ENVIRONMENTAL CAMPAIGN WITH 3R CONCEPT IN IMPROVING COGNITIVE OF SDN BELITUNG UTARA 3 STUDENTS

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ABSTRACT

The purpose of this Community Service is to increase students' cognition about the dangers of plastic waste and waste management with the concept of 3 R. The method used is through oral communication by conveying material on types of waste, the dangers of plastic waste, the period of waste decomposing in nature based on its type and the concept of waste management through 3R namely reduce, reuse and recycle. After obtaining the material, students practiced making pen holder workshops from used bottles and straws. The stages of PkM are participants filling in the pretest questionnaire, delivery of waste management material with the 3R concept, practice making workshops, questions and answers and posttest. The results obtained in this Community Service activity at SDN Belitung Utara 3 were that students experienced a cognitive increase of 12% regarding waste management with the 3Rs. Students also produced beautiful pen holder workshops from bottles and straws with ribbon decorations.

Keyword: *Environment Campaign; 3R Concept; Waste Processing; Cognitif*

INTRODUCTION

Waste is still a global problem in the world. Some countries have not managed waste properly. Data from the National Waste Management Information System (SIPSN) of the Ministry of Environment and Forestry (KLHK) in 2023, the result of input from 132 districts / cities throughout Indonesia, states that the amount of national waste will reach 21.1 million tons (Waluyo, 2023). Of the total national waste production, as reported by the official website of the Ministry of Environment and Forestry, 66.47% (11.5 million tons) can be managed, while the remaining 33.53% (5.8 million tons) have not been managed properly (sipsn, 2023).

People use plastic bags and plastic packaging for food and drinks on a daily basis. These plastics cause plastic waste that if not managed properly, then plastic waste is difficult to decompose naturally. Not many people are accustomed to using tumblers as beverage containers and lunch boxes to be used as food containers.

Since 2016, Banjarmasin has implemented a ban on the use of plastic bags in retail stores (Haswar & Assifa, 2019). Consumers are accustomed to carrying grocery bags when shopping at retail stores. However, in traditional markets, plastic bags are widely

used, and the ban has not yet been implemented. The government through the Environmental Agency has been trying to educate the public to get used to shopping using purun (woven rattan) bags as a substitute for plastic bags.

The 3Rs are one of the solutions to reduce household waste (Amien et al., n.d.; Gusti et al., 2022; Istiqomah et al., 2019; Nizaar & Muhardini, 2020; Puspitawati & Rahdriawan, 2012). Children as the young generation, need to understand the concept of hygiene awareness and protect the environment around them. The environmental campaign to manage waste with the 3R concept can provide awareness in the minds of SDN Belitung Utara 3 students not to litter, reduce the use of plastic, and process waste that is still of economic value.

Plastic waste that has been buried in the soil is difficult to decompose or degrade (non-biodegradable). Plastic waste requires several generations of life to hundreds of years before it can be completely decomposed or decomposed by the soil.[2]

As quoted from the February 5, 2024 edition of the online news portal halobanua.com, there are at least 3 villages that complain about garbage, inundation and drainage problems, namely in Telaga Biru, Telawang and Pelambuan Villages. Pelambuan Urban Village Head, Junaidi stated that the garbage problem in Pelambuan, Jalan PM Noor, is still a big homework for his party (Akhmad, 2024). At several points garbage until noon is still piling up in the road area, the condition of the garbage to overflow on the road if there is a delay in the transportation of garbage by officers(Akhmad, 2024).

The team of mandatory lecturers conducted an environmental campaign at SDN Belitung Utara 3 to educate students as the younger generation about the dangers of plastic waste, wise waste management and the importance of maintaining environmental cleanliness.

Based on the identification of problems found from observations on April 16, 2024, the priority problems at SDN Belitung Utara 3 are:

1. The majority of students do not know how to process waste with the 3R concept.
2. Plastic waste is still a problem at school due to lack of awareness of cleanliness..
3. Students do not know that segregated waste can be saved in the Waste Bank and can be of economic value.
4. The majority of students do not know the dangers of plastic waste.

Solution

Based on the description of the priority problems above, the solution offered by the PDWA Team of Lambung Mangkurat University is to hold a PkM that contains material:

1. Manage waste with the 3 R's concept.

2. The dangers of plastic waste.
3. orting out waste that can be saved in the Garbage Bank.
4. Making work from plastic waste to reduce plastic waste generation

The output targets of this community service activity are:

1. Cognitive improvement of students about waste management with the 3R concept.
2. Cognitive improvement of students about the dangers of plastic waste.
3. SDN Belitung Utara 3 has savings in the nearest Waste Bank.
4. The results of the workshop from plastic waste made by students.

PKM Implementation Objectives

The purpose of implementing PDWA is to improve the cognitive of SDN Belitung Utara 3 students regarding waste management with the 3R concept. Community Service activities involving students are in line with the implementation of the Merdeka Belajar-Kampus Merdeka (MBKM) policy. This also supports the Main Performance Indicators (IKU 2) of Higher Education by involving students to gain experience outside the campus through PkM activities, they will gain experience providing socialization to PkM participants with waste management material with the 3R concept, improving videography skills by documenting PkM activities and interacting with PkM participant students. In addition, PkM activities also support IKU 3, namely lecturers doing activities outside the campus.

METHODS

Community Service activities were carried out on July 9, 2024 at SDN Belitung Utara 3 Banjarmasin. There were 34 participants from grades 1-6. The PkM method is divided into 3 stages, which are:

1. Pretest, participants filled out a pretest questionnaire containing 5 questions related to waste management.
2. Material was delivered through oral communication by conveying material on types of waste, the dangers of waste, the time for waste to decompose in nature and processing waste with the concept of 3R. After the material, participants practiced making pen holder workshops from plastic bottles and straws.
3. Posttest, participants filled out a questionnaire containing 5 questions with a Guttman scale after receiving waste management material and practice making crafts.

RESULTS AND DISCUSSION

Community service was carried out on July 9, 2024 at SDN Belitung Utara 3 Banjarmasin. The participants who participated in the PDWA activities were 34 people from grades 1-6. The

activity was opened by Mrs. Dini Puspita Dewi, S.Pd as the principal of SDN Belitung Utara 3. The PkM activity began with participants filling out a pretest questionnaire with 5 question items and 2 answer options using a Guttman scale. In the next session, the material "Waste Management with 3Rs" was delivered by Lalita Hanief. PkM material includes types of organic and inorganic waste, the concept of waste management with 3 R, namely reduce, reuse and recycle with examples, the length of time waste can decompose and the dangers of waste if not properly processed.

Waste is still a problem that needs attention in Banjarmasin city. Based on observations in the field, there are still piles of garbage found on vacant lots and in rivers. Awareness of protecting the environment and being wise in waste management is the key to the success of cleanliness in an area. The community has played an active role in maintaining environmental cleanliness by processing waste with the 3R concept.

It is very important to provide understanding from an early age so that they want to keep the environment clean. Reduce can be done by finishing food and drinks, bringing drinking bottles / tumblers, bringing food containers, bringing grocery bags. Reuse can be done by using used jam containers as condiment holders, donating used clothes, donating used books. Recycle is an effort to reprocess used goods into new items such as making flower pots from used beverage bottles, making pen holders from used straws, making decorative flowers from used bottle caps.

Picture 1 Waste management material with the 3R concept

Efforts to process waste with the 3 R's can make a big difference by reducing waste generation in the neighborhood. Students are expected to have new knowledge about waste management and can retell it to other family members. Waste if not processed can cause various problems such as disease, unpleasant odors, polluting rivers and soil, and flooding.

After learning about waste management, students practiced making crafts from used straws and bottles. Putri Ayu Hidayatur Rafiqoh was the presenter in the practice of making pen holders

from used straws. The materials needed are plastic cups or used bottles, doubletape, scissors, straws and ribbons to decorate. Participants were divided into 4 groups and made their work as creative as possible from straws and plastic bottles. This activity trains and hones children's creativity as well as teamwork.

Picture 2 Participants' craft from bottles and straw.

Before filling out the posttest questionnaire, participants took a quiz by answering 2 questions asked by Bambang Dwi Waluyo, Achmad Bayu Chandrabuwono and Noviana Sari. Student members were involved in distributing questionnaires, accompanying participants when practicing making crafts and documenting PkM activities.

The PkM activity ended with filling out a post-test questionnaire to measure cognitive changes in SDN Belitung Utara 3 students after participating in the environmental campaign with the 3R concept. The PDWA team hopes that students can make good habits, namely reducing waste generation and processing waste wisely so that environmental cleanliness is maintained.

The next stage is to publish the results of PkM activities in the form of videos uploaded on the Youtube channel, publish scientific articles in the ULM High Ridge Journal and attend the 2024 Wetlands international seminar at Lambung Mangkurat University.

Supporting factors in the implementation of PkM are the facilities provided by SDN Belitung Utara 3 in the form of classrooms, microphones and projectors. In addition, the condition of the participants who enthusiastically listened to the material and maintained a conducive atmosphere during the activity. The inhibiting factors are children who are easily distracted by outside distractions so that assistance from students is needed during the PkM activities.

Based on the results of the post test data processing, there was an increase of 12% compared

to the pretest. There are 5 question items asked in the questionnaire using a Guttman scale. This data shows that there is a cognitive improvement after the delivery of waste management material with the 3R concept.

CONCLUSIONS

PkM activities convey material about the 3R concept in processing waste, namely reduce, reuse and recycle. In addition, the material presented was about the dangers of plastic waste. Through this environmental campaign with the concept of 3R, it affects the cognitive of SDN Belitung Utara 3 students in terms of waste management. As much as 12% has increased. Participants also practiced making pen holders from bottles and straws. Students showed high enthusiasm in following the series of PkM by actively answering questions asked by the team of compulsory lecturers.

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