



Implementation of Ecological-Based Civic Education to Increase Students' Environmental Awareness in Ngodolendo Hamlet

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Keywords:	Abstract
Environmental Awareness; Ecological Citizenship; Basic Education	<i>This study aims to analyze the implementation of ecological-based civic education in increasing students' environmental awareness in Ngodolendo Hamlet. The background of this research is based on low environmental awareness, especially in waste management, which is influenced by the lack of contextual and participatory environmental education. This research uses a qualitative approach with a descriptive method through observation, direct participation, and documentation during the implementation of the program. The results of the study show that the implementation of ecological-based citizenship education through socialization activities and real actions, such as waste management and the manufacture of recycled products, is able to improve students' knowledge, attitudes, and skills related to environmental concerns. Contextual and experiential learning approaches (learning by doing) have proven to be effective in fostering awareness and active participation of students. In addition, this activity also contributes to forming the character of responsible citizenship through the internalization of ecological citizenship values. Thus, ecologically-based civic education can be an alternative learning strategy that is relevant in increasing environmental awareness from an early age. Therefore, continuous efforts are needed in integrating environmental education into learning to form a generation that cares and is responsible for the environment.</i>

INTRODUCTION

Background of the Study

Citizens are a fundamental element in the sustainability of a country, because their existence and active role are what keep the existence of the country maintained. Every country certainly expects its citizens to be able to contribute to various national problems, including environmental problems. A healthy and comfortable environment is a supporting factor for the creation of social harmony in the life of the state. Conceptually, there are three types of citizens, namely sponge citizens, stone



citizens, and generator citizens. Sponge citizens refer to citizens who do not have a strong stance and tend to follow the flow of change without a critical attitude. Stone citizens describe the character of citizens who are rigid, reluctant to accept change, and tend to hinder the dynamics of democracy. The citizen generator is a type of citizen who is able to be a mover and actively participate in the life of the nation and state. Of the three categories, citizen generators are seen as an ideal form because they are able to make positive and constructive contributions in carrying out their rights and obligations as citizens, including having awareness, concern, and active participation in solving public problems, including environmental issues (Clark, 2001).

The formation of the character of citizen generators cannot be separated from the role of education. Through education, citizens can comprehensively understand their rights and obligations. Education functions as a means of improving the quality of individuals as well as the formation of the nation's character based on religious, philosophical, psychological, socio-cultural, and scientific and technological values (Nurihsan, 2016). Thus, education has a strategic role in producing citizens with character and responsibility.

One of the important forms of education to be provided to the community is environmental education. This education aims to foster awareness of the importance of preserving the environment and ecosystem balance. The environment in which you live has a great influence on the quality of human life. A clean and healthy environment will support a better quality of life, while a dirty environment has the potential to reduce the quality of life which is characterized by the emergence of various diseases and social problems (UNESCO, 2017). Therefore, environmental education is needed that reaches the community at large in order to be able to produce awareness and behavior changes that are real and have a significant impact.

The Problem of The Study

Environmental awareness is a fundamental aspect in realizing sustainable development (Wilibrodus Manga Lamauran, 2025). One of the problems that is still a concern is waste management, especially plastic waste which has a wide impact on the ecosystem. In Ngodolendo Hamlet, waste management is still conventional, which is only collected and disposed of in temporary landfills without being balanced with collective awareness of the environmental impact it causes. This condition shows the need for educational efforts that are able to increase public awareness and participation, especially the younger generation. Children as the next generation have a strategic role in preserving the environment. Instilling the value of environmental concern from an early age is a preventive step in building environmentally friendly behavior in the future (Aisyah, 2014). Therefore, the concept of ecological citizenship is felt to be able to emphasize that every citizen has a moral and social responsibility in protecting the environment (Dobson, 2003).

Research's State of the Art

Research on ecological-based civic education has actually been carried out extensively, such as, Wilibrodus Manga Lamauran, et al (2025), Aisyah, et al (2024), Rizka Hamidah and Wardiani Hiliadi (2026), Meidi Saputra (2017), Ika Murtiningsih

(2023), who explain how important ecological-based civic education is to be able to cultivate a character that cares and is responsible for the environment. Various approaches such as *eco-civic education*, contextual learning, and school-based programs have proven to be able to form attitudes of caring for the environment. However, most research still focuses on the formal school environment and focuses on the learning process in the classroom, with strategies such as material integration, habituation, and school activities.

Based on various previous studies, it can be concluded that ecological-based civic education has an important role in shaping environmental awareness and responsibility in students through the integration of ecological values in learning. Studies have shown that approaches such as eco-civic education, contextual learning, and the integration of Education for Sustainable Development (ESD) are effective in improving students' ecological competence, both in terms of knowledge, attitudes, and behaviors (Mirza Hardian, 2026). However, the majority of research still focuses on the context of formal education in the school environment and has not explored much implementation in real-life in the community. Therefore, research is needed that develops a more contextual and applicative approach to ecological-based civic education, particularly through the direct involvement of students in the community environment, in order to bridge the gap between theoretical understanding and real practice in maintaining environmental sustainability.

Novelty, Research Gap, & Objective

The novelty of this research lies in the development and implementation of ecological-based civic education that does not only focus on the formal school environment, but is extended into the context of real life in society, particularly in Ngodolendo Hamlet. This research also integrates the concept of ecological citizenship with the direct practice of locally-based environmental management and emphasizes the active role of students as citizen generators who not only understand ecological values theoretically, but are also able to implement them in concrete actions. Thus, this study offers a contextual approach that connects civil society learning with social realities and environmental problems at the community level.

Although much research on ecological-based civic education has been conducted, it still largely focuses on the context of formal education in the school environment and is limited to the learning process in the classroom, such as the integration of materials, habituation, and school activities. Previous research has not explored much how the implementation of ecologically-based civic education in people's lives is directly involved, as well as how students' active involvement in real social contexts can increase environmental awareness and participation. In addition, there is still a gap between students' theoretical understanding of the environment and real practices in managing environmental issues, such as waste management at the local level.

This study aims to analyze the implementation of ecological-based civic education in increasing students' environmental awareness in Ngodolendo Hamlet. In particular, this study aims to: first, identify the form of implementation of ecological-based civic education in the context of society, and analyze the role of students as ecological citizens in dealing with environmental problems, especially

waste management, and third, examine the extent to which this approach is able to increase student awareness, responsibility, and active participation in maintaining environmental sustainability.

METHOD

Type and Design

This research is included in qualitative research with a descriptive approach. This type was chosen because the research focuses on an in-depth understanding of the process of implementing ecological-based civic education and how it affects students' environmental awareness in the context of real life in society. Qualitative research allows researchers to explore phenomena holistically, contextually, and naturalistically. This research can also use a participatory approach or community-based research, because it involves students directly in environmental activities in the community, so that it is not only observational but also participatory. The research design used is a case study. The case study was chosen because it focuses on one specific location, Ngodolendo Hamlet, with the aim of understanding in depth the implementation of ecologically-based civic education in a specific local context. Data collection techniques are carried out through participatory observation, documentation, and direct involvement of researchers in activities. Observation was used to observe the level of participation, enthusiasm, and behavior of participants during the activity. Documentation is carried out to support data in the form of photos, activity notes, and participants' work.

Data and Data Sources

The data in this study consists of primary data and secondary data related to the implementation of ecological-based civic education in increasing students' environmental awareness in Ngodolendo Hamlet. Primary data is the main data obtained directly from the field through the interaction of researchers with research subjects. These data include: The level of student participation and involvement in ecological-based activities; changes in attitudes, awareness, and environmental behavior of students; students' perceptions and experiences during the activity; Information from informants such as students, community leaders, and parties involved in activities. Primary data were obtained through participatory observation techniques and in-depth interviews.

Secondary data is supporting data obtained from various sources relevant to the research. This data includes; activity documents (reports, field notes, activity agendas); Photographs or visual documentation during the activity; Student work related to environmental activities; Literature, journals, and references related to ecologically-based civic education. Meanwhile, the data sources in this study include: The main informants of students involved in ecological-based civic education activities. Supporting informants from community leaders, activity facilitators, and other relevant parties. Then documents in the form of activity archives, photos, and notes related to the implementation of the program.

Data Collection Technique

Teknik pengumpulan data dalam penelitian ini dilakukan untuk memperoleh informasi yang komprehensif mengenai implementasi pendidikan kewarganegaraan berbasis ekologis dalam meningkatkan kesadaran lingkungan siswa di Dusun Ngodolendo. Adapun teknik yang digunakan meliputi *pertama*, Observasi Partisipatif. Observasi partisipatif dilakukan dengan cara peneliti terlibat langsung dalam kegiatan yang berkaitan dengan pendidikan kewarganegaraan berbasis ekologis. Melalui teknik ini, peneliti mengamati secara langsung tingkat partisipasi, antusiasme, serta perubahan sikap dan perilaku siswa terhadap lingkungan selama kegiatan berlangsung. Observasi ini memungkinkan peneliti memperoleh data yang bersifat alami, kontekstual, dan sesuai dengan kondisi nyata di lapangan. *Kedua*, Wawancara dilakukan secara mendalam kepada informan yang terlibat dalam penelitian, seperti siswa, tokoh masyarakat, dan pihak terkait lainnya. Wawancara bertujuan untuk menggali informasi mengenai pengalaman, persepsi, serta pemahaman siswa terhadap kegiatan yang dilaksanakan, termasuk dampaknya terhadap kesadaran lingkungan mereka. Wawancara dilakukan secara semi-terstruktur agar tetap fleksibel namun terarah sesuai fokus penelitian. *Ketiga*, teknik dokumentasi digunakan untuk melengkapi data penelitian melalui pengumpulan dokumen-dokumen yang relevan, seperti foto kegiatan, catatan lapangan, arsip kegiatan, serta hasil karya siswa. Data dokumentasi berfungsi sebagai bukti pendukung yang memperkuat hasil observasi dan wawancara. *Keempat*, studi Literatur yang diperoleh dari berbagai sumber seperti buku, jurnal ilmiah, artikel, dan laporan penelitian yang relevan dengan pendidikan kewarganegaraan berbasis ekologis, kesadaran lingkungan, serta konsep ecological citizenship. Studi literatur bertujuan untuk memperkuat landasan teoritis, memberikan kerangka konseptual, serta mendukung analisis data agar lebih komprehensif dan terhubung dengan kajian ilmiah yang telah ada.

Data Analysis

Data analysis is carried out in a qualitative descriptive manner through three stages, namely data reduction, data presentation, and conclusion drawn. The data obtained was then analyzed to identify patterns of changes in students' environmental awareness after participating in the activity. To ensure the validity of the data, this study uses the triangulation technique of sources and methods, so that the data obtained is more valid and can be accounted for. Data analysis is carried out in a qualitative descriptive manner through three stages, namely data reduction, data presentation, and conclusion drawn. The data obtained was then analyzed to identify patterns of changes in students' environmental awareness after participating in the activity. To ensure the validity of the data, this study uses the triangulation technique of sources and methods, so that the data obtained is more valid and can be accounted for.

RESULTS AND DISCUSSIONS

Geographical, Environmental Conditions and Natural Potential of Ngodolendo Hamlet

Ringinanom Village is located at coordinates of around 7°16'51" South Latitude (LS) and 110°5'1" East Longitude (BT). Based on this astronomical location, Ringinanom Village is located in the southern and eastern hemispheres, and is included in the Central Java region. Geographically, Ringinanom Village is one of the villages located in Parakan District, Temanggung Regency, Central Java Province. This village is located on the eastern slope of Mount Sindoro with an altitude of about 814 meters above sea level (masl). The condition of the area is dominated by relatively fertile plains so that it supports agricultural activities and community plantations. Ringinanom Village has a strategic location because it is close to the district government center. The distance of Ringinanom Village is about 1.5 km from the center of Parakan District, about 12 km from the capital of Temanggung Regency, and approximately 80 km from the capital of Central Java Province, namely Semarang City. This village consists of several hamlets, one of which is Ngodolendo Hamlet.

Ngodolendo Hamlet is one of the residential areas with environmental conditions that are quite supportive of the lives of its people. Social relations between residents are still well established through a culture of togetherness and cooperation. The settlement pattern in this hamlet is simple and adjacent to agricultural land owned by residents. The main livelihood of the people of Ngodolendo Hamlet is dominated by the agricultural sector. The safe and peaceful atmosphere of the hamlet reflects the harmonious life of the community. Ngodolendo Hamlet is known to have diverse and valuable natural potential. Its geographical location in a highland area makes the soil in this village fertile and supports agricultural activities. Tobacco commodities are the main plantation products that are widely cultivated by the local community. In addition, various types of vegetable plants and palawija are also developed by villagers. These natural resources play an important role as an economic support for the people of Ngodolendo Hamlet.

In addition to agricultural products, the natural potential of Ngodolendo Hamlet can also be seen from the availability of quite a large land. This provides an opportunity for the community to develop agricultural and plantation businesses optimally. The natural condition that is still well maintained and the cool atmosphere is an added value for this hamlet. This potential can be used as a basis for the development of economic activities based on local resources. If managed optimally, the natural wealth of Ngodolendo Hamlet is able to provide long-term benefits to its community.

Overview and Concept of Civic Education (PKn)

Education is essentially a process of internalization and inculcation of values. Through the educational process, individuals are formed into cultured individuals in accordance with the values transferred during the learning process. If education is understood as a cultural process, then its implementation is not limited to learning in the classroom alone (Komalasari K., 2012). Therefore, civic education can take place through formal, non-formal, or informal channels. Educated citizens will make a

significant contribution to the progress of the country, because the character and mentality formed during the education process are the main capital in supporting the sustainability of the nation-state. The condition of citizens with character and intelligence will encourage the creation of a harmonious, dynamic life, and leads to the welfare and happiness of the community (Manullang, 2011).

Law Number 2 of 1989 concerning the National Education System explains that "Civic Education is an effort to equip students with basic knowledge and abilities regarding the relationship between citizens and the state as well as State Defense Education (PPBN) in order to become reliable citizens of the nation and the Unitary State of the Republic of Indonesia." This means that civic education has an important role in shaping the character of the nation in accordance with the values of rights and obligations. As it is said, civic education is an effort made to provide students with basic knowledge and skills about the fundamental relationship between citizens and the state and also preliminary education in defending the state as a form of state defense as mandated in the 1945 Constitution and Pancasila. (Ina Magdalena, 2020)

Civic Education (PKn) is a field of study that has a strategic role in shaping the character of good and responsible citizens. Conceptually, PKn is not only oriented towards mastering citizenship knowledge (*civic knowledge*), but also includes skill building (*civic skills*) and attitude (*Civic Disposition*) which reflects moral commitment in community life (Arif, 2016). Margaret Stimmann Branson affirmed that civic education aims to form intelligent and responsible citizens through the development of critical thinking skills as well as active participation in democratic life (Branson, 1998). In the Indonesian context, Dasim Budimansyah also emphasized that PKn functions as a vehicle for democracy education based on the values of Pancasila to form citizens with character and responsibility. (Budiansyah, 2013)

From a pedagogical perspective, civic education is a learning process that is contextual and experience-based. John Dewey through the concept *learning by doing* emphasizing that students need to be directly involved in social experiences in order to be able to internalize civic values in real terms (Ord, 2012). Through this approach, PKn plays a role in instilling awareness of rights and obligations, forming an attitude of concern for the public interest, and developing participatory skills such as the ability to discuss, cooperate, and make decisions democratically (Alfiyatul Mahdiyah, 2023). Thus, citizenship education not only produces individuals who understand the concept of citizenship, but are also able to implement it in daily life.

As the world develops, the concept of citizenship also includes responsibility for environmental issues. In this case, the concept *ecological citizenship* emphasizing that responsible citizens are those who have the moral awareness to maintain environmental sustainability both in private and public spaces (I Nengah Agus Tripayana, 2024). This shows that the role of civic education is increasingly broad, not only to form law-abiding and democratic citizens, but also individuals who care about the environment and the sustainability of life. Therefore, PKn is an important foundation in forming citizens who are responsible, characterful, and able to contribute to realizing a harmonious and sustainable society.

Ecologically-Based Civic Education

Ecological education or environmental education is a process designed to foster global public awareness of the surrounding environmental conditions. The implementation is oriented to real life, so it focuses not only on providing knowledge about the environment, but also on developing skills in maintaining and caring for the environment. This is done through a combination of learning processes and hands-on practice supported by relevant theoretical foundations (Nur Hasanah, 2026). Environmental education is understood as an approach that aims to create a society that *environmentally literate*, namely individuals who are able to understand and take action on environmental problems. This education aims to prevent damage to the environment as well as to repair and the fact is that every individual has a responsibility to preserve the environment so that it is maintained for future generations.

The main goal of environmental education is to form individuals and communities, especially Indonesian people, to be more sensitive to the environment, knowledgeable, and understand the complexity of nature. In this case, ecological education has four principles that must be carried out, namely the principle of preventive measures, the principle of sustainable development, the principle of precaution, and the principle of responsibility (Nur Hasanah, 2026). In the context of basic education, environmental education is not only limited to teaching about ecological issues but also involves the development of skills and attitudes that encourage behavioral change towards environmental sustainability through integrative learning both from the basic concept of ecology and nature conservation efforts (Marlina, 2024). Thus, ecological education serves not only as a transfer of knowledge, but also as a process of forming ecological character. (Wilibrodus Manga Lamauran, 2025)

In the context of citizenship, environmental education based on community activities, although carried out informally, is in practice able to encourage citizen involvement (*civic engagement*). Various social activities that take place indirectly form *hidden curriculum* that are effective in instilling ecological citizenship values. Through this process, collective awareness grows to continue to maintain the environment as an effort to improve the quality of life of the community. In the perspective of Civic Education, these successes affirm the importance of citizens' willingness and awareness to be involved in various social and state affairs. *Civic engagement* refers to the participation of citizens in community life in order to improve social conditions and shape a common future. With this active involvement, various social problems, including environmental issues, can be handled more effectively. (Komalasari E. N., 2023)

On the other hand, the environmental damage that is currently occurring is inseparable from the dominance of the anthropocentric paradigm, which is a view that places humans as the center and ruler of nature. This paradigm tends to encourage exploitative behavior that is oriented solely to human interests, without considering the balance of the ecosystem. As a result, environmental aspects are often ignored, causing various ecological problems that have an impact on the sustainability

of life. Thus, a paradigm shift is needed towards ecological awareness that is more oriented towards sustainability and shared responsibility. (Komalasari E. N., 2023)

In its implementation, ecologically-based civic education emphasizes a contextual and participatory approach (Mohamad Syahri, 2022). Learning is not only carried out through the delivery of materials in the classroom, but also through real activities such as waste management, recycling, greening, and environment-based social actions (Komalasari E. N., 2023). This approach is in line with John Dewey's thought which emphasized the importance of direct experience *learning by doing* in the learning process. Through this experience, students can internalize the values of ecological citizenship in a more profound way

Implementation of ecological-based civic education in Ngodolendo Hamlet

The implementation of ecological-based civic education can be seen directly in the real actions carried out in Ngodolendo Hamlet, namely with a series of activities. This planning stage is in the form of an initial survey of the environmental condition of Ngodolendo Hamlet. Not only the physical environment, but also the habits of the people. Then the preparation of ecological citizenship socialization materials was also carried out, so that socialization activities could run well. The Socialization Stage contains material on the types of waste, the impact of waste on the environment, and the role of citizens in preserving the environment. The purpose of this socialization is to increase children's knowledge about waste and its impact. This evaluation stage is carried out through direct observation of the enthusiasm, participation, and understanding of participants during the activity. With an evaluation of the advantages and disadvantages of the methods used, it can be seen and in the future can be imitated and improved.

The implementation of this program began with the planning stage which was carried out through an initial survey of the environmental condition of Ngodolendo Hamlet, both from the physical environment aspect and the community's habits in waste management. The results of the survey show that waste management is still carried out simply without sorting, as well as low awareness of children about the negative impact of plastic waste on the environment. These findings are in line with the results of previous research which stated that low environmental literacy in the community, especially children, is generally due to the limitations of environmental education that is contextual and sustainable. Therefore, the preparation of ecological citizenship socialization materials that are tailored to the characteristics of the target is a strategic step, considering that planning based on field needs is an important factor in supporting the success of community empowerment programs. At this planning stage, the program target was also set, namely the children of Ngodolendo Hamlet, especially at the elementary school level. The implementation of activities is scheduled periodically, namely once a week. The location of the program implementation is centered at the KKN post and TPQ Al-Azhar Hamlet Ngodolendo as a representative place and easy to reach by participants.

The socialization stage was carried out through the delivery of materials that included types of waste, the impact of waste on the environment, and the role of citizens in preserving the environment. This activity is designed interactively through simple discussion and question and answer methods, so that students, especially

children, can be actively involved in the learning process. The results of the implementation of the activity showed an increase in participants' knowledge about the classification of organic and inorganic waste, as well as the growth of initial awareness about the importance of maintaining environmental cleanliness.

These findings are in line with the view of Kokom Komalasari (Hakam, 2012) in Dasim Budimansyah who emphasized that education as a cultural process not only functions to transfer knowledge, but also instill values and attitudes through active and participatory interaction. Thus, this socialization activity plays a role as an initial stage in instilling ecological citizenship values in children in Ngodolendo Hamlet.



Figure1. Stage of Socialization of Ecological Citizenship

After socialization, the activity continued with an ecological citizenship action in the form of the practice of processing plastic waste into useful goods. The activity began with the use of plastic waste as a dye element in creative activities. Through this activity, children gain a first-hand understanding that plastic waste is not always a useless item, but can be repurposed creatively. These results support the view of environmental education which emphasizes the importance of *experiential learning* so that students are able to internalize the value of environmental care more deeply.



Figure 2. Ecological Citizenship Action Stage: Utilization of Plastic Waste as a Dye Element

Follow-up actions in this program are realized through the activity of making savings from used plastic bottles, which aims to teach waste management while instilling economic value and building saving habits from an early age. The high

enthusiasm of participants in participating in each stage of the activity shows that the hands-on approach (experiential learning) is effective in increasing environmental awareness while forming a positive character in children.

This finding is in line with the view of Prayitno and Manolang who stated that character formation through real activities tends to be easier to internalize than learning that is purely theoretical. Thus, this activity not only functions as a means of environmental education, but also as a medium for sustainable character formation.



Figure 3. Ecological Citizenship Action Stage: Making Savings From Used Plastic Bottles

The activity of making pencil cases from plastic waste shows the active participation of children in processing used goods into functional products. This activity not only contributes to developing the creativity of the participants, but also strengthens their understanding of the concept of recycling as part of citizens' responsibilities in preserving the environment.

The findings are in line with the concept of ecological citizenship put forward by Andrew Dobson, which emphasizes the importance of the active role of individuals in maintaining environmental sustainability through tangible actions in daily life. Thus, this activity not only has educational value, but also functions as a means of internalizing ecological citizenship values from an early age, thus forming a mindset and behavior that indicates concern for environmental sustainability. This is in line with the goals of basic educators who are not only centered on cognitive aspects, but also effective and psychomotor. (Aisyah, 2014)



Figure 4. Ecological Citizenship Action Stage: Making Pencil Holders From Plastic Waste

The ecological citizenship action is further realized through the activity of making keychains from used plastic materials. This activity not only trains the

participants' fine motor skills, but also fosters confidence and pride in their own work. In addition, this activity strengthens children's understanding of the use of plastic waste through a recycling process that has value for use.

The findings show that practice-based recycling activities can be an effective medium in increasing environmental awareness while building positive character in children. This is in line with the concept of character education which emphasizes the importance of creative activities as a means of internalizing values, as stated by Thomas Lickona that character formation will be more optimal through direct experience involving cognitive, affective, and psychomotor aspects. (Aisyah, 2014)



Figure 5. Ecological Citizenship Action Stage: Making Keychains From Used Plastic Materials

The closing activity in this program is realized through the manufacture of lanterns from recycled materials, especially plastic waste, as a means of integration between developing creativity and instilling concern for the environment. The high enthusiasm of the participants during the activity shows that waste management can be packaged in an attractive, fun, and educational way. This indicates that a creative practice-based approach is able to increase the active involvement of participants in understanding environmental issues.

These activities strengthen the implementation of ecological citizenship through concrete actions that have a positive impact on the environment. In line with the concept of generator citizens put forward by Nadine & Clark in Numan Somantri, the ideal citizen is an individual who is able to participate actively and constructively in community life. Thus, this activity not only functions as a creative learning medium, but also as an effort to form the character of citizens who care and are responsible for the environment.



Figure 6. Ecological Citizenship Action Stage: Making Lanterns From Recycled Materials

The evaluation stage was carried out through direct observation of the level of enthusiasm, participation, and understanding of participants during the series of activities. The results of the evaluation showed that the integration of socialization methods and direct practice was proven to be effective in increasing environmental awareness and concern in children. This approach allows participants not only to understand concepts theoretically, but also to internalize them through real experience.

However, the implementation of the program still faces several obstacles, such as limited implementation time and differences in the level of understanding among participants. These obstacles are important reflection material for the improvement of the program at the next stage. Overall, the findings of this study show that socialization activities and ecological citizenship actions are able to make a positive contribution in shaping the environmental awareness of children in Ngodolendo Hamlet, while strengthening the findings of previous research on the effectiveness of participation-based environmental education in building environmental care behaviors.

Analysis

The implementation of ecological-based civic education in Ngodolendo Hamlet shows that an integrative approach between socialization and real action can be an effective strategy in increasing environmental awareness in children. Ecological citizenship is a concept that emphasizes the awareness, attitudes, and actions of citizens in maintaining, protecting, and preserving the environment as part of social and moral responsibility (Hiliadi, 2026). The initial stage in the form of socialization provides a cognitive foundation for participants regarding basic environmental concepts, such as the types of waste and their impact on life. The increased understanding of participants regarding the difference between organic and inorganic waste indicates that the knowledge transfer process is going well. This is in line with the concept *civic knowledge* in civic education that emphasizes the importance of initial understanding as the basis for the formation of citizens' attitudes and behaviors.

Furthermore, practice-based activities such as making savings, pencil holders, keychains, and lanterns from plastic waste show the effectiveness of the approach *learning by doing* in building ecological awareness. The active participation and enthusiasm of the participants during the activity is an indicator that the contextual learning method is able to increase student involvement. This finding corroborates John Dewey's (Ord, 2012) view that direct experience is the main means of meaningful learning. Through direct involvement, participants not only acquire practical skills, but also internalize the values of environmental concern as part of social responsibility.

From a civic perspective, this activity reflects the efforts of the formation of *Civic Disposition*, namely the attitude and character of citizens who care about the environment. Creatively carried out recycling activities not only build ecological awareness, but also foster the value of responsibility, independence, and self-confidence in children. This is in line with the concept of character education put forward by Thomas Lickona, who emphasizes the importance of integrating cognitive,

affective, and psychomotor aspects in shaping individual character (Aisyah, 2014). In addition, the implementation of this program can also be analyzed through the concept *ecological citizenship*. Activities that encourage children to manage waste creatively are a tangible form of citizen participation in protecting the environment. According to Andrew Dobson, ecological citizenship requires moral awareness and real actions of individuals in maintaining environmental sustainability. In this context, children play the role not only of recipients of knowledge, but also of agents of change who begin to show environmentally friendly behavior in daily life.

Furthermore, the program can also be associated with the concept *generator citizens* presented by Nadine & Clark in Numan Somantri. Through active involvement in environmental activities, children begin to show character as citizens who are not passive, but capable of participating constructively. This is an early indicator of the formation of the ideal citizen character, namely individuals who have awareness, care, and responsibility for the environment and society (Wilibrodus Manga Lamauran, 2025). However, the results of the evaluation show that the implementation of the program still faces several obstacles, such as time constraints and variations in the level of understanding of participants. This shows that the implementation of ecological-based civic education requires more careful planning and program sustainability so that the impact is more optimal. The sustainability of activities is an important factor so that behavioral changes that are formed are not temporary, but can develop into inherent habits. In addition, ecological literacy is also very important to be provided so that they are able to think critically about environmental issues (Wilibrodus Manga Lamauran, 2025).

Overall, the results of this study show that the integration between civic education and ecological education through a participatory and contextual approach is able to make a positive contribution to increasing students' environmental awareness. This program not only succeeds in improving aspects of knowledge, but also shapes attitudes and behaviors that reflect responsibility as citizens. Thus, the implementation of ecological-based civic education can be a relevant learning model in facing environmental challenges in the future, especially at the basic education level.

CONCLUSION

Based on the results of the research, it can be concluded that the implementation of ecological-based civic education through socialization activities and real actions in Ngodolendo Hamlet is able to increase children's environmental awareness, especially at the elementary school level. Socialization activities provide a basic understanding of the types and impacts of waste, while practical activities such as making products from plastic waste have proven to be effective in fostering environmental care and creative skills of participants. The integration between cognitive approaches and *experiential learning* is a key factor in the success of this program.

In addition, the program also contributes to forming the character of responsible citizenship, which is demonstrated through increased active participation, concern, and awareness of children to the importance of protecting the

environment. The implementation of the concept of ecological citizenship in this activity shows that contextual and participation-based education is able to produce positive changes, not only in the aspect of knowledge, but also in the attitudes and behaviors of participants. Thus, ecologically-based civic education can be an alternative learning approach that is relevant in shaping a generation that cares about and is responsible for the environment. Although there are still limitations, such as implementation time and differences in participants' level of understanding, this program shows great potential to be developed and replicated in other community environments.

REFERENCES

- Aisyah, K. A. (2014). Pentingnya Membangun Kesadaran Lingkungan Melalui Pembelajaran PKN di Sekolah Dasar Guna Membentuk Karakter Peduli Lingkungan pada Siswa. *Jurnal Pendidikan Guru Sekolah Dasar*, 1 (3).
- Alfiyatul Mahdiyah, C. S. (2023). Peran Pendidikan Kewarganegaraan dalam Membangun Bangsa di Era Modern. *Indigeneous Knowledge*, 2 (3).
- Arif, D. B. (2016). Pengembangan Komponen Kompetensi Kewarganegaraan dalam Buku Tulis Teks Pendidikan Kewarganegaraan SMP/MTs. *Jurnal Civics*, 13 (1).
- Branson, M. S. (1998). The Role of Civic Education. *The Communitaris Network*.
- Budiansyah, D. (2013). Penguatan Pendidikan Kewarganegaraan. *Jurnal Civics*, 10 (1).
- Clark, N. &. (2001). *Menggagas Perubahan Pendidikan IPS*. Bandung: Remaja Rosdakarya.
- Dobson, A. (2003). *Citizenship and the Environment*. Oxford: Oxford University Press.
- Hakam, K. A. (2012). Pendidikan Kewarganegaraan sebagai Pendidikan Nilai dan Karakter. In Budimansyah, *Pendidikan Karakter: Nilai Inti bagi Upaya Pembinaan Kepribadian Bangsa*. Bandung: Widya Aksara Press.
- Hiliadi, R. H. (2026). Praktik Kewarganegaraan Ekologis Melalui Program Eco Green di SMAN 1 Kusan Hilir. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 11 (1).
- I Nengah Agus Tripayana, d. (2024). Ecological Citizenship: Pelestarian Lingkungan Masyarakat Adat Berbasis Kearifan Lokal. *Journal of Social and Education*, 5 (1).
- Ika Murtiningsih, S. F. (2023). Implementasi Karakter Peduli Lingkungan di Sekolah Adiwiyata. *Bhineka Tunggal Ika: Kajian Teori dan Praktik Pendidikan PKN*, 10 (2).
- Ina Magdalena, A. S. (2020). Pembelajaran Komponen Kompetensi Kewarganegaraan Di Sekolah Dasar Negeri Bojong 3 Pinang. *Bintang: Jurnal Pendidikan dan Sains*, 2(3).
- Komalasari, E. N. (2023). Membentuk Kewarganegaraan Ekologis Melalui Pendidikan Lingkungan Berbasis Kegiatan Masyarakat. *Journal of Environmental Education and Sustainable*, 24 (1).
- Komalasari, K. (2012). *Pembelajaran Pendidikan Kewarganegaraan*. Bandung: UPI Press.
- Manullang, P. &. (2011). *Pendidikan Karakter dalam Pembangunan Bangsa*. Jakarta: Grasindo.
- Marlina, d. (2024). Integrasi Pendidikan Lingkungan dalam Pembelajaran Sains untuk Mengembangkan Kesadaran Ekologis pada Siswa Sekolah Dasar. *JSES: Jurnal Sultra Elementary School*, 5 (1).
- Mirza Hardian, K. K. (2026). Conceptualizing the Convergence of Education for Sustainable Development and Ecological Citizenship: A Transformative Pedagogical Framework for Civic Education. *Kalacakra*, 7 (1).

-
- Mohamad Syahri, d. (2022). Ecological Education: Concrete Effort in Applying the Concept of Ecological Citizenship in Schools. *Jurnal Civics*, 19 (1).
- Nur Hasanah, d. (2026). Memahami Konsep Dasar Pendidikan Lingkungan: Upaya Menghadapi Persoalan Kerusakan Lingkungan. *Pendas: Jurnal Ilmiah Pendidikan Dasar*, 11 (1).
- Nurihsan, A. J. (2016). *Bimbingan dan Konseling dalam Berbagai Latar Kehidupan*. Bandung: Refika Aditama.
- Ord, J. (2012). John Dewey and Experiential Learning: Developing the Theory of Youth Work. *Youth and Policy*, No. 108.
- Saputra, M. (2017). Pembinaan Kesadaran Lingkungan Melalui Habitiasi Berbasis Media Sosial Guma Menumbuhkan Kebajikan Moral terhadap Pelestarian Lingkungan. *Jurnal Moral Masyarakat*, 2 (1).
- UNESCO. (2017). *Education for Sustainable Development Goals: Learning Objectives*. Paris: UNESCO.
- Wilbrodus Manga Lamauran, A. Y. (2025). Peran Pendidikan Kewarganegaraan dalam Membangun Kesadaran Lingkungan Berkelanjutan. *Jurnal Lazuardi*, 19 (4).

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