

Profile of Learning Environmental Literacy in Elementary School

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Abstract

The aim of this study was to describe the learning profile that has an impact on environmental literacy of elementary school students. This research used descriptive qualitative research. The sources of data in this study are 4 elementary schools in Subang Regency. The data collected was data regarding the profile of students' environmental literacy learning in the Elementary School by focusing on the profile of environmental knowledge, attitudes, and environmental behavior based on environmental literacy measurements. Data collection techniques were carried out by triangulation (combined) through interview and survey techniques. The instruments used in this research were interview guidelines and questionnaires. The data analysis technique was carried out through the stages of data reduction, data presentation, and drawing conclusions. This research showed that: 1) Environmental knowledge profiles in school local content have been well applied in the curriculum which can be seen in the conditioning of the learning environment that blends with nature, and 2) The profile of environmental attitudes and behavior in learning has been well integrated at every grade level, as evidenced by the collaboration between students in protecting the environment. This study recommends educators to focus on environmental literacy to renew their understanding of the importance of protecting the environment and forming social awareness of the surrounding environment.

Keywords: Environmental Literacy, Elementary School

INTRODUCTION

Environmental literacy is a conscious attitude to keep the environment in balance (Kusumaningrum, 2018). This awareness is also interpreted as an environmental literacy attitude, which not only has knowledge of the environment but also has a responsive attitude and is able to provide solutions to environmental issues. Students as part of society who are prepared as the next generation and agents of change in society need to be equipped with environmental literacy skills. As stated by Patrisiana et al. (2020) that primary school education as part of strengthening environmental literacy aims to develop the ability of individuals to interact with their environment in a conscious and planned manner in developing their potential to the environment directly so that significant changes occur and progress in maintaining environmental conditions. The cultivation of this understanding and attitude of environmental concern is best done through environmental education (Joseph, 2021). Through environmental education which has a learning objective in the form of environmental literacy, students are expected to be able to maintain, manage, and preserve the environment wisely and wisely so

that a literate generation of the environment will be created.(Wardani et al., 2021), because only individuals who have literacy, awareness, and sensitivity will contribute in dealing with environmental problems (Köse et al., 2011). The measurement of environmental literacy ability consists of four components, namely environmental knowledge, attitudes and behavior towards the environment, and cognitive skills (McBeth & Volk, 2009).

However, the OECD (Organization for Economic Co-operation Development) stated that the low environmental literacy of elementary school students on the results of the PISA (Program for International Student Assessment) test in science was due to several aspects being tested related to the environment.(Choi et al., 2011). As for two of the four aspects of scientific literacy related to the environment, namely the context aspect which includes health and disease, natural resources, environmental quality, and so on as well as the attitude aspect shown by an interest in science and technology, assessing the appropriate scientific approach to science. and technology, as well as perception and awareness of environmental issues (Klucevsek, 2017; Yulianti & Kusumaningrum, 2021; Wardani, et al., 2021).

This problem is supported by data from a preliminary study conducted through interviews with teachers in two elementary schools in Ciater District, Subang Regency that the implementation of environmental literacy-based learning by paying attention to the environmental literacy component has not been promoted. The main factor is the lack of knowledge of school residents regarding environmental literacy. When carrying out thematic learning the teacher tries to link learning with everyday life and the surrounding environment, from this it is known that there are still many students who do not recognize the environment. In addition, schools have not yet used environmental care activities such as routine community service. The fact about the number of students who do not recognize the environment is evidenced by the understanding of protecting the environment, students are only limited to throwing garbage in its place but in practice it is still lacking. Students do not yet have a sensitive attitude towards the environment. This is evidenced by the dirty condition of the classroom due to trash and the facilities in the classroom being scribbled on. In the school environment there are practical plants and various plants that are deliberately planted to make the school environment beautiful, but students do not try to care for them by watering or applying fertilizer.

Previous research on environmental literacy has been carried out by Karimzadegan & Meiboudia (2012) in exploring aspects of environmental literacy in learning science education in elementary schools in Iran. Meilinda et al. (2017), in their research, also analyzed the

environmental literacy profile of students at the Adiwiyata Natural School, Surakarta in terms of knowledge and attitudes. Similar research was also conducted by Salimi et al. (2021) in describing the environmental literacy profile of natural school students on cognitive, emotional, spiritual aspects, and the application of ecology into the practice of life. In contrast to previous studies, this study focuses on environmental literacy profiles in terms of environmental knowledge, attitudes, and environmental behavior in elementary school students in Subang Regency. Several studies that have been conducted on the profile of environmental literacy in elementary schools indicate that environmental literacy is a very important competency for elementary school students in maintaining an understanding of ecology and overcoming environmental problems for the sustainability of human life (Pilgrim et al., 2007; Suryanda et al., 2019). By practicing environmental literacy from an early age, students are expected to be able to harmonize development growth with the environment so as to create a harmonious environment between society and the environment (Agsari, 2018).

Therefore, based on the explanation, this study aims to describe learning that has an impact on environmental literacy of elementary school students in Subang Regency in terms of environmental knowledge profiles, attitudes, and environmental behavior. This is due to the lack of literature on environmental literacy learning in elementary schools regarding the three profiles. The results of this study can be used as an illustration and guideline for learning environmental literacy, especially at the level of elementary school students.

METHOD

This research uses a qualitative descriptive research type. Qualitative descriptive research aims to describe, explain, and answer in more detail the problems to be studied by studying as much as possible an individual, a group or an event. This research is considered as an interpretive method because the research data is more related to the interpretation of the data found in the field. Qualitative research is a method used to examine the condition of natural objects with actual conditions where the researcher is the key instrument. The sources of data in this study are 4 elementary schools in Subang Regency from 4 different sub-districts.(McBeth & Volk, 2009). Data collection techniques were carried out by triangulation (combined) through interview and survey techniques. The instruments used in this research are interview guidelines and questionnaires/questionnaires. The data analysis technique is carried out through the stages of data reduction, data presentation, and drawing conclusions (Miles & Huberman, 1994).

RESULTS AND DISCUSSION

Results

Environmental Knowledge Profile in School Local Content

Environmental literacy is knowledge and individual understanding of constructive aspects environment, the principles that occur in the environment, and act nurturing environmental quality that is applied daily. Environmental literacy-based schools can be realized in the application of all school members to behave well in daily life by using skills to the conditions of the school environment. From the results of interviews conducted with 4 elementary school principals, information was obtained that environmental literacy is the local content of the curriculum in the four elementary schools. This of course aims to develop students so that they have characters that are in accordance with the expectations of education in Indonesia. The local content of this curriculum is manifested in several ways, namely maintaining togetherness in maintaining the school environment, creating a conducive, safe, comfortable, and integrated learning environment with nature as well as adding hand washing and environmental sanitation. In addition, the form of local culture from the student aspect in relation to environmental literacy is to familiarize students with throwing garbage in its place, requiring students to line up before entering class in an orderly, neat and polite manner, also before starting to study must pray first, with the condition of the class being clean. , neat and conducive. Teachers are also asked to set an example for students both in saying, acting, and acting. The community is also involved in every activity in the context of developing schools and existing resources related to the environment. also before starting to study, it is mandatory to pray first, with the condition of the class being clean, tidy and conducive. Teachers are also asked to set an example for students both in saying, acting, and acting. The community is also involved in every activity in the context of developing schools and existing resources related to the environment. also before starting to study, it is mandatory to pray first, with the condition of the class being clean, tidy and conducive. Teachers are also asked to set an example for students both in saying, acting, and acting. The community is also involved in every activity in the context of developing schools and existing resources related to the environment.



Figure 1. Habituation of Handwashing as One of the School's Local Content

Environmental literacy is a form of environmental care character that can be applied in the form of environmental love activities. The views of several target schools regarding character education are: As an aspect of personality, character is a reflection of the whole personality of a person, both in terms of mentality, attitude and behavior. Character is a psychological, moral, or character trait that characterizes a person or group of people, and is an inner standard that is implemented in various forms of self-quality. According to all schools that are sources of research data, this basic component in preparing students who have environmental awareness and sensitivity is a form of environmental care character and has been integrated into their respective school curricula that are adapted to environmental situations and conditions due to environmental conditions that may at times change. According to one school respondent, a good curriculum must be able to follow the dynamics of society. Because as an educational product, the curriculum is designed to help children's learning process and can accommodate the actual needs as well as the needs of children in the future. There are several things that need to be considered in accommodating the various values that grow in the community in the school curriculum regarding environmental love, including:

The strategies that can be done so that the environmental love character curriculum can run consistently are: teachers must play an active role in implementing the curriculum or as implementers, meaning that they play a role in carrying out the existing curriculum and carry out their role as teachers, namely teaching, educating, fostering and evaluating learning activities, as well as adapters, meaning that teachers are given the authority to adapt the existing curriculum to school characteristics and local needs. Even teachers are given the role to become curriculum developers and have the authority to design the curriculum. The teacher

can not only determine the objectives and content of the lesson delivered, but the teacher can also determine what strategies are suitable in the learning process. This includes teachers being given a role as curriculum researchers, namely teachers have the responsibility to test various components of the curriculum, for example testing curriculum materials, testing the effectiveness of the program, testing strategies and learning models and so on including collecting data on the success of students in achieving curriculum targets. In addition, monitoring and evaluation are also held to oversee the process and see the results at the end of each assessment, both in the middle and at the end of the semester, from the implementation of the curriculum.



Figure 2. Teachers as Developers and Implementers of Environmental Literacy Curriculum in Schools

Profile of Environmental Attitudes and Behaviors in Learning Activities in Elementary Schools

The implementation of learning that instills values, ethics and morals as well as environmental awareness in target schools is manifested in the awareness of all elements in instilling a caring attitude towards the environment which begins not only through orders but provides examples of good attitudes and behavior that will serve as role models for students in elementary school. The planting of environmental care character education carried out by schools in Subang Regency is by adjusting the development of students according to their respective grade levels where each grade level has different characteristics, both in the lower grade and the upper grade on elementary school.



Figure 3. Example of Cultivating Environmental Care Characters in Schools

As for low-grade students, the cultivation of environmental care character education is carried out by: 1) defecating and urinating in the toilet, 2) throwing garbage in its place, 3) cleaning the school yard, 4) not picking flowers in the school garden, 5) Do not step on the grass in the school garden, and 6) Maintain the cleanliness of the madrasa. Meanwhile, for high-class students, in planting the formation of environmental care characters in the form of: 1) Maintaining the cleanliness of shared toilets, 2) Cleaning trash cans, 3) Cleaning the school environment, 4) Beautifying classrooms and schools with plants, 5) Participating in maintaining the garden in the school yard. , and 6) Participate in activities to keep the environment clean

In terms of the adoption of the values of love for the environment in learning in schools, most of the respondents stated that the implementation of instilling the character of love for the environment in children through waste processing activities, morning picket activities, good and correct hand washing activities, personal neatness activities and garden and school environment maintenance activities . This activity aims to train students to be able to love their environment from an early age and be able to maintain the beauty of the environment starting from the school environment. This activity is carried out routinely in schools in order to create a beautiful and beautiful environment that can support teaching and learning activities. In this regard, of course, teachers play an important role in the creation of environmental-based learning. As for the steps taken by the teacher in the process of inculcating the value of caring for the environment in learning, namely: using the environment as a place of learning and learning media, carrying out the learning process outside the room can foster student curiosity

and concern for the environment and the cultivation of the value of caring for the environment is also supported by activities that have become routine at school.

Discussion

The first aspect of environmental literacy is discussing knowledge environment which is individual understanding of constructive aspects, principles, and actions environment and contained in the school's local content curriculum. One form of local content in this curriculum is to create a conducive, safe, comfortable, and integrated learning environment natural. According to Rigolon (2012), where learning has an active role in improving environmental literacy. The closer students are to beautiful nature, the higher the level of understanding and knowledge of environmental literacy. This is in line with the opinion Koc & Ontas (2020) that meaningful learning that should exist in the curriculum for elementary school students is learning that involves students' cognitive activities directly with their learning resources. Another factor that affects the understanding and knowledge of environmental literacy is the learning material. Learning materials must raise environmental issues that are familiar to students to help students think critically and creatively, discuss and find solutions to these problems with natural scientific investigations (Nadiroh et al., 2021). In addition, the books provided should also be environmentally based. Environmental literacy books with illustrated designs are the best choice to stimulate imagination and help students understand (Andriani et al., 2017; Muthukrishnan, 2019).

Environmental literacy is also a manifestation of the character of loving the environment. The environmental care character of the Elementary School in Subang Regency has been integrated into the curriculum of each school which is adapted to the situation and environmental conditions. This is in accordance with the respondent's statement that:

“character that is psychological, moral or character traits that characterize a person who is implemented in various forms of self-quality. Characters in this elementary school have been integrated in all learning both inside and outside the classroom, especially the character of loving the environment. This means that students are always given education or the value of loving the environment in every implementation in all learning and outside class hours so that it is always embedded in their personality.”

The role of teachers in the application of environment-based learning is also very important. This is in accordance with the respondent's statement "*the role of the teacher in this case is that every teacher after entering the school environment must be able to provide an example for students, both in saying, acting, and acting. It also requires students to line up before entering class in an orderly, neat and polite manner, before starting learning, they must*

pray first, including memorizing short verses, with the condition of the class being clean, neat and conducive." This shows that learning activities are no longer just knowledge exploration but at the same time utilizing the environment as a learning medium, school residents are also encouraged to develop efforts to improve environmental management and quality. (Anggraini et al., 2019). Tamara's (2016) research result shows that in the school environment, it is the teacher who plays an important role in the formation of students' environmental care attitudes. Teachers who are aware of the importance of caring for the environment, and are able to contribute to students regarding the attitude of caring for the environment in their daily activities (Maesaroh, Bahagia, & Kamilludin, 2021).

The planting of environmental care character education carried out by schools in Subang Regency is by adjusting the development of students to love literacy skills environment. In this case, all students at the elementary school level are trained to have the ability to appreciate the earth and all living things, admire nature, be close to nature, and use those feelings to others. This aspect is indicated by concern for the environment when learning takes place. Students' sensitivity to the environment is naturally shown when they work together to pick up the garbage that is scattered in the yard and sort it out. It is an attempt by students to make themselves more meaningful to other people or the environment. This is in accordance with the opinion Arweck & Nesbitt (2007) and Pandya (2017), which states that a person who has a character of complete environmental value can make himself have a good character, have complete ethics, and be meaningful for the social and family environment. This is in line with the opinion Horton & Horton (2019) and Boafo et al. (2016) that humans who have ecological knowledge and apply it well will understand their behavior and actions, not only having an impact on themselves and others but also on the natural environment in which they live, which must be maintained in order to maintain the carrying capacity for survival. life of oneself, others, and the environment.

CONCLUSION

Based on the results of the research and discussion, it can be concluded that: 1) The environmental knowledge profile in the school's local content has been well implemented in the curriculum which can be seen in the conditioning of the learning environment that blends with nature and the role of the teacher in being an example to train environmental literacy, 2) Attitude and attitude profiles. Environmental behavior in learning has been well integrated at every grade level, as evidenced by the collaboration between students in protecting the

environment in simple things such as picking up and sorting garbage in the school yard. This study recommends educators, teachers, and counselors to focus on students' environmental literacy because to introduce and update students' understanding and awareness about the importance of protecting the environment and forming social awareness and sensitivity to the surrounding environment so that environmental damage can be prevented. A suggestion for further research is to investigate this trend among public or private schools in several regions of Indonesia.

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