

Implementing Effective Strategies to Foster Environmental Care Character among Students

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ABSTRACT

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This study employs a qualitative research approach with a case study design to investigate the teacher's strategy in developing students' environmental caring character, as well as the factors that support and hinder this strategy in the 3T area. The research subjects consist of school principals, teachers, and students at public elementary school Belitang, Indonesia. Data were collected using interviews, observations, and documentation analysis, and analyzed through data reduction, presentation, and conclusion. The study finds that the teacher's strategy in cultivating the character of caring for the environment for students is successful, as it involves planning, directing, and implementing environmentally sound policies, providing motivation, creating conducive learning conditions, giving positive directions, and changing student behavior towards the environment. Supporting infrastructure, such as the availability of landfills and cleaning equipment in each class, also contributes to this success. However, the lack of a garbage pit remains an inhibiting factor, leading to the scattering of final waste in the school's backyard.

Keywords

Elementary school

Environmental caring

Learning strategies

Student character

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Introduction

Character education is essential in today's society as it can improve the quality of the character of the current and future generations. Schools, as a formal education institution, play a crucial role in shaping the attitudes, character, and behavior of students. Environmental concern is one of the character traits expected to be formed in students during the educational process. Character is the unique qualities of an individual or group of people that contain values, moral capacity, and resilience in facing difficulties and challenges. There are several ways in which teachers can shape student character, and there are specific objectives of character education itself [1]-[3]. Early character education can provide a strong foundation for fostering environmental awareness. Environmental awareness can be instilled based on the school curriculum and programs planned by the school. However, the formation of student character is not solely the responsibility of teachers or schools, but also of the community. Still, in formal education, teachers have a crucial role and strategy in shaping student character.

Strategy is a planned and deliberately implemented pattern for activities or actions, including activity goals, participants, activity contents, activity processes, and supporting facilities. According to Ref. [4], strategy is the type or style of plan used by teachers to achieve a goal. Schools, as educational institutions, are responsible for shaping student character, with teachers' role and contribution being dominant. Teachers develop character education values to students, and these values, once instilled, will gradually become habits and implemented in daily life. One of the character education values that can be implemented in daily life is environmental awareness. Environmental awareness is the attitude and action that always tries to prevent damage to the natural environment around it and develops efforts to repair the damage that has occurred [5],[6].

Environmental awareness in students can be seen from activities such as classroom cleanliness, providing organic and non-organic waste bins, and being mindful in the use of energy. The attitude of caring for the environment includes working hard to protect nature, valuing health and cleanliness, wisely managing and using natural resources, and taking responsibility for the environment. It suggests the need for human awareness in managing waste. The effort to manage waste is by disposing of it in the right place. Waste should be thrown into waste bins or landfill sites. However, human awareness is vastly different. Sometimes, there are still many who dispose of their waste improperly, such as into rivers. Improper waste disposal can damage the environment and is considered normal because there are no strict rules. If this situation is allowed to continue, environmental damage will occur. It is essential to provide an understanding to the younger generation in Indonesia about the importance of environmental concern. Environmental awareness can be instilled through

character education, especially in schools. Moreover, the problems in Indonesia are not only related to waste but also to forest fires, floods, landslides, and so on.

Previous research conducted Ref. [7]-[9] found that character education had a significant impact on environmental awareness among students. The character education program helped increase students' knowledge and awareness of environmental issues and motivated them to participate in environmental preservation activities. The program included values such as caring for the environment, being responsible for the environment, and actively contributing to environmental preservation. The character education program provided learning experiences for students to be more aware of their environment and take part in efforts to preserve it. Character education is crucial in shaping student character and can instill environmental awareness in students. The teacher's role and strategy in character education are significant, and schools play a vital role in shaping students' character. Environmental awareness is essential in managing waste and preserving the environment. Character education programs can help increase students' knowledge

The objective of this study is to emphasize the importance of character education in schools and how it can help to improve the quality of character in current and future generations. It highlights the role of schools and teachers in shaping the attitudes, character, and behavior of students, and how character values such as environmental awareness can be instilled in students through planned programs and the curriculum. The objective is to show how early character education can serve as a foundation for instilling environmental awareness in students, and how teachers can use strategies to help achieve this goal. Additionally, the study aims to create awareness about the importance of environmental consciousness and how character education can be used to inculcate this value in students, leading to responsible and sustainable practices for preserving the environment.

Method

This research is a qualitative investigation that utilizes the case study methodology. The methods used for data collection comprise observation, interviews, and documentation. The data analysis in this research is based on the data analysis stages theory proposed by Miles & Huberman, which involves data reduction, data presentation, and verification of findings. The research was carried out at a public elementary school in Palembang, Indonesia. The research participants in this study comprise the school principal, teachers, and students. The case study method is a widely used research technique that focuses on gaining an in-depth understanding of a specific subject or event. The findings will provide insights into the educational practices and experiences of the school's stakeholders, which could help inform policy and practice in the field of education.

Results

A. Character growth strategy

The study focuses on the strategies used by teachers to develop environmentally conscious behavior among students in remote, underdeveloped, and disadvantaged areas (3T regions) and the supporting and inhibiting factors. The study uses a case study approach in the school. The research findings revealed that teachers use various strategies to develop environmentally conscious behavior among students. To enhance environmental awareness, based on the study on the strategies of teachers in fostering environmental care character for students, the following steps can be taken:

- Encouraging teacher training: Provide training for teachers on how to develop and implement strategies for fostering environmental care character in students. This training can include the importance of environmental care, effective teaching methods, and how to create a conducive learning environment for the students.
- Establishing a green school program: Implement a green school program in the school, where students are encouraged to participate in environmental activities such as cleaning up the school grounds, planting trees, and reducing waste. Teachers can take the lead in organizing these activities and ensuring students are motivated to participate.
- Encouraging student participation: Encourage student participation by providing them with opportunities to lead environmental projects in the school, such as developing a recycling program or creating a school garden. Teachers can also create a sense of ownership among students by involving them in decision-making regarding environmental issues in the school.
- Using positive reinforcement: Use positive reinforcement to encourage students to engage in environmentally friendly behaviors. Teachers can use praise and recognition to acknowledge students who exhibit environmentally responsible behavior, such as proper waste disposal or reducing their carbon footprint.
- Collaborating with the community: Collaborate with the community to raise awareness about environmental issues and to implement environmental initiatives. Teachers can involve community members in school activities, such as clean-up campaigns or tree planting activities, to help students understand the importance of taking care of the environment and to promote positive environmental behavior.

By implementing these steps, the school can enhance environmental awareness among students and help them develop positive environmental attitudes and behaviors. Teachers can play a crucial role in fostering environmental care character in students, and by providing them

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with the necessary training and support, they can make a significant impact on their students and the environment. The study revealed that there are several factors that support the development of environmentally conscious behavior among students. Firstly, the teacher's motivation, passion, and commitment are essential in driving the students' interests in preserving the environment. Secondly, school facilities and infrastructure such as clean water supply, sufficient waste disposal, and electricity are essential in providing a conducive learning environment. Thirdly, supportive and cooperative school administrators, parents, and stakeholders play a significant role in promoting and supporting the teachers' strategies.

B. Character Achievements

From the given data, it can be analyzed using the performance achievement perspective to evaluate the performance in maintaining cleanliness and sustainability in the school environment.

- **Habituation to Maintain Cleanliness and Sustainability of the School Environment:** The school has successfully instilled habits in students to maintain cleanliness in the school environment by keeping their shoes neatly arranged, disposing of trash properly, and carrying out their scheduled duties. This is confirmed through the interview conducted with Ibu Susiwati, a grade V teacher, who stated that the students have been trained to keep the school environment clean. Thus, the school has achieved a good performance in instilling cleanliness habits in its students.
- **Disposing of Garbage in its place and washing Hands:** The school has provided facilities to dispose of trash properly and to wash hands before entering the class. During the observation, it was found that the students were using these facilities properly. The school has provided several trash bins in different sizes, which are strategically placed to encourage proper disposal of waste. The school has also provided handwashing facilities to promote personal hygiene. Thus, the school has achieved a good performance in providing facilities for waste disposal and handwashing.
- **Providing Bathrooms and Clean Water:** The school has provided toilet facilities and clean water for use. During the observation, it was found that the students were using the toilet and water facilities properly. The students were seen washing their hands after using the toilet and turning off the tap to conserve water. Thus, the school has achieved a good performance in providing toilet and water facilities and promoting proper use of these facilities.
- **Energy Saving Habituation:** The school has encouraged the habit of conserving energy by turning off electrical appliances such as fans and lights when not in use. The headmaster of the school stated that the fans in each classroom should be turned off after school and during breaks. During the observation, it was found that the students were turning off the

fans after completing their tasks. Thus, the school has achieved a good performance in promoting energy conservation among its students.

- **Building Wastewater Sewerage:** The school has built a good drainage system to dispose of wastewater. The drainage system is regularly cleaned by students and teachers to prevent blockages. This is confirmed through the interview conducted with Ibu Susiwati, who stated that the students are instructed to clean the drainage system during their duty. Thus, the school has achieved a good performance in providing a good drainage system and promoting proper use and maintenance of the system.
- **Habituation separates types of organic and inorganic waste:** The school has encouraged the habit of separating organic and inorganic waste. During the observation, it was found that the students were segregating their waste into organic and inorganic categories. This shows that the school has achieved a good performance in promoting waste segregation among its students.

In conclusion, the school has achieved a good performance in maintaining cleanliness and sustainability in the school environment. The school has provided the necessary facilities and instilled the proper habits in its students to promote a clean and sustainable environment.

Discussion

The teacher's strategy in providing motivation to students is through education, teaching, and training. Educating means transmitting and developing life values. Teaching means transmitting and developing knowledge and technology. In the teacher's strategy of fostering environmental care, the teacher always provides motivation and encouragement in learning by obeying the rules at school, dressing neatly, keeping the classroom clean and comfortable, and disposing of garbage in its place. This can have a positive influence on students to learn in and outside the classroom. The good influence of the teacher can also be applied by students at home and at school. There are several indicators of the teacher's strategy in fostering environmental care, including providing motivation to students, creating a student learning environment, being skilled in giving positive directions to students, being skilled in mastering the class by adjusting the situation and conditions of the classroom, and changing student behavior towards the environment for the better [10]-[13].

In the teacher's strategy of creating a student learning environment, a teacher needs to equip themselves with the right classroom management strategy to create a calm and conducive learning atmosphere. A conducive school environment is closely related to the quality of student learning. It is realized that a conducive classroom can prevent students from boredom, fatigue, and monotony. On the other hand, a conducive classroom can stimulate interest, motivation, and learning endurance [5]. Creating a clean and tidy learning

environment is also very important for students. A clean and comfortable environment creates a conducive learning environment.

In the teacher's strategy of being skilled in giving positive directions to students, the teacher always directs and provides positive motivation to students in learning in and outside the classroom. The positive direction given by the teacher includes maintaining the school environment. The school environment is the first benchmark of cleanliness because with a clean environment, students can follow learning in and outside the classroom comfortably. The teacher always directs students to carry out duties, dispose of garbage in its place, clean the toilet after use, wash their hands before entering the classroom, and dress neatly.

In the teacher's strategy of being skilled in mastering the class by adjusting the situation and conditions of the classroom, the teacher always creates a calm, conducive, and enjoyable learning atmosphere. As a teacher, they must master the class according to their respective strategies. The teacher also always knows the condition of the class that must be kept clean, which can make students comfortable in learning. Strategies like classroom management and positive reinforcement can help create a safe and supportive learning environment. By providing clear expectations for behavior and consequences, teachers can help students understand how to act in a respectful and responsible way [14]. Additionally, recognizing and rewarding positive behaviors can help reinforce good habits and attitudes.

Another important strategy for promoting environmental awareness is integrating environmental topics and activities into the curriculum [12]. Teachers can incorporate lessons on sustainability, conservation, and climate change into various subjects, such as science, social studies, and language arts. Field trips and outdoor activities provide hands-on learning experiences that foster a connection to nature and inspire students to take action to protect the environment [15]. Finally, teachers can serve as role models for environmental responsibility by practicing what they preach [16]. By demonstrating sustainable behaviors, such as using reusable bags and bottles, conserving energy, and reducing waste, teachers can show their students how to live a more eco-friendly lifestyle. They can also encourage students to get involved in environmental initiatives and take action to make a positive impact in their communities. Promoting environmental awareness and responsibility among students is a critical issue in today's world [17],[18]. By using effective teaching strategies and serving as positive role models, teachers can help students develop a deeper understanding of environmental issues and inspire them to take action to protect the planet [19].

Conclusion

The efforts made by the teachers of SD Negeri Sumber Rahayu Belitang II in cultivating an environmentally conscious mindset in their students is commendable. Through the implementation of various strategies, such as guidance, direction, reminders, and motivation,

the school has successfully instilled a culture of environmental care among its students. The daily practice of waste management and cleanliness has become a part of the school's culture, aimed at shaping the students' character of environmental responsibility. The conducive learning environment with adequate facilities and cleanliness has also played a significant role in supporting the school's efforts. However, the absence of a proper waste disposal system remains a challenge for the school, leading to waste accumulation behind the school. The school's efforts to instill environmental awareness and responsibility among its students is a step towards creating a more sustainable future. It is crucial for other educational institutions to adopt similar strategies and practices to contribute to a healthier and cleaner environment.

Conflict of Interest

The authors declare that there is no conflict of interest.

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