can be through the learning house portal, digital class features and learning resource features. Digital class features in the form of a learning management system specially developed to facilitate virtual or face-to-face learning processes between teachers and students. The learning resources feature presents teaching materials for students and teachers based on the curriculum. Teaching materials are presented in a structured manner with an attractive appearance in the form of images, videos, animations, simulations, evaluations, and games. This material can be in the form of educating children in applying health protocols (Lestari et al., 2020).
Fallis (2013), explained that there is an institution in the USA that is the center for the development of a core Eco literacy called the Center of literacy. There are 4 competencies from the core of Eco literacy that are developed including, knowledge, character, personal health and human relations with nature. All competencies contained in the core of Eco literacy aim to maximize the learning potential of students, from their attitudes to their skills in synergy with nature. This is similar to the presentation from the Center for Eco literacy (2015) which explains that the result of implementing Eco literacy is the formation of a green behavior pattern that reflects a dynamic and synergistic relationship between humans and nature so that a healthy lifestyle, human prosperity in the 21st century, is also maintained. balance of the world chain ecosystem.

Conclusion

Green behavior that is grown in children based on eco-literation includes 4 components of eco-literation, namely implications, ecological knowledge, knowledge of environmental problems and environmentally responsible behavior. Through these 4 literacy components children can have a concern for health, personal hygiene and care for the environment, the ability to communicate and apply ecological concepts, an understanding of various problems and issues related to the environment that are influenced by aspects of politics, education, economy, and government institutions and active participation which is aimed at solving and solving problems through selected lifestyle activities. During the COVID 19 pandemic, cultivating Eco literacy-based green behavior can be provided through online learning by utilizing digital technology through modeling, habituation, and repetition in everyday life such as consuming healthy food, exercising diligently, carrying out health protocols (diligently washing hands with soap and running water, wearing masks and keeping your distance), besides teaching people to limit activities that can harm themselves and the environment, which are packaged attractively and conveyed through various digital media such as blogs, websites, podcasts, and other social media.

References


Maurer, M., Koulouris, P., & Bogner, F. X. (2020). Green awareness in action-how energy conservation action forces on environmental knowledge, values and behaviour in adolescents’ school life. Sustainability (Switzerland), 12(3). https://doi.org/10.3390/su12030955

literacy, ecoliteracy: What do we mean and how did we get here? *Ecosphere*, 4(5).
https://doi.org/10.1890/ES13-00075.1


