Nature-based learning as an effort in building students' character education values

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ABSTRACT: Nature-based learning is a conceptual framework, which basically describes a concrete structure of learning experience by utilizing nature as the material, the media, and the learning environment. This learning process is designed to promote the natural environment as natural environment preservation. The key of nature-based learning approach is the material that is fascinated for children learning process. In addition, it is taken from their surroundings. Therefore, promoting character-building values for children will be more effectively delivered by a pleasure learning process. This article aims to describe nature-based learning as an approach to promote character-building values for children. Based on this approach, proposed activities will also relate to surroundings, the locals, and those are developed according to local wisdom. These activities are certainly beneficial for daily life as well as local society characteristics. Character education value aims to develop national character values, which are highly intelligent, well cultured, and able to contribute for human life development. There are many education character values promoted to children such as values of environmental care, social, brave, tolerance, religiosity, cooperation, love, curiosity, etc. Therefore, the nature-based approach can be certainly used to embed character education value for children through an innovative and pleasant activity.

1 INTRODUCTION

The development of science and technology are becoming more advanced in this modern era. This is something that is expected to be good, but in fact, this rapid development may bring harms for human itself. One of the most crucial problems concerning human's life is the problem of environment such as global warming. The natural environment is assumed to be exploited as maximal as possible without considering the effects.

Children, in this case, are lack in knowledge and do not have any idea about the concern of nature. Therefore, teaching the children about environment preservation can be used as an effort in preserving the environment early. What students do at home is basically influence by what is told by teachers at school. In this case, school environment is the representative place to teach and build the values of character education. It is expected that later, these values can be implemented in daily and social life, particularly in taking care of the environment. Besides, the figures at schools are the third models for children to build their good character after the family members and the society.

The implementation of the values of environment preservation for children should be conducted by using attractive, fun model or media. By doing so, the students will be more engaged to the material of natural environment. Practically, this type of learning is conducted outside the classroom. Concerning this concept, (Sanjaya 2008) stated, "according to the characteristic of student-centered learning, the learning is possibly takes place everywhere since classroom is not the only one place students can learn".

In accordance with the implementation of nature-based learning, there is a significant point that should be considered. That point is the implementation of character education. According to Kurniawan & Hendarsih (2013), it is stated that nature-based learning has two main objectives; they are character building and behavior building.

Moreover, the Ministry of Education and Culture (Wibowo 2013) describes that character is the combination of moral traits and qualities formed by the internalization of several policies that is believed and used as the basic in deciding perspective, thought, and behavior. A person is claimed having good character when he/she has adequate understanding concerning his/her potentials and are able to manifest concretely the potentials into behavior.

It is explained by Zubaedi that character education in Indonesia is implemented based on nine basic principles of character that become the main objective of character education. Those principles are (1) love of God and the universe; (2) responsibility, discipline, and independent; (3) Honesty; (4) Respect and well-mannered; (5) Affection, caring, and teamwork; (6) Self-esteem, creativity, hard work, and passion; (7) Justice and leadership; (8) Humble and gentle; (9) Peace-loving attitude and unity. Meanwhile, Koesoema (2007) stated that there are eight values in character education such as value of significance, value of work, value of loving the homeland, value of democracy, and value of unity. Furthermore, Hidayatullah (2010) believed that there are about sixty nine values obtainable in character education. Some of them are justice, trust, forgiveness, expectation, wisdom, positive thought, virtue, bravery, skillful, intelligent, smart, caring, empowerment, democracy, generous, dynamism, discipline, efficiency, self-awareness, empathy, mutual cooperation, economy, and so on. Based on those theories of character education, it can be concluded that there are actually 18 values of character education which represents the whole process of character education that basically are dozens in amounts. Those eighteen values are religious, honesty, tolerance, discipline, hard work, creativity, independent, democracy, curiosity, spirit of nationality, loving home land attitude, appreciation, communication, peace-loving attitude, reading passion, caring of environment, caring of the social, and responsibility (Rahmawati 2014).

Muslich (2011) said that the objective of character education is to improve the quality of education implementation and to build complete, good character-oriented education result. In accordance to this objective, nature-based learning emphasizes more on learning process underpinned by the concepts of nature as the material, learning by the nature, and learning in the natural environment. It is done this way in order to make the students be familiar with the nature, and finally, make them love the nature and be able to preserve it. Nature school, in this case, is a type of school that emphasizes the learning more on the process instead of the result of learning. The learning processes in this type of school basically try to value any students' activity naturally. The paradigm of nature school is expected to be able to offer a better problem solving way concerning the problem of environment to face the global competition and industry.

2 RESEARCH METHODOLOGY

Research approach that is used in this study is qualitative descriptive research since this study aims to describe verbally the information concerning the study. The technique of analysis the data is inductively done in which the analysis is not conducted to test or prove a prediction or hypothesis, but to describe the theory and conclusion based on the data collected during the study. The data are collected from various sources. The collected data are completely used along with the underpin theories in understanding and drawing conclusion (Sutopo 2006).

3 DISCUSSION

The implementation of nature-based learning in the first stage is by mapping the theme for students. The theme mapping is conducted by considering several aspects such as (a) the themes are chosen from students' surrounding environment, (b) the themes is gradually chosen from the simplest to the more complex theme, (c) the themes are chosen based on what students are interested to, (d) scope of the themes should cover all aspects of students; development, and (e) the themes are developed based on the natural sources of learning.

Broadly speaking, there are six natural elements of learning sources in nature-based learning. Those

elements are earth, water, air, fire, space, and natural phenomena. Learning sources about earth include living things like human, animals, and plants and also inanimate objects such as ground, sand, stone, mud, and clay, in which those objects are supposed to be dug, mixed, built, and carved. Meanwhile, using the learning sources concerning the water is by exploring puddles and creek, and by making use of pump and waterwheel. For the concept of air-based learning sources, it can be applied by using sound, simple propeller, rainbow and bubble. The next learning source is using fire. What are included in this element are using the shadow during sunny day, sundial, and mirror to reflect the light of fire. Space-related elements in nature-based learning refer to the naked eyes visible elements of space such as sun, moon, stars, rainbow, and sky. Meanwhile, the last learning source related to the nature is the natural phenomena. It refers to natural phenomena that happen in students' surrounding area. For example, dry season, rainy season, and natural disaster. In this case, students are introduced to those several phenomena so that they can identify what phenomena happen or available in their surroundings.

Media used are different, reviewed from implemented nature-based learning media such as humans, animals, plants, stones, soil, water, air, fire, moon, stars, and clouds. It also includes natural phenomena in Indonesia such as rain, hurricanes, floods, etc.

According to Moore (2014), it is stated that nature always offers educational context for interdisciplinary approach using various subject areas, including learning about nature. Based on the use of student learning resources in natural-based schools, the majority utilizing nature and its content can be directly inserted values of character education, essentially and naturally. Relevant character education values implemented into natural-based schools learning process are a strong belief in Allah, loving environment, nationalistic, being creative and independent, curious, cooperative, and skillful.

By developing learning resources of nature-based learning process and character education values in a harmony, it will educate children who have real experiences; good understanding to environment; opportunities to learn according to their age development; knowledge of nature sustainability; interaction with adults and peers. It will also enrich children's knowledge of religious, physical, motor, language, social, emotional, and art values development. The majority of mini-school-based learning process is implemented with a variety of fun activity innovations to attract students to learn. In line with this, Jackman (2001) stated that playing is the essence of developmentally appropriate practice (DAP). DAP is a learning that is appropriate with the stage of child development. Playing basically provides opportunities for creative, discovering, knowing, and learning about the world. Playing in this case can also give children pleasure and help them to know themselves and their surroundings.

In the implementation of nature-based learning is surely required a method of learning based on fun nature-based learning method. It is a method to construct the natural concept that is just discovered by children from their natural learning sources. Children are expected to be able to construct their learning experiences in the neighborhood with the help of adults or peers. In addition, certainly, it can also use a nature-construction-playing method where this method is a learning method with structured-game, building stuff from natural materials such as sticks and stones, which allows cost-saving because the objects are arranged around the environment.

Furthermore, the principles of assessment in this natural-based learning process, among others, are comprehensive, in which assessments are conducted on all aspects of child development such as religious values, moral values, cognitive, language, social, and physical motor. Further assessment is continuous where the assessment process is carried out continuously using appropriate methods and tools or instruments. Objective, it means that assessment is done in accordance with existing conditions. Authentic, it means that this case is in accordance with daily children condition and it is integrated with the learning process.

Educative, it means that the assessment should have educational values. Therefore, it can educate, for children, educators, parents and the observers. The last is meaningful. It should be useful, serious or important.

Based on the results of the study on the implementation of natural-based learning, there are several findings that can be revealed based on aspects of cognitive, psychomotor and affective. Students enrolled in this natural-based school get some advantages. In the cognitive domain, students' cognitive abilities are developed significantly in advance rather than their counterparts of

conventional school. For the psychomotor domain, students' development is more advance because students can explore many things when participating in outdoor learning process. Of course, it is supported by teacher's guidance and adequate facilities. This excellence of psychomotor aspect is one of the best benefits of the implementation of a natural-based school. In this case, children seem to be more active when learning outside the classroom. Furthermore, affective aspect of children is also significantly developed because the children's attitudes and its application in real life are straightforwardly directed during the real activity of outdoor learning.

Beside those three aspects mentioned above, another advantage of natural-based learning is that students are able to be autonomous learners with good problem solving ability. It is shown by the students' attitude when they encounter problem or difficulty. For example is when a student's handkerchief is wet due to water spillage. In this case, a student with good problem solving ability will solve this problem spontaneously by hanging the handkerchief on stairs handle or on a bush to make it dry quickly. This problem solving action is performed by the student without asking or even waiting for instruction from the teacher. Another problem solving action mostly performed by students during the outdoor learning process is their initiative to put the scattered garbage to the trash bin. This action is spontaneously performed without asking or waiting for the teacher's instruction. Thus, it can be concluded that this nature-based learning process may significantly develop children's skills and attitudes. Therefore, the character education values contained in nature-based learning process are value of loving the homeland, caring with the environment, caring with others, caring with plants, caring with animals, caring with the nature, discipline, honesty, well-mannered attitude, and so on.

Conversely, based on the results of this study, it is found that the assessment aspect in the application of natural-based learning for early childhood education is not well-developed yet. Actually, the assessment form is already formed as description, but on the other hand, it is not representative enough since the inputs are conducted manually. Simply, it can be said that this matter becomes one of the limitations in applying nature-based learning process. Another findings found in the study is that the natural learning model in the natural-based school can positively improve the quality of early childhood learning as it becomes more active learning. In addition, students may have good social skills and more developed cognitive abilities along with their social awareness during the learning process. This is certainly in sequence with the learning purpose of early childhood education, which is to conduct a fun learning process that full of enjoyment.

4 CONCLUSION

Based on described literatures regarding nature-based learning as an effort to instill the value of children character education, it can be concluded that the use of student learning resources in natural-based schools isthat the majority utilizes nature and its contents.It naturally can be put into character education. Relevant character education values implemented into natural-based schools learning process are a strong belief in Allah, loving environment, nationalistic, being creative and independent, curious, cooperative, and skillful.

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