

Urgency of Adiwiyata School for education as sustainable development

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ABSTRACT

This research is intended to be understood; 1) the urgency of education as an environmentally sustainable development; 2) the background of implementing the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta; and 3) the implementation of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta. The research used in this research is qualitative research. The research subjects were the chief coordinator of the adiwiyata team, and the teacher. Determination of research subjects is done by purposive sampling technique. Data collection techniques were carried out using interview, observation and documentation methods. This type of data analysis uses the Milles & Huberman model, namely reduction, data display, and drawing conclusions/verification of data. The results of this study are; 1) The concept of sustainable development is related to ethical issues, the discussion of the concept of sustainable development in the future (future) and also focuses on the problem of welfare (poverty); 2) There are a number of things underlying the implementation of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta, both the overall background, philosophical, geographical, juridical, both organizational background; and 3) To support the growth of the values of attention problems in SMP Muhammadiyah 3 Yogyakarta can use four aspects of the Adiwiyata program, such as environmentally sound policies, implementation of environment-based policies, participatory based planning activities and management of environmentally friendly supporting facilities.

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1. INTRODUCTION

Education for sustainable development is very important for all nations (the world) and cannot be delayed anymore. The responsibility of each nation to support awareness and build a nation that supports to support development [1]. Education for sustainable development (ESD) or also called continuing education for certain countries is a key concept of education in the new millennium [2].

Sustainable development can be achieved through education, because education is a means to change people's perceptions, attitudes and ways [3]. The Johannesburg Johannesburg Summit, broadening the

vision of sustainable development and re-supporting educational goals in the millennium development goals and education for all education for all that was sparked in the Dakar framework, and calling for the Decade of Education for sustainable development (Decade of Education for Sustainable Development)/DESD [4]. The UN in the general session at the 57th session in 2002 declared the 2005-2014 period as DESD. UNESCO appointed to guide this publication can play a key role in developing quality standards in education for sustainable development [5].

Indonesia responded positively to the discourse of the decade of education for sustainable development (DESD) [6]. The Ministry of National Education places education for sustainable development (Education for Sustainable Development) as one of the paradigms of education in Indonesia, namely education produces noble people who are a blessing for the universe [7]. Such a human being fulfills his needs by paying attention to the needs of current and future generations (intergenerational sustainability) [3]. This paradigm invites humans to think about the sustainability of planet earth and the sustainability of the entire universe [8]. Education must foster an understanding of the importance of ecosystem sustainability and balance, namely the understanding that humans are part of the ecosystem [1]. Education must provide an understanding of the values of social and natural responsibility to give a picture to students that they are part of a social system that must synergize with other humans and parts of the natural system that must work together with nature and all of its contents [9]. With these values, a critical understanding of the environment (social and natural) will emerge and all forms of intervention on the environment, both good and bad, including development [2]. For this reason, one of the efforts the government has taken to support the achievement of sustainable education goals is the existence of the adiwiyata program [10, 9].

In 2006 the government launched the adiwiyata program as an effort to accelerate the development of environmental education, especially in the formal education channel [11]. The adiwiyata program is aimed at encouraging and forming environmentally friendly schools that are able to participate in carrying out environmental preservation and sustainable development for the benefit of present and future generations [12].

As a token of appreciation in the adiwiyata school program implementation, in 2017 the Ministry of the Environment awarded the environmental love award to national adiwiyata schools that actively participated in environmental protection and management to 423 schools that care and are cultured in the environment, both at the District/City, Province level and National [13]. The award was presented by the Minister of LHK, in this case represented by the Head of the Ministry of Education and Human Resources Development and Development Agency (BP2SDM), Helmi Bassalamah, accompanied by the Expert Staff of the Minister for Innovation and Competitiveness of the Ministry of Education and Culture (Kemendikbud), Ananto Kusuma Seta, in a series of the Indonesian Youth Defending Environment event (GEMILANG), in Jakarta [14]. They are considered to inspire and play an active role in efforts to preserve the environment, plants and endangered animals [15]. The government hopes that through this program the sensitivity of the younger generation to care for the environment can be realized [13, 16].

The caring attitude of students towards the environment is one of the characters that needs to be developed in the educational environment [17]. This concern can also be formed through school culture. According to Kurniawan [18] "the concern of students to the environment can be formed through a conducive school culture" [19, 20]. Meanwhile, according to Deal and Paterson [21] that school culture is a group that underlies the behavior, traditions, daily habits, and symbols practiced by students, teachers, staff (management and administration) and the community around the school [20]. Adiwiyata school program is part of the growth of school culture (School Culture) [22, 23].

SMP Muhammadiyah 3 Yogyakarta is one of the junior high schools that supports the achievement of environmental character education. This can be seen in the vision of SMP Muhammadiyah 3 Yogyakarta, namely "The realization of students of faith, excellence in achievement and environmental insight" [24]. Before establishing as an adiwiyata school, SMP Muhammadiyah 3 had already participated in various activities related to the love of the environment. SMP Muhammadiyah 3 Yogyakarta implements adiwiyata school program which aims to form environmental care characters for students and develop environmental care characters for students through various activities at school, one of which is the animal lovers community where in this community students are introduced to various endangered animals and also how to care for them, such as cleaning bird cages that have been scheduled for students who follow the community. The purpose of the establishment of SMP Muhammadiyah 3 Yogyakarta as an environmentally friendly school is to equip them to be trained to always preserve the environment and make improvements to the environmental damage that has occurred and if after graduating from school it is expected to become a person who is able to apply it outside the school environment.

Based on the description above, the researcher would like to conduct a deeper analysis study regarding the Urgency of the Adiwiyata School for Education as Sustainable Development. The formulation of this research problem are: 1) How is the urgency of education as an environmentally sustainable

development; 2) What is the background of the application of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta; and 3) How is the implementation of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta?

2. RESEARCH METHOD

SMP Muhammadiyah 3 Yogyakarta is located on Jalan Piere Tendean Street No. 19 Wirobrajan, City of Yogyakarta, Special Region of Yogyakarta 55252. This school was chosen because it received the title of adiwiyata school in 2014. Besides Muhammadiyah Middle School has other privileges, likewise SMP Muhammadiyah 3 Yogyakarta is also known as a school that has a lot of cooperation with schools outside country. Among them are Japan, South Korea, Thailand, Malaysia and Singapore. While being a project for Muhammadiyah schools, it was distributed in various activities. Now SMP Muhammadiyah 3 Yogyakarta also opens bilingual classes, IT-based schools and develops Model School Networks. However, SMP Muhammadiyah 3 Yogyakarta still has characteristics as an environmentally friendly school.

The vision of SMP Muhammadiyah 3 Yogyakarta is: "The Creation of Faithful Students, Excellence in Achievement and Environmental Insight". The mission of SMP Muhammadiyah 3 Yogyakarta, namely: a) Fostering appreciation and practice of the teachings of Islam through learning iqro, tadarus Al-Qur'an and dhuhur prayer in congregation at school; b) Foster a spirit of discipline in all aspects; c) Encourage students to improve their English language skills, Scientific Writing, PTD and Computers; d) Encourage students to recognize their potential and increase creativity in the arts and sports; e) Increase effective learning, complete minimum is achieved with 100% graduation; f) Increase awareness of the environment with the green movement; g) Applying healthy and environmentally friendly behavior and h) Building the character of students who care about the environment and clean culture.

The research approach used in this study is a qualitative approach. The reason for using this method is because they want to understand and describe urgency of adiwiyata school for education as sustainable development. In this study, the subjects of the study is adiwiyata team coordinator leader and teacher. From the subject of this research, it is expected to obtain complete data on the urgency of adiwiyata school for education as sustainable development. Determination of the subject of the study was carried out by purposive sampling technique. According to Sugiyono [25] purposive sampling, namely the technique of sampling data sources with certain considerations. This particular consideration, for example, the person who is considered to know the best about what we expect, or maybe he is the ruler so that it will be easier for researchers to explore the object /social situation under study.

Data collection techniques are carried out by using interview, observation and documentation methods. First, in-depth interviews guided by interview guides and non-structural. The interview is the primary data in this study. The interview was intended to obtain data by asking questions about everything to the informant about urgency of adiwiyata school for education as sustainable development. Informants interviewed were adiwiyata team coordinator leader and teacher. Second, observation. Observations were made to obtain information about urgency of adiwiyata school for education as sustainable development. Observations made are formal and informal. Third, the method of documentation. The documents studied are texts and photos of the activities the teachers of SMP Muhammadiyah 3 Yogyakarta. The texts are in the form of school profiles and other notes relating to the teacher. While the photo and recording documents provide visual information about the practical activities the teachers of SMP Muhammadiyah 3 Yogyakarta.

In this study the type of data analysis uses the Miles and Huberman models, namely the activities in qualitative data analysis is carried out interactively and take place continuously until complete so that the data is saturated. Activities in data analysis, namely data reduction, data display, and data conclusion drawing/verification. Three main activities are interrelated and carried out simultaneously, namely data reduction, displaying data and completing conclusions or verifying data, namely as follows Figure 1 [25]:

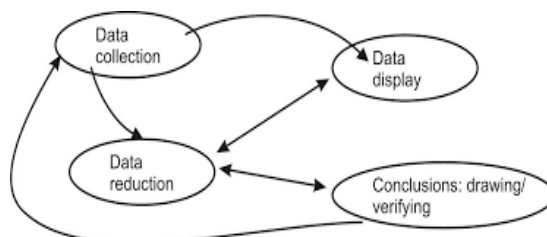


Figure 1. Technique of data analysis in the model of Miles and Huberman

3. RESULTS AND DISCUSSION

3.1. The urgency of education for sustainable development

Sustainable development is the ideal of national development for all countries in the world, including Indonesia. Education for sustainable development is a teaching-learning approach that empowers people of all ages with the responsibility to create and enjoy a sustainable future. Education for sustainable development prepares all levels of society to plan, deal with and find solutions to problems that threaten the sustainability of the planet and drive behavior change for a sustainable future. Thus, the concept of sustainable development is closely related to ethical issues, bearing in mind that the concept of sustainable development is future-oriented and also focuses on the problem of poverty. This concept is very concerned about the welfare of the next generation.

The sustainable development achievements compiled by the United Nations have 17 indicators of the UN-SDGs version, one of which is quality environmental education [26]. One of the things that the Indonesian government has done to support the creation of quality environmental education is by creating a Adiwiyata school program. The Adiwiyata school program is a program of the Indonesian Ministry of Environment in supporting the creation of awareness of school residents in protecting and preserving the environment [27]. The Adiwiyata program needs all of our attention because we see a phenomenon that we really feel, namely "the Earth is getting hotter and more damaged" so that the environment we live in is no longer comfortable [28]. Therefore, the Adiwiyata school program must be of particular concern to all of us. One of the supporting factors in implementing the Adiwiyata program in schools is by mobilizing all school members to participate actively, providing socialization on the importance of the Adiwiyata program for environmental and earth sustainability, providing understanding to school members of the importance of environmental sustainability and making activity plans that support the Adiwiyata program [29].

Not only that, routine habituation, modeling, learning while doing and teachers integrate material with the concept of the importance of environmental education are also effective ways to support the achievement of the Adiwiyata school program [30]. Of course, this educational influence has an impact on increasing knowledge and skills and will help in the formation of positive attitudes and behaviors. Environmentally friendly behavior can be shaped according to expectations. Where the way of forming behavior according to expectations is determined by three things, namely: the formation of behavior with habits, the formation of behavior with understanding and the formation of behavior with models or examples.

3.2. Based on background above the implementation of Adiwiyata School in SMP Muhammadiyah Yogyakarta

The implementation of the Adiwiyata school program historically began in 2012 which was already an Adiwiyata school but only in 2014 was officially established as a Adiwiyata national school. But before it is established as the SMP Muhammadiyah Yogyakarta, it follows the Go Green School, healthy school competition, greening movement, then all school members must adopt healthy and environmentally friendly behavior.

Philosophically, the implementation of Adiwiyata School in SMP Muhammadiyah 3 Yogyakarta based on the line of thought and agreement with all school staff, together have a commitment to prioritize educational programs related to character development, especially the environmental care character of students.

Sociologically the application of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta is from the community environment at SMP Muhammadiyah 3 Yogyakarta very heterogeneous, such as traders, food vendors, community leaders and so forth. The location of SMP Muhammadiyah 3 Yogyakarta on the edge of the highway does not have a large area. To overcome the noise in the teaching and learning process the room in front (near the highway) is not used for teaching and learning activities.

Juridically the application of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta is listed in the vision and mission of the school, which is "The realization of students who have faith, excel in achievement and environmentally friendly". While its mission is to foster appreciation and practice of the teachings of Islam through learning iqro', tadarus Al-Quran and midday prayers in school, foster a spirit of discipline in all aspects, encourage students to improve English language skills, scientific papers, PTD and computers, encourage students to recognize their potential and enhance creativity in the arts and sports, increase effective learning, complete minimally achieved with 100% graduation, increase environmental stewardship with greening movements, apply healthy and environmentally friendly behaviors, build students' character to care for the environment and be cultured clean.

Organizationally, the implementation of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta is also the support of the Muhammadiyah organization. The stipulation of Yogyakarta Muhammadiyah 3 Junior High School as an adiwiyata school was appointed from the City Environment Agency as a participant in the adiwiyata school. Then after the requirements are met, progress to the

provincial level, and if it has passed the provincial selection, it will advance to the National level. So the Muhammadiyah Organization here only acts as a forum that provides a place.

3.3. Implementation of the Adiwiyata School program at SMP Muhammadiyah 3 Yogyakarta

Policies in schools based on the environment can be seen from the vision, mission and goals of the school. The vision of SMP Muhammadiyah 3 Yogyakarta is "The realization of students who are faithful, disciplined, skilled, superior in achievement and environmentally friendly". The environmental element in the SMP Muhammadiyah 3 Yogyakarta mission is seen in the sixth, seventh, and eighth points of "Increasing awareness of the environment with the greening movement, Applying healthy and environmentally friendly behavior, Building the character of students caring for the environment and clean culture. The curriculum structure contains preservation of environmental functions, preventing pollution, and environmental damage. And there is a minimum completeness of learning in compulsory subjects or local content related to the preservation of functions or the environment, preventing pollution or environmental damage.

The implementation of an environment-based curriculum at SMP Muhammadiyah 3 Yogyakarta can be seen from educators who have competence in developing environmental learning activities. Educators apply methods that involve students actively through effective learning and PAIKEM (active, innovative, creative, effective, and fun learning) and develop learning strategies, educators develop learning indicators and assessment instruments related to PPLH (law concerning environmental protection and management), educators draw up learning designs related to PPLH, the percentage of educators involving people parents of students and the community related to PPLH, the results of environmental learning innovations are communicated a number of 1-3 media (school bulletin, school bulletins, exhibitions, web-sites), educators are able to master the concepts and are able to apply these concepts in solving environmental problems, students produce real work related to PPLH (recycled products, pictures, poems or papers), students have the ability to solve environmental problems (assignments given by each teacher), students communicate the learning outcomes.

Participatory-based environmental activities are carried out by carrying out planned environmental protection and management activities for school residents, namely by involving school residents in the maintenance of buildings and school environments (daily picket assignments, weekly picket assignments, plant caring tasks, cleaning competitions), schools utilizing land and school facilities according to the rules of PPLH (parks, lawns, green houses, small ponds, composter), extracurricular activities that are used for learning related to PPLH (animal lovers community, self-development making used goods), classification of creative activities and innovations from residents schools in the effort of PPLH, participate in environmental action activities carried out by outside parties.

Management of supporting facilities at SMP Muhammadiyah 3 Yogyakarta, which is seen by the availability of infrastructure facilities to overcome environmental problems in schools in accordance with the standards of facilities and infrastructure (clean water, rubbish bins, composters, waste water bins, sapti tanks, RHT, music rooms that are equipped with sound absorbers), facilities and infrastructure to support environmental learning (composter, green house, toga, fish pond, biopore, impregnated well), facilities and infrastructure according to their function (the room has natural light and air ventilation, tree maintenance and regulation shade, using paving blocks, efficient use of electricity, water, and ATK (saving paper assignments using the web-site, saving markers using LCD, no drop box), the canteen makes efforts to improve the quality of canteen services.

4. CONCLUSION

Based on the results of the research and discussion above, conclusions can be drawn. First, educational innovation is important to anticipate the increasingly severe environmental damage, social crisis and cultural crisis. Education with a paradigm of sustainable development is not intended to change the situation for the better instantly and quickly, but aims to prepare the lives of future generations that are better, safer and more comfortable. This is the essence of ESD which is a manifestation of the understanding that education is a long-term investment vehicle for the creation of a better life. The keyword of concern lies in the words attitude and behavior where the attitude and behavior are related to each other. Attitudes in the form of knowledge (cognitive), affection (feeling) and psychomotor (action) verbally. While behavior is a real form of action. Second, SMP Muhammadiyah 3 Yogyakarta is a school that implements the Adiwiyata school program or environmentally friendly school, which makes this school look different from junior high schools in general. There are a number of things that lay behind the implementation of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta, both historical, philosophical, geographical, juridical and organizational backgrounds. Third, to support the implementation of the adiwiyata school program at SMP Muhammadiyah 3 Yogyakarta using four aspects of the Adiwiyata program, such as environmentally sound

policies, implementation of an environment-based curriculum, participatory-based environmental activities and management of environmentally friendly supporting facilities.

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