

Waste Management Model through Ballistic Program in SDN 42 Ampenan



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ABSTRACT: This study aims to describe the waste management model through the Balistik (plastic filled pillow) program at SDN 42 Ampenan. This research uses qualitative research using a case study approach. The subject of this research is the first grade teacher of SDN 42 Ampenan. The object of this research is building the character of students' responsibility for the environment. Data collection techniques used interviews and documentation. Data analysis used in this research is data analysis from Milles and Huberman which consists of data reduction, data presentation, and conclusion drawing. The results showed that the waste management model through the BALISTIK program at SDN 42 Ampenan consists of planning, implementation and evaluation. At the evaluation stage, it was proven to be successful in achieving positive results in the development of student character, then the school also held a BALISTIK exhibition and follow-up of the program. There are three character dimensions of P5 that have been achieved, namely Belief, Fear of God Almighty and Noble Character, mutual cooperation and creativity. Students have shown increased responsibility for the environment by being actively involved in waste management activities, as well as showing better environmental awareness by understanding the importance of keeping the school and surrounding environment clean.

KEYWORDS: Model, waste handling, ballistic

I. INTRODUCTION

A great nation is a nation that has a strong character side by side with high competence that grows and develops from a pleasant education and an environment that applies good values in all aspects of life (Effendy, 2017). It is only with strong character and high competence that the nation's identity becomes solid, collaboration and competitiveness of the nation increases so as to be able to answer the various challenges of the 21st century era. Based on this, national education must also focus on strengthening character.

Strengthening the nation's character is one of the Nawacita points launched by President Joko Widodo through the National Movement for Mental Revolution (GNRM). This commitment was followed up with the President's direction to the Minister of Education and Culture to prioritize and cultivate character education in the world of education. On this basis, the Ministry of Education and Culture launched Strengthening Character Education (PPK) gradually starting in 2016.

Strengthening Character Education is not a new policy at all because since 2010 character education in schools has become a National Movement (Effendy, 2017). Previously, there was the implementation of the 2013 Curriculum which not only emphasized hard skills-based education, but also soft skills development (Marta, Fitria, Hadiyanto, & Zikri, 2020). The implementation of this curriculum is through a thematic learning model by integrating several subjects including preparing characters that will be strengthened in students' personalities. The character values developed in students can be seen in the Core Competencies (KI) seen in the teacher's handbook and the lesson plans used.

In February 2022, the Ministry of Education and Culture announced that the gradual implementation of the Merdeka Curriculum is an innovation in the education system as well as a response to the dynamics of the times and changing educational needs. The Merdeka Curriculum is planned to become the national curriculum in 2024 (Saraswati, 2022). This curriculum is a manifestation of the convergence of various aspirations and potentials that exist in society. One of the main characteristics of the independent curriculum is student independence in developing soft skills and character in accordance with the Pancasila Student Profile Project (Kemendikbud, 2022).

The Pancasila Learner Profile (P3) becomes the foundation of the independent curriculum implementation by accommodating six main dimensions, namely: faith and piety in God Almighty and noble character, global diversity, mutual cooperation, independence, critical reasoning, and creativity (Kemendikbud, 2022). These dimensions create a strong foundation for shaping students' character and abilities.

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The importance of character education development as described above, including through the P5 program (Pancasila Student Profile Strengthening Project), many education units have implemented best practices in the implementation of character education. SDN 42 Ampenan has implemented the BALISTIK (plastic pillow) program. This program was initiated not only to fulfill the P5 co-curricular activities but also as a solution to the condition of the school environment which often becomes less clean, especially from plastic waste after class breaks, even though previously in the morning the school yard had been cleaned.

The BALISTIK program instills character education, especially about students' responsibility for the cleanliness of their environment. This program is run by using plastic as a substitute for pillow stuffing which is usually filled with darkon, foam, or kapok. The plastic used is plastic that has become waste such as snack wrappers or plastic luggage containers. Because the amount of plastic needed is quite large, this program is implemented for one semester. Therefore, with a long enough time, this program can shape students to be more aware of the cleanliness of their environment and be responsible with their snack plastic waste to collect as material in the BALISTIK program.

II. RESEARCH METHOD

This research uses qualitative research using a case study approach. The subject of this research is the first grade teacher of SDN 42 Ampenan. The object of this research is building the character of students' responsibility for the environment. Primary data is data collected directly by researchers in the field. Data collection techniques are using interviews and documentation. This technique is used to obtain comprehensive and in-depth information about the activities of utilizing plastic waste into plastic filled pillows (BALISTIK) at SDN 42 Ampenan. The activities of the Pancasila Student Profile Strengthening Project (P5) have been carried out in the odd semester, namely from January to June 2024.

III. RESULTS

Program Planning:

The implementation of the Merdeka Curriculum with co-curricular P5 (Project for Strengthening the Profile of Pancasila Students) requires teachers to find P5 ideas that are suitable for their environmental conditions. Several ideas emerged from the first grade teacher who implemented the independent curriculum. Furthermore, the plan was submitted to the principal and discussed with the entire teachers' council. Ballistics is the most appropriate choice to be implemented because after recess the school hygiene conditions become less clean because of plastic waste from student snacks. During the first and second weeks of planning this program, the school has formulated objectives that are focused on developing the character of student responsibility for environmental cleanliness and plastic waste management. In addition, this activity also aims to develop students' creativity in processing plastic waste into economically valuable products.

Program Implementation:

Finalization of the Ballistics activity plan was carried out in the first and second weeks. Furthermore, in the third week, the socialization of Ballistic activities was carried out to first grade students. The socialization began by discussing the lack of school hygiene and the dangers of plastic waste to the environment, to the introduction of the Ballistics activity program. The socialization activities raised students' awareness about the dangers of plastic waste, which in turn motivated them to carry out ballistic activities to protect their environment from plastic waste.

In the fourth week, the division of the Ballistics activity group was carried out, followed by making an agreement regarding the deadline for the task. Furthermore, from the fifth to the sixteenth week, students carried out Ballistic activities by collecting, cleaning, and processing plastic waste into pillow stuffing. The plastic waste collection process is carried out by students in the school environment every day. Students not only collect plastic waste from their own snacks, but also become more aware of plastic waste found in the school yard which is then collected as material for Ballistics.

The process of cleaning and processing plastic waste into pillow stuffing material is carried out every Saturday. The process of cleaning the waste is done by washing it using soapy water. After washing, the waste is dried by drying it in the sun. All of these processes need to be done to ensure that the plastic waste used as ballistic material is completely clean. Meanwhile, the waste processing is done by cutting the cleaned and dried waste into small parts so that it is comfortable to use as pillow filling.

Program Evaluation:

The BALISTIK program at SDN 42 Ampenan has been successful in achieving positive results in student character development. Students have shown increased responsibility for the environment by being actively involved in waste management activities, as well as showing better environmental awareness by understanding the importance of keeping the school and surrounding environment clean. In addition, the program succeeded in building cooperation among students to achieve a common goal in plastic waste management. Students learn to work together in teams to collect, separate and manage plastic waste effectively.

Students' level of concern for environmental cleanliness has also increased, where they are actively involved in waste collection activities and understand the importance of keeping the environment clean and healthy. Thus, the BALISTIK program has had a positive impact on plastic waste management and environmental cleanliness in the school and surrounding areas. However, there

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were some noted obstacles identified during the evaluation, namely many students who did not bring scissors and students who were less patient waiting for the washed plastic waste to dry. The follow-up is that the school will help prepare scissors for the next activity. Washing dirty plastic can be done at home to speed up the process of processing plastic waste.

BALISTIK Product Exhibition:

The eighteenth week was the exhibition stage of the BALISTIK products produced by the students. Through this exhibition, the results of students' creativity in processing plastic waste into plastic filled pillows were exhibited to all school members and the surrounding community. The BALISTIK product exhibition became an appreciation event for students' efforts in keeping the school environment clean and producing economically valuable products from plastic waste.

Follow-up:

Overcoming obstacles that arose in the evaluation of the BALISTIK Program, such as many students who did not bring scissors and students' lack of patience in waiting for the washed plastic to dry. The follow-up will be for the school to provide scissors for the next activity. In addition, to speed up the processing of plastic waste, students will be encouraged to wash dirty plastic at home before bringing it to school. This is expected to reduce the time needed to clean plastic waste at school and expedite the process.

By involving more students from various grade levels, the BALISTIK program will have a greater impact in raising awareness of the importance of keeping the environment clean and managing plastic waste properly. By spreading the program to all grade levels, it is hoped that the values of cleanliness and environmental awareness will be further embedded in the school culture. In addition, involving more students can also create a cleaner, healthier and more caring school environment. Therefore, the BALISTIK program not only provides direct benefits for the students involved, but also for the entire school community in an effort to preserve the environment.

IV. DISCUSSION

Program Planning:

Based on the research findings above, the BALISTIK program is a program created by the school as an implementation of the Pancasila Student Profile Strengthening Project (P5) to address the waste problem in the school. This program is carried out by collecting plastic waste to be used as pillow fillings, thus helping to reduce the amount of plastic waste that pollutes the environment. This is because plastic waste is the most common waste found in the environment such as food wrappers, plastic ice packs, plastic grocery bags, and others (Rahman, 2022).

The BALISTIK program was created based on the three dimensions of the Pancasila Student Profile, namely faith and devotion to God Almighty and noble character, mutual cooperation, and creativity (Kemendikbud, 2022). These dimensions produce several sub-elements such as protecting the natural environment which relates to students' attitudes of responsibility, cooperation, and creativity.

Program Implementation:

The BALISTIK program is carried out by first providing socialization to students to introduce the program, plans and information and direction to students. Providing information to students is related to the moralizing method in the formation of student morals. Through moralizing, information is conveyed to students and the value internalization process occurs directly (Hanum, Suyata, & Sumardi, 2020). Students were informed and encouraged to collect plastic waste to be used as the contents of plastic pillows. This is done in order to increase the attitude of responsibility towards the environment and reduce environmental pollution.

The implementation of the process of collecting, cleaning and processing plastic waste in the school environment is part of the P5 activity which is carried out every Saturday. This activity is carried out continuously from the fifth to the sixteenth meeting, with the main objective of maintaining school cleanliness and strengthening students' responsible values towards plastic waste. The implementation of this process shows the existence of repetition techniques in the cultivation of student morals related to the attitude of responsibility towards the environment. This is in accordance with the research findings of Kuliahana dan Marzuki (2020) that the cultivation of moral values is not enough to be done once, but must be done repeatedly so that the moral values of students are consistent and have an impact on students' abilities and actions.

P5 activities of the BALISTIK program on Saturdays at school are carried out by collecting plastic waste, then separating dry plastic waste from wet or dirty plastic waste that needs to be sterilized. The wet or dirty waste is washed and then dried in the sun. If the waste is not dirty and has dried, it can be cut directly by students into small shapes. The results of these small pieces of plastic waste are then combined and used as filling for plastic pillows or BALISTIK. Thus, the making of BALISTIK is one example of the application of the principle of environmentally friendly business, namely recycle. This is in accordance with the opinion of Herlinawati (2022) that recycle is the process of processing waste into new goods or products, and one of the actions is like turning plastic waste into souvenirs or other new products.

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Program Evaluation:

The BALISTIK program has achieved positive results in students' character development. There are three character dimensions of P5 that are achieved, namely Belief, Fear of God Almighty and Noble Character, mutual cooperation and creativity (Kemendikbud, 2022). In the first dimension, namely Belief, Fear of God Almighty and Noble Morals, there is an increase in student responsibility, this is measured based on indicators of responsibility. According to Darmiatun, et al (Patmawati, 2018) indicators of responsibility at school are as follows:

- a) Make a report on each task performed either orally or in writing
- b) Perform tasks without direction
- c) Showing interest in knowing problems in the immediate scope
- d) Preventing fraud in carrying out tasks.

Based on these indicators, through the BALISTIK program, there is an increase in responsibility for the environment by collecting garbage without being told and actively involved in waste management activities, understanding the importance of keeping the school and surrounding environment clean and being able to foster students' interest in overcoming waste problems.

The second dimension, namely about working together, also shows cooperation between students, according to Hendarman et al (2018) the indicators of mutual cooperation consist of solidarity, helping, respect, cooperation, empathy, anti-discrimination, anti-violence, and volunteerism. In all processes, the BALISTIK program has met the indicators of mutual cooperation. Meanwhile, the third dimension, namely creativity, can be seen from the idea of used goods being utilized into useful items such as pillows. In accordance with the creative indicators presented by Munandar (Qomariyah & Subekti, 2021) there are five indicators of creative thinking, namely fluency thinking, flexible thinking, original thinking, elaboration ability. Based on these five indicators, the BALISTIK program is included in 1 indicator, namely fluency thinking, as seen from the teacher being able to find answer ideas to solve problems and students having the knowledge that used goods can be made into useful items.

V. CONCLUSIONS

The waste management model through the BALISTIK program at SDN 42 Ampenan consists of planning, implementation and evaluation. At the evaluation stage, it was proven to be successful in achieving positive results in the development of student character, then the school also held a BALISTIK exhibition and follow-up of the program. There are three character dimensions of P5 that have been achieved, namely Belief, Fear of God Almighty and Noble Character, mutual cooperation and creativity. Students have shown increased responsibility for the environment by being actively involved in waste management activities, as well as showing better environmental awareness by understanding the importance of keeping the school and surrounding environment clean.

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