

Education On Waste Sorting As A Preventive Effort To Address Waste Problems In The MI NU 03 Kebonagung Environment

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Abstract. *The effort to maintain cleanliness in our surroundings must start with ourselves by doing small things. Guidance for students regarding environmental issues caused by waste accumulation is necessary to raise their awareness so that they become more concerned about their surroundings. By actively participating, students can cultivate the habit of disposing of waste in its proper place. However, due to the numerous categories of waste, it is necessary to provide guidance to students about the types of waste, namely: organic waste, inorganic waste, and the 3Rs (Reduce, Reuse, Recycle) and their management. Students must be socialized to abandon the old habit of simply throwing away waste, but also to receive guidance and to get accustomed to sorting, selecting, and categorizing waste while implementing the development of waste banks so that they have economic value. If it can be implemented, then the practice of processing waste will be a concrete step in waste management. The socialization was carried out in the form of presentations and other interactive activities. In the future, it is hoped that these small habits can be taught within families and the surrounding community, which would help reduce environmental issues caused by waste.*

Keywords: *waste sorting, 3R, student guidance, efforts to protect the surrounding environment.*

Abstrak. Upaya menjaga kebersihan lingkungan harus dimulai dari diri sendiri dengan melakukan hal-hal kecil. Pembinaan terhadap siswa mengenai isu-isu lingkungan yang disebabkan oleh penumpukan sampah sangat diperlukan untuk meningkatkan kesadaran mereka agar lebih peduli terhadap lingkungan sekitar. Dengan berpartisipasi aktif, para siswa dapat menumbuhkan kebiasaan membuang sampah pada tempatnya. Namun, karena banyaknya kategori sampah, maka perlu adanya pembinaan kepada siswa mengenai jenis-jenis sampah, yaitu: sampah organik, sampah anorganik, dan 3R (Reduce, Reuse, Recycle) serta pengelolannya. Siswa harus disosialisasikan untuk meninggalkan kebiasaan lama yang hanya membuang sampah begitu saja, tetapi juga mendapatkan bimbingan dan dibiasakan untuk memilah, memilih, dan mengelompokkan sampah sekaligus menerapkan pengembangan bank sampah agar memiliki nilai ekonomis. Jika hal tersebut dapat dilaksanakan, maka praktik pengolahan sampah akan menjadi langkah konkret dalam pengelolaan sampah. Sosialisasi dilakukan dalam bentuk presentasi dan kegiatan interaktif lainnya. Kedepannya, diharapkan kebiasaan-kebiasaan kecil ini dapat diajarkan di lingkungan keluarga dan masyarakat sekitar, sehingga dapat membantu mengurangi permasalahan lingkungan yang disebabkan oleh sampah.

Kata kunci: pemilahan sampah, 3R, bimbingan siswa, upaya menjaga lingkungan sekitar.

1. BACKGROUND

Waste is one of the common problems that often occurs worldwide. The increasing population and its activities are causing the volume of waste to keep rising. As a result, addressing waste requires a considerable amount of money and increasingly larger land. In addition, waste also causes flooding, environmental pollution, global warming, and leads to various diseases if not managed properly and correctly (Baroah, 2020).

Waste management and sorting aim to prevent environmental pollution that poses a threat to health. Waste management and sorting are also carried out to gain benefits and advantages for humanity. This is based on the view that waste is a resource that can be utilized and has economic value. Waste is categorized into wet waste and dry waste.

Organic waste is waste that comes from the remains of living beings (nature) such as animals, humans, plants, and products derived from them, which can result from the decomposition of plants and living matter that can be broken down and utilized by microorganisms. Organic waste can be utilized to produce biogas and compost. Eco-enzymes are multifunctional liquids derived from the decomposition of manure or wet waste, sugar, and water (Pradhana, 2022).

Inorganic waste is waste that is difficult to decompose, so it is necessary to sort and manage inorganic waste properly and wisely. Plastic and glass bottles, various scraps of fabric are types of inorganic waste that have resale value and can be recycled. In the sorting and processing of inorganic waste, it must be done properly and correctly; if the sorting and processing methods are wrong, it can lead to various negative impacts.

Improper waste management is a serious issue in human life. Therefore, it is necessary to sort waste properly to avoid negative impacts on humans. Waste sorting is the first step in effective waste management. By sorting waste, we can recycle and reuse waste that is still suitable for use, aiming to avoid littering.

The sorting of waste certainly also applies within the school environment. Institutional education is the right preventive application to instill a sense of care and love for the environment in the nation's children. The introduction and cultivation of awareness in maintaining a clean environment is very important, as well as the obligation to always adopt a healthy lifestyle, which is the responsibility of all school members. Providing knowledge about the environment is necessary so that students are aware of the importance of preserving the environment for sustainability. Waste management and sorting are not only important for maintaining cleanliness and health in the environment, but also for instilling environmental awareness in students (Imron, 2022).

The role of the MI NU Kebonagung teacher is very important in teaching and supervising students about cleanliness and environmental awareness. The teacher provides concrete examples to the students first on how to dispose of waste and sort organic and inorganic waste that the school has prepared. Raising awareness among school members about disposing of waste in designated places and educating them on waste sorting can reduce the dangers of littering. Educators are required to instill in students the importance of caring for the

environment. Through this character-building, students will have a foundation and become accustomed to maintaining the cleanliness of the school by disposing of waste in the proper places.

2. MENTHOD

The Community Service Program (KKN) MIT-18 of Walisongo State Islamic University in Kebonagung Village, Ngampel District, Kendal. The community service activity was conducted at MI NU 03 Kebonagung, with the subjects of the service being the 5th and 6th-grade students, each consisting of 2 classes. This activity is carried out over 2 weeks. The subject was chosen based on the team's consideration that fifth and sixth-grade students understand theory more quickly, allowing them to implement it and serve as role models for their peers. The implementation period will start from Monday, July 29, 2024, to August 5, 2024, taking place around 08:00-10:00 WIB.

The implementation of the activities carried out involves educating about reducing, separating, and utilizing waste. The division of activities in the first week focuses on educating through theory using a lecture method supported by animated PPT media. In the second week, the education continues by following up on the results from the first week's socialization in the form of creativity based on the 3Rs, which are Recycling, Reducing, and Reusing in waste management.

A survey has previously been conducted at MI NU 03 Kebonagung regarding the situation and conditions. There is only one trash bin available, and it hasn't been separated between organic and inorganic waste. Additionally, the lack of supervision from teachers has led students to openly throw trash anywhere, which is inappropriate. The existence of this KKN program is aimed at helping students improve the waste disposal habits of elementary school children in a proper and appropriate manner, thus facilitating final waste management.

1. Lecture and Simulation Method

This lecture and simulation method is employed during the educational activity on sorting organic and inorganic waste, using interactive media such as PowerPoint and animated videos to make children more enthusiastic about learning about waste identification and sorting.

2. DemonstrationMethod

This demonstration method is used when presenting material on the definition of waste, types of waste, methods of sorting and processing waste, as well as the impact of waste on the environment by showing a video titled "My Waste, My Responsibility."

3. Question and answer method

This method is used for students' reflection on the material presented by the team, allowing students to gain new understanding and experiences, as well as benefits that can be applied in daily life (Sutopo, 2021).

3. RESULT AND DISCUSSION

The results of the KKN MIT-18 activities that have been carried out include discussions with the school principal to gather information about the waste management system, specifically whether the school has implemented the separation of organic and inorganic waste, as well as the challenges faced in waste management to find good and effective solutions. The outcome of the discussions led the KKN MIT-18 team to agree to conduct educational socialization and guidance for the 4th and 5th-grade students of MI NU Kebonagung.



Picture 1 Education socialization on waste sorting and processing at MI 03 Kebonagung.

Subsequently, they will provide assistance and practical training by supplying and facilitating two waste bins, one for organic waste and the other for inorganic waste. The organic waste bin is symbolized by the color green, while the inorganic waste bin is symbolized by the color yellow. In addition, the KKN MIT-18 team always encourages students to dispose of their waste in the designated bins according to the instructions provided at the trash cans. During the educational socialization and assistance activities, the KKN MIT-18 team provided an initial explanation regarding the definition of waste, types of waste, contemporary waste, and the impact of waste on health and the environment. They also showed a YouTube video related to the prohibition of littering (Ayu, 2023).



Picture 2 sorting of organic and inorganic waste

After the presentation of the material, the 4th and 5th-grade students of MI NU Kebonagung practiced throwing trash in the designated bins according to the labels indicating the type of waste. There are two trash bins available, which are classified as organic and inorganic types. If a mistake occurs in the practice being carried out, the KKN MIT-18 Team reminds and provides a brief explanation regarding the types of waste and how to dispose of it according to the classification criteria of that waste. Socialization activities about the separation of organic and inorganic waste are important to carry out because these activities can provide understanding to students regarding waste that is easy or difficult to decompose, thus maintaining environmental cleanliness. In addition, similar research has been conducted to explain that socialization related to waste sorting, using various appropriate concepts, can foster and habituate students to dispose of waste correctly, thereby facilitating the final waste disposal process. It is necessary to have the habit of disposing of waste in its proper place (Purnomo, 2023).

The activity of sorting organic and inorganic waste at MI NU Kebonagung is still ongoing after the KKN MIT-18 program has concluded. This activity received a positive response from the students; after the socialization, the average student understood and could distinguish between organic and inorganic waste. This is evident from the enthusiasm of the students in throwing their plastic snack wrappers into the designated inorganic waste bins. In addition, if there are leaf litter from plants and trees at the school, students should dispose of it in the organic waste bin.

The positive impact resulting from the implementation of waste sorting activities in schools is:

1. Students are accustomed to disposing of waste in the appropriate place according to its type, which certainly has a positive impact on the activities they engage in within their surroundings.
2. The creation of a clean school environment free from scattered trash.
3. The implementation of a healthy lifestyle from an early age.

4. The development of awareness to always care for and love the environment.
5. Facilitating the processing and recycling of waste according to its type.

4. CONCLUSION

A series of results from the KKN MIT-18 UIN Walisongo Semarang work program activities have been carried out successfully with the support of all parties involved in the event and the preparation of this report. In this regard, the activity aims to develop the understanding of MI NU 03 Kebonagung students regarding the differences between organic and inorganic waste. The sustainability of activities carried out by the school to instill habits and guide participants in always disposing of waste in the appropriate place according to its type, aims to foster awareness among the students of MI NU 03 Kebonagung about the importance of maintaining health, cleanliness, and caring for the environment through healthy living. This will shape a character of environmental love as well as the implementation of a prosperous healthy lifestyle. This activity is still far from perfection; therefore, the author hopes for participation from all parties and constructive suggestions for the improvement of future events. Input and suggestions for the next similar activities can be applied in various other school areas by developing better and more engaging potentials for character education focused on environmental love.

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