Social Studies Teachers’ Views on Eco-Citizenship Education

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ABSTRACT

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| The aim of this study is to examine social studies teachers’ views on eco-citizenship education and to identify the practices, challenges, and suggestions for improvement encountered during this educational process. The research was conducted with 20 social studies teachers working in secondary schools in the city center of Malatya and employed a qualitative research method using a semi-structured interview form. The data obtained were analyzed through content analysis. The findings indicate that teachers primarily define eco-citizenship in terms of environmental responsibility, awareness of nature, and sustainability; and that in their classes, they emphasize project-based practices, recycling activities, and nature observations. It was found that students demonstrate high participation and voluntariness in practice-based activities. However, lack of materials, time constraints, and insufficient family support emerged as significant challenges. As a result of the research, suggestions such as developing up-to-date materials, implementing practice-oriented programs, and strengthening school-family-community cooperation were highlighted. These findings point to the necessity of systematic support and collaboration for the effective implementation of eco-citizenship education. Since the study adopted a qualitative design, the results may not be generalizable to all contexts. Quantitative or mixed-method research in larger and more diverse samples could help to verify and extend these findings. |

*Keywords: eco-citizenship, social studies, environmental education, sustainability*

1. INTRODUCTION

Since the last quarter of the 20th century, intensive efforts have been made at both national and international levels to address environmental problems; numerous significant initiatives such as the Kyoto Protocol, Cartagena Biosafety Protocol, and the UN Conference on Sustainable Development have been implemented. However, despite these ongoing efforts continuing into the 21st century, environmental problems have persisted and even grown, with natural beauty and life increasingly under threat. As Simonnet (1993) also pointed out, this situation is regarded as humanity endangering its own future. In light of this picture, natural scientists and societies have begun to question the current trajectory and seek solutions. The growing concern about environmental issues has sparked new debates on the relationship between citizenship and the environment in both political and social spheres. The concept of citizenship has historically evolved in various dimensions such as civil, political, and social citizenship (Sarıipek, 2006). However, today, with rapid developments in communication and transportation technologies and increasing economic and political interdependence among countries, new dimensions such as global and digital citizenship have been added to the concept. Along with these developments, the concept of eco-citizenship, which emphasizes individuals taking responsibility for environmental problems, has also emerged (Becker, 2008).

Eco-citizenship proposes not only redefining the relationship between the individual and nature from the perspective of citizenship but also assuming environmental responsibility at the individual level, going beyond traditional roles of citizenship (Jagers, Martinsson & Matti, 2014; Karatekin, 2019). This approach necessitates that individuals play an active, conscious, and ethical role in solving environmental problems and that a social awareness regarding environmental issues is cultivated.

Eco-citizenship is a comprehensive concept that approaches environmental action with a democratic vision and evaluates an individual’s relationship with the environment in terms of both personal and societal impacts. This perspective requires not only environmentally conscious behaviors in daily life but also consideration of society’s overall impact on the environment. As Sauvé & Orellana (2008) emphasize, every individual should act with the awareness of protecting the natural environment and taking responsibility not only for today’s society but also for future generations and all populations worldwide. At this point, our values and political affiliations enable us to consider the potential impacts of our actions on the environment and develop humility and respect for all living beings who share the planet with us. (Avcu & Koçoğlu, 2025). According to Séguin et al. (2005), eco-citizenship refers to the process of understanding reality and generating solutions by targeting specific problems. However, the responsibilities of eco-citizenship are not limited to considering only the consequences of individual actions; as Harribey (2021) also highlights, the concept also encompasses active participation in democratic decision-making processes, contributing to the increase of social awareness, critically evaluating current individual, economic, and governmental practices, and developing alternative social and cultural models that are more sensitive to nature and societal needs. Therefore, eco-citizenship is a contemporary understanding of citizenship that aims to strengthen ethical responsibility and social consciousness regarding environmental issues (Sauvé & Orellana, 2008; Séguin et al., 2005; Harribey, 2021).

Furthermore, the concept of eco-citizenship should be associated with the construction of a stronger sense of “world citizenship,” grounded in renewed cultural, natural, and ethical foundations. As inspiringly expressed by the British philosopher Peter Critchley in his article *Being at One: Making a Home in the Earth’s Commonwealth of Virtue* (2015), we need to reassess our expectations for the future by becoming more aware of our place within the intricate web of life. Critchley emphasizes that humans are fundamentally connected to the natural world, and that this reality should be reflected in governance, economic structures, and civil society. According to him, reinterpreting our place in the world and rejecting claims of human dominance over nature form the foundation of a comprehensive eco-citizenship that integrates both social and natural worlds. In this context, Critchley argues that a global ethic developed in line with this approach will play an integral role in reconstructing the world we inhabit. Such an ethical understanding encompasses not only individual but also political and institutional dimensions. In conclusion, the idea that humanity is part of a community of life and virtue requires a policy approach that encompasses the entire biosphere (Critchley, 2015).

Ecological citizenship education, on the other hand, forms the basis of an "earth citizenship" in which individuality and universality are addressed simultaneously, and in which humans consider not only their own interests but also those of the entire global community. This approach challenges the anthropocentric and hierarchical traditional worldview, aiming to redefine the human-nature relationship from the ground up. While traditional perspectives argue that humans are superior to nature, that controlling and exploiting nature is a natural right, ecological citizenship emphasizes establishing an equal, reciprocal, and responsible relationship with nature. An examination of the history of civilization reveals that humanity’s attempts to dominate nature have often led to destructive outcomes. At the root of this destruction lies a fundamental misreading of nature and the positioning of humans as entities outside and above nature. Unfortunately, this misreading has not been limited to individual perceptions but has also been reproduced over generations through social and cultural transmission. Historically, educational systems and societal norms have mostly conveyed the human-nature relationship from an anthropocentric perspective, encouraging the perception of nature as merely a “resource.” This longstanding approach, persisting from ancient times to the present day, has resulted in an insufficient questioning of human impacts on and responsibilities toward nature. However, ecological citizenship education aims to foster a consciousness and awareness that enables individuals to question their relationship with nature and to understand the integrity of nature as well as the rights of non-human beings (Tunç & Yücedağlar, 2024).

In this context, ecological citizenship education is not limited to the transfer of environmental knowledge alone; it also encompasses the development of a sense of ethical responsibility toward nature, social awareness, and universal values. Such education encourages students not merely to be passive recipients of knowledge but to become active and responsible earth citizens. In this sense, ecological citizenship education contributes to a more realistic and inclusive reading of nature for a sustainable future by enabling individuals both to understand nature and to reinterpret their relationship with it (Sampedro et al., 2022; Cho & Park, 2023; Tunç & Yücedağlar, 2024).

The primary aim of this study is to examine social studies teachers’ perspectives on eco-citizenship education and to reveal the current state, encountered challenges, and areas in need of development regarding eco-citizenship education in social studies classes. In the face of the increasing importance of environmental issues at both global and local levels, the main focus of the research is to understand teachers’ views on the concept of eco-citizenship, how they reflect this concept in their educational practices, and the difficulties they encounter during implementation. Within the scope of the study, it is intended to evaluate the practices, processes, and content related to eco-citizenship education based on the experiences and observations of social studies teachers.

Accordingly, the objectives of the research are as follows;

1. To identify how social studies teachers define the concept of eco-citizenship and to reveal their individual/professional approaches to this topic;
2. To determine how eco-citizenship education is incorporated into social studies courses, and which methods, strategies, and content are utilized;
3. To examine teachers’ observations regarding student participation, interest, and interaction in eco-citizenship education;
4. To identify the challenges, obstacles, and limitations (such as materials, time, curriculum, environmental support, etc.) encountered in eco-citizenship education;
5. To determine social studies teachers’ suggestions and expectations for the improvement of eco-citizenship education;
6. To provide guiding recommendations for educational policies, curriculum development processes, and practitioners, and to contribute to the literature in light of the findings obtained.

The results of this research are expected to contribute to the evaluation of current practices in eco-citizenship education and to the development of educational programs in this field. In this way, it is aimed to provide a theoretical and practical basis for practices aimed at fostering a sustainable environmental awareness and a sense of responsible citizenship.

2. material and methods

This study is conducted within the framework of a qualitative research approach. Qualitative research enables the examination of phenomena in their natural context using various qualitative data collection methods such as observation, interviews, and document analysis (Yıldırım & Şimşek, 2005). In this method, researchers are concerned with the concepts constructed by individuals and the meanings attached to these concepts (Merriam, 2013). Qualitative research also involves analyzing research problems through interpretative techniques and exploring the meanings attributed to social issues. Researchers thematically analyze data obtained through both deductive and inductive reasoning, while remaining sensitive to the context of humans and their environment. This approach makes it possible to examine and interpret data in depth (Creswell, 2013). In this study, the phenomenological design, one of the qualitative research designs, was employed. Phenomenology is a method that aims to collect information about phenomena by examining individuals’ experiences (Kocabıyık, 2016). Events, experiences, perceptions, concepts, and situations that we encounter in life may emerge as phenomena whose meanings are not fully understood. The phenomenological design is preferred to better understand such phenomena. Phenomenology draws on the sources and diversity of individual experiences; it analyzes, evaluates, and compares these experiences. This method provides an opportunity to examine unknown or insufficiently understood phenomena in detail, thus allowing for a broader and deeper understanding (Yıldırım & Şimşek, 2011; Creswell, 2013; Patton, 2014).

In the phenomenological approach, data sources are generally individuals who have experienced the phenomena under investigation. The main data collection method for such research is interviews. In addition, the observation method is used as a supplementary data collection tool. Since phenomenology is a part of qualitative research methodology, it does not aim to provide generalizable or definitive results; rather, it offers information that helps to clarify and understand phenomena in a more detailed and explicit manner. Studies present and explain case examples based on specific experiences, enabling a better understanding of the subjects explored (Yıldırım & Şimşek, 2011).

**2.1 Participants**

In this study, the convenient sampling technique, one of the purposive sampling methods, was employed. This method allows the researcher to select situations that are easily accessible and close to them, facilitating the progression of the research in a quick and practical manner. Convenient sampling is typically preferred in situations where other sampling methods are not applicable, as it is a low-cost and practical approach (Yıldırım & Şimşek, 2011; Büyüköztürk, 2024). Using this method, the study was conducted with a total of 20 middle school teachers, comprising 11 female and 9 male teachers working in middle schools in the central district of Malatya. The principle of easy accessibility was observed in participant selection. The data collection process continued until sufficient and satisfactory information was obtained, and the study group was completed after interviewing the 20th participant (Avcu, K. M., & Koçoğlu, E. 2025).

In this study, it was determined that sufficient data was provided and no new information was being obtained, leading to the completion of the study group. Participants were assigned codes such as P1, P2, P3, ..., P25 to maintain confidentiality. Additionally, the data obtained from the interviews were included in the findings section to support and provide evidence for the results.

**Table 1**. **Sociodemographic Characteristics of the Teachers Forming the Working Group**

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| **Characteristic** | **Description** |
| Gender | 11 female, 9 male |
| Age Range | 25-30 years |
| Professional Experience | 3-10 years |
| Education Level | All teachers have at least a bachelor's degree, 6 teachers have a master's degree |

**2.2 Data Collection Tool**

In this study, a semi-structured interview form containing open-ended questions prepared by the researcher was used as the data collection method. In the process of developing the interview form, the first step was to review the relevant literature and create a framework that included key points. Then, the validity of the interview form was ensured by seeking expert opinions. In this context, the opinions of three faculty members from the Department of Turkish and Social Sciences Education at İnönü University were consulted. In addition, two social studies teachers and one Turkish teacher also reviewed the questions. Necessary updates were made in line with the suggestions. After making the required revisions and additions, this framework was finalized into the interview form.

The questions expected to be answered in the interview form are as follows:

1. What does the concept of eco-citizenship mean to you?
2. How do you incorporate eco-citizenship education into your social studies classes?
3. What are your observations regarding student participation and interest in eco-citizenship education?
4. What challenges or obstacles do you encounter while implementing eco-citizenship education?
5. What aspects of eco-citizenship education do you think need improvement, and what are your suggestions?

**2.3 Data Collection and Analysis**

This study was conducted with 20 middle school teachers working in central Malatya during the 2024–2025 academic year. During the research process, pre-scheduled interviews were held with the participants. The locations and times of the interviews were determined according to the participants’ availability. Audio recordings were taken during the interviews in order to allow for detailed analysis. The data were analyzed using the content analysis method. In the analysis process, thematic categories were first created based on the research questions and theoretical framework. Then, the collected data were organized according to these categories. Finally, the data were presented with frequency values.

To ensure the reliability of the research and to eliminate potential individual biases during the coding of the data, the interview data were evaluated and coded independently by both the expert and the researcher (coders) conducting the study. Afterwards, these codings were compared, and the numbers of agreements and disagreements were identified to determine the level of inter-coder consistency. The reliability of the research was calculated using Miles and Huberman’s (1994/2016) reliability formula: “reliability = number of agreements / (total number of agreements + disagreements).” According to the formula, the reliability value calculated for the study was determined as 93%. Since the level of agreement between coders was 93% in this study, it was concluded that the desired level of reliability had been achieved. According to Saban (2009), in qualitative research, when the agreement between expert and researcher evaluations is 90% or above, the desired level of reliability is considered to be achieved. In the study, data saturation was determined to have been reached when no new themes or codes emerged and existing themes were repeated during the final interviews. Some of the findings obtained during the analysis of the interviews were shared with two social studies teachers outside the sample, and feedback was obtained regarding whether the findings corresponded with the participants’ experiences (member checking). In this way, the validity of the findings was increased.

3. results and discussion

In this section, the findings obtained from the research are presented and interpreted through tables.

**Table 2. Teachers’ Views on the Concept of “Eco-Citizenship”**

| **Theme** | **Sub-Themes** | **Frequency (f)** |
| --- | --- | --- |
| Environmental Responsibility and Nature Awareness | - Sensitivity to environmental issues- Conscious use of natural resources | 11 |
| Sustainability | - Intergenerational responsibility- Long-term perspective | 8 |
| Environmental Advocacy | - Social responsibility projects- Community involvement | 6 |
| Eco-Friendly Behaviors in Daily Life | - Role modeling- Developing eco-friendly habits | 5 |
| Legal and Ethical Responsibilities | - Knowledge of environmental laws- Compliance with rules- Ethical considerations | 4 |

**Environmental Responsibility and Nature Awareness**

*Explanation*: The most frequently cited theme by teachers is associating eco-citizenship with environmental responsibility and awareness of nature. Participants define eco-citizenship as acting with a consciousness to protect the environment, avoiding harm to nature, and adopting responsible behaviors towards natural resources. This theme highlights the importance of instilling environmental awareness in students at an early age.

*Participant View:*

* K2: “Eco-citizenship means living without harming nature and acting with an awareness to protect the environment. It is very important to convey this to students in social studies classes.”

**Sustainability**
*Explanation*: Teachers emphasize that eco-citizenship is not limited to current environmental problems but also includes a sense of long-term and intergenerational responsibility. Sustainability is presented as a fundamental element, focusing on the importance of using resources wisely for both present and future generations.

*Participant View:*

* K7: “I define eco-citizenship as fulfilling our responsibilities today and for future generations to ensure a sustainable life.”

**Environmental Advocacy**

*Explanation*: Some teachers highlight the need for students to develop sensitivity to environmental issues not only at the individual level but also at the societal and community level. They encourage students to participate in social responsibility projects, take active roles in the community, and develop an identity as environmental advocates.

*Participant View:*

* K11: “Creating social awareness about environmental issues and taking active roles at school and in society is fundamental to eco-citizenship.”

**Eco-Friendly Behaviors in Daily Life**

*Explanation*: Teachers emphasize that eco-citizenship education should not be limited to theoretical knowledge but should lead to the development of eco-friendly attitudes and behaviors in daily life. Teachers act as role models, supporting students to practice environmental awareness outside of class.

*Participant View:*

* K15: “I try not only to provide information, but also to ensure that students exhibit eco-friendly behaviors and serve as examples in their daily lives.”

**Legal and Ethical Responsibilities**
*Explanation*: A group of teachers define eco-citizenship as being knowledgeable about environmental laws, complying with regulations, and acting with ethical responsibility. The practical implementation of these responsibilities such as recycling, waste management, and energy conservation are highlighted as essential components of eco-citizenship education.

*Participant View:*

* K19: “Knowing and applying environmental laws such as recycling, waste management, and energy saving is also a part of eco-citizenship.”

The dominant approach among teachers is to associate eco-citizenship with environmental responsibility and nature awareness. Teachers define eco-citizenship as acting with sensitivity towards the environment, protecting natural resources, and adopting a sustainable lifestyle. This approach contributes to raising environmentally conscious and socially responsible individuals. Sustainability is a prominent sub-theme, indicating that teachers consider eco-citizenship as a long-term responsibility extending beyond present issues. They emphasize the need to instill values that safeguard the rights of future generations. Environmental advocacy emerges as an important aspect, as teachers encourage students to participate in social projects and develop a sense of responsibility towards society and the environment. Practical application and daily eco-friendly behaviors, supported by role modeling from teachers, are considered vital for real behavioral change in students. Finally, knowledge of legal regulations and ethical responsibilities is integrated into eco-citizenship, ensuring that students become aware of their formal obligations regarding environmental protection.

**Table 3. Participants’ Views on “Incorporating Eco-Citizenship Education into Social Studies Lessons”**

| **Theme** | **Sub-Themes** | **Frequency (f)** |
| --- | --- | --- |
| Project and Activity-Based Learning | - In-class projects- Hands-on activities- Active participation | 10 |
| Recycling and Waste Management Practices | - Waste separation- Reuse- Zero waste principles | 8 |
| Current Environmental Issues | - Current environmental news- Case analysis and discussion | 7 |
| Field Trips and Nature Observations | - Nature observation- Ecosystem studies | 5 |
| Social Responsibility | - Environmental campaigns- Tree planting- Cleaning activities | 4 |
| Role Play and Art Activities | - Drama activities- Sketches and dramatizations | 3 |

**Project and Activity-Based Learning**

*Explanation*:A significant portion of participants emphasize the importance of project and activity-based practices that involve active student participation. Through both in-class and extracurricular projects, students' environmental awareness increases, and their problem-solving skills regarding environmental issues develop. This approach supports the lasting acquisition of eco-citizenship consciousness.

*Participant View*:
• K2: “Every year, I organize in-class projects related to recycling and waste management. Students become more conscious about waste separation.”

**Recycling and Waste Management Practices**

*Explanation*: Teachers implement concrete activities to instill in students the habits of waste separation, reuse, and the adoption of zero waste principles in daily life. These activities encourage students to become environmentally responsible individuals.

*Participant View*:
• K2: “Every year, I organize in-class projects related to recycling and waste management. Students become more conscious about waste separation.”

**Current Environmental Issues**

*Explanation*: Discussing current environmental news and cases in lessons contributes to students developing sensitivity to environmental problems. Through current events, students gain awareness about the environment, resulting in lasting learning.

*Participant View*:
• K6: “In social studies class, I cover topics like environmental issues and sustainability, and I have students discuss current environmental news.”

**Field Trips and Nature Observations**

*Explanation*: Observations in nature and field trips allow students to closely observe the environment and witness ecosystem processes firsthand. This method has been found effective in developing environmental awareness.

*Participant View*:
• K9: “With students, we conduct nature observations in the schoolyard and organize field trips about environmental pollution.”

**Social Responsibility**

*Explanation*: Within the scope of social responsibility, students are encouraged to participate in activities such as environmental campaigns, tree planting, and cleaning. These practices enable students to assume responsibility both individually and at a societal level.

*Participant View*:
• K13: “Every term, we always organize an environmental campaign or a tree planting activity as part of our social responsibility efforts.”

**Role Play and Art Activities**

*Explanation*: Through artistic activities such as drama, sketches, and dramatizations, students experience both environmentally harmful and protective behaviors through empathy. In this way, environmental values are internalized.

*Participant View*:
• K18: “We use drama activities and short sketches to dramatize behaviors that harm and protect the environment.”

According to the participants, project and activity-based learning stands out in the effective implementation of eco-citizenship education in social studies lessons. This approach enables students to become aware of environmental problems and to actively seek solutions through practical application. With recycling and waste management practices, students acquire environmentally friendly habits. Current environmental issues and field trips increase students’ environmental awareness and sensitivity. Social responsibility activities help students gain both individual and social awareness, while role play and art activities support the development of empathy and the internalization of environmentally sensitive behaviors.

**Table 4. Participants’ Views on “Student Participation and Interest in Eco-Citizenship Education”**

| **Theme** | **Sub-Themes** | **Frequency (f)** |
| --- | --- | --- |
| High Participation and Volunteering | - Active participation- Expressing opinions- Collaboration | 9 |
| Development of Responsibility | - Behavioral change- Acquisition of eco-friendly habits | 8 |
| Empathy | - Sensitivity to environmental issues- Awareness of living beings and nature | 7 |
| Loss of Interest or Superficial Participation | - Decreased motivation- Participation only due to assignment requirements | 5 |
| Reflections on Family and Environment | - Sharing information with family- Development of eco-friendly habits at home | 4 |

**High Participation and Volunteering**

*Explanation:* Most participants stated that, especially in practice-based activities, students participated with great enthusiasm and willingness, freely expressed their ideas, and actively joined group work. Such practices increase students’ creativity and level of participation.

*Participant View:*
• K1: “Especially in hands-on activities, students participate with great eagerness and express themselves.”

**Development of Responsibility**
*Explanation:* After eco-citizenship education, a sense of responsibility towards the environment and positive behavioral changes were observed in students. It was emphasized that students acquired eco-friendly habits such as recycling and saving water.

*Participant View:*
• K5: “After out-of-class projects, I noticed a visible change in students’ recycling habits.”

**Empathy**
*Explanation:* It was noted that students became more sensitive and responsive to environmental issues and other living beings, developing empathy. This increased awareness is believed to have positive societal impacts in the long term.

*Participant View:*
• K9: “Some students developed empathy towards environmental issues and act more sensitively in protecting the environment.”

**Loss of Interest or Superficial Participation**
*Explanation:* It was observed that, for some students, motivation decreased and participation remained superficial, especially in topics that were not engaging or when activities became routine. Participants stated that it is not possible to maintain high motivation in all students at all times.

*Participant View:*
• K14: “On topics that are not engaging, some students can remain passive or participate only because it is required for homework.”

**Reflections on Family and Environment**

*Explanation:* It was observed that students shared the knowledge and behaviors they acquired at school with their families and even initiated eco-friendly habits at home. This is an important indicator that eco-citizenship education extends beyond the school environment.

*Participant View:*
• K18: “Children share what they have learned with their families and even report that they have started waste separation practices at home.”

According to teachers’ observations, eco-citizenship education, especially in practice-based activities, increases students’ high participation and willingness to engage. The development of responsibility, acquisition of environmentally friendly habits, and growth of empathy are also evident among students. However, loss of interest or superficial participation is also observed in some students. One of the most significant findings is that students transfer the knowledge and behaviors they have acquired to their families and surroundings; this is an important indication that eco-citizenship education extends beyond the school.

**Table 5. Participants’ Views on “Challenges Encountered and Solutions Proposed in the Implementation of Eco-Citizenship Education”**

| **Theme** | **Sub-Themes** | **Frequency (f)** |
| --- | --- | --- |
| Lack of Materials and Resources | - Lack of up-to-date materials- Inability to find age-appropriate resources- Teachers preparing their own materials  | 10 |
| Time Constraints and Intensive Curriculum | - Overloaded lesson content- Inability to allocate sufficient time for activities | 9 |
| Lack of Family Support | - Lack of parental interest- Inability to reinforce learning at home | 7 |
| School Administration and Infrastructure Problems | - Lack of recycling infrastructure- Inadequate physical environment | 5 |
| Sustaining Student Interest | - Loss of motivation in the long term- Decreased interest due to repetitive activities | 4 |
| Social and Cultural Barriers | - Societal habits- Resistance from parents | 3 |

**Lack of Materials and Resources**
*Explanation:* The majority of participants complained about the lack of up-to-date and age-appropriate environmental education materials. Teachers frequently noted that they are forced to prepare their own materials, and this situation limits the effectiveness of the lessons.

*Participant View:*
• K2: “It is difficult to find sufficient and up-to-date materials for eco-citizenship. Most of the time, I have to prepare my own resources.”

**Time Constraints and Intensive Curriculum**
*Explanation:* Due to a crowded curriculum and limited time slots, it was reported that not enough time can be devoted to eco-citizenship education. Teachers struggle to find time for project- and practice-based activities.

*Participant View:*
• K5: “The curriculum is very intensive; we have difficulty finding time to address eco-citizenship topics.”

**Lack of Family Support**
*Explanation:* Parents’ indifference or lack of awareness towards environmental issues prevents students from reinforcing what they have learned at home. This makes it difficult for positive behaviors to become permanent.

*Participant View:*
• K9: “Most parents are uninterested in environmental issues; students cannot reinforce at home what they have learned at school.”

**School Administration and Infrastructure Problems**
*Explanation:* The lack of recycling bins or the necessary physical infrastructure and equipment for environmental activities at schools was frequently mentioned.

*Participant View:*
• K14: “There are no recycling bins at school, and we lack sufficient infrastructure for activities.”

**Sustaining Student Interest**
*Explanation:* In long-term projects or when activities are repeated, some students experience decreased motivation and loss of interest. Teachers try to develop new and different practices to keep students engaged.

*Participant View:*
• K18: “Although some students are interested at first, they may lose motivation over time.”

**Social and Cultural Barriers**
*Explanation:* Certain societal habits and parents' attitudes—such as seeing environmental awareness as unnecessary—make it difficult to mainstream environmental education. In some cases, parents have even openly opposed certain practices.

*Participant View:*
• K20: “Some parents consider environmental issues unnecessary and even oppose some activities.”

The most common challenges faced by teachers in the implementation of eco-citizenship education are lack of materials and resources, time constraints and an intensive curriculum, lack of family support, problems related to school administration and infrastructure, sustaining student interest, and social and cultural barriers. To overcome these problems, teachers reported developing solutions such as preparing their own materials, cooperating with municipalities and environmental associations, making lessons more engaging, and organizing informative meetings for families.

**Table 6. Participants’ Views on “Recommendations and Suggestions for Improving Eco-Citizenship Education”**

| **Theme** | **Sub-Themes** | **Frequency (f)** |
| --- | --- | --- |
| Development of Up-to-Date Materials | - Development of age-appropriate content- Visual and digital materials- Use of case studies | 11 |
| Practice-Based and Participatory Programs | - Project-based activities- Active student participation- Campaigns and environmental activities | 9 |
| In-Service Training | - Continuous professional development- Seminars and workshops- Experience sharing | 8 |
| Family and Community Collaboration | - Joint school-family-community projects- Informative meetings- Social awareness activities | 6 |
| Improvement of School Infrastructure and Environmental Facilities | - Recycling bins- Ecological areas- Opportunities for nature observation | 5 |
| Flexibilization of the Curriculum | - Integration of lesson content- Flexible and enriched content- Integration with other subjects | 4 |

**Development of Up-to-Date Materials**
*Explanation:* The most emphasized recommendation by participants is the development of up-to-date and age-appropriate materials. It was stated that preparing visual, digital, and practice-oriented content, and enriching lessons with case studies, is necessary.

*Participant View:*
• K2: “There is a need for specially prepared up-to-date materials and content suitable for student level for eco-citizenship.”

**Practice-Based and Participatory Programs**
*Explanation:* It was indicated that more hands-on and project-based activities should be included in lessons and that active student participation increases the permanence of learning.

*Participant View:*
• K7: “More hands-on and project-based activities should be included in lessons; student participation should be increased.”

**In-Service Training**
*Explanation:* The importance of teachers’ continuous professional development through seminars, workshops, and experience sharing was emphasized.

*Participant View:*
• K9: “It is very important for teachers to receive continuous training and share experiences on this topic.”

**Family and Community Collaboration**
*Explanation:* For the permanence of students’ achievements, the necessity of involving families and the community in the process, organizing informative meetings, and implementing joint projects was highlighted.

*Participant View:*
• K13: “Including families and the community in the process ensures the permanence of students’ achievements.”

**Improvement of School Infrastructure and Environmental Facilities**
*Explanation:* It was stated that opportunities for environmental education in schools, such as recycling bins, ecological areas, and possibilities for nature observation, should be increased.

*Participant View:*
• K16: “Schools should provide facilities such as recycling bins and small ecological areas in the yard.”

**Flexibilization of the Curriculum**
*Explanation:* It was emphasized that eco-citizenship education should be presented more flexibly and in an integrated manner within the social studies curriculum, and that its association with other subjects is important for wider coverage.

*Participant View:*
• K19: “Eco-citizenship topics should be integrated with existing lesson content and be given more space in the curriculum.”

According to participants’ recommendations, the effectiveness of eco-citizenship education first requires the development of up-to-date and practice-based materials. Practice-oriented and participatory programs should reinforce students’ environmentally friendly behaviors and attitudes. Other important development areas include expanding in-service training for teachers’ professional development, strengthening cooperation with families and the community, enriching school infrastructure, and making the curriculum more flexible. These suggestions offer a holistic approach for sustainable and lasting gains in eco-citizenship education.

4. Conclusion

In this study, the views of social studies teachers on eco-citizenship education were examined; how teachers define the concept of eco-citizenship, how they address this concept in their lessons, the challenges encountered during implementation processes, student participation, and their suggestions for improving education were discussed.

According to the participants, for social studies teachers, eco-citizenship primarily stands out as a concept identified with environmental responsibility and awareness of nature. This finding is consistent with the results of previous studies: environmental sensitivity by Çabuk and Karacaoğlu (2003); attitudes toward environmental problems by Şama (2003) and Timur, Yılmaz, and Timur (2013); environmental attitudes and behaviors by Murphy (2004); environmental attitudes and awareness by O’Brien (2007); environmental attitudes and perceptions by Arık and Yılmaz (2017); and research on environmental literacy by Koç and Karatekin (2013) and Kayalı (2018). Participants defined this concept in terms of individuals acting in an environmentally conscious way, protecting natural resources, and adopting a sustainable lifestyle. It is understood that the concept of eco-citizenship is seen as a holistic approach that requires taking responsibility for the environment not only at an individual level but also on a societal and global scale. Especially the emphasis on sustainability, social participation, and environmental advocacy indicates that social studies teachers view eco-citizenship as a multidimensional and contemporary understanding of citizenship.

Another important finding of the study is that project- and activity-based learning practices stand out in eco-citizenship education. Teachers stated that hands-on activities such as recycling and waste management, addressing current environmental issues, nature observations, and social responsibility campaigns are effective in fostering students’ environmental awareness. It was found that both in-class and out-of-class activities support the development of environmental sensitivity and responsible behaviors in students, and additionally, role-playing and art activities increase students’ levels of empathy and awareness.

From the perspective of student participation, high motivation and voluntarism were observed in practice-based activities, and it was understood that students tend to develop a sense of responsibility and empathy towards the environment. This finding is also consistent with the results of studies on environmental attitudes and perceptions by Çabuk and Karacaoğlu (2003), Sam, Gürsakal, and Sam (2010); environmental education by Önder (2015); and environmental awareness and sensitivity by Akçay and Pekel (2017). However, it was observed that in theory-heavy lessons or when activities become routine, there may be declines in participation and problems with superficial interest. Participants stated that students transfer the knowledge and behaviors they gain at school to their family environment, and thus, eco-citizenship education extends beyond the school setting.

The most significant challenges encountered in the implementation of eco-citizenship education are the lack of materials and resources, time constraints and an intensive curriculum, lack of family support, and issues related to school administration and infrastructure. The research findings reveal that teachers frequently experience a shortage of up-to-date and age-appropriate materials, are unable to find sufficient time for practical activities and projects, and that insufficient involvement from families and school administrations limits the effectiveness of the education. Additionally, certain societal and cultural barriers and attitudes towards environmental sensitivity are seen to create resistance in educational practices.

Participants’ recommendations for improving eco-citizenship education focus on developing up-to-date and practice-based materials, making programs more participatory and experiential, increasing in-service training, strengthening cooperation between school, family, and community, arranging school infrastructure to support environmental education, and making the curriculum more flexible. Teachers emphasized that they should not only be transmitters of knowledge, but also play a role in instilling environmentally friendly attitudes and behaviors in students.

Furthermore, the findings of this study indicate that eco-citizenship education has found a meaningful and effective place within social studies lessons; however, current practices have not reached the desired level due to various structural, pedagogical, and cultural limitations. Nevertheless, enhancing teachers’ professional development and material support, strengthening school-family cooperation, and disseminating practice-oriented instructional strategies emerge as primary requirements for increasing the effectiveness of eco-citizenship education.

**Disclaimer (Artificial intelligence)**

Authors hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

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