

Integration of Environmental Education in Eco Pesantren Daarut Tauhiid Bandung

Emtizal Saprodi ¹, Prof. Dr. Wanjat Kastolani, M.Pd², Dr. Epon Ningrum, M.Pd³

¹ Student of Geography Education Program, School of Postgraduate Study, Indonesia University of Education, Jl. Dr. Setiabudi No. 229, Bandung 40154, Indonesia. Emtizal21@gmail.com

² Geography Education Program, School of Postgraduate Study, Indonesia University of Education, Jl. Dr. Setiabudi No. 229, Bandung 40154, Indonesia. wanjatkastolani@upi.edu

³ Geography Education Program, School of Postgraduate Study, Indonesia University of Education, Jl. Dr. Setiabudi No. 229, Bandung 40154, Indonesia. eponningrum@upi.edu

Abstract

Environmental care is a characteristic that must be owned by everyone. For this reason, schools are required to develop an attitude of caring for the environment through curriculum and learning. The purpose of this study was to determine the integration of environmental education in eco-schools in Daarut Tauhiid Bandung, to find out the implementation of the eco boarding program in eco boarding schools, and to find out the evaluation of the integration of environmental education in eco boarding schools. The method used is descriptive. The research variables are environmental education, eco boarding program, environmental care attitude. The research instrument uses observation, interviews, and documentation. Data analysis uses descriptive. The research results show; integrating environmental education in eco boarding schools through three ways namely; first, the integration of environmental education through the national curriculum namely; human resource improvement, training, outreach, manuals, and programs. Integration through boarding school curriculum namely; Clean, Neat, Orderly and Organized Program (BRTT) and Clean, Green and Flowering (Berhiber) Program. Integrating environmental education through learning. Based on this, the researcher recommends that the implementation of environmental education and eco boarding school programs in schools can touch with balanced the cognitive, affective and psychomotor aspects of students.

INTRODUCTION

Environment for humans is one of the important things in life and even the environment that can truly provide convenience for a living is essentially very limited in extent. This limitation becomes even more limited due to environmental problems. According to Soemarwoto (2004) defines the environment as a place where living things with all their survival. Along with the development of time and increasing human activities, environmental damage tends to get worse and trigger an increase in the number of events and intensity of hydrometeorological disasters (floods, landslides, and drought) that occur in turns in many parts of Indonesia. Recorded in 2017 with 2,341 catastrophic events, which dominated the catastrophic events of 2016, which were floods, followed by tornadoes and landslides, disasters in 2017, more than 3.49 million displaced and claimed 377 lives and damaged more than 47 thousand housing units BNPB (2017)

The cause of environmental problems lies in the socio-cultural and socio-economic environment of humans. Therefore according to Soeriaatmadja (2000, 116), it is these people who need environmental education so that the quality of the environment is not damaged worse and natural resources are not increasingly scarce. The implementation of environmental education is a commitment of the community and international governments in protecting the earth and pollution and damage is the key to preparing people with knowledge, expertise, values, and attitudes to care about the environment so that they can actively participate in solving environmental problems

Ozsoy, et al., (2012) This basic environmental problem is the responsibility of all, not stopping at the call of course, but there must be a real step from each individual responsible for this, according to Keraf (2014) to face environmental challenges on earth, what is needed is to change patterns and community lifestyle to realize environmentally conscious individuals. Environmental problems are expected to be the responsibility of all parties, governments, academics and the role of religious leaders, because this has become a problem of humanity globally, which will affect the lives of creatures for now and in the future. Similarly, the role of many people and the private sector to ensure environmental conditions can be maintained and not fully damaged again for the implementation of sustainable development, namely conscious and planned efforts, which integrate the environment, including resources, into the development process to ensure capability, prosperity, and the quality of life of present and future generations (Saragih, 2000).

Many parties have even started a good environmental concept in the community that forms a community that cares about the environment, the government starts from various programs such as green cities, eco campuses, eco-schools, *go green* adiwiyata, eco boarding schools, etc. From the various programs up to now, it still runs quite well, although there are some deficiencies both from the government or the community itself, the success of a program is that all parties must work together to achieve these goals, but herein lies the problem that government programs do not to the people, or the lack of socialization from the government, which ultimately the programs did not last long and were replaced with new programs. So, it does not rule out the possibility that disasters, especially in Indonesia, still often occur due to human activity itself, both from small things and even bigger problems. One such effort is to apply the concept of Eco-boarding schools, an eco boarding program launched by the Ministry of Environment and Forestry. Harper (2008) states that a belief about thoughts and actions that connect between religion and the environment is called eco-theology or sometimes called *eco-spirituality*.

The Ministry of Environment and the Ministry of National Education collaborate in efforts to protect and manage the environment. The provision of education about the environment in Indonesia is contained in the Environmental Education (PLH) program which is carried out in schools ranging from elementary schools to secondary and vocational schools. Law Number 32 of 2009 concerning Environmental protection and management in General Provisions Article 1 number 1 states, the Environment is a unitary space with all objects, power, conditions, and living things, including humans and their behavior, that affect nature itself, continuity of life, and the welfare of humans and other living things. The environment and education are two things that can not be separated, they both influence one another. Humans cannot live without a healthy environment, therefore education on the importance of managing and protecting the environment is needed. Education is believed to have a strategic role to foster environmental care, values, morality, and skills that support sustainable development (Maryani, 2015, p. 5), Education which is one of the important aspects in life becomes one of the important highlights in environmental development. Environmental education is the main framework for realizing people who care about the environment, sustainability and biodiversity protection of Saito (2013).

Specifically, about environmental education (PLH) Education provides a special place for the environment to be able to play a role in advancing the standard of living of people so that currently always launched in education how to protect and care for the environment. One of the main aspects of advancing environmental education is to develop an existing environmental curriculum (Tara, 2013). Based on the conceptual it can be stated that to change people's paradigms and behavior, it can be done by providing understanding to the community about the environment and concepts

ecological concepts through Environmental Education (Mulyana, 2017, p.17) Education is one of the tools to change human attitudes.

According to Chen (2008) states that environmental education is a very important tool in providing knowledge, positive attitudes towards the environment and building skills to protect and improve the quality of the environment. In environmental education, according to Suraida (2013, p. 2), there are efforts to lead individuals towards lifestyle changes and environmentally friendly behavior. That the purpose of environmental education changes attitudes. According to UNESCO in Afandi (2013) that the purpose of environmental education is to help explain the problem or concern and attention about the interrelationships between economic, social, political, ecological issues in cities and in rural areas to provide opportunities for everyone to develop knowledge, values, attitudes, commitments, and the capabilities needed to protect and improve the environment, and to create new patterns of behavior in individuals, groups, and communities as a whole to the environment. Therefore according to Syahri (2013, p. 93), environmental education should be developed based on the basic concepts of the environment which are applied in all types and lines of education from elementary school to tertiary education, while according to Sullivan in Bezzina (2006) states that the environmental crisis is a social problem and not merely a natural thing. Environmental Education has a very important role in dealing with environmental problems that arise today.

One way to shape these characters, academically, of course, the answer is only one, namely "education". Education makes it possible to shape the character as a human being as expected by Hamzah (2013). Meanwhile, according to Tadkiroatun Musfiroh in Sulistyowati (2012: 20), mental attitude and behavior can be called character. Character can be interpreted as the character, character, character, and personality of a person that is formed from the results of the internalization of various virtues (virtues) that are used as a basis for perspective of thinking and acting, and acting. Caring for the environment is an attitude and action that always seeks to prevent damage to the surrounding natural environment and develop efforts to repair natural damage that has occurred as for the indicators of environmental care according to Nenggala (2007). In environmental education can be integrated into integrated learning. The term integration has the meaning of assimilation or the union of different elements so that it becomes a whole or rounded unity. Literally, integration is opposed to separation, an attitude that puts each field in different boxes (Bagir, 2010) At the junior high school stage there is already something related to the environment, namely natural science (IPA) courses, in secondary schools the upper level (high school) is taught a special way namely geography subjects, but in general environmental education (PLH) in elementary, junior and senior high schools is still minimal Winarno et al., (1994).

Concrete actions that can be carried out as stated by Keraf (2010) include promoting tree planting activities in schools and neighborhoods, reducing water use, electricity and motor vehicles, monitoring snacks sold in school canteens, saving the use of books and stationery, and other activities that have a positive impact on environmental preservation efforts. As stated by Siombo (2011, p. 429) that in every rural community throughout Indonesia there is 'wisdom' in interacting with nature. Initially in the understanding of 'religious religious', it still becomes a link that nature has given life so it needs to be preserved and preserved.

From the statement above, it is no different from the problems faced by Daruut Tauhiid Islamic Boarding School in Bandung, where the Daarut Tauhiid Boarding School High School Putra who are in the boarding school environment is one of the objectives to form students who love the environment with the existence of environmental education in high school. specifically regarding environmental education, making environmental material focused on each subject,

study/ tausiyah and most importantly the students' work/teacher as well as teaching environmental education material to students both at school and outside of school.

Problem Formulation. Based on the background of the problems above, the formulation of the problem in this study are;

1. How to integrate environmental education in Eco Pesantren Daarut Tauhiid Bandung?
2. How is the implementation of the Eco boarding program at the Daarut Tauhiid Bandung Islamic Boarding School?

The purpose of this study is;

1. To find out the integration of environmental education in Eco Pesantren Daarut Tauhiid Bandung
2. To find out the implementation of the program at Daarut Tauhiid Bandung Islamic Boarding School

RESEARCH METHOD

In this paper, the research method used is the descriptive method chosen because the researcher only intends to present data systematically, factually, and accurately about the facts and the meaning of phenomena in the field. Descriptive research is research that describes a situation or event, does not seek or explain relationships, does not test hypotheses or make predictions. Research location in Daruut Tauhiid Bandung Islamic boarding school, Eco Pesantren is located on Jalan Cigugur Girang, Parongpong District, West Bandung Regency, West Java, Indonesia. The research instrument uses observation, interviews, and documentation.

DISCUSSION

Environmental education is one of the efforts to create a generation of environmental awareness who will become the perpetrators and guardians of sustainable development in the future, especially regarding environmental education. Education provides a special place for the environment to be able to play a role in advancing the standard of living of people so that today is always launched in education on how to maintain and care for the environment.

This research is about the integration of environmental education, the implementation, and evaluation of environmental education in Daarut Tauhiid *Boarding School* Putra Bandung's.

Integration of Environmental Education in the Curriculum

First, Implementation of learning models across subjects Emphasis on sustainable management of natural resources and the environment. Issues or related material are: Management of water resources, management of land resources, management of air resources, management of marine and coastal resources, energy and mineral resources, conservation of endangered animals/plants, biodiversity, and spatial planning. Joseph Cornell, a natural (*educator nature educator*) who is famous for the game in nature that he developed is very understanding of this psychology. The integration model of environmental education in the high school curriculum is based on four pillars of education, namely: *learning to know, learning to do, learning to live together and learning to be*. *Second*, the development of environmental education in line with this, the directorate general of primary and secondary education (Dikdasmen) Ministry of Education and Culture should also encourage the development and stabilization of the implementation of environmental education in schools, among others through teacher upgrading, promotion of environmental services month,

preparation of education implementation manuals environment

Table : Integration of Environmental Education in Curriculum

No.	Curriculum	Integration of Environmental Education
1	Policy on increasing human resources	Training, socialization, encouraging environmental service, preparation of Guidelines for Implementation of Population and Environmental Education (PKLH) for Elementary, Middle School, High School, and Vocational Schools
2	Implementation of cross-subject learning	models The integration model of environmental education in the high school curriculum is based on four pillars of education, namely: learning to know, learning to do, learning to live together and learning to be. the existing subjects have environmental education content especially subjects oriented to moral targets such as Pancasila and Citizenship Education subjects and Religious Education subjects which are presented from primary, secondary, to tertiary education levels.
3	Implementation of the curricular activities of	the Adiwiyata program, based programs environment

Integration of Environmental Education in the Islamic Boarding School Curriculum

First, the policy of developing a nature-based curriculum. The efforts made by the Daarut Tauhiid High Boarding School Putra in developing a nature-based curriculum are a learning model that integrates environmental education and the development of environment-based learning methods.

Second, the Eco Pesantren program policies, namely the Clean, Rapih, Orderly and Organized Program (BRTT) and the Clean, Green and Flowering (Berhiber) Program Based on interviews with the vice-principal in the development of the environmental education curriculum at Daarut Tauhiid Boarding School Putra

1. The Clean, Rapih, Orderly and Organized Program aims to make the pesantren community including the Daarut Tauhiid High Boarding School Putra. The Integrated Waqf Area of Daarut Tauhiid (DT) is increasingly visible. Starting from pilgrims who recite, pray, and carry out other positive activities. In the environment of the Eco Pesantren, waqf assets are not only prosperous with recitations, the Santri High School Daarut Tauhiid Boarding School (DTBS) is directed to implement Clean, Rapih, Orderly, Regulated (BRTT) in the afternoon.
2. The BERHIBER program in the Daarut Tauhiid Islamic Boarding School is known for its Clean, Green, and Homely (BERHIBER) culture, things like this can not be separated from the seriousness of Daarut Tauhiid himself in implementing the BERHIBER culture in the DT Ponpes environment, thus often making students, worshipers, and even worshipers. other general residents feel at home for a long time in the Ponpes DT neighborhood, both in the Gegerkalong area and in the Eco Pesantren area.

Table : Integration of Environmental Education in Islamic Boarding School

No	CurriculumPesantren Curriculum	Environmental Education Integration
1	Policy	Nature-based curriculum development Development of extracurricular activities
2	Eco Pesantren Program	Clean, Neat, Orderly and Organized (BRTT) Program Clean, Green and Flowering (Bertiber) Program

Integration of Environmental Education in Learning at Daarut High School Tauhiid Boarding School Putra

On the subject of specialization in science namely biology, physics, chemistry, mathematics and Civics in high school, competency standards to be developed in the syllabus of learning can also provide equipping students to develop knowledge competencies, attitudes, and behaviors towards the environment.

On the subject of specialization in social studies, namely geography, sociology, economics, history and citizenship, the intended achievement of competence in understanding facts, concepts and generalizations about social and cultural systems to: develop critical attitudes in social situations as a result of differences in society, determine attitudes towards the process of development and socio-cultural change and respect for socio-cultural diversity in community culture. Realizing national unity based on Pancasila and the 1945 Constitution, accustoming to meeting norms, enforcing laws and implementing regulations, participating in realizing a democratic society and government, upholding, implementing and respecting human rights. Based on competency standards, environmental material related to social subjects and citizenship in schools can provide positive knowledge, attitudes and behavioral competencies on the environment.

Table: Structure and content of the curriculum at the high school level

No	Subject	Competencies
1	Groups of religious subjects and noble morals This	group of subjects is intended to shape learners into human beings who believe in and have faith in God Almighty and have good morals that include ethics, manners or moral as an embodiment of religious education.
2	Groups of citizenship and personality	subjects This group of subjects is intended to increase the awareness and insight of students on their status, rights, and obligations in social life, the nationhood of these subjects is intended to increase awareness and state and to improve the quality of himself as a human being.
3	Group of science and technology	subjects This group of subjects is intended to recognize, respond to and appreciate science and technology and instill the habit of thinking and behaving in a critical, creative and independent manner.

4	Group of aesthetic	subjects This group of subjects is intended to increase sensitivity, the ability to express and the ability to appreciate beauty and harmony. The ability to appreciate and express beauty and harmony includes appreciation and expression both in individual beauty to be able to enjoy and be grateful for life and in social life to create harmonious togetherness.
5	Group of physical, sports and health	subjects This group of subjects is intended to increase the physical potential and instill sportsmanship and awareness of healthy living.

CONCLUSION

Based on the results of data analysis, it can be concluded that; Integrating environmental education in the Daarut Tauhiid eco boarding school through the national curriculum. Each subject inserts content about the environment in the learning process. There are 3 ways to integrate environmental education, namely; 1) integration of environmental education in the curriculum with increased human resources, training, outreach, environmental manuals, programs related to the environment. 2) integration of Environmental Education in the Islamic Boarding School Curriculum namely; Clean, Neat, Orderly and Regular Program (BRTT) and Clean, Green and Flowering Program (Berhiber) 3) integration of Environmental Education in Learning at the Daarut Tauhiid High *Boarding School* by adjusting the basic competencies of subjects. Besides that environmental education is implicitly integrated in the vision, mission, and goals of the pesantren eco.

REFERENCES

- Affandi, R. "Integration of Environmental Education Through Social Studies Learning in Elementary Schools as an Alternative to Creating Green Schools," in *Pedagogia*, Vol. 2, No. 1, February 2013, p. 101.
- Bagir, ZA 2010. *Integration of Imu and Religion*, Bandung: Mizan Pustaka
- Bezzina, C., Pace, Paul. (2006). *School improvement, school effectiveness or school development*. London: Trentham Books Limited.
- BNPB, 2017, Indonesian Disaster Data and Information. Received March 2, 2017, from <http://dibi.bnpb.go.id/>
- Chen, TB and Chai LT 2010. Attitude towards the Environment and Green Products: Consumer Perspective. *Management and Science Engineering*. Vol. 4.No. 2. PP. 27-39.
- Hamzah, S. 2013. *Environmental Education: A Bit of Introductory Insights*. Bandung: Refika Aditama
- Harper, CL (2008). Religion and Environmentalism. *Journal of Religion and Society*, pp. 5-26 ISSN: 1941-8450. <http://biasadiangkringang.blogspot.com/> (Online). Accessed on 21 September 2018 at 21.58 WIB.
- Keraf, AS 2014. *Environmental Philosophy: Nature as a Living System*. Yogyakarta: Kanisius.
- Keraf, AS 2010. *Global Environmental Crisis and Disasters*. Yogyakarta: Kanisius
- Maryani, E. 2015. *Eco-Pedagogical Approach in Efforts to Grow and Environmental Care*.

- Proceedings of the National Seminar on Social Education “Actualization of Ecopedagogy in Social Sciences Learning”, Lambung Mangkurat University, Banjarmasin, October 2015
- Mulyana, R. Planting Environmental Ethics through Environmental and Cultural Care Schools
Tabularasa Journal Pps Unimed Vol.6 No.2, December 2009
- Ozsoy, S ., Ertepinar, H & Saglam, N. 2012. Can Eco-Schools Improve Elementary School Students’ Environmental Literacy Levels? Asia-Pacific Porton on Science Learning and Teaching, Vol. 13 Issue 2 / Dec 2012.
- Saito, CH 2013. Environmental Education and Biodiversity Concern: Beyond The Ecological Literacy. American Journal of Agricultural and Biological Sciences, 2013, 8 (1), 12-27
- Saragih, B. 2000. Animal-Based Agribusiness. Bogor; Library of Entrepreneurship
- Siombo, MR 2011. Local Wisdom in the Perspective of Environmental Law. Journal of Law, No. 3, Vol. 18, July 2011: 428 - 443
- Soemarwoto, O. 2004. Ecology, Environment , and Development. Jakarta: Djambat
- Soeriaatmadja, RE 2000. Sustainable Development with an environmental perspective. Jakarta: Directorate General of Higher Education Ministry of National Education
- Sulistiyowati, E. 2012. Implementation of the Character Education Curriculum. Yogyakarta: Citra Aji Parama.
- Suraida. 2013. Education with Environmental Insights in Learning Biology. Edu-Bio Journal, Vol. 4, 2013
- Syahri. M. 2013. Green Moral-based Sustainable Development. Bandung: Widya Aksara Press.
- Tara, A. 2013. Application of the Environmental Education Curriculum. Accessed on 21 September 2018 at 21:00 WIB. Law Number 32 of 2009 concerning Environmental protection and management
- Winarno, R., Wahyudi, Syamsuri, 1. & Sustio, H. 1994. Development of Teaching Environmental Education for Basic Education Levels in the Framework of Supporting Sustainable Development. Unpublished research report. Malang: IKIP Malang Population and Environmental Education Study Center, Malang.