



INTEGRATION OF GREEN EDUCATION IN THE LEARNING PROCESS IN FACING NATIONAL AND GLOBAL ISSUES

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Abstract

This research explains about Green Education in the learning process in Facing National and Global Issues. The method used in this research is qualitative descriptive analysis at SMA Negeri 1 Tebing Tinggi Kab. Serdang Bedagai. The data collection techniques were carried out by means of field observations and interviews. The results of this research show that globalization has a major impact on life and the environment. The existence of extreme climate change, food crises and ongoing economic difficulties are examples of sustainability issues that must be faced in today's global world. Considering the importance of the environment for human life, it is necessary to take responsibility for the sustainability of the environment for future generations. Schools have access to integrating green education values through the application of Education for Sustainable Development (ESD) development methods such as critical thinking skills and attitude skills in making decisions regarding issues relating to environmental quality both nationally and globally.

Keywords: *Green Education, Learning Process, Education for Sustainable Development*

1. INTRODUCTION

Today's natural conditions have become a hot topic of conversation, starting with natural damage characterized by extreme weather changes and global warming. This is caused by environmental damage which is the result of the construction of social actors who have changed the world's social order (Hertanto, 2016). The damage to the earth that occurs on land and sea due to rubbish and toxic materials and in the air layer (ozone) due to air pollution, radiation, and even space debris scattered around the earth is caused by excessive exploration and exploitation. Social and political forces play a major role in global warming. The reason is the problem of demands to fulfill society's increasing economic needs (Legionosuko., 2019).

Furthermore, the lifestyle of modern society tends to shift towards a more exploitative lifestyle. The aim is to reap as much profit as possible (Arifudin, 2021). Excessive exploitation of nature and the use of technology that is not environmentally friendly results in damage to the environmental order. So, environmental problems lie in humans' lack of wisdom in treating the environment (Sulistyo, 2018). The effect has a big impact on people's lives themselves. Meanwhile, humans should be able to live side by side in harmony with the environment and nature because they both need each other (Pradana., 2018).

Schools as formal institutions are expected to be a way to develop environmental awareness and are the main foundation for sustainable development (Arifudin, 2022). Apart from that, the role of teachers is also needed to be able to implement government policies to continue to educate and guide in a better direction, especially in responding to current issues that are currently occurring. One example is the Adiwiyata school (green school) which was initiated by the Ministry of the Environment (KLH) where the school has a program that aims to encourage the creation of knowledge and awareness among school residents in efforts to preserve the environment. Through green education applied in the school environment, it is hoped that it can develop environmentally caring characters in students (Nopitasari & Juandi, 2020).

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Through the concept and philosophy of environmentally friendly education (green education), namely returning to nature as a learning object and confirming the importance of ecosystem sustainability and understanding the impact of environmental damage. Green education or in other words, Education for sustainable development (ESD) is a tool to promote the ability to think critically, imagine future scenarios, and collaboratively make decisions (Legionosuko., 2019). As awareness of green education grows, it is supported by creativity and creativity. Entrepreneurial abilities so that they can process and utilize waste and make it into a learning tool. With further ideas and willingness it can be commercialized into an additional competency for students, of course by collaborating with related parties and using science and technology (Barwell et al., 2022).

Green education-based learning is a strategy that encourages students to learn not only depending on what is in books but also in real life. This learning concept departs from conceptual learning which prioritizes the principle that what students need to learn first is what is in their environment. Through a learning process that experiences and discovers for itself, students will grow their awareness of overcoming environmental problems (Amin & Hamidah, 2020). Through green education implemented at Adiwiyata schools, it is hoped that it can develop environmentally caring characters in students. Green education or in other words Education for sustainable development (ESD) is a tool to promote the ability to think critically, imagine future scenarios, and make decisions in a collaborative way. Based on this, this research focuses on Green Education in Facing National and Global Issues (Silvia & Tirtoni, 2023).

2. RESEARCH METHODS

This type of research is qualitative research. According to Ibnu in (Sofyan, 2020) qualitative research is research where the data is expressed in verbal form and analyzed without using statistical techniques. Based on several definitions of qualitative research above, it can be concluded that qualitative research. Meanwhile, the method used in this research is using a descriptive method or approach. The objects in this research consist of 2, namely formal objects in the form of data related to critical reviews of studies on green education in facing national and global issues. In this research, the author will use observation, documentation, and interview methods as tools for collecting data because this research is library research. In other words, according to (Ulfah, 2022) this technique is used to collect data from primary and secondary sources.

3.RESULTS AND DISCUSSION

Education for sustainable development is an idea that originates from environmental education which was initiated by the Ministry of Environment and the Ministry of Education and Culture in 2005 in the form of the Adiwiyata school. Adiwiyata School aims to create good conditions for the school to become a place of awareness for the school community (teachers, students, and other workers). Meanwhile, Education for Sustainable Development (ESD) is a tool to help people have the ability to make decisions and take action to improve the quality of life without sacrificing the environment. Several educational goals for sustainable development are integrated into three aspects of ESD, namely Integration of ESD into the Curriculum, Integration of ESD with Teachers/Educators, and Integration of ESD into the Classroom.

Green education is a learning process that aims to increase awareness, knowledge, attitudes and skills of individuals and groups in understanding, appreciating and protecting the environment. This education is designed to help individuals develop an understanding of the relationship between humans and their environment, as well as encourage responsible action towards environmental sustainability. The objectives of green education are (1) increasing awareness; (2) Increasing Knowledge; Developing a Positive Attitude; (3) Improving Skills; (4) Encourage Participation. Meanwhile, the main targets of environmental education are (1) Development of

Environmental Awareness; (2) Formation of Pro-Environmental Attitudes; (3) Increasing Environmental Knowledge and Literacy; (4) Sustainable Skills Development; (5) Encourage Active Participation.

In the Merdeka curriculum, schools are given the freedom to carry out learning in accordance with the potential and conditions of the surrounding environment, in order to develop not only cognitive aspects but also student character (Silvia & Tirtoni, 2023). In connection with the concept of green education and Adiwiyata, the aim of learning is to change the behavior or character of students who become more concerned about the environment. To achieve this goal, Adiwiyata schools must integrate environmental material into subjects. According to Hamzah (Amin et al., 2020), the substance of environmental education must cover at least 5 subjects, namely the social environment, spatial environment, natural environment, artificial environment, as well as climate change and environmental disasters. The environmental material content is described in table 1.

Table 1. Environmental Material Components

Topics of Environmental Education	Material
K1. Social Environment	(1) value and culture systems, (2) environmental regulations and policies, (3) environmental ethics, (4) environmental component interaction systems.
K2. Spatial Environment	(5) history and concept of ecosystems (6) ecological units and their structure, (7) various ecosystems, (8) natural resources, (9) diversity of living things, (10) population and density, (11) balance and conservation.
K3. Natural Environment	(12) biosphere, (13) abiotic components, (14) environmental pollution, (15) matter and its cycles, (16) energy flow, (17) competition and adaptation.
K4. Artificial Environment	(18) environmental and resource management, (19) spatial planning, (20) environmentally friendly lifestyle.
K5. Climate Change and Environmental Disasters	(21) sustainable development, (22) greenhouse gases, (23) energy and emissions, (24) technology and emissions, (25) low-emission lifestyle, (26) disaster mitigation, (27) AMDAL, and (28) environmental literacy.

A. Integration of Sustainable Development (ESD) Education into the Curriculum at SMA Negeri 1 Kab. Serdang Bedagai

ESD is integrated into the environmental sustainability-based curriculum at SMA Negeri 1 Kab. Serdang Bedagai by implementing Environmental Education in the syllabus and RPP. ESD is included in the core lessons and is not used as additional learning. Environmental Education material is integrated into several subjects such as English, Mathematics, Science, PKN, PAI, and Physical Education. In this case, ESD is aimed not only at integrating sustainability topics into the curriculum but also at learning outcomes related to sustainability. Furthermore, learning objectives, teaching methods, learning objectives, and assessment measures are so closely aligned that they reinforce each other. The aim is to build competency from all processes received and undertaken. The development of a sustainable environment-based curriculum is to integrate environmental education in subjects such as English, Mathematics, Science, Islamic Education, PKN, Social Sciences, and Physical Education. The development of the ESD

curriculum is carried out in collaboration with various agencies that are in line with ESD, including the DPLHD and DKK of Serdang Regency regarding the Environment to serve as a reference, consultants and guest teachers providing counseling to teachers by presenting presenters from various agencies and community groups.

Curriculum development planning is formulated based on Adiwiyata's policies based on the Joint Decree of the Environment and the Minister of National Education. Organizing the development of an environment-based curriculum is related to the organizational component, consisting of three components the Adiwiyata team of teachers, the Adiwiyata OSIS team, and the class motivator team. The environmental-based curriculum material was developed by the Adiwiyata team of teachers by compiling the PLH Curriculum, in the form of a syllabus and lesson plans. An ESD-based curriculum is implemented in learning activities. For example, in English subjects, it is making warning boards or slogans about cleanliness and sanitation. In PAI subjects, for example, teachers can integrate environmental education into learning activities by implementing learning by utilizing the school environment as a learning resource. The implementation of the ESD curriculum is also followed by supporting policies such as the development of planting various plants in schoolyards, the construction of gazebos as places for environmental literacy and so on. The learning model used in implementing the ESD curriculum is a cross-subject learning model. Apart from being implemented in the form of integration in subjects.

B. Integration of ESD for Teachers/Educators at SMA Negeri 1 Kab. Serdang Bedagai

Educators are agents of change who can provide the educational response needed to achieve the SDGs. The knowledge and competencies they possess are very important for restructuring educational processes and educational institutions toward sustainability. Teachers are required to face this challenge by orienting themselves towards EDS. One form of ESD integration for teachers is carrying out various activities, including teachers taking part in Focus Group Discussions (FGD), training, and preparing modules. Focus Group Discussion (FGD) was carried out to map the basic problems faced by teachers at SMA Negeri 1 Kab. Serdang Bedagai.

This FGD produced an inventory of several basic problems faced by teachers in learning at school. Some of the problems include: First, students' lack of interest in subjects and the perception that environmental education is not connected to every subject. Second, the learning model is still monotonous and lacks variety. Third, limited learning facilities and infrastructure that support creativity and innovation in the learning process. Fourth, there is a lack of enrichment material for teachers outside the texts used. Based on several of these problems, a mechanism for the next activity is then developed, namely training which aims to increase or enrich environmental insight through learning models or methods.

Furthermore, as a facilitator, the teacher must make it easy for students to learn, one of which is providing modules as the necessary supporting facilities. The modules used in terms of content, teaching, and learning methods refer to the syllabus that has been prepared by the school. For teachers to be ready to facilitate ESD, teachers must continuously develop key competencies, namely knowledge, skills, attitudes, values, motivation, and commitment. The teaching used illustrates sustainability competencies through a variety of innovative teaching and learning. In addition, the modules used allow access to external partners, such as communities, non-formal educational institutions, and project-oriented ESD and collaboration networks.

C. Integration of ESD Concepts into Classes at SMA Negeri 1 Kab. Serdang Bedagai

All school residents play an active role in maintaining a clean environment. The school instills responsibility in the school community to maintain cleanliness without exception. This is an integration of the ESD concept of participatory activities in the classroom, where every

school member has the same obligation to support Adiwiyata school policies in even small matters, even from the smallest area, namely the classroom. One form of bringing the ESD concept into the classroom is 1) picket officers cleaning and tidying the classroom before and after learning; 2) teachers not smoking in the school environment, especially when teaching in class; 3) not storing rubbish in study desk drawers; 4) the teacher inserts PLH material during KBM; 5) carry out class pickets and PMR member pickets; 6) carry out clean Friday by distributing keeping which has been provided by the PLH team as a form of environmental literacy service effort. One of the class activities that is learned outside the classroom is through learning activities carried out outside the classroom. It is intended that the subject matter containing the environment is not just theory but that all school members understand, support, and implement the Adiwiyata school program, so apart from theory there must also be practice.

4. CONCLUSION

From the explanation of the research results above, it can be concluded that sustainable development is not just a way to overcome the environmental crisis but also the social and economic crises experienced in various parts of the world. One form of education that can have a big impact on development is education for sustainable development (ESD). Education for sustainable development enables every human being to acquire the knowledge, skills, attitudes, and values needed to shape a sustainable future. In implementing education for sustainable development, several aspects are carried out, including: First, integration of Sustainable Development (ESD) Education into the Curriculum. The school implements environmental education in the syllabus and lesson plans.

Delivery of environmental material through the school curriculum which is integrated into several subjects at school. Second, ESD integration for teachers/educators. The form of ESD integration for teachers is that various activities are carried out to enrich the scope of teacher skills in delivering material and content, including: a) Teachers taking part in Focus Group Discussions (FGD), b) Training and Module Preparation. c) Focus Group Discussion (FGD) was carried out to map the basic problems faced by teachers at SMA Negeri 1 Kab. Serdang Bedagaidan solves this problem.

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