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Strengthening Character and Social Awareness among Adolescents through Literacy and Environmental Education Programs around SMK Dewantoro

Abstract

This study aims to describe the efforts to strengthen character and social awareness among adolescents through literacy and environmental education programs at SMK Dewantoro. The research background is based on the importance of cultivating environmental and social awareness in the younger generation as essential capital for facing global challenges and ensuring environmental sustainability. This study employed a qualitative descriptive method with data collected through observation, interviews, and documentation. The literacy and environmental education program was implemented through activities such as reading and discussing environmental literature, school clean-up actions, waste management, tree planting, and energy-saving campaigns. The results indicate that the program successfully fostered students' awareness of the importance of cleanliness, ecosystem preservation, empathy, and social care within both the school and the surrounding community. Furthermore, students showed improvements in discipline, responsibility, cooperation, and a sense of belonging toward the environment. These findings confirm that integrating literacy and environmental education into school activities effectively shapes students' social and environmental awareness and can serve as a model for other schools in promoting sustainable education.

Keywords: Character Strengthening, Social Awareness, Environmental Education, SMK Dewantoro

1. Introduction

Education in the 21st century emphasizes not only academic achievement but also the formation of character and social awareness among students. Adolescents, as the nation's next generation, face increasingly complex global challenges such as environmental crises, moral degradation, and declining social concern. The growing tendency of youth to be individualistic, insensitive to environmental issues, and lacking social responsibility has become a critical concern in education. Schools, as formal institutions, play a strategic role in instilling values of character and environmental consciousness so that young people grow into individuals who are ethical, caring, and responsible. Hamidah, A. N. (2025).

Environmental literacy and education represent effective approaches to instill these values. Environmental literacy goes beyond the ability to read and understand information—it encourages students to think critically, act creatively, and care deeply about environmental

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sustainability. According to Roth (1992), environmental literacy includes ecological understanding, problem-solving skills, and a commitment to maintaining natural balance. Meanwhile, environmental education aims to shape attitudes, values, and behaviors that support environmental preservation and social well-being (Tilbury, 1995). The integration of these two approaches serves as a vital means of strengthening youth character, including discipline, responsibility, cooperation, and social empathy. Rijal, A. S. (2025).

SMK Dewantoro, as a vocational education institution, recognizes the importance of character development aligned with the goals of Education for Sustainable Development (ESD). The school has developed a literacy and environmental education program that involves students in various activities such as reading ecology-themed literature, waste management through a recycling bank, tree planting, energy-saving campaigns, and community cleanliness outreach. These initiatives aim not only to enhance students' environmental knowledge but also to foster social concern and responsibility for environmental sustainability.

The implementation of literacy and environmental education programs at SMK Dewantoro also represents a concrete effort to support the achievement of the Sustainable Development Goals (SDGs), particularly Goal 4 (Quality Education) and Goal 13 (Climate Action). By engaging students in real-world environmental and social activities, the school seeks to internalize moral and social values relevant to future challenges. This aligns with Lickona's (2013) view that character education must encompass moral knowing, moral feeling, and moral action, ensuring that students not only understand values but also experience and practice them. Kurdaningsih, S. V. (2025).

Based on this background, it is essential to explore how the literacy and environmental education programs at SMK Dewantoro contribute to strengthening adolescents' character and social awareness. This study is expected to provide a comprehensive overview of the strategies, processes, and outcomes of the program and serve as a model of best practice for other schools in realizing sustainable character education. Diez-Ojeda, M. (2025).

2. Theoretical Framework

The theoretical framework serves as the conceptual foundation that explains and supports the study on *Strengthening Character and Social Awareness among Adolescents through Literacy and Environmental Education Programs around SMK Dewantoro*. This framework encompasses several key theoretical perspectives as follows: Harris, N. C. (2025).

2.1. Character Strengthening Theory

Character strengthening is the process of shaping values, attitudes, and positive habits that are internalized within students. According to Lickona (2013), character education encompasses three core dimensions: *moral knowing*, *moral feeling*, and *moral action*. The process of character strengthening does not merely focus on knowledge about moral values but also emphasizes habituation through real-life actions. In the school context, character building is implemented through activities that cultivate discipline, responsibility, cooperation, and environmental awareness. Literacy and environmental education programs serve as effective means to foster these character traits. Hu, B. (2025).

2.2. Adolescent Development Theory

Adolescence is a transitional stage between childhood and adulthood, marked by biological, cognitive, and socio-emotional changes (Santrock, 2016). During this period, adolescents possess high curiosity, a strong desire for recognition, and a growing sense of

responsibility toward their surroundings. A supportive school environment through literacy and environmental education programs provides an avenue for developing social identity and positive character traits such as social awareness and responsibility for environmental sustainability. Taylor & Francis. (2025).

Social Awareness Theory: Social awareness refers to attitudes and behaviors that demonstrate empathy, solidarity, and active participation in addressing social issues (Schwartz, 2010). This awareness can be nurtured through activities that promote understanding of the balance between humans and nature. Programs that engage students in school cleanliness, conservation, and environmental management help foster empathy, cooperation, and a sense of social responsibility.

2.3. Environmental Literacy Theory

Environmental literacy refers to an individual's ability to understand the interrelationships between humans and ecosystems, as well as to act responsibly in maintaining environmental balance (Roth, 1992). It includes ecological knowledge, problem-solving skills, and environmental stewardship. School-based environmental literacy activities such as reading ecology-themed books, group discussions, and hands-on actions (e.g., tree planting and waste management) enhance students' understanding and awareness of environmental preservation.

2.4. Environmental Education as a Strategy for Sustainable Learning

Environmental education is a learning process aimed at instilling understanding, values, and actions that support environmental conservation (Tilbury, 1995). It is an integral component of *Education for Sustainable Development* (ESD), encouraging learners to adopt a sustainability-oriented mindset. At the school level, such programs can be integrated into the curriculum and extracurricular activities such as recycling initiatives, green gardens, and energy-saving campaigns to habituate students to environmentally friendly behaviors.

2.5. Interrelation among Theories

Character strengthening, social awareness, literacy, and environmental education are interrelated and mutually reinforcing in developing morally upright and environmentally conscious adolescents. Adolescent development theory underscores that this period is critical for the internalization of moral and social values. Through literacy and environmental education, students gain not only ecological knowledge but also social responsibility, leadership, and collaboration skills in maintaining their school environment.

Thus, this theoretical foundation affirms that literacy and environmental education programs are not only tools for enhancing knowledge but also effective strategies for strengthening adolescent character and social awareness at SMK Dewantoro in achieving sustainable education goals.

3. Method

The research method describes the approach, procedures, and techniques used to examine *Strengthening Character and Social Awareness among Adolescents through Literacy and Environmental Education Programs around SMK Dewantoro*. The research was systematically structured as follows: Pangestika, R. R. (2025).

3.1. Research Approach

This study employed a qualitative descriptive approach, aiming to provide an in-depth description of the process and outcomes of character strengthening and social awareness development through literacy and environmental education programs. This approach allows the researcher to understand natural phenomena based on participants' experiences, interactions, and perceptions. Omeri, N. (2025).

Research Location and Duration: The study was conducted at SMK Dewantoro, selected because it has implemented literacy and environmental education programs as part of its student character-building efforts. The research took place over a period of three months, covering the preparation, data collection, and analysis stages.

3.2. Research Subjects and Informants

The research subjects were students of SMK Dewantoro actively participating in the literacy and environmental education program. Key informants included:

- a. School Principal – providing information about policy and institutional support for the program.
- b. Program Supervisors and Teachers – explaining the planning, implementation, and evaluation processes.
- c. Student Participants – sharing firsthand experiences on how the program influenced their character and social awareness.
- d. Cleaning Staff or Local Community Members (if relevant) – offering perspectives on the environmental impact of the program.

Informants were selected using purposive sampling, focusing on individuals most knowledgeable and actively involved in the program.

3.3. Data Collection Techniques

Data were collected through several methods:

- a. Participatory Observation – directly observing environmental literacy activities such as reading and discussing ecological books, school clean-up campaigns, tree planting, and waste management.
- b. In-depth Interviews – conducted with school leaders, teachers, and students to explore their experiences, perceptions, and the program's influence on character and social awareness.
- c. Documentation – collecting photos, program schedules, reports, and school policy documents related to literacy and environmental education.

Research Instruments: The primary research instrument was the researcher, who acted as the key data collector and analyst. Supporting instruments included interview guides, observation sheets, and field note templates to ensure consistency in data collection. Yaguwipa. (2025).

3.4. Data Analysis Techniques

Data analysis was conducted interactively following the Miles and Huberman model, which includes:

- a. Data Reduction – selecting, focusing, and simplifying key data from observations, interviews, and documentation.

- b. Data Display – organizing data into narratives, tables, or matrices for clearer interpretation.
- c. Conclusion Drawing and Verification – interpreting data to identify patterns, meanings, and relationships between literacy–environmental education programs and the strengthening of adolescents’ character and social awareness.

3.5. Data Validity Techniques

To ensure validity, the study employed triangulation techniques, including:

- a. Source Triangulation: Comparing information from various informants (teachers, students, school principals).
- b. Technique Triangulation: Combining observation, interviews, and documentation methods.
- c. Member Check: Verifying findings with informants to ensure accuracy and alignment with field realities.

Data Research Procedures

- a. Preparation Stage: Preliminary study, proposal development, and obtaining permission from the school.
- b. Data Collection Stage: Conducting observations, interviews, and documentation according to the school’s activity schedule.
- c. Analysis and Reporting Stage: Compiling findings, drawing conclusions, and formulating recommendations.

Through this method, the research is expected to provide a comprehensive depiction of how literacy and environmental education programs at SMK Dewantoro contribute to strengthening character and nurturing social awareness among adolescents.

4. Result

The study on *Strengthening Character and Social Awareness among Adolescents through Literacy and Environmental Education Programs around SMK Dewantoro* produced several significant findings based on observations, in-depth interviews, and documentation collected over a three-month period. The results are presented across the following key aspects. Yusnia, Y. (2025).

4.1. Implementation of Literacy and Environmental Education Programs

The literacy and environmental education program at SMK Dewantoro was implemented systematically and continuously. The core activities included:

- a. **Environmental Literacy:** Students regularly read and discussed books or articles on ecology, climate change, and waste management every week.
- b. **Environmental Action:** Activities such as tree planting, developing green school gardens, waste sorting and management, and energy-saving campaigns involved all members of the school community.
- c. **Community Education:** Students conducted outreach activities in the surrounding community to raise awareness about household waste management and environmental cleanliness.

These activities were facilitated by supervising teachers in collaboration with student organizations and external partners such as the local Environmental Agency (*Dinas Lingkungan Hidup*).

4.2. Character Strengthening among Adolescents

The program effectively strengthened several key character values:

- a. **Discipline and Responsibility:** Students showed improved punctuality, task completion, and cleanliness maintenance. Teachers recorded a reduction of approximately 30% in disciplinary violations compared to before the program implementation.
- b. **Teamwork and Leadership:** Through group activities such as garden creation and waste bank management, students practiced teamwork, leadership, and decision-making.
- c. **Integrity and Care:** Students consistently maintained personal and school cleanliness even without direct teacher supervision.

Field observations indicated that routine activities and teachers' exemplary behavior were crucial factors contributing to success. Cahaya. (2025).

4.3. Enhancement of Social Awareness

Interviews and documentation revealed an increased sense of social awareness among students after participating in the program:

- a. Students actively helped peers in environmental tasks, such as moving waste bins or watering plants.
- b. They encouraged the local community to engage in joint clean-up activities.
- c. Empathy increased as students became more sensitive to the environmental impact of human behavior, such as littering.
- d. Teachers reported that students became more cooperative, empathetic, and socially conscious in daily interactions.

4.4. Impact on School and Community Environments

The program created tangible positive changes:

- a. The school environment became cleaner, greener, and more organized, which was positively acknowledged by visitors and local residents.
- b. The school's waste bank successfully reduced inorganic waste by approximately 40% per month.
- c. Local residents began adopting waste-sorting practices and maintaining cleanliness after the students' outreach efforts.

4.5. Supporting and Inhibiting Factors

Supporting Factors:

- a. Strong support from school leaders and teachers.
- b. High student enthusiasm due to varied and enjoyable activities.
- c. Collaboration with external institutions such as environmental agencies and nature-loving communities. Pujia. (2025).

Inhibiting Factors:

- a. Limited funding for sustainable activities such as garden maintenance and plant procurement.
- b. Some students required additional motivation to maintain consistent reading habits.

Key Findings: Overall, the study shows that integrating literacy and environmental education significantly contributes to shaping positive character and enhancing adolescents' social awareness. Students not only gained ecological understanding but also internalized moral values such as discipline, responsibility, cooperation, and empathy in daily life, both at school and within their communities. Joeey. (2025).

4.6. Implications

The findings confirm that literacy and environmental education programs can serve as a *best practice model* for other schools seeking to promote sustainable character education. With improved funding and strengthened reading culture, this program has the potential to create long-term behavioral change among youth toward greater environmental and social responsibility.

5. Discussion

The findings of this study demonstrate that the integrated literacy and environmental education program at SMK Dewantoro had a significant impact on developing students' character and social awareness. The analysis of these results in relation to theoretical foundations is presented below. Mayoga. (2025).

5.1. Character Strengthening through Literacy and Environmental Education

The data indicated notable improvements in discipline, responsibility, integrity, and cooperation among students following program participation. This aligns with Lickona's (2013) concept of character education, which comprises *moral knowing*, *moral feeling*, and *moral action*.

Environmental literacy activities such as reading and discussing ecological texts enhanced students' awareness and emotional connection to moral values (*moral knowing* and *moral feeling*), while practical actions like waste management and tree planting fostered behavioral expression of these values (*moral action*).

The consistent engagement in such activities supports the theory of behavioral habituation, which asserts that positive behaviors become habitual through repetition. The observed 30% reduction in disciplinary violations supports the conclusion that environmental routines effectively strengthen positive character traits.

5.2. Social Awareness as a Product of Empathy and Interaction

The program not only influenced environmental awareness but also fostered stronger social empathy. The finding that students engaged in mutual assistance and encouraged community cooperation aligns with Schwartz's (2010) social concern theory, which emphasizes awareness of human interdependence and motivation to contribute to collective well-being.

Community outreach provided authentic experiences for students to practice empathy and social engagement, in line with Vygotsky's theory of *social interaction*, which posits that adolescent moral development is shaped through meaningful social contexts. Umami. (2025).

5.3. Environmental Literacy as a Foundation for Knowledge and Attitude Formation

Environmental literacy activities improved students' understanding of ecological and sustainability issues. Interviews revealed that students became more sensitive to topics such as plastic waste, global warming, and conservation. This supports Roth's (1992) definition of environmental literacy, which involves ecological knowledge, problem-solving skills, and environmental stewardship.

Students' behavioral changes such as bringing reusable bottles and maintaining school cleanliness illustrate how literacy can bridge knowledge and sustainable action.

5.4. Adolescence as a Strategic Stage for Character Development

This research reinforces Santrock's (2016) theory that adolescence is a critical phase for developing identity, moral values, and social habits. Literacy and environmental education activities provided adolescents with a platform to channel curiosity, seek recognition, and contribute meaningfully to their communities.

Participation in green garden and waste bank projects allowed students to practice leadership, teamwork, and decision-making key components of adolescent identity formation. Taylor & Francis. (2025).

5.5. Program Impact on School and Community Sustainability

Visible improvements in the school environment such as cleaner spaces, organized green areas, and a 40% reduction in inorganic waste illustrate the effectiveness of environmental education as a strategy within *Education for Sustainable Development* (Tilbury, 1995).

Furthermore, community adoption of waste-sorting and cooperative clean-up activities demonstrates a multiplier effect beyond the school, aligning with Sustainable Development Goals (SDG 4: Quality Education and SDG 13: Climate Action).

5.6. Supporting Factors and Challenges

Program success was supported by leadership commitment, student enthusiasm, and external collaboration. Managerial support and partnerships were critical to sustainability. However, challenges included limited funding and varying levels of student motivation for reading activities.

These findings are consistent with prior studies suggesting that the sustainability of environmental literacy programs depends on school policy support, funding, and stakeholder involvement. Yaguwipa. (2025).

5.7. Implications

The findings highlight that integrating literacy and environmental education represents a viable *green education* model for character development. Other schools can adapt similar strategies by tailoring them to local contexts, strengthening reading culture, and fostering partnerships with external institutions to ensure long-term sustainability.

6. Conclusion and Suggestions

6.1. Conclusion

The literacy and environmental education program at SMK Dewantoro effectively fostered key character values discipline, responsibility, cooperation, and social awareness among adolescents. These findings align with theories of character education, social concern, and environmental literacy, and are consistent with the goals of sustainable development. Routine engagement, active participation, and meaningful social interaction were identified as the main drivers of success. The program not only positively influenced students but also created broader environmental and social impacts within the school and surrounding community.

6.2. Suggestions

Based on the findings and conclusions of this study, several suggestions are proposed to enhance the sustainability and impact of literacy and environmental education programs in strengthening adolescent character and social awareness:

- a. For Schools and Educators: Schools should continue integrating literacy and environmental education into the formal and extracurricular curriculum. Teachers are encouraged to design creative and context-based learning activities that connect environmental knowledge with real-life practices. Regular reflection sessions or student journals can also be introduced to help learners internalize the values of discipline, responsibility, and empathy.
- b. For School Management: The school leadership should allocate sufficient funding and resources to maintain green school facilities, such as tree planting areas, waste banks, and environmental corners. Building partnerships with local environmental agencies, universities, and NGOs will strengthen program sustainability and provide students with broader learning experiences.
- c. For Students: Students are encouraged to take active roles not only as participants but also as *agents of change* in promoting environmental and social awareness among their peers and community. Student-led initiatives, such as eco-clubs or literacy circles, can be expanded to foster leadership, teamwork, and civic responsibility.
- d. For Parents and the Community: Parental involvement and community collaboration are essential in extending environmental and moral education beyond school boundaries. Joint activities such as community clean-ups, recycling campaigns, and family literacy projects can help reinforce positive habits and shared responsibility for environmental sustainability.
- e. For Policy Makers and Educational Authorities: The government and education authorities should encourage the replication of similar literacy-based environmental education programs across schools through policy support, teacher training, and grant funding. Such initiatives align with national character education goals and the Sustainable Development Goals (SDGs), particularly in promoting quality education (SDG 4) and climate action (SDG 13).
- f. For Future Research: Further studies could explore the long-term behavioral impact of environmental literacy programs and compare their effectiveness across different educational levels or community settings. Quantitative approaches may also complement qualitative findings to measure specific improvements in students' character and social responsibility.

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