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TEACHER INSIGHTS ON POLLUTION

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Abstract:
The aim of this research is to determine the level of information and awareness for the environment of teachers who are working in the schools in Gonen district of Isparta. The study group of the research consists of 16 volunteer teachers, 6 science sciences and 10 classroom teachers, who work in the schools in Gonen district of Isparta. As a research model, a descriptive research method was used from qualitative research methods. The research uses a semi-structured interview form developed by the researcher as a data collection tool. The semi-structured interview form contains a total of 9 questions. Descriptive analysis and content analysis were used to analyze data from the semi-structured interview form applied in the research. According to the research findings, teachers have no deep knowledge of the diversity of environmental pollution. It is seen that teachers are emphasizing physical and environmental pollution that they create superficially when talking about the presence of factories in the region. It was concluded that the source of livelihood was on agricultural activity and that the agricultural drugs used reduced the soil efficiency. To preserve the natural structure in the region, the village and the city can be conscious of students and teachers. Plans and projects can be designed under a heading to reduce environmental pollution. Social activities related to the environment can be organized to promote the natural beauty of the region.

Keywords: environment, environmental pollution, science teachers, teacher's opinion

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1. Introduction

It's the natural and artificial areas where the environment is interacting throughout the journey of life. These areas affect the environment in a variety of themes, physically, socially, economically and culturally (nature, 2012; Environmental Law No. 2872). The environment that bears the traces of life is a vibrant and lifeless environment that covers all groups (Karataş, 2014; Kocataş, 2014; Gökmen and Solak, 2015; Uyar, Birvural and Karakuyu, 2018). Human beings can be shown as a living example of life patterns in the natural environment. From the early days, people struggled to understand and define the areas in which they lived. (Özbuğutu and Karahan, 2014). Human interaction with the environment has increased. This interaction is changing in line with the human population, the constant needs of people (T. Öztürk and Öztürk, 2015; Aydın, 2016; s. 12). Increasing human and environmental interaction brings negative consequences. The air, the soil, the increase in human influence on the water, which forms a certain part of nature's main ingredients, is driving the interaction of the living in the natural environment in a negative direction. These negative interactions are the basis for environmental pollution. The concept of environment, especially 20. from the 18th century onwards, it is brought up with increasing environmental pollution with human activity. Environmental pollution threatens life in the world (Türkoğlu and Şahin, 2013; Aydın, 2013; Ministry of Environment and Urbanization, 2018). Measures are provided to reduce the resulting environmental pollution. Environmental training, especially at a young age, is noticeable. Environmental training allows environmental pollution to be reduced or even avoided. Children should not be taken away from natural life, but rather create areas in which they can be found in natural life. The learning method created by living and doing can also improve the knowledge and experience of children in the environment.

It is considered useful to have children in close contact with nature from a young age, with the logic of tilting while the tree is in mourning, and to have close contact with many species, such as plants and animals (Öztürk, 2013). In this training, the support of our teaching is the most importance.

In environmental education, it is necessary to increase the sensitivity of students to the environment through teachers and to transfer the necessary awareness to them (Yalçınkaya, 2013). Teachers are a role model for students (Semenderoğlu and Arslan, 2022). Training to reduce environmental pollution through teachers has a key location. In order for people to get more accurate information about the environment, they need to gain awareness of the environment (Kurt Konakoğlu, 2020). The awareness and sensitivity of individuals against environmental pollution can be ensured by environmental training (Bozkurt and Cansüngü, 2002). Environmental education in our country is provided by teachers in formal and informal terms with the achievements of some courses within the scope of formal education. Teachers are expected to have the necessary sensitivity in protecting the environment when the criteria for the Department of National Education Teaching Occupational Competencies are reviewed (MEB, 2017). For this reason, the levels of information and awareness for the environment are very

important for teachers to contribute to environmental education and to develop environmental awareness in students. This research aims to reveal the views of science and classroom teachers on the environment, to reveal the gains they have in the environment of teachers, to further define teachers' views on environmental pollution.

The study has been looking for answers to the following questions:

- What are the levels of information about environmental pollution of teachers who are working in the Gonen district of Isparta?
- What are the environmental levels of teachers?
- What are the levels of information for teacher environmental pollution?
- What is the awareness of environmental pollution of teachers who are working in the Gonen district of Isparta?
- What are teachers' environmental awareness?
- What is teachers' awareness of environmental protection?

To uncover the impact of rose and cement factories in the environment where research, science and classroom teachers work, to uncover the environmental levels of science and classroom teachers, it is extremely important that science and classroom teachers who have studied the environment during the undergraduate period receive in-service training on shortcomings due to their awareness of environmental and environmental pollution.

2. Literature Review

In the study of the field conducted by the researcher, the science in the field of education using the concept of pollution, the students of teachers, class teachers, preschool, primary school, secondary school and university (Altınsoy, 2018; Aydın, Koz and Bozdoğan, 2015; MR, Saz, Osmanpehlivan and Demir, 2020; Hızlı, 2003; Ertürk, 2017;Atik and Uyanık, 2020; Özcan and Arık, 2019; Özcan and Demirel, 2019; Pınar and Yakışan, 2018; Sağsöz and Doğanay, 2019; Selçuk and Yılmaz, 2017; Uyanık, 2017; Yanarates and Yılmaz, 2020; Yılmaz, 2019; Yılmaz, Samsunlu and Peker, 2017) were found. However, studies involving the views of both science teachers and classroom teachers on environmental pollution were not found as a result of research.

3. Material and Methods

3.1 Research Model

In this research, the research was used to determine the views of science and classroom teachers in primary and secondary schools in Isparta Gonen on environmental pollution. In the Betimsel study, no cause-and-effect relationship is sought between events and cases. In this type of research, the general characteristics of the workgroup are tried to be uncovered by basic statistical values such as frequency distribution (LIN, 1976; akt. Turhanoğlu, 2012). The descriptive research method has been used to determine the levels of opinion and awareness of environmental pollution of science and classroom teachers in Gonen district.

3.2 Participants

The study group of the study consists of 16 teachers, six science and ten classroom teachers, serving in primary and secondary schools in the Sparta district of Gonen in 2021-2022 academic year. When determining the study group (a) volunteering to participate in the study, (b) the criteria for taking environmental training courses in the undergraduate period have been taken into account and a total of 16 teachers who meet these criteria have been included in the study. Teachers are coded with a 'T'

3.3 Data Collection Tool

The semi-structured interview form developed by researchers was prepared according to the following criteria; it was noted that the teachers in the study group were able to explain environmental pollution and that the first questions were easy to answer so that teachers could understand the questions freely. The questions contained in the interview form generally include specific meanings in the researcher's mind, so the same questions may have different meanings by other people outside the researcher. The interview form has been presented to the expert opinion to determine whether this undesirable situation exists in the interview form, whether the questions on the interview form are out of the environment and fit for the workgroup. At this stage, a draft interview form consisting of 13 open-ended questions has been prepared. 4 faculty members who are experts in the field of classroom education and science education have been interviewed. In the preparation of the questions, an environmental training, two science training and a classroom training expert have their opinions taken. Open-ended questions included in the semi-structured interview form were presented to the views and evaluations of 4 faculty members, “appropriate”, “corrected and available”, “not available”.

These questions have been removed from the interview form because 4 questions in the draft interview form, which has 13 questions in line with the expert's “can be corrected and used” proposal, do not reflect the purpose of the study when it is examined in terms of environmental education, and no awareness can be made between the girls and boys. The questions on the interview form were first tested with two teachers outside the study group. There has been pilot practice with 1 science teachers and 1 classroom teachers to determine whether the questions are clear or not. The interview form with a total of 9 questions has been ended.

The research was conducted in the same physical environment as the participants. Participants work in and around the Gonen district of Isparta. The interviews with teachers were conducted in the work environment in which they served. Researchers and participants have been in the same physical environment during the introductions and discussion. Various vehicles with and without technology are used as part of the research. Accordingly, technological tools: (1) Laptop, (2) Internet package, (3) Smartphone (for voice recording), (4) Google Drive program and email address, (5) WhatsApp program. Non-technological equipment; (1) Gradebook, (2) Half-structured interview form used. The research uses a variety of semi-structured interview forms to collect data. This form was developed by the researcher with expert insights.

3.4 Collection of Data

All conversations (information transfer and discussion questions) were conducted face-to-face and recorded with the voice program on the smartphone. In the investigation, the negotiations continued in succession. In the first part of the app, the conversations were one-on-one and each conversation was scheduled to be approximately 15 minutes. Time has been flexible due to questions asked, or repeated questions if requested, taking into account the learners' responsiveness. Prior to the interview, the interview form prepared by the researcher has been checked, the interview form has been reviewed, the researcher has been given the opportunity to ask questions. The researcher has placed his phone in a convenient location before the application so that he can easily record the call. Then the interview was switched. In the process, the researcher did not interfere with the teacher in any way. All discussions of this research were conducted face-to-face in the classroom and in the teachers' lounge environment. The call data collected in the research was recorded in the telephone and computer environment.

3.5 Data Analysis

In the findings of the study, the first and second questions found in the semi-structured interview form were analyzed according to the descriptive analysis technique. The highest quotes in the power of representation have been selected to allow readers to describe the current situation. According to Yıldırım and Şimşek (2011), descriptive analysis is an analysis technique that includes steps for the subjective interpretation of the findings described, a pre-determined theoretical framework, editing of qualitative data, explaining the findings. This type of analysis is more abstract than content analysis. The descriptive analysis is defined as the type of content that is not subject to a detailed analysis method.

The remaining 7 discussion questions have been analyzed based on content analysis technique. Content analysis is a systematic way of taking a text based on specific encoding, where words are summarized by converting into categories. (Büyüköztürk and others, 2013:250). Analysis of the data according to vulture Altun and Apaydın (2013) is four steps as encoding data, creating categories, editing data according to codes and categories, ensuring validity and reliability. In this respect, the teacher's opinions recorded on the audio recorder have been listened to and made a written document. Data made into a written document has been collected and codes have been created. The generated codes are listed. In the listed codes, those associated with each other are categorized under common themes, taking into account the similarities and differences. The data obtained from teachers is placed in a theme that belongs to the themes created. After placing the data in themes, it is numerically expressed how much is touched on which theme. An expert opinion has been applied to whether the data obtained represents categories and themes (environmental education expert, science education expert and science teacher). The frequencies given in the findings represent the numbers that have similar meaning to the questions in the semi-structured interview form.

4. Findings

Findings from science and classroom teachers are 'levels of information for the environment in accordance with science and classroom teachers', 'levels of information for environmental pollution in accordance with science and classroom teachers', 'awareness of the environment in accordance with science and classroom teachers'. The figures and tables are explained with the help of 'awareness of environmental protection in accordance with science and classroom teachers' and 'activities made for the environment in accordance with the views of science and classroom teachers'.

4.1. Perspective of Teachers

"What does the environment mean to you?" The question has been asked, and the analysis taken into account the answers given has resulted in Table 1. When creating Table 1, according to The Ministry of Environment and Urbanization of Turkish Republic (2018) The definition of environment is physical, biological, social, economic and cultural atmosphere which all human beings and other creatures have been living together and having interactive relation. It's everything our eyes see in a simple way. It's the environment we live in. The nature around us and even the environment. The break in the rings of the chain that forms the natural balance affects the entire chain and causes the balance to deteriorate." taking into account the 'live-life environment', "coexistence-adaptation" and "habitat" codes for the environment have been established and the teachers' views on the environment have been analyzed.

Table 1: Environmental Information Level

	Codes	**Frequency**
Environment	Vibrant and lifeless environment	8
	Habitat	7
	Unity – adaptation	2

In view of Table 1, it was determined that eight teachers identified the 'live-lifeless environment' code and seven teachers as 'habitat' and two teachers as 'coexistence-adaptation'.

As an example of live and lifeless media code, T3 "*All living beings are the environment*" described it as an example of the combination and adaptation code T5 "*… because there is a combination, there must be a harmony, mutual understanding*". The habitat code is addressed by T1 as "*… I think of where we live, so that earth is the environment*".

4.2. Teachers' Opinion on Environmental Problems

The first sub-problem of the research is "What are the levels of information for teachers in the environment?". Taking into account, to determine the findings of this sub-problem, the participants were asked: "What does the environmental problem mean to you?". The analysis of the answers is reflected in Table 3.

The opinion of Özçalık (2021) regarding the definition of the environmental problem of is: "*In the last century, climate change, desertification, loss of biodiversity, acid rain,*

rapid population growth, poverty, hunger, warped urbanization, unplanned industrialization, air, global environmental problems such as water and soil pollution, hazardous waste, soil destruction, sea and ocean pollution, the thinning or drilling of ozone layer, increased pollution, jeopardize the sustainability of the environment; the safety of people, health, productivity and the safety of other creatures pose a threat to food safety and water resources." Taking into account the 'life threatening elements', 'waste' and 'air and water pollution' codes have been identified for environmental problems. Based on these codes, teachers' views on environmental issues have been analyzed.

Table 2: Environmental Problems

	Codes	**Frequency**
Environmental Problems	Life-threatening elements	12
	Air, water pollution	5
	Waste	2

In view of Table 2, it was determined that teachers have identified the environmental problem through "life-threatening elements", "waste" and "pollution of air and water".

According to Table 2, they have reported opinion on the most 'life threatening elements', while at least 'waste'. 12 participants have expressed an opinion on the environmental issue, and they have expressed that the elements that threaten their lives are the cause. 5 participants have said there is air, water, soil pollution. 2 participants have expressed their opinion of waste.

T5 said that "*I think the environmental problem is a vital threat to living things."*. T14 made his definition about environmental problems; for example, air and water pollution code: "*The place we live, the city, the street, the water, the air…. contamination*."

It is addressed to the T13 waste code: "*A problem itself is that food, waste, all of which are sold in sealed packages, is already a problem… it is a big problem … it is like evaluates the moment we go to for our own pleasure in picnic areas or beaches… it will never come again*."

4.2. Opinions on the Environmental Impact of the Cement and Gul Factory

The third sub-problem of the research is "What are teachers' awareness of the environment?". To determine the findings of this sub-problem, the following question was addressed: "What is the impact of the cement and Rose factory in your area on the environment?".

According to Table 3, 10 participants have covered economic activities, employment and employment opportunities for teachers on the positive effects of the rose and cement factory. Based on the views given by teachers, they discussed 7 participating gases (bad smell), 5 participating chemicals and 1 participants' cancer issues about the negative impact of factories on the environment. the 4 participating factories have not shown an opinion on this question because they have not seen it before and have no knowledge of its existence.

Table 3: Effect of factories

	Codes	**Frequency**
Positive	Economy	5
	Employment	5
Negative	Gases	7
	Chemicals	5
	Cancer	1

T11's point of view regarding the gas that comes out of the gas code *"… I always say the dirty environmental reactions that the chimneys need filters…. the waste from the factory pollutes too much in the environment otherwise." "in fact, if I start at the cement factory, there's a job opportunity for the environment, but also pollution, for example*," T12 expressed his point of view on economies and cancer codes: "*there's a lot of cancer in the cement factory, and the vegetation around it is not grainy green. I mean, it hurts. The factory's a good influence. I thought you said the economy would come to life again. Because business opportunities are important in the public, but do not harm the environment.*"

4.3. Views on the Environmental Consciousness of Local People

The third sub-question of the research is "How much are the flights of the teachers to their organizations?". In order to use the purposes of determining the group belonging to this sub-problem, was formulated the following question: "Do you think that the people living in this region are a cartel about the environment?".

Table 4: Consciousness level of local people

	Codes	**Frequency**
Consciousness Levels	Conscious	2
	Unconscious	7
	İndecisive	7

Reflections on Table 5 indicate that 2 are the contents of the affected local residents, 7 affected local people are unconscious, and the other 7 influences are undecided on this issue.

Regarding the unstable code T1 used the phrase "*So yes. It's not right to generalize, of course, there are also cards... there are those who don't have business cards, there are those who ignore them... it totally depends on the person. It is not possible to generalize*." Regarding the unconscious code, T2 said "*No, welcome them… for my own village. Since their education level is low, they do not have enough information on this subject. They are trying to consume nature.*"

4.4. Opinions on the Duties of Teachers in Order to Raise Public Awareness

The fourth sub-problem of the research, "What are the teachers' awareness of environmental protection?", poses a question. In order to determine the findings of this sub-problem, the participants were asked: "What kind of duties do you have to raise awareness of the public?". 16 of the participants emphasized the necessity of environmental education. While 7 participants talked about the importance of student

and parent cooperation, the other 7 participants stated that they are a role model as teachers. 2 participants expressed their views on educational videos.

Table 5: Teachers' Tasks

	Codes	**Frequency**
Tasks	Environmental training	16
	Parent cooperation	7
	The teacher is a role model	7
	Educational videos	2

As shown in Table 6, we are the foundation of education because for T1 teachers are "*role models and we are the teacher of parent collaboration codes, starting in the classroom at first… I think it will be created from school. With the support of families, of course. We can train at school as much as we want. We will not be able to make a breakthrough unless families support this with the training, they have given us."* We are trying to instill environmental education, starting with children; for T9 "*environmental education and educational video codes. When it comes to it, we send a video or brochure that the ministry gave us... and we send it to our parents*."

4.5. Insights on What Environmental Pollution Comes from

The second sub-problem of the study is "What are the levels of information for teacher pollution?". This creates the following question: "What do you think is causing environmental pollution?"

Table 6: Natural and Artificial Pollution Causes

	Codes	**Frequency**
Natural Weldment	Raw	1
	Landslide	1
	Flood	1
	Earthquake	3
	Forest fires	8
With Artificial Weldmen	Acid rain	1
	Sound pollution	2
	Chemical use in agriculture	2
	Global warming	3
	Soil pollution	9
	Forest fires	9
	Water pollution	11
	Waste	13
	Air pollution	13

As shown in Table 6, a total of 16 views from participants indicated that pollutants are natural sources, while the total of 75 views indicate that environmental pollution is artificial.

T13 has expressed his opinion: "*I think that air pollution comes first, especially because they use stove and coal here… but because they use too much pesticides, they can go up to the*

source water and cause this… often the pollution of the environment was such a waste of such waste. This kind of stuff is too much to dispose of."

T14 has a point of view: "*Especially chemical drugs and fertilizer used in agriculture pollute water sources, even make plants harmful to human health, and people and animals that consume these plants become ill...*"

4.6. Opinions on Responsibilities Required for Environmental Protection

The fourth sub-problem of the research is "What are the teachers' awareness of environmental protection?" question is taken into account. In order to determine the findings of this sub-problem, the participants were asked: "Do you think you have responsibilities for the protection of the environment?" question has been asked.

Table 7: Environmental Protection

	Codes	**Frequency**
Individual Responsibilities	Nature walk clubs	3
	To be an exemplary individual	9
	Awareness studies	13
Social Responsibility	Follow the rules (criminal procedure)	10
	To be a member of the environmental organizations	16

As shown in Table 7, a total of 25 views from the participants indicated the individual responsibilities required to protect the environment, while the other 26 views indicated the social responsibility needed to protect the environment.

For T11, the concept of consciousness is emphasized in the code of individual responsibilities, the need for criminal action in the code of social responsibility: "*First people need to be aware, I think to our country that these three isolating recycle bins should be everywhere in all cities. It's also necessary to enforce this and apply criminal action. There are a few countries I've been following. Japanese and Korean style. That's where it's being processed*." he said it. T2 said "*I am closely following the theme for individual and social responsibility codes "…. I'm also in college, and I'm in nature walk clubs right now. I love nature. I mean, I have a lot of respect for nature. I would participate in this event, whether it was a social event or a group*."

O1 said about individual and social responsibility codes: "*…if we first create consciousness from ourselves … as a teacher, I have more influence as a teacher. I fix myself in your students, in public. I will also improve the environment we live in*." He has expressed his views: "*I am a member of the "THEME foundation" for the T8 code of social responsibility. I'm even a voluntary theme practitioner, a baby theme practitioner at school*."

4.7. Discuss the Activities of the Environment

The fifth sub-problem of the research is "What are the activities that teachers have done for the environment?". The following question was asked: "What kind of environmental activities do you do in your courses?"

Table 8: Environmental activities

In-class Activities	**Codes**	**Frequency**
	Recycling	1
	Video-documentary-animation	7
	Dashboard	8
Extracurricular Activities	Trip-watch	6
	Environmental cleanliness	10

As shown in Table 8, *"… for the T1 in-class event code. we use a lot of paper. Homework for photocopying. For example, we are always trying to dissociate them and throw them away. Has made opinions." While I was seeing T1, I also did the cleaning of the district in my previous classes for the code of extracurricular activities, because of the pandemic. but we're trying to collect the trash we see when we go out to the garden around us."*

T2, for the in-class activity code, declared: *"In-class activity is often a film viewing or a material study that is sensitive to it. I'm usually doing an off-course event on a trip, so if I can get the permits, it's a trip. There is also a part of the village that you know about".*

We are addressing many things, even if they are not included in the curriculum for the T5 in-class event code. Has been described. "For example, I had my students watch a documentary about it. There is a future in the world, especially in the water consumption and the water shortage… I mention it too much…"

4.8. Suggestions for the Prevention of Environmental Pollution

The fourth sub-problem of the research is "What are the teachers' awareness of environmental protection?" In order to determine the findings of this sub-problem, the participants were asked, "What kind of suggestions can you make for the prevention of environmental pollution?"

Table 9: Environmental pollution prevention recommendations

Codes	**Frequency**
Mass media	2
Environmental training	7
Rule-check	7

As shown in Table 9 also expressed his views by saying "the tree bends at age" to the T13 environmental education code has a point of view. *"I think if the controls are more organized and beautiful, I believe that if we educate children at a young age, everything will be even more beautiful, or if we are to warn them in a way that people understand".*

There is so much that can be done for the code of T5 and T6 mass communication tools they have a point of view. *"… of course, there is something that can be done with all the mass media… the scope of events is vast…", "I don't know how we're going to do it; it's going to be possible through the media through education… people need to face to face them. Perhaps pollution is too large..."*

For the T10 rules and control codes: "*The written rules will already be sufficient for the safety of the environment to be followed in writing. These rules are not implemented unfortunately …*" and are separated from other participants.

4. Results and Discussion

In the scope of the study, it was determined that teachers' awareness and knowledge levels for environmental pollution were generally inadequate. The results of the study were created, taking into account the sub-problems below. Many of the participants have indicated that they do not have the necessary equipment for environmental and nature training. Those who are partially satisfied have stated that they have the equipment for environmental education, but they do not have enough knowledge to provide environmental and nature training.

In the study, "What are the levels of information for the environment of teachers?" in relation to the first sub-problem, science teachers responded to the environmental definition of science in accordance with the opinions of science and classroom teachers based on the academic knowledge in the science teaching program and science textbook, and it was concluded that classroom teachers did their environmental definition through example abstract concepts such as 'green and blue' without providing academic justification.

In the study, "What are the levels of information for teacher pollution?" in relation to the second sub-problem, acid rains, forest fires, landslides, erosion, flood, environmental pollution of most science and class teachers, it was determined to give answers such as earthquakes, faucets, droughts. Similar and Akkaya (2022), in their study for teacher candidates, they presented the results stated that teachers' candidates relate to environmental problems such as drought, flooding, melting of glaciers and famine to climate change. One of the remarkable results of the study is that teachers provide examples of recent forest fires in our country, both natural and artificial environmental pollution. It is remarkable that a large part of the teachers think that recent forest fires are human. Abay et al. (2022) have shared results in the study that support the study, indicating that forest fires are natural causes and human causes, but that the human factor is more effective. As a result of the research, it was determined that the sources of environmental pollution were communally responded to by science and classroom teachers through air pollution, water pollution, soil pollution, image pollution and waste.

'What are teachers' awareness of the environment?" in relation to the third sub-problem, teachers have two views on the impact of factories on the environment, and the positive side prioritizes economy and employment, while the negative side has consequences that indicate that natural life has an effect on the order of natural life. The results from the third sub-problem of the study are both positive and negative for the part of the factories in the work carried out by Turkkan (2015). This is consistent with the findings of the work carried out. Many of the participants expressed their hesitant to the environmental awareness of the local people, while the other part indicated that they were conscious.

"What is teachers' awareness of environmental protection?" in relation to the fourth sub-problem, class teachers stated that the foundation of education started with classroom teachers, and it was concluded that role model in environmental education and contribution in the family is of great importance. In addition, the proposal that a classroom teacher should also be in the primary and secondary school programs of community service courses is remarkable. Science teachers have emphasized that non-school learning environments should also be integrated into education. In this process, results have also been found that environmental organizations should be members. Taflı and Atıcı (2022) found findings that support the study, stressing the need to create an out-of-school learning environment, and the importance of moving education and education to different points.

5. Recommendations

Teachers can be given in-service training on environmental pollution. Applied environmental education can be included in the curriculum. Environmental education seminars can be given to the parents of the students. The issue of environmental pollution can be investigated using quantitative research methods.

Conflict of Interest Statement
The authors declare no conflicts of interest.

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