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;

* To identify how social studies teachers define the concept of eco-citizenship and to reveal their individual/professional approaches to this topic;
* To determine how eco-citizenship education is incorporated into social studies courses, and which methods, strategies, and content are utilized;
* To examine teachers’ observations regarding student participation, interest, and interaction in eco-citizenship education;
* To identify the challenges, obstacles, and limitations (such as materials, time, curriculum, environmental support, etc.) encountered in eco-citizenship education;
* To determine social studies teachers’ suggestions and expectations for the improvement of eco-citizenship education;
* 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.

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.

3. results and discussion

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

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

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| **Theme** | **Frequency (f)** |
| Environmental Responsibility and Nature Awareness | 11 |
| Sustainability | 8 |
| Environmental Advocacy | 6 |
| Environmentally Friendly Behaviors in Daily Life | 5 |
| Legal and Ethical Responsibilities | 4 |

* *P2: “Eco-citizenship means living without harming nature and the environment, and acting with an awareness of protecting the environment. It is very important to convey this to students in social studies classes.”*
* *P7: “I define eco-citizenship as fulfilling our responsibilities towards both present and future generations for a sustainable life.”*
* *P11: “Creating social awareness about environmental issues and taking an active role in school and society are the fundamentals of eco-citizenship.”*
* *P15: “I strive not only to provide information, but also to ensure that students demonstrate environmentally friendly behaviors in their daily lives and serve as role models.”*
* *P19: “Knowing and implementing environmental laws, such as recycling, waste management, and energy saving, are also part of eco-citizenship.”*

The most common approach is to associate eco-citizenship with environmental responsibility and awareness of nature (f=11). Teachers define the concept of eco-citizenship as individuals acting in an environmentally conscious manner, protecting natural resources, and adopting a sustainable lifestyle. This approach contributes to students developing environmental awareness at an early age and becoming individuals who are sensitive to society. Sustainability (f=8) demonstrates that teachers do not see eco-citizenship as limited only to current environmental problems, but relate it to long-term and intergenerational responsibility. Participants emphasize the importance of highlighting the principles of sustainability and the rights of future generations in social studies lessons. Students are taught that the conscious use of resources and the protection of ecosystems are social responsibilities. Social participation and environmental advocacy (f=6) focus on students developing sensitivity to environmental issues not only on an individual level, but also at social and public levels. Teachers support students’ participation in social responsibility projects related to the environment, taking an active role in society, and developing an identity as environmental advocates. In this way, it is aimed for students to become individuals who can make their voices heard and participate in solution processes regarding environmental issues. Demonstrating environmental advocacy (f=5) reveals that eco-citizenship education should not be limited to theoretical knowledge alone, but that students should also develop environmentally friendly attitudes in daily life, with teachers serving as role models in this regard. Participants note that environmental practices carried out outside of class make it easier for students to achieve behavioral change. Legal and ethical responsibilities (f=4) show that some teachers define eco-citizenship as knowing environmental laws, complying with regulations, and observing ethical responsibilities. In particular, addressing concrete practices such as recycling, waste management, and energy conservation in lessons ensures that students become aware of their legal and ethical obligations concerning the environment.

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

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| --- | --- |
| **Theme** | **Frequency (f)** |
| Project- and Activity-Based Learning | 10 |
| Recycling and Waste Management Practices | 8 |
| Current Environmental Issues | 7 |
| Field Trips and Nature Observations | 5 |
| Social Responsibility | 4 |
| Role-Playing and Art Activities | 3 |

* *P2: “Every year, I organize in-class projects related to recycling and waste management. Students become more aware of waste separation.”*
* *P6: “In social studies classes, I cover environmental issues and sustainability, and I have students discuss current environmental news.”*
* *P9: “Together with students, we conduct nature observations in the schoolyard and organize field trips about environmental pollution.”*
* *P13: “Each semester, we definitely carry out an environmental-themed campaign or tree planting event as part of social responsibility.”*
* *P18: “Through drama activities and short sketches, we act out behaviors that harm and protect the environment.”*

The majority of participants engage in practices within the scope of project- and activity-based learning (f=10), in which students actively participate. Through both in-class and out-of-class projects, students are encouraged to develop solutions to environmental problems. Such activities help to reinforce eco-citizenship awareness. Recycling and waste management practices (f=8) stand out with concrete activities aimed at helping students adopt principles such as waste separation, reuse, and zero waste in their daily lives. The theme of current environmental issues (f=7) focuses on increasing students’ sensitivity to environmental problems through current news and case studies discussed in class. Participants note that addressing these topics through discussion and analysis ensures more permanent learning. Field trips and nature observations (f=5) allow students to directly interact with nature and observe how ecosystems function in real settings. This method is considered effective for developing environmental awareness and responsibility. Within the theme of social responsibility (f=4), teachers ensure that students participate in environmentally themed campaigns, such as tree planting or cleaning activities, with a sense of social consciousness. Role-playing and art activities (f=3) make it easier for students to internalize environmental values and develop empathy by enacting both positive and negative behaviors toward the environment.

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

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| --- | --- |
| **Theme** | **Frequency (f)** |
| High Participation and Volunteering | 9 |
| Development of Responsibility | 8 |
| Empathy | 7 |
| Loss of Interest or Superficial Participation | 5 |
| Reflections on Family and Community | 4 |

* *P1: “Especially in hands-on activities, students participate eagerly and express themselves.”*
* *P5: “After out-of-class projects, I observed a noticeable change in students’ recycling habits.”*
* *P9: “Some students developed empathy towards environmental problems and are behaving more sensitively about protecting the environment.”*
* *P14: “In topics that are not interesting, some students may remain passive or participate only as a requirement for assignments.”*
* *P18: “Children also share what they have learned with their families, and they mention starting waste separation practices at home.”*

Most participants observed high student participation and volunteering (f=9). It was noted that especially in practice-based activities and projects, students are highly enthusiastic and show active participation. In such activities, students tend to express their own ideas, participate in group work, and produce creative solutions. The theme of responsibility development (f=8) indicates the positive habits observed in students after eco-citizenship education and a tendency to become more responsible individuals towards the environment. Participants reported positive changes in students’ environmental habits (e.g., recycling, water conservation). Within the empathy theme (f=7), it was observed that students approached environmental issues more sensitively and developed empathy towards other living beings and nature. Some teachers emphasized that this increased awareness could lead to positive social outcomes in the long term. The theme of loss of interest or superficial participation (f=5) points to situations where some students’ motivation decreases, and participation remains superficial when activities become routine. Participants stated that it is not possible to maintain high motivation for all students at all times, and especially in theory-heavy lessons, disinterest can increase. Reflections on family and community (f=4) show that students transfer the knowledge and behaviors they acquire to their home environment, raise their families’ awareness, and help spread environmentally friendly habits. This is highlighted as an important indicator that eco-citizenship education extends beyond the school.

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

|  |  |
| --- | --- |
| **Theme** | **Frequency (f)** |
| Insufficient Materials and Resources | 10 |
| Time Constraints and Intensive Curriculum | 9 |
| Lack of Family Support | 7 |
| School Administration and Infrastructure Issues | 5 |
| Maintaining Student Interest | 4 |
| Social and Cultural Barriers | 3 |

* *P2: “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.”*
* *P5: “The curriculum is very intensive; we struggle to find time to address eco-citizenship topics.”*
* *P9: “Most families are indifferent to environmental issues; students cannot reinforce at home what they have learned at school.”*
* *P14: “There are no recycling bins at school, and we lack adequate infrastructure for activities.”*
* *P18: “Although some students are interested at first, they may lose motivation over time.”*
* *P20: “Some parents see environmental issues as unnecessary and even oppose certain activities.”*

The vast majority of participants encounter the problem of insufficient materials and resources (f=10). Teachers stated that there is a lack of up-to-date and age-appropriate environmental education materials and that they often have to prepare their own materials. This situation limits the effectiveness of the lessons and the diversity of activities that can be implemented. Time constraints and an intensive curriculum (f=9) indicate the limited time allocated to eco-citizenship topics and the heavy content of other subjects. Teachers emphasized that due to curriculum pressures, they are unable to devote sufficient time to projects and hands-on activities. Lack of family support (f=7) is a significant factor that prevents students from reinforcing what they have learned at home. Participants expressed that families’ indifference or lack of sensitivity to environmental issues makes it difficult for children to maintain positive behaviors over time. School administration and infrastructure issues (f=5) encompass the lack of necessary tools, equipment, and environments for environmental education. In particular, the lack of physical infrastructure for recycling practices or nature activities was highlighted. Maintaining student interest (f=4) was mentioned as a challenge in long-term projects or repetitive activities, as students’ motivation may decrease over time. Participants stated that they try to keep students engaged with new and interesting activities. Social and cultural barriers (f=3) demonstrate that certain societal attitudes and habits make environmental education more difficult. Some parents consider environmental awareness unnecessary and may even resist eco-friendly practices. Teachers reported that to overcome these obstacles, they develop their own materials, seek support from external stakeholders (such as municipalities and environmental associations), make lessons more enjoyable, and organize informative meetings for families.

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

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| --- | --- |
| **Theme** | **Frequency (f)** |
| Development of Up-to-Date Materials | 11 |
| Practice-Based and Participatory Programs | 9 |
| In-Service Training | 8 |
| Family and Community Collaboration | 6 |
| Improvement of School Infrastructure and Environmental Facilities | 5 |
| Flexibility in the Curriculum | 4 |

* *P2: “There is a need for specially prepared, up-to-date materials and content appropriate to students’ levels for eco-citizenship.”*
* *P7: “More hands-on and project-based activities should be included in lessons; student participation should be increased.”*
* *P9: “It is very important for teachers to receive ongoing training and to share their experiences on this topic.”*
* *P13: “Including families and the community in the process ensures that students’ gains are permanent.”*
* *P16: “Schools should be provided with recycling bins and small ecological areas in the schoolyard.”*
* *P19: “Eco-citizenship topics should be integrated with existing lesson content and given greater emphasis in the curriculum.”*

The most frequently emphasized need by participants was the development of up-to-date materials (f=11). Teachers stated that materials appropriate for different age groups, visual and practice-based resources, increased digital content, and the sharing of real-life environmental case studies should be prepared. Practice-based and participatory programs (f=9) stand out with the view that actively involving students in projects, campaigns, and environmental activities will make learning more effective and permanent. Participants stressed that lessons should not be purely theoretical, but should also be supported with activities based on practice and experience. In-service training (f=8) points to the necessity of increasing seminars, workshops, and experience-sharing meetings to ensure the continuous professional development of teachers regarding eco-citizenship. In this way, teachers' access to up-to-date information and their pedagogical competencies will be enhanced. Family and community collaboration (f=6) suggests strengthening the cooperation between school, family, and community so that the environmentally friendly behaviors acquired by students at school can be transferred to family and community life. Informative meetings, joint projects, and social awareness activities are examples of such efforts. Improving school infrastructure and environmental facilities (f=5) draws attention to the need for creating ecological areas in schoolyards, recycling points, and opportunities for nature observation to support practice-based education. Flexibility in the curriculum (f=4) reveals that eco-citizenship topics should be integrated into the current social studies curriculum and included more extensively through flexible content. It is especially believed that environmental education integrated with different subjects will have a positive impact on student outcomes.

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.

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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