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The Actualization of Adiwiyata School Values Through the Environmental Campaign of Al-Fattah Islamic Junior High School, Semarang

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Abstract

Tambakrejo Village faces complex environmental issues, such as waste accumulation and flooding. This is exacerbated by the low awareness among the community regarding waste management and environmental preservation. To address these challenges, the Environmental Education Movement in Schools was initiated as an implementation of school-based environmental education. The program aims to encourage and develop environmentally conscious and culturally aware schools that are capable of participating in and implementing efforts to preserve the environment within the framework of sustainable development. The PBLHS (Environmental Education Movement) at SMP Al-Fattah, Tambakrejo Village, Semarang City, is supported by Saka Energi Muriah Limited and Semarang State University, and includes the following activities: (1) socialization, (2) preparation of the Learning Program Plan (RPP), (3) training of Adiwiyata cadres, (4) integration of PBLHS into the curriculum, (5) implementation of PBLHS, (6) provision of facilities and infrastructure, and (7) monitoring and evaluation. The results of the activities show an increase in students' awareness of waste and energy management, as well as the development of environmentally friendly habits at the school through intracurricular, co-curricular, and extracurricular activities. The development of facilities such as waste sorting stations, environmental posters, and the formation of Adiwiyata cadres strengthens the role of students as agents of change within the school and the surrounding community. The implementation of PBLHS at SMP Al-Fattah has successfully instilled environmental preservation values in students and fostered environmentally conscious character.

Keywords: *pblhs, lingkungan, berkelanjutan, tambakrejo, adiwiyata*

INTRODUCTION

Semarang City has the largest waste generation in Central Java Province, with a total waste generation of 431,534.65 tons in 2022 (Kementrian Lingkungan Hidup, 2022). The waste contribution in Semarang City in 2022 primarily came from households, accounting for 72%, with the largest composition being food waste at 42%, followed by plastic waste at 19%. Waste management in Semarang City, according to the Local Policy and Strategy (Jakstrada) of the Semarang City Environmental Agency, shows that 17.65% of the waste generated was reduced through reuse and recycling efforts, 77.64% of waste was managed through sorting, collection, and processing at the landfill, while 4.71%, or around 60 tons of waste, was unmanaged (Dinas Lingkungan Hidup Kota Semarang, 2020). The significant amount of unmanaged waste could negatively impact environmental quality, which, in turn, affects public health (Puspitasari et al., 2022). This issue is further exacerbated by the Jatibarang Landfill in Semarang City being at risk of overcapacity (Harjanti & Pratamaningtyas, 2020).

One area facing various complex environmental problems is Tambakrejo Village, located on the coast of Semarang City. This area experiences environmental issues such as tidal flooding (rob) due to land subsidence and flooding during the rainy season caused by the overflowing Tenggang River Tenggang (Martuti et al., 2022). These conditions are worsened by the fact that some residential areas in Tambakrejo are categorized as slum areas, which struggle with waste management and

environmental issues (Makhmudi & Muktiali, 2018).

Environmental conservation efforts are being made through household-level waste management, such as waste sorting by establishing waste banks and waste collection services. However, in practice, the community lacks enthusiasm for participating in waste bank activities and environmental conservation efforts, such as waste sorting and organic waste composting. This situation is influenced by the community's awareness of environmental conservation (Herawati & Banowati, 2019).

Another effort to achieve sustainable environmental management is through environmental education in schools, promoted through the Environment-Based Education Movement in Schools (PBLHS), which has been actively implemented since 2006 and is known as the Adiwiyata School program (Kementerian Lingkungan Hidup Dan Kehutanan, 2019). The PBLHS movement aims to increase students' knowledge of environmental education and encourage their active role in environmental conservation, both within and outside the school environment (Munawar et al., 2019).

One of the schools in Semarang City that plays an active role in the PBLHS movement is SMP Al-Fattah in Tambakrejo Village. However, in its implementation, the school faces challenges such as the absence of a PBLHS Movement Plan document and a Learning Program Plan (RPP) related to environmental education. Another issue is the limited capacity of human resources (HR) and the lack of supporting facilities and infrastructure for the implementation of environmental education at the school.

Since 2023, the initiative to develop SMP Islam Al-Fattah into an Adiwiyata school has been carried out by Saka Energi Muriah Ltd, in collaboration with Semarang State University, through community empowerment and development programs (PPM). This initiative began with the signing of a joint commitment, a workshop on the introduction of Adiwiyata schools, and the provision of waste sorting facilities and infrastructure. This aligns with efforts to enhance environmental education, plans to increase the number of Adiwiyata schools in Semarang City, and the principles of the Sustainable Development Goals

METHODS

The community service activities at SMP Al-Fattah were carried out through several structured and participatory stages, designed to ensure the active involvement of all stakeholders, including students and teachers. Each stage of this program aims to raise environmental awareness and knowledge, as well as strengthen collective capacity in the implementation of activities

1. Initial Socialization and Coordination

This activity prepares the community for participation through meetings to socialize the planned service activities and agree on the participants and the mechanism for implementing the program.

2. Training and Assistance in Document Preparation

Training sessions provide theoretical and practical knowledge on preparing the PBLHS movement plan documents, which include an action plan, program achievements, monitoring, and program evaluation.

Assistance is provided to integrate the PBLHS movement plan documents with the lesson plans (RPP) through Focus Group Discussions (FGD) involving partner facilitators and program implementation partners.

3. Training and Assistance

Training sessions provide theory and demonstrations on implementing PBLHS for teachers and educators, based on the prepared plan documents. This is followed by assistance in the implementation of PBLHS, which includes the formation of Adiwiyata school cadres. A campaign conducted with the involvement from the local community around SMP Al-Fattah and school members.

4. Facilities and Infrastructure Provision

The provision of facilities and infrastructure includes information boards about PBLHS, the installation of waste management systems, and the placement of posters for environmental awareness campaigns.

5. Assistance

This ongoing assistance serves as part of the monitoring and evaluation process during the program's implementation, aiming to identify problems and provide solutions for the partners.

6. Evaluation

Evaluations are conducted before (pre-test) to assess the participants' initial knowledge, and after the training (post-test) to identify progress in partners' knowledge and skills, using evaluation

instruments.

RESULTS AND DISCUSSION

Adiwiyata Program Coordination

Before implementing the Adiwiyata Program activities, coordination was carried out with various parties involved in community empowerment activities. This coordination aimed to align perceptions, both with the school and teachers, as well as with related institutions participating in the activities. The alignment of perceptions covered environmental education materials to be provided to the students, the equipment and materials to be prepared, the location of the training sessions, and the schedule for implementation.

In this PPM (Community Service Program) activity, the principal of SMP Al-Fattah, Mr. Suratman, was involved in discussions related to the Adiwiyata school program. The outcomes of the coordination were: (1) Approval from the school regarding the Adiwiyata school program. (2) Materials provided focused on school cleanliness, followed by mentoring or socialization with students on the importance of throwing waste in designated bins. (3) Support for various programs, including waste utilization, enabling students to learn waste processing and plastic waste management.

Additionally, future government involvement, particularly from the Ministry of Environment, is planned to deliver materials to strengthen the PBLHS movement and the Adiwiyata school program. The involvement of relevant institutions ensures that the program aligns with initiatives already undertaken by the Semarang City Environmental Agency, and guarantees the sustainability of the programs in the future.



Fig. 1. Coordination with the Principal of Al-Fatah Tambakrejo Middle School

Implementation of PBLHS Integrated with Lesson Plans (RPP)

The implementation of PBLHS at SMP Islam Al-Fattah focuses on two main areas. First, in carrying out the PBLHS movement through education, the school integrates this initiative into intramural, co-curricular, and extracurricular activities. Intramural activities refer to face-to-face interactions between teachers and students. Co-curricular activities support intramural activities, such as assignments given by teachers to students. Extracurricular activities involve developing students' talents and interests. Second, through habitual practices, the PBLHS movement is integrated into Character Education Strengthening (PPK).

According to Article 5 of Presidential Regulation No. 87 of 2017 on Strengthening Character Education, PPK is based on three principles: (1) Focusing on developing the potential of students. (2) Leading by example in the educational environment. (3) Being reinforced through daily habits. For example, if the school has a program that encourages students to dispose of waste in designated bins, teachers must also follow this program as role models for students.

The first step taken was the preparation of Lesson Plans (RPP) integrated with PBLHS activities. Nine subjects have been developed and integrated with PBLHS activities, including Mathematics, English, Islamic Religious Education, Craftsmanship, Biology, Social Studies (IPS), Civics (PPKN), and Visual Arts.

Provision of Facilities and Infrastructure to Support PBLHS Implementation

The PBLHS program was further implemented through initiatives aimed at fostering habitual practices among the school community. One of the activities carried out was the provision of trash bins at three different locations, with a total of six bins—three for organic waste and three for inorganic

waste at each location. This initiative helps instill waste separation habits among students and staff, contributing to environmental conservation efforts at the school.



Fig. 2. Organic and inorganic waste bins facilities

Poster Competition

The poster competition at SMP Al-Fattah as part of the PBLHS (School-Based Environmental Education) movement is a creative effort to raise students' awareness of environmental issues. The competition was held with various sub-themes, including water conservation, school environment care, adaptation to climate change, waste sorting through the 3R principle (Reduce, Reuse, Recycle), and greening in residential and school areas. The primary goal of this competition is to educate students through the media they create themselves, so they not only learn the theory but also apply their knowledge in visually appealing forms.



Fig. 3. Implementation of inter-class poster competition

The essence of this competition is to build collective awareness and foster a sense of environmental responsibility among students. Through their poster creations, students can express their understanding of environmental issues and how to address them, leading to the internalization of environmental conservation values. In addition, this activity serves as an effective way to introduce and promote the PBLHS program at the school, strengthening the collective commitment to protect and care for the environment. With its diverse themes, the poster competition encourages active student participation in environmental movements, both at school and at home.

The follow-up plan for this competition is to document the winning entries in the form of posters displayed around the classroom environment. This step not only recognizes the winners but also serves as a promotional tool and a sustainable campaign for the PBLHS movement at SMP Al-Fattah. In this way, it is hoped that an environmentally friendly culture will continue to grow and take root among students, making them active agents of change in environmental conservation.



Fig. 4. Awarding prizes to poster competition winners

CONCLUSION

The Environmental-Based Education Movement in Schools (PBLHS) at SMP Islam Al-Fattah, Tambakrejo, Semarang is crucial in its efforts to shape a generation of youth who are concerned about environmental preservation and capable of actively addressing various environmental challenges, such as the waste management crisis and climate change. This is realized through the establishment of Adiwiyata cadres who act as disseminators and implementers, driving student participation, and serving as role models for other students in exhibiting environmentally friendly behaviors in their daily lives at school.

Additionally, it is essential to integrate environmental education into the curriculum. This integration aims to build students' awareness from an early age through the habituation of environmentally friendly behaviors, such as waste management and energy conservation, which they will carry into their daily lives. PBLHS involves stakeholders from various sectors to strengthen collaboration in creating sustainable solutions, making it vital to adopt as part of long-term educational and environmental strategies.

The poster competition with themes of conservation, climate change adaptation, waste separation (3R), and greening residential areas not only provides students with the opportunity to creatively express their understanding of environmental topics but also encourages them to actively engage in environmental movements, both at school and at home.

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