



Implementation of the pancasila student profile strengthening project thru video media and waste sorting practices for early childhood

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Abstract

Instilling an environmentally conscious character from an early age is an important step in shaping a generation that is responsible toward nature. However, the implementation of learning that integrates digital media and hands-on practice in early childhood education still needs further study. This research aims to enhance children's understanding and skills in distinguishing between organic and inorganic waste thru educational video media and direct practice. At the same time, it aims to develop teachers' competencies in implementing the Pancasila Student Profile Strengthening Project at TK Hidayatul Muftadiin. The method used is descriptive with a simple mixed-method approach thru field studies. Data were collected thru observation, interviews, and documentation of project activities. The project was carried out by presenting educational videos about the impact of littering, solutions for protecting the environment, and how to dispose of organic and inorganic waste. The subjects of the study were 22 kindergarten B children who participated in waste sorting practices based on the color of the trash bins. The research results show that 19 out of 22 children (86.4%) successfully separated organic and inorganic waste correctly, while 3 children (13.6%) experienced difficulties. This research indicates that learning thru educational videos and hands-on practice can enhance children's understanding and ability in waste sorting, as well as support the development of an environmentally conscious character in early childhood.

Keywords: Character, environmental awareness, early childhood, P5

INTRODUCTION

Indonesia, as a country rich in natural resources, faces serious challenges in the form of environmental damage caused by humans and nature. Therefore, efforts to instill an environmentally caring character from an early age become very important as a foundation for the formation of values, attitudes, and habits that are responsible toward the surrounding nature (Loho & Christianty, 2023). In early childhood, also known as the golden age, it is a crucial period for brain development as well as the cognitive, social, emotional, and moral abilities of children, so character education should begin at this stage for optimal results (Fadilah, 2025). Character education for early childhood aims to develop spirituality, personality, self-control,

honesty, responsibility, and everyday caring attitudes in society and the environment (Salam et al., 2022). The educational approach must be adjusted to the stages of moral development according to Piaget and Kohlberg, which emphasize the gradual learning of good and bad values thru social experiences and the introduction of moral rules (Safitri & Dewantoro, 2025). Thus, character formation in early childhood requires concrete, enjoyable learning experiences that are appropriate for the child's developmental stage.

Environmental education integrated with character education plays an important role in fostering ecoliteracy, which is the ability to recognize, understand, and act responsibly toward nature (Lubis et al., 2024). Participatory approaches, experiential learning (outdoor learning), and the implementation of environmentally friendly school programs (adiwiyata schools) are effective in increasing awareness and environmentally caring behavior (Commons, 2025). In this context, multimedia learning media, particularly educational videos, have been proven to enhance children's interest, understanding, and skills in waste management as well as instilling an attitude of environmental care (Fadilah et al., 2024).

In the national framework, the values of Pancasila play a central role in shaping students' character, where the Pancasila Student Profile Strengthening Project (P5) is designed as a project-based learning approach to strengthen the internalization of Pancasila values, including environmental awareness (Nanda, 2025). At the Kindergarten (TK) level, P5 becomes an effective means to develop critical, creative, and collaborative thinking skills thru exploratory activities oriented toward environmental issues such as waste sorting, waste management, and the reuse of used materials (Nanda, 2025; Loho & Christianty, 2023).

Kindergarten (TK) as the first formal educational institution has a strategic function in shaping the character of early childhood thru a conducive learning environment, positive attitude habituation programs, and enjoyable learning methods based on play and exploration (Sinambela, 2025). The use of Educational Play Tools (APE) has become an effective medium in stimulating children's cognitive, social, and creativity aspects, making learning meaningful and reinforcing environmentally caring behavior (Panggabean, 2020).

Nevertheless, research on the implementation of P5 in fostering an environmentally caring character in early childhood thru the integration of educational video media and direct practice is still limited. Some previous studies have focused more on environmental education in general or the use of learning media separately (Fadilah et al., 2024; Loho & Christianty, 2023). Therefore, this research is important to provide an empirical picture of the effectiveness of using video media and waste sorting practices as a contextual learning strategy in kindergarten.

Based on this description, this research aims to analyze the application of learning video media and direct waste sorting practices to improve children's ability to distinguish between organic and inorganic waste according to the P5 objectives, as well as to develop an environmentally caring character holistically and contextually at Hidayatul Mubtadiin Kindergarten.

METHOD

Research Design

This research uses a simple mixed method with a descriptive design through a field research approach. The quantitative approach is used to describe children's ability to sort waste, while the qualitative approach is used to understand the learning process, children's responses, and teachers' experiences during the implementation of the activities. The use of mixed methods allows researchers to obtain a more comprehensive picture of the process and outcomes of instilling environmental care character in early childhood through educational video media and direct practice at TK Hidayatul Mubtadiin (Waruwu, 2024).

Participant

The research subjects are 22 children from Group B of Hidayatul Mubtadiin Kindergarten, aged around 5-6 years, and 1 classroom teacher as the main informal subject. The main data were obtained through direct observation of learning activities and waste sorting practices, interviews with the teacher as the facilitator, and documentation of the Pancasila Student Profile Strengthening Project (P5) activities with an environmental theme.

Instrument and Data Collection

The focus of this research is directed toward two main questions, namely: (1) how the implementation of P5 through video media and direct practice in kindergarten; and (2) how children's ability to distinguish between organic and inorganic waste after participating in the activities. Data collection techniques include: 1. Observation to observe children's behavior and engagement during the learning video and waste sorting activities. 2. Semi-structured interviews with teachers conducting the lessons to obtain information about the process and challenges during the project. 3. Documentation in the form of photos, videos, and activity notes to support data validity. The observation instrument uses a simple assessment sheet with indicator types, namely: (1) the child is able to mention examples of organic and inorganic waste; (2) the child is able to choose the trash bin according to color/category; and (3) the child shows environmentally caring behavior during the activity. Each indicator is assessed with the categories of developing very well (BSB), developing as expected (BSH), starting to develop (MB), and not developing (BB).

Data Analysis

analysis was conducted descriptively in percentage to determine the number of children who successfully and unsuccessfully sorted waste. Meanwhile, qualitative data is analyzed thru the stages of data reduction, data presentation, and inductive conclusion drawing (Sugiyono, 2016). The validity of the data is strengthened thru source triangulation, which involves comparing data from observations, interviews, and documentation to ensure that the research results are credible and accurately reflect the real conditions (Rahardjo, 2010). With this method, the research can illustrate how educational video media and direct practice can enhance children's understanding and skills in sorting organic and inorganic waste, as well as develop a comprehensive environmental care character within the context of early childhood education.

RESULTS AND DISCUSSION

RESULTS

This research discusses the development of an environmentally conscious character from an early age thru the implementation of the Pancasila Student Profile Strengthening Project (P5) at TK Hidayatul Muhtadii. The research results show that out of 22 kindergarten B children who were the subjects, 19 children (86.4%) were able to accurately distinguish and sort organic and inorganic waste after participating in learning thru educational videos and direct practice. Meanwhile, 3 children (13.6%) still experienced difficulties in sorting waste according to its type. This data indicates an increase in children's understanding and skills in waste management after being provided with education supported by video media and practical activities.

Table 1. Results of Children's Ability to Sort Waste

Category	Number of Children	Percentage
Successfully sorted accurately	19	86,4%
Still experiencing difficulties	3	13,6%
Total	22	100%

Data were obtained thru direct observation of learning activities and interviews with the principal and class teachers regarding the development of children's environmental awareness. The observation results showed that most children were enthusiastic while watching the video, actively answered the teacher's questions, and were able to practice waste sorting according to categories.

DISCUSSION

The success of most children in sorting waste correctly can be achieved thru a learning concept that uses a multisensory approach via visually and audibly engaging video media, accompanied by real practice activities that allow children to conduct direct exploration (Yaswinda & Ismet, 2017). This approach is in line with Piaget's cognitive development theory and Kohlberg's moral development theory, where children learn thru concrete experiences and social interaction processes (Arminania, 2025).



Picture 1. Learning with Educational Video Media

The use of educational video media facilitates the delivery of messages about the impact of littering and the importance of disposing of waste properly in a way that is easily understood by young children. Direct practice of sorting waste can strengthen children's observation and understanding, as well as form positive habits that can be applied in daily life (murhum). These findings are in line with the research by Fadilah et al. (2024), which shows that educational video media positively influences knowledge and attitudes related to waste disposal behavior.



Picture 2. Introduction to organic and inorganic waste and color-coded trash bins

Although most of the children succeeded, there are still 3 children who are experiencing difficulties. Based on the results of the teacher's interview, the difficulties are suspected to be influenced by differences in cognitive development readiness, shorter attention spans, and a lack of habituation to waste sorting in the home environment. These findings indicate that the success of environmental character education is not only influenced by activities at school but also by family support as the child's first learning environment. Therefore, reinforcement through communication between teachers and parents needs to be carried out continuously.



Picture. The child mentions organic and inorganic waste and describes the different types of waste.

This research also has limitations. The number of subjects is relatively limited and was only conducted at one kindergarten institution, so the research results cannot yet be widely generalized. In addition, the observation duration was conducted over a short period, so it does not yet reflect the sustainability of children's behavioral changes in the long term. Thus, the overall results show that the integration of educational video media and direct practice is an effective method that not only enhances the understanding of waste sorting concepts but also supports the development of an environmentally caring character in early childhood, in accordance with the P5 objectives at TK Hidayatul Mubtadiin.

CONCLUSION

Based on the research results, it can be concluded that learning using educational video media accompanied by direct practice in sorting waste significantly improves early childhood understanding and skills in distinguishing between organic and inorganic waste. As many as 19 out of 22 children successfully sorted the waste correctly, demonstrating the effectiveness of the learning method that integrates visual aspects and real-life experiences. This approach is also effective in fostering an environmentally conscious character in children, in line with the goals of the Pancasila Student Profile Strengthening Project (P5) at TK Hidayatul Mubtadiin.

However, there are still a small number of children who experience difficulties, indicating the need for personalized, repetitive, and consistent learning both at school and at home. The role of teachers as facilitators and role models is very important in strengthening the internalization of environmental care values in early childhood.

Based on these findings, this research practically recommends that early childhood education teachers more frequently integrate audiovisual media with hands-on learning activities in thematic lessons, particularly those related to the environment. In addition, parental involvement is needed thru simple habits at home, such as sorting waste with children, so that learning becomes sustainable and contextual.

The contribution of this research lies in strengthening empirical evidence that the combination of educational video media and direct practice is effective in enhancing cognitive abilities as well as fostering an environmentally caring character in early childhood. This research also provides implementational references for early childhood education teachers in developing experiential learning strategies that align with the implementation of the Pancasila Student Profile Strengthening Project (P5).

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