



## **Strengthening Environmental Awareness Among Elementary School Students Through The Use of Tumblers**

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**Abstract.** *The increasingly uncontrollable issue of plastic waste has captured people's attention. Instilling environmental awareness from an early age is crucial to prevent this problem from being passed down to future generations. This community service program aims to educate students about the importance of environmental preservation and to raise awareness of the dangers posed by non-biodegradable plastic waste. This activity invites students to replace bottled water with reusable tumblers as a practical solution. The socialization activity on the use of tumblers to reduce plastic waste was conducted on November 11, 2024, SDN No. 57 Banda Aceh. Prior to this session, some students already had a basic understanding of plastic waste and its environmental impacts. Positive habits, such as bringing their own tumblers to school instead of purchasing bottled beverages, had already been adopted by a number of students. The event was carried out smoothly and received a highly positive response from the sixth-grade students of SDN 57 Banda Aceh. The students were enthusiastic throughout the entire session and provided excellent feedback during the discussions. Motivational rewards further encouraged students to actively participate in the socialization and pay close attention to the material presented.*

**Keywords:** Awareness, Environmental, Students, Tumblers.

### **INTRODUCTION**

Waste management remains a significant environmental issue in both urban and rural areas (Sudiarawan, 2022). Plastic waste, in particular, has become a pressing global environmental concern. Plastic waste constitutes a highly complex problem with the potential to generate multidimensional consequences. This issue may further aggravate the impacts of climate change. Hence, it is imperative for society to collaboratively engage in efforts to minimize the use of single-use plastics (Ningrum, 2024). Plastic, especially from single-use items such as drinking bottles, is difficult to decompose naturally and can persist in the environment for decades or even centuries. As a result, it contributes to land and water pollution, threatens biodiversity, and poses risks to ecosystems if not properly managed (Tamala et al., 2022). Plastic bottles also pose a health risk as they may leach harmful chemicals into the water or beverages they contain. According to data from the Central Bureau of Statistics and the Indonesian Plastics Industry Association, Indonesia produces 64 million tons of plastic waste annually, of which 3.2 million tons end up in the



ocean. Furthermore, 6.8 million tons of plastic bottles are produced every year, with a 5% annual growth rate (Nasution et al., 2023).

Consumers who use plastic bags often show indifference by disposing of them carelessly (Zen et al., 2016). A simple yet impactful action that society can take is to replace single-use plastic bottles with reusable tumblers. Children, as part of the community, can be educated on the importance of using tumblers instead of buying bottled water. This awareness must be cultivated early to foster a lifelong commitment to environmental stewardship (Sudiarawan, 2022). In urban areas such as Banda Aceh, the increasing population and demand for convenient single-use products have led to a rise in plastic waste. This situation has prompted schools to take proactive steps in reducing plastic usage. As educational institutions, schools have a vital role in shaping the character of children, including instilling environmental responsibility (Tamala et al., 2022). According to (Fassa & Heryanto, 2021)(Fatimah et al., 2023) (Rejokirono et al., 2023) (Atmaja et al., 2024) (Hukubun et al., 2024) , providing knowledge, raising awareness, and empowering early childhood are crucial steps in fostering environmental stewardship and addressing the threats posed by plastic waste. A training program is needed that not only provides fundamental knowledge but also actively engages participants in hands-on practice, enabling them to acquire the necessary technical skills (Titisari et al., 2025). Schools and relevant stakeholders need to develop programs that can enhance students' learning orientation toward the environment and foster collective awareness regarding their ability to analyze and synthesize their surrounding environment (Prabawani et al., 2020). SD 57 Banda Aceh, located in the city center, recognizes the importance of participating in environmental conservation efforts by raising awareness among its students about the negative impact of plastic waste. Through the "Go Green" socialization program, SD 57 Banda Aceh introduces the use of tumblers to students as a concrete step toward reducing dependence on disposable plastic bottles. This initiative aims to establish an environmentally conscious culture among students, one that they can carry with them beyond their school years.

## **METHODOLOGY**

The "Bring Your Tumbler" campaign was designed to educate students about the importance of environmental protection and the dangers posed by non-biodegradable plastic waste. The campaign took place on November 11, 2024, at SDN 57 Banda Aceh, and targeted sixth-grade students. PowerPoint presentations were used as the primary teaching medium, supplemented by posters to keep the students engaged. At the end of the



session, a quiz was administered to assess student understanding, with tumblers awarded as prizes to boost participation. The event concluded with group photos and closing remarks. The implementation steps included :

1. Coordination and Scheduling. Coordination meetings were held with the school principal, sixth-grade homeroom teachers, and physical education teachers to schedule the activity during a physical education class on Monday, November 11, 2024.
2. Implementation of the Socialization Program. The session was well received by teachers and students. The material covered the importance of using tumblers to reduce plastic waste, the dangers of plastic waste to the environment, the health and hygiene benefits of using tumblers, and how small actions like bringing a tumbler can help protect the Earth.
3. Provision of Supporting Materials. Posters were used to creatively reinforce the messages, and tumblers were awarded to students who won the quiz.
4. Evaluation and Q&A Session. A Q&A session was conducted to evaluate students' comprehension of the material presented.

## **RESULT AND DISCUSSION**

The socialization program aimed to serve as an initial step in building environmental awareness among the 25 sixth-grade students. This activity aims to provide an understanding of the importance of using tumblers in the school environment to reduce plastic waste. In addition, grade VI students were chosen as participants in the socialization, they are expected to be able to bring this good habit in the school environment and can apply it in everyday life. The topics covered included:

1. Why use a tumbler?
2. Environmental hazards of plastic waste.
3. Benefits of using a tumbler.
4. Let's bring a tumbler to school!
6. Small actions for a cleaner Earth.
7. Protect the Earth for our future—bring a tumbler to school.

Prior to the session, several students already had a basic understanding of the environmental impact of plastic waste and had adopted positive habits such as bringing reusable tumblers. Their knowledge was evident during the discussion session, where they already understand the dangers of plastic waste that can pollute the environment and damage the ecosystem. With this good understanding, the socialization is expected to strengthen their positive habits as well as provide additional insights for students of



grade VI SDN 57 Banda Aceh City. The session aimed to reinforce and expand this understanding using visually engaging media (PowerPoint and posters). Topics discussed included:

- Reducing Single-Use Plastic Bottles: Reusable tumblers are a more sustainable alternative. Each tumbler can replace the use of at least four single-use bottles, helping reduce plastic pollution (Widiatmoko, 2024).
- Environmental Hazards of Plastic Waste: Plastic waste takes centuries to decompose and pollutes land and water, endangering wildlife, especially marine animals (Dlh, 2019).
- Health and Hygiene Benefits of Tumblers: Using a personal tumbler ensures safer drinking water and helps maintain environmental cleanliness (Dlh, 2022).
- Protecting the Earth with Small Actions: Bringing a tumbler is a simple but impactful habit that contributes to a cleaner and healthier environment (Maulana, 2023).

The program received a highly positive response from sixth-grade students of SDN 57 Banda Aceh. Students were enthusiastic and provided insightful comments during discussions. Through this discussion, we hope that students will be more aware of their role in protecting the environment, starting from simple habits such as bringing a tumbler. In addition, this activity can also provide insight to them that the small actions they take can have a big impact on preserving the earth in the future. This socialization is a good first step to instill an environmentally friendly lifestyle from an early age to children. The quiz at the end of the session served as both an evaluation tool and a motivational activity. The quiz included questions about the negative impacts of plastic waste, the benefits of using tumblers, and simple steps that can be taken to reduce single-use plastic waste. Students who participated in the quiz showed good understanding and recalled the main reasons why waste is generated. They were also able to mention some simple steps to reduce the use of plastic. Three students answered the quiz questions correctly and received tumblers as prizes. Additionally, snacks were distributed to the remaining 22 students as a gesture of appreciation for their participation. These incentives helped create a positive and memorable experience. Here is the documentation of community service activities:



Figure 1. Providing material to students



Figure 2. Providing quizzes to students



Figure 3. Post-service activity group photo with students

## CONCLUSION

The results of this socialization program show that efforts to strengthen environmental awareness among elementary students through the use of tumblers have proven effective. The program significantly improved the students' understanding of the dangers of single-use plastic and the importance of sustainable practices. High levels of student engagement and the observed changes in attitudes demonstrate the success of the initiative in fostering environmental consciousness from an early age. Reward-based motivation played a key role in encouraging active participation and attentiveness throughout the session.





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