Developing Students' Environmental Attitude through Malang Waste Bank Program

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Abstract. In character education, it is mentioned the importance of three components of good character, namely moral knowing, moral feeling, and moral action. These components are essential to help students understand, feel, and more importantly, practice positive values. This qualitative descriptive study aims to describe a particular symptom and depict it as it is. Results show information regarding 1) the implementation of students' character development program in school, 2) Waste bank activities related to the development of students' environmental attitude, 3) Some factors that support and inhibit the students' environmental attitude.

Keywords: Characters, environmental attitude, waste bank.

INTRODUCTION

Malang is an educational, industrial, and tourism city, which often becomes an interesting city to many urban people. Even there are many people from other cities who come to study in Malang. Students who are studying in Malang not only learn about intellectuality but also develop their good attitudes, especially toward the environment. The environmental attitude can be developed through waste bank program. The 3R principle is applied in waste management: reduce, that is, reducing or limiting the things that cause waste; reuse, that is, reusing the stuff for a similar or different purpose; recycle, or remaking new goods from the waste so it can be useful.

Participation of the community (students) means involving the community in the program by providing opportunities to identify problems, find a solution, make decisions, plan, implement, monitor, and evaluate the program. So the program will be theirs to maintain in a sustainable manner. Participation can be viewed from three perspectives in the development context, namely tool, goal, and process [1]. Firstly, participation has been accepted as an essential tool. Secondly, participation as a goal means that it "supports people in articulating and negotiating their interests at the social, institutional, and policy-making levels." Thirdly, participation as a process or a principle in management is viewed as an observation that intensively involves the actors participating in the project, including how to achieve the goals, how to measure the progress, and how to run the program.

According to Aristotle's, character (attitude) is closely related to everyday habit or routine. Having a good habit does not necessarily mean that one appreciates the importance of values and characters [2]. For example, someone who is getting used to saying something truthfully for fear of punishment may not understand the actual value of honesty. Therefore, emotional aspects are also essential in character education. This component is called "desiring the good" or the desire to do good things [3].

Although more studies on "Developing Students' Environmental Attitude through Malang Waste Bank Program" are needed, some previous studies in this area have inspired this current study, thus become the relevant literature.

It was expected that the open space would create an image of a beautiful, comfortable, economical, and sustainable city [4]. On the other hand, there has been an increasing number of built spaces in the city, which shifted the function of the green space from open areas to residential, trading, services, and industrial areas. The allocation of open space is 30% of the total city area (20% public open space and 10% private open space), as stated in the Law on Spatial Planning (UUPR) Number 26 of 2007. In this case, it is necessary for the local government to support this law. The challenges of the City Spatial Plan (RTRWK) have been overcome in 3 years since the enactment of the UUPR; however, many cities have not complied with the regulation. Thus, the participation of stakeholders and the community is paramount for the successful management of the urban open space.

The study of sustainable cities cannot be separated from sustainable development. In the case of the natural environment, the government is required to make a regulation on spatial planning, monitor its implementation, and at the same time solve current environmental problems related to CO2 emissions and waste management. The Regulation of the Minister of Home Affairs Number 1 of 2007 states that the urban green open space is open spaces filled with plants for ecological, social, cultural, economic, and aesthetic purposes.

Another related study on Challenges of Urban Forest Lands and Landscapes in Jakarta. In his study, the classification of urban forests was based on the form and structure of the forests and made visually. It was mentioned that the shape and structure of urban forests...
could reduce temperature, noise, and dust, but might increase humidity. This function is essential in grouping urban forests so that they can be used as identifiers. It was found that stratified urban forests were highly effective in solving environmental problems in the urban area, such as air temperature, noise, dust, and humidity.

Based on the aforementioned studies, it is crucial to conduct a further study by analyzing current problems related to "Developing Students' Environmental Attitude through Malang Waste Bank Program.”

This study aims to examine, assess, and obtain a comprehensive description of the implementation of Malang Waste Bank program in developing students’ environmental attitude, and identify some factors that may support and inhibit the attitude.

LITERATURE REVIEW

Character Education

In character education, it is mentioned the importance of three components of good character, namely moral knowing, moral feeling, and moral action [3]. These components are essential to encourage students to understand, feel, and more importantly, practice positive values. Each of the components is explained below.

a. Moral Knowing. It includes six learning objectives: 1) increasing moral awareness, 2) enhancing knowledge about moral values, 3) developing perspective-taking skills, 4) developing moral reasoning skills, 5) developing decision-making skills, and 6) improving self-knowledge.

b. Moral Feeling. It refers to six emotional aspects required to be a person with good characters. The aspects include 1) conscience, 2) self-esteem, 3) empathy, 4) kindness, 5) self-control, and 6) humility.

c. Moral Action. This component is the outcome of the two other components. To act morally, one has to have three aspects: 1) competence, 2) will, and 3) habit.

Today, there are four global issues concerning the environmental preservation program (Indra Ismawan, 1999), namely:

a) Pollution (e.g., acid rain, climate change, water pollution, pollution caused by chemical substances, industrial waste, and nuclear waste).

b) Natural resources (e.g., deforestation, loss of genetic resources, soil erosion and desertification, critical soil, destruction of the marine ecosystem, land degradation, and loss of agricultural land).

c) Urban (e.g., land use, environmental sanitation, clean water, urban growth management, social welfare and education, slum housing and neighborhood, as well as reforestation in big cities).

d) Management (e.g., monitoring and reporting, investment analysis, cost-benefit analysis, cost-effectiveness, risk analysis, and environmental impact analysis).

Environmental Education as the Basis of One's Attitude and Behavior

Environmental education should be developed based on the basic concepts of the environment that are applied in all education types and levels, from elementary school to higher education, whether it is formal, non-formal or informal education conducted by government or private institutions. Environmental education must encourage a good attitude and behavior in dealing with both natural disasters (i.e., earthquakes, volcanic eruptions) and human-made disasters. Also, similar attitudes are necessary for reducing pollution caused by human acts [6].

Environmental problems are moral problems and related to human behavior. It is not merely a technical problem. Likewise, the global ecological crisis that we experience today is a moral issue or a global moral crisis. Therefore, it is essential to have good ethics and morality to overcome this problem. It cannot be denied that recent environmental issues, both global and national ones, are mostly caused by human behavior. According to Arne Naess [4], the current environmental crisis can only be overcome through a fundamental and radical change of the human perspective and behavior. What is most needed now is a new lifestyle, which is applied by not only an individual but also the whole society. In this case, environmental ethics are fundamental to guide humans when making interactions in this universe.

The global environmental crisis that we are experiencing today is mostly influenced by fundamental-philosophical errors in humans’ understanding or how they think about themselves, nature, and the whole ecosystem. This fallacy can lead to wrong behavior towards nature. Humans often have wrong perspectives toward nature and their place in this entire universe. Moreover, this is the beginning of the current environmental disasters. Therefore, understanding human perspectives and behavior in interacting both with nature and with other human beings in the entire ecosystem is imperative. The wrong perspective may be caused by anthropocentrism, which views humans as the center of the universe, the only ones who have values, while nature and its components are merely a means of satisfying humans’ interests and needs.

Modern society needs to protect the quality of the environment, biodiversity, and human interactions. The effective mechanism, including strict regulations, incentives, fines, environmental monitoring, and continuous assessment are required. Nowadays, our society tends to prioritize materialistic values. It requires a comprehensive and complementary approach to change the perspective [7]. Indonesian society needs to be familiar with environmental ethics to increase their awareness of the principles so that environmental preservation and biodiversity conservation can work well.

Ethical argumentation is a valid reason to protect the environment and biodiversity. This argument arises from religious values, philosophies, and cultures so that it can be understood by most members of society. Ethical
arguments for preserving the environment and biodiversity can arouse people's instincts and encourage good behavior. Callicott stated that this argument arises from the appreciation of life, nature, weakness, a sense of beauty, uniqueness, the beauty of life, and belief in God's creation and His greatness. Communities often accept this argumentation or at least take it into consideration [8].

METHOD

This study uses a qualitative descriptive method by exploring and reviewing relevant literature on Developing Students' Environmental Attitude through Malang Waste Bank Program.

The study was conducted at schools in Malang City during the 2014/2015 school year, and data were collected through various techniques: a) in-depth interviews to find information about building students' character through environmental education, b) observation, that is, collecting data in the field through a careful observation by directly looking at the activities being studied [9], c) documentation, which is used to strengthen and complement data obtained from the interviews.

The data used in this study were primary and secondary data. Data source (Key Informant) included Head of Malang Education and Culture Office, Head of Malang Environmental Agency, School Principal, schoolteacher, and the administrators at Malang Waste Bank.

The data were analyzed using the analytical method proposed by Glasser & Strauss, which includes four stages: (a) data reduction, identification and data coding, (b) data categorization, (c) synthesis, and (d) hypotheses formulation in the form of draft or concepts about Developing Students’s Environmental Attitude through Malang Waste Bank Program. These steps were performed through the following activities:

RESULT

Based on the study on Developing Students' Environmental Attitude through Malang Waste Bank Program, the following results are obtained:

1. Programs for developing students’ environmental attitude at schools:
   a) Developing students' environmental attitude through the implementation of environmental education policies under the Ministry of Environment covered eight aspects. The environmental attitude development program was also done through the Malang Waste Bank under The Environment, Hygiene and Park Agency by educating students and familiarizing them with hygiene and environmental attitude.
   b) Developing environmental attitude by establishing a Madrasah Waste Bank under the supervision of Malang Waste Bank.
   c) Through the Madrasah Waste Bank, students were taught to practice the religious value of "cleanliness is next to godliness" and "shodagoh through good use of waste." The Waste Bank program also supported the Adiwiyata school, which developed the students’ environmental attitude.
   d) Students participated in conserving the school environment guided by the teacher. In this case, the students were asked to take care of the plants that grew in front of the class and to bring manure or compost from their house. This way, the students would be accustomed to preserving the school environment and were expected to do the same in their neighborhood.
   e) The implementation of an environmental curriculum that integrated local content and was taught monolithically and integratively, and followed by the realization of Adiwiyata (environmentally cultured) school.

2. Malang Waste Bank program was aimed at developing the students’ environmental attitude.
   a) The young generation or school students are a strategic generation to realize "green and clean city," thus Malang Waste Bank conducts mentoring for waste bank units at schools.
   b) There was a work division in developing the students’ environmental attitude through Malang Waste Bank. The Environmental Agency provides educational facilities. Some other facilities and equipment needed by Malang Waste Bank were also provided, such as bins, bio pores, decomposers, etc.
   c) Malang Waste Bank played an essential role in developing the students’ environmental attitude, as seen in the socialization activities and assistance provided for Elementary School 1 Sukun. Also, some tools needed by the school were provided, such as farming tools, organic fertilizers, and plants.

3. Supporting and inhibiting factors in developing the students’ environmental attitude:
   a) Factors that supported these activities include the support from relevant agencies, including The Environment, Hygiene and Park Agency, the Environmental Agency, and the Education Office for the establishment of waste bank units in schools. It was funded by CSR from PLN.
   b) Other supporting factors in developing the students’ environmental attitude were the committee members who showed enthusiasm in managing the Madrasah Waste Bank, and teachers who were willing to sort out waste, so the students were excited in participating in the waste bank program.
   c) One of the inhibiting factors was the lack of awareness of the community to sort out the waste. There were only 60% of the waste banks which had been actively working and still needed some assistance.
d) Other inhibiting factors in this activity were parents’ misunderstanding that perceived the activities as something that would make their children a scavenger.

CONCLUSION

Based on the results above, it is concluded that there were programs for developing students’ environmental attitude at schools, the aim of Malang Waste Bank program was to develop the students’ environmental attitude, and several supporting and inhibiting factors in developing the students’ environmental attitude.

REFERENCES