



| Research Article / Araştırma Makalesi |

## Investigating Views of Classroom Teachers and Students on the Interaction of Children with Nature

### Çocukların Doğa ile Etkileşimi Konusunda Öğretmen ve Öğrenci Görüşlerinin İncelenmesi

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#### Keywords

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#### Anahtar Kelimeler

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#### Abstract

**Purpose:** This research aims to investigate the interaction of primary school students with nature and to evaluate these interactions in terms of classroom teachers' views.

**Methodology:** Case study method within the qualitative research approach was used in the study. The study group of this research includes 10 classroom teachers and 18 primary school students on 3th grade who were selected randomly and voluntary basis. So as to get basic data, semi-structured interviews has used by asking 10 question to teachers and 5 for students. The data were analyzed through the "constant comparative analysis" method, one of the qualitative data analysis methods. Findings were presented in tables and direct quotations from teachers' conversations were used where appropriate to support the analyzed data.

**Conclusions:** According to results of the study, most of the participants have a common view that a great number of students are exposed to virtualization when they are getting away from the nature and have a fear against to nature and also they do not have the chance to know the nature. When the results obtained from the students were examined, it was concluded that the students did not know the meaning of terms such as natural life and organic. It has been determined that the topics that students wonder about nature are related to the growth and nutrition of animals and plants and also the current issues.

**Suggestions:** At the end of the study, some suggestions were made for the practical applications that can be made in the educational environments about the internalization of the natural life by the students.

#### Öz

**Çalışmanın Amacı:** Bu araştırmanın amacı öğrencilerin doğa ile etkileşimlerinin öğrenci ve öğretmen görüşleri açısından incelenmesidir.

**Yöntem:** Çalışmada nitel araştırma yaklaşımlarından özel durum çalışması kullanılmıştır. Araştırmanın çalışma grubunu gönüllülük esasına dayalı olarak rastgele seçilen 10 sınıf öğretmeni ve üçüncü sınıfa devam eden 18 ilkökul öğrencisi oluşturmaktadır. Veri toplama aracı olarak mülakat tekniğinden yararlanılmıştır. Yüz yüze yapılan mülakatlarda sınıf öğretmenlerine 10 ve öğrencilere beş sorudan oluşturulmuş yarı yapılandırılmış görüşme formu uygulanmıştır. Verilerin analizinde nitel veri analizi yöntemlerinden "sürekli karşılaştırmalı metod" kullanılmıştır. Bulgular tablolar şeklinde sunulmuş, katılımcıların alıntlarıyla desteklenmiştir.

**Sonuçlar:** Araştırmada sonuçlara göre öğretmenler öğrencilerin doğal yaşam ile ilgili konularda hazırbulunmuşluklarının yüksek olduğunu, öğrencilerin doğal hayattan ayrı kalması halinde sanallaşmaya yöneldiğini, öğrencilerin doğaya korkarak yaklaştıklarını ve öğrencilerin doğayı tanıma fırsatlarının olmadığını düşünmektedirler. Ayrıca öğretmenlere göre mevcut öğretim programı öğrencilerin doğa ile etkileşimi konusunda yetersiz kalmaktadır. Öğrencilerden elde edilen sonuçlara bakıldığında ise öğrencilerin doğal hayat, organik gibi terimlerin anlamını bilmedikleri sonucuna ulaşılmıştır. Öğrencilerin doğa ile ilgili merak ettikleri konuların hayvanların ve bitkilerin büyümesi ve beslenmesi üzerine, ayrıca güncel konular ile ilgili olduğu belirlenmiştir.

**Öneriler:** Çalışmanın sonunda doğal hayatın öğrenciler tarafından içselleştirilmesi konusunda eğitim-öğretim ortamlarında yapılabilecek pratik uygulamalara yönelik öneriler getirilmiştir.

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## INTRODUCTION

When it is looked at the root of word nature, it is seen that it is derived from being born (Kutru, 2012). Nature can be defined as a structure that can change, be changed, be renewed, which bears living and non-living beings, formed outside human touch and which can exist without human existence (Kahyaoglu, 2015). Nature is defined as the environment in which living things live in the most general terms (Çeliker & Akar, 2015).

Nature has went through various changes since the beginning of the universe and it still exists. Mankind has been interacting with nature from the beginning. As a result of this interaction, different feelings such as fear, admiration and protectionism began to be observed in humans. But today, in societies that are not directly intertwined with nature, people are seen to be indifferent to nature (Yağmur, 2019)

The way human beings perceive nature also shows how he relates to nature. Experiencing and acquiring nature as an experience plays a determining role in the relationship between man and nature. A person who does not interact with nature cannot notice natural problems and cannot worry about nature (Kutru, 2012).

As people began get closer to nature, representatives of philosophical movements have started to think about nature. In the Greek view, nature and man are compared to each other. Nature is thought to be an intelligent organism, just like man. In the Renaissance period, the view that man and nature are different was defended. The belief that nature was created by a mind beyond its own will has been adopted (Yağmur, 2019).

With the developing world, significant changes have been experienced in the way of perceiving nature in recent years (Yağmur, 2019). Many factors such as social situation, environment, education and personal characteristics affect the human perception of nature. Humans have an innate orientation towards nature. Because man meets his aesthetic, emotional and spiritual needs with nature. In order to meet these needs, the individual must have a life with nature. Having a natural life is important for the individual, especially for children, in every sense, in terms of their development in every field (Soran & Kutlu, 2012). The ability of children to acquire a natural life also contributes to development areas in terms of developing their aesthetic sense as a personality, social communication skills and cognitive problem solving ability.

Human beings experience nature in direct, indirect and representational ways. Direct experience is an experience that involves physical intimacy with unplanned nature in which the individual lives in the forest, garden, natural area. Indirect experience is the planned and controllable experiences of the child in the zoo, botanical garden. Representative experience includes the experiences of the individual in the presence of some materials such as television and video (Yağmur, 2019).

The concept of nature is one of the difficult concepts to learn. Children try to learn such concepts by constructing and internalizing them by establishing a connection through life in their minds (Çeliker and Akar, 2015). Children's interaction with nature is disappearing day by day. According to children living in big cities, interaction with nature is seen as related to keeping pets. Pet feeding instills animal love and environmental awareness for children. But it is not enough to understand nature. Because nature is a concept that is perceived by contacting with five sense organs. Communication of children who interact with nature is strengthened and they develop a more positive attitude towards the environment and life (Yağmur, 2019).

There are issues that need to be known and questions that need to be answered in order to raise awareness of nature to children. At this point, attention should be paid to the questions of how nature awareness and education should be given to children, which ways and methods should be followed (Çukur and Özgüner, 2008).

The child can ask various questions in interaction with nature. With what, why and how questions, the child tries to get to know and understand nature. They can find these answers through direct interaction with nature. J.J. Rousseau argues that nature is the best teacher for the child. He thinks that nature alone is sufficient for education (Yağmur, 2019). In J. J. Rousseau's work *Emile*, the harmony of education with nature is the most basic principle. *Emile* takes her lesson from nature, not from people. At this point, nature is seen as a teacher in itself, and nature education should be appropriate to the meaning of being a child in nature (Badamchi, 2017).

Nature has a function that prepares the ground for learning. As the child learns through life in nature, new learning occurs, the child experiences social and sensory experiences. When the child is away from nature, he cannot establish a relationship with nature and cannot internalize natural life. For this reason, the child needs to walk around in nature for a long time and get to know nature. Thus, the child will combine his daily life with his experiences in nature in his daily life. The child tends to explore and examine nature's ambiguity and disagreement. As a result, he creates new experiences, experiences. This situation shapes the child's world. The child starts to love nature as soon as he is intertwined with his life (Yağmur, 2019).

Piaget argues that children structure their learning through experiences and that children need concrete materials. Children try to know the world by living and by doing according to Piaget. For this reason, the child should actively participate in nature. When children touch trees and come into contact with animals, they establish their first life. This one and similar experiences should be done in the open space and most of the year. Outdoor games and activities related to nature, which are performed at certain intervals, are very important for minimizing individual differences in the learning process while making children learn by doing and experiencing (Pamuk-Kahrıman, 2019). When nature is accessible to children, it is one of the most desired playgrounds by children. Along with the interaction with nature, the child exhibits creative games in natural life. Nature encourages the child to dream, to explore. Nature life appeals to all sensory organs of the child (Yağmur, 2019). Experiences that appeal to all sensory

organs prepare the ground for permanent learning. The living space he is in, is an important factor in making sense of nature for children. This interpretation passes through shaping the child's love for nature through education. (Köşker, 2013).

Children do not know the environment in which they live, cannot understand the functionality of the elements in nature and cannot grasp the importance of nature. This can only be possible with a correct nature education. Nature education is an interactive education in nature. These trainings enable students to be sensitive to the environment and improve their problem solving skills (Yardımcı, 2009).

It is extremely important for children to know nature at a young age. Because as children get to know nature, they can develop positive behaviors. As children get to know nature at an early age, their interest in nature can develop, and they can also prepare the ground for positive attitudes and behaviors (Yardımcı, 2009). The earlier you start nature education, the better for the child and for the positive gains to be gained. Early childhood is important for the formation of permanent knowledge, and at this point, it is also important to start nature education at an early age. As a result of nature education that started at an early age, the individual internalizes the situation and continues this situation as a part of his life (Yağcı, 2016). Starting nature education early is important for empathy and respect for nature (Çeliker and Akar, 2015).

For a healthy nature education and for the necessity of children's interaction with nature, it is necessary to know the vital importance of nature, to perceive nature, to learn its structure and functioning (Kahyaoğlu, 2015). Today, many problems are encountered in nature education. Interaction with nature is tried to be achieved within the school. For this reason, the student cannot fully grasp the necessity, benefit and need for nature (Yağcı, 2016). Class rules for students are quite much. This does not make the classroom environment exciting for students. When it comes to nature, students' emotions such as interest and curiosity are activated. For interaction with nature, instead of keeping children in the classroom environment, it is necessary to do various activities in nature for their interest and curiosity. In order for nature education to be effective, in-school and out-of-school activities should support each other. Nature education, may play a role in the revival of the nature child bond which is close to breaking at this point. Students who interact with nature will have experiences that will be in direct contact. Nature-based education subjects should not be taught with in-class education in the school building. It should be added to the program as an out-of-school education by going out into nature and observations should be included and continuity should be ensured in this regard (Yağcı, 2016).

In nature education, indoor and outdoor activities should be done simultaneously. Thus, children can better explore and internalize nature. Nature should not be explained to children only as elements and as pictures. They should eliminate their curiosity and show and discover how living and non-living beings continue their lives. Students should get to know nature by hearing, touching, presenting life concretely. When children learn nature by doing, they can transfer these experiences to their lives. Such experiences of primary school-age children play an important role in gaining awareness at an early age (Köşker, 2013).

Nature trainings can be diversified as a short lake walk, planting trees, planting flowers, and experimenting with nature. With nature education, the individual loves nature, becomes more conscious of nature and values it. Nature education gives the child the opportunity to get to know the environment and to carry the theoretical concepts they have adopted to the field of application. Thus, the student discovers natural life, approaches real life, and can develop different perspectives on problems. In addition, children can learn to be more sensitive in nature-oriented actions (Yağcı, 2016).

In nature education, the individual understands nature by making various associations. In nature education, it is important to develop student's value judgments, to grasp and understand nature. Activities that take place in the natural environment are effective for students, and attitudes towards nature leave positive marks on the student's behavior. With out-of-class activities, the student can learn and talk more about nature, and the student's negative feelings and alienations towards natural life decrease (Çeliker and Akar, 2015).

Today, with the intensification of urbanization, natural and green areas are decreasing. This triggered people to stay away from natural life. Especially as children spend time indoors, they move away from active life and this situation pushes them towards virtuality. However, if children are intertwined with natural life, they can spend their energy better, develop their psychomotor skills and gain sociability. Being in the natural environment also plays an important role in developing their imagination and creativity (Cengiz and Doğtaş, 2015).

Nature activities play a supportive role in children's developmental areas (Uysal, 2007). Interaction with nature can leave long-term emotional traces in the child. Thus, emotional development of the child can be achieved. The decrease in interaction with nature also affects physical development, emotional development, and moral development (Yağmur, 2019). Cognitive observation, improvement in research skills, ability to establish cause and effect relationships, improvement in creative thinking can be observed in children who perform nature activities. Children develop psychomotorly with nature activities. For example, with the interaction of nature, the child can use his sensory organs in a coordinated manner, provide hand-eye coordination and move in a balanced way. With the interaction of nature, children develop socially positive attitudes towards themselves and their bodies. They grow up with a sense of accomplishment and thus increase children's self-confidence. With nature activities, students can learn the relationships of living and non-living beings, understand natural events such as rain, wind, thunder in nature, and recognize situations caused by seasons in nature (Uysal, 2007).

Children interact with nature in different ways. The child looks at nature more for fun and adopts nature as an area of play and exploration. In this way, it interacts with nature. Again, as an experience, children perceive nature within a boundary drawn by adults. They expand it by making sense with their imagination (Yağmur, 2019; Yüzbaşıoğlu, Yaz & Yılmaz, 2019).

Environment and nature-related issues are included in the Life Studies course in education programs at the third grade of primary school. The curriculum of the course was accepted in 2005, and minor changes were made in 2009. In the Life Studies program, activities in the natural area should be used to introduce nature and to improve students' perception (Birinci, 2013).

When the literature is examined, it was aimed to determine the thoughts of classroom teacher students and primary school students about their perceptions and responsibilities about nature in the study conducted by Köşker in 2013. According to the results of the study, it was observed that children perceive nature as a relaxing, happy and living space. It was observed that teacher candidates perceive nature as a living space, as being similar to students. Kahyaoğlu (2015) aimed to determine primary school students' perceptions of the concept of nature through metaphors. According to the results obtained in the study, the metaphors developed by primary school students vary as the vital function of nature, the diversity of nature, the aesthetics of nature, and the balance and rules of nature. Likewise, in the study Uysal conducted in 2007, it was aimed to determine the teachers' views on the functionality of science and nature activities applied in preschool education institutions. According to the results of the study, most of the teachers stated that they experienced some problems in case of applying science and nature activities. These problems are inadequacy of equipment, problems in organizing trips, crowded classes, physical inadequacy of classes, lack of application areas. Again, Çeliker and Akar (2015) aimed to determine junior high school students' perceptions of the concept of nature through metaphors. It was reached to the conclusion that junior high school students perceive the nature as "living place", "source of life", "altruistic", "excited and peaceful", "guiding", "indispensable value", "lecturer", "color" and "containing diversity".

In the light of the above information, it is seen that the concept of nature is very important for the development of children in the teaching-learning process. Children who learn through experiences, by doing and living, realize permanent learning. For this reason, students need to make permanent learning in order to interact with nature with different methods and techniques and to ensure their development at a high level. The research is important in terms of primary school students' interaction with nature, students' adoption of nature and evaluating classroom teachers' work towards students. The study is important because it is conducted in the classroom with face-to-face interviews with both teachers and students. When the literature is examined, it is thought that this study will contribute to the field and the curriculum, as there are very few studies on the concept of nature with both students and teachers.

### **Purpose of research**

The aim of this study is to examine the opinions of classroom teachers and primary school students about children's interaction with nature. In the light of this general purpose, answers to the following questions are sought in the study.

1. What are the opinions of classroom teachers about students' interactions with nature?
2. What are the educational activities that classroom teachers do to develop their students' awareness and perception of nature?
3. What are primary school students' views and opinions about nature?

### **METHOD**

This study was conducted within the framework of qualitative research approach. Since the opinions of teachers and students about a situation were wanted to be taken in the study, "case study" was adopted as a method. The most basic feature of case studies is to investigate one or more cases in depth. In other words, the factors related to the situation (environment, individuals, events, processes, etc.) are handled with a holistic approach and the focus is on how they affect the relevant situation and how they are affected by it (Yıldırım and Şimşek, 2006: 77). Within the scope of the study, the concept of nature was chosen as the "case" and the views of the research group regarding the related concept were tried to be revealed in depth in order to seek answers to the basic questions "What", "How", "Why" (Çepni, 2010). On the other hand, the case study was deemed appropriate due to the fact that there is a context within the scope of the study for the purpose of evaluating students' interactions with nature in terms of students' and teachers' views and that a systematic and in-depth description will be made through that context (Stake, 1995).

#### **Study group**

Participants in the study were determined through easily accessible sampling from purposeful sampling methods. The teacher working group consists of 10 classroom teachers working in a public primary school. In the selection of teachers participating in the study, volunteerism was taken as a basis. The student working group participating in the study consists of 18 third-grade students who are studying at a primary school. 5 of the students are girls and 13 are boys and their ages vary between 8-9.

**Table 1. Preliminary information about class teachers participating in the research**

Teacher's code	Gender	Age	Service years	School of graduation	No of students	Branch
K1	F	43	19	Karadeniz Technical University	22	1
K2	M	55	35	Ankara Education Institute	15	3
K3	F	35	12	Celal Bayar University	22	4
K4	F	41	20	Tokat Gazi Osman Paşa University	21	1
K5	F	41	16	Niğde University	22	2
K6	M	44	22	Erzincan University	18	3
K7	M	35	14	Gazi University Kastamonu Education Faculty	31	4
K8	F	33	10	Gazi University Kastamonu Education Faculty	22	2
K9	F	29	7	Sinop University	28	2
K10	F	39	18	Karadeniz Technical University Biology Department	20	4

Considering the years of service of the classroom teachers participating in the study, it is seen that it varies between 33 and 55 and the average service year is 17.3. Within the scope of the research, K9 (7 years of service) is the teacher with the least professional experience, and K2 (35 years of service) is the teacher with the most professional experience. Presenting the experiences of these participants and comparing their views will have an important place in terms of the quality of the research. Eight of the 10 participants in the study stated that they were graduates of education faculty, one of them was graduate of education institute and one of them was graduate of biology department.

#### **Data collection tool and data collection processes**

Semi-structured interview was used as data collection tool in the study. In the study, a form with questions to be asked face to face to teachers and students was developed. The questions in this interview form were directed to the teachers, and the answers received were recorded on a tape recorder. In the first part of the semi-structured interview form, demographic information about the teachers was tried to be obtained. In the second part of the form, the questions directed to the teachers were prepared in a way to reveal the level of knowledge of the teachers about the interaction of students with nature. In addition, the questions were directed to two teachers who were not within the scope of the study as a pilot and the comprehensibility of the questions was tested. The final form is given to the semi-structured form with 10 general questions. During the interviews, sub-questions that were sometimes not included in the interview form were asked, in order to obtain more in-depth information about the situation, where deemed necessary, in line with the answers received from the teachers. In the research, in the semi-structured interview technique prepared for classroom teachers, the questions in the A section were prepared to obtain preliminary information about the teachers who contributed to the study. Through these questions, data on the teachers' gender, age, professional experiences, the school they graduated from, the number of students in the branch and branches they teach were tried to be obtained. Semi-structured interview form was used in the interviews with the students. It was deemed appropriate to conduct the interviews using a written copy. This form consists of 3 parts. Part A was prepared to determine the students' prior knowledge, Part B was prepared to determine their views on nature, and Part C was prepared to determine students' suggestions about nature. In addition, five pictures were given to measure the readiness levels of the students in the study conducted with the students to support the opinions of the teachers. Attention has been paid to the fact that these pictures are tools and products used in the villages of the researched section. The students were given pictures of sickle, barn, saddle, rake and tobacco and asked to match them with their names. Expert opinion was obtained for the credibility and consistency of the semi-structured interview form prepared in the study. The semi-structured form is finalized with five general questions.

#### **Analysis of data**

The data obtained by making use of the semi-structured interview form applied to the teachers and recorded on the tape recorder were then written on paper. The data were processed using the "continuous comparative analysis" method, which is widely used in qualitative research. This method is basically based on a private to general understanding. The data analyzed with the continuous comparative analysis method are coded into categories and at the same time, the data are continuously compared (Ekiz, 2009). The thoughts expressed by each teacher were revealed through continuous comparative analysis.

#### **Credibility and consistency**

Long-term interaction of the researcher, consultation with expert opinion and participant approval are very common in studies. The fact that the researcher is present in the working environment allows the existing prejudices to be eliminated (Başkale, 2016). While the researchers should act impartially during the analysis process, in some cases they may add their personal interpretation, even if unwillingly. In order to overcome this situation, the study can be continued with the approval of the participants (Yıldırım and Şimşek, 2006). Expert opinion was obtained for the reliability and consistency of the semi-structured interview forms prepared in this study. The prepared questions were forwarded to two academicians and they were asked to examine them in terms of



language and meaning compatibility, and the necessary feedbacks were received. Expert review is one of the measures taken to increase the quality of research (Yıldırım, 2010). The previous professional experiences, past experiences and experiences of the participant classroom teachers who clearly express their thoughts during the interviews will help in answering the questions sought and contribute to the credibility of the research. For consistency in the study, it is taken into consideration that the applications are in harmony with the analyzes made by different researchers (Yıldırım & Şimşek, 2006). For the theme of consistency in the context of the study, the answers given by teachers and students in a public primary school to the interview questions were classified separately and categorized by the researchers, and the categories were compared and the consistency was tried to be established (Çepni, 2010) by looking at the harmony between independent observers (Şahinoğlu and Bebek, 2018).

## FINDINGS

In this section, analysis and findings of the data obtained through semi-structured interview technique will be included. The semi-structured questions in the B part of the interview form prepared for the classroom teachers who contributed to the study were used to obtain the opinions and thoughts of the teachers about the interaction of students with nature. With these questions, the readiness levels of the students about natural life, the original questions about nature coming from the students, were tried to be examined from the perspective of the teacher about the students' understanding of natural life. In the interviews it was also asked opinions of teachers in relation to disadvantages experienced by children who lived in urban life, the difficulties they had in natural life, help provided by teachers and adequacy of curriculum in internalizing natural life. As a continuation of these questions, the dimension of informing their students about organic markets was asked, and it was wanted to determine whether the agricultural games on the internet contributed to the students and the extent of the contribution of technology to natural life.

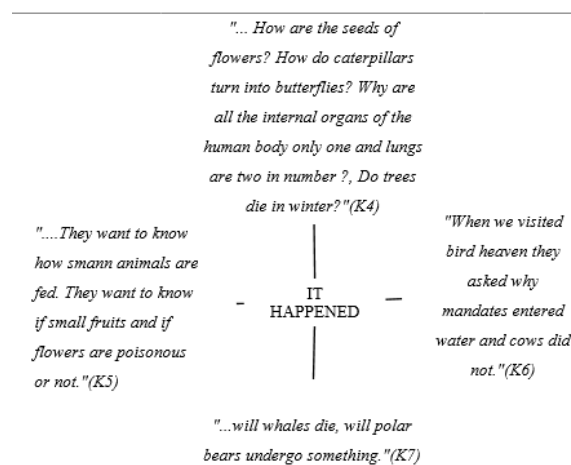
The first thing that was asked to the teachers who participated in the study was "What are the readiness levels of the students in matters related to natural life?" Five teachers expressed the view that students' readiness levels were at a high level for this question. A teacher expressed this opinion as follows;

*"Since the school I worked in was in the countryside of the district center, the students were well prepared, they all live in self-contained houses, so they have gardens and they have a lot of knowledge as they go to their village on the weekend."(K3)*

Four teachers stated that their students' readiness was moderate. A teacher said;

*"Due to the location of our school most of my students are connected to the village. They may not understand when we say natural life directly, but many of them know natural life." (K6)*

In the matches prepared to support the students' teachers' views, 10 of the students made these matches correctly. Eight students made mistakes in matching. It has been observed that the saddle, tobacco and sickle were mixed in these errors. About the readiness of the students, five teachers answered that they were at the upper level and four teachers were at the middle level. Considering the students' answers together with the teachers, most of the teachers stated students had a level of readiness, and this was supported by the answers given by the students. To the teachers who participated in the research, the question of "Are there any catchy questions from your students about natural life that surprised you? If so, can you give an example?" has been posed. With this question, it was aimed to learn the questions that the students were curious about nature and the questions that came to the teachers in line with this curiosity. When the answers were analyzed, it was seen that there were five teachers thinking it has not occurred, whereas this has not come to their mind during interview and one teacher was not confronted with this type of question. Four participants stated that such questions were asked to them. The answers given to these questions are presented separately in Figure 1.



**Figure 1: Questions asked to teachers by students about natural life**

When Figure 1 is examined, it can be seen that the topics that students are curious about are current issues, feeding small animals, how plants grow and what variety they have, and why some animals are different from others.

Parallel to the second question, it was tried to determine how teachers convey natural life to students and what kind of studies they do to internalize it. The question of "What do you do for your students to understand, comprehend and internalize nature?" has been asked. Their answers to this question are summarized in Table 2.

**Table 2. What teachers do for the internalization of natural life**

Opinions	Teachers	f
I have a picnic and we visit the green areas.	K1, K5, K6, K7	4
I take children out to the school garden.	K1, K4, K5	3
Experiment, observation.	K3, K4	2
I'm doing a project.	K6, K7	2
I'm doing peer teaching.	K7	1
I take advantage of technology.	K1	1
I am speaking verbally.	K2	1
I associate it with daily life.	K3	1
I have environmental cleaning activities done.	K10	1
I'm not doing anything.	K8, K9	2

When table 2 is examined and answers of teachers regarding meaning of nature, understading and internalizing it are reviewed, it was seen that they had picnic, went to green areas (K1: "... we have picnic, we have examination as there is green area ..."), had examinations in school garden (K5: "...When they go to garden they lie on the grass ..."), conducted experiments and observations (K3: "...Generally we realize small experiments in order for them to learn by observing and we realize similar events."), realized projects (K6: " We make a bird paradise, village or countryside trip at least once a year. Last year, as a class, we did a project titled "Don't End Bird Paradise". "), were supported with peer teaching (P7: "... There are children from the village, they are more involved with nature, they tell their friends about village life in the lessons.."), used technology, used traditional expression methods, made internalization by giving examples from daily life, realized environmental cleaning activities. As a result, it can be said that the majority of TEACHERS are trying to internalize nature with their students with out-of-class activities and practices.

K8, one of the teachers who stated that I do not do anything to internalize natural life, said: "I do not do much. They are already intertwined with nature, I cannot touch them. There is even a hedgehog in his house. There was no internalization by going out to nature and open spaces. " and P9: "Actually I do not do much, I cannot do anything. I think children are already good at this. Because of that, they are very involved with natural life." As can be understood from these views, it can be said that the reason teachers say we do nothing about understanding, comprehending and internalizing natural life is that students are in rural areas of the city center and they are intertwined with nature.

In this part of the study, the teachers asked, "Do children who grew up in urban life have any disadvantages compared to those who grew up in village life? If so, what are they? " The question has been posed. All of the teachers agreed that children who grow up in urban life are disadvantaged. Under these views, they stated different disadvantages. These disadvantages are summarized in Table 3.

**Table 3. Disadvantages of children raised in city life**

Opinions	Teachers	f
There are no opportunities to know nature.	K2, K3, K8, K10	4
They go virtual.	K4, K6, K9	3
Obesity	K1, K6	2
They approach nature in fear.	K4	1
Social, psychological	K1	1
They are unlucky	K5	1
Spoiled	K7	1

When Table 3 is examined, most of the teachers stated that students do not have the opportunity to learn about nature among the disadvantages they experience. The statements of the teachers in line with these views are given below;

"City dwellers have disadvantages of course, why? Because at least the child living in the village is intertwined with animals, at least he may have met pets or encountered wild animals, he may have seen a bird's nest, that is, he knows what they feed and what they move and what they can live with, but those who live in city life The children cannot benefit from them, they cannot see them, they only see them on the television in the picture, but the village children live them live.." (K2)

*"Of course, sure. Many vegetables do not know where the fruit grows in their natural environment, how the production is made in the natural environment or what is used, they do not know about any of them, there are students who do not know where the strawberry grows, they are disadvantaged in many aspects. " (K3)*

Teachers stated that children growing up in urban life do not know natural life, cannot observe natural creatures, and do not have information about how agricultural products are grown.

The opinion of one of the teachers who unite around the virtualization of the other dominant view of children is as follows:

*"...They can distinguish between real life and virtual life much better. They learn the soil, animals and air by experiencing them much more. They are also involved, which we call learning by doing and living. The child in the city stays on the tablet on the screen in the books." (K9)*

Teachers agreeing on this opinion state that play ground of children is the virtual world. Teachers are united in the view that virtual games distract children living in the city from the real world, that children play computer-oriented games, and that children cannot provide permanent learning because learning by doing and living does not act.

Again, teachers (K1, K6) say that children who grow up in urban life can not step on the ground, run or play, and that they throw their energy at the computer, which increases obesity rates as a disadvantage.

In addition to the teachers' opinions, the students were asked, "Would you like to live in the village? Why is that?" The question has been posed. 17 of the students answered that I would like it and one of them did not (T10). The students who answered I would like to have united around the following opinions;

- *Air in village is nice (Ö1, Ö2, Ö12)*
- *My relatives are there( Ö1, Ö15)*
- *Playing games is nice (Ö3, Ö7, Ö9)*
- *Natural (Ö11, Ö13)*
- *I liked animals (Ö15, Ö16)*
- *I like cows(Ö6)*
- *ever green (Ö4, Ö7)*
- *Fruit, vegetables (Ö4)*
- *No fight in village (Ö13)*
- *Forest, flower (Ö5)*

When looking at the answers of the students, it is obvious that the disadvantages are clearly seen. The presence of fresh air in the villages, the abundance of playgrounds, naturalness, curiosity and love for living things, and a peaceful environment make the natural life attractive for children growing up in urban life.

The question of "What are the difficulties and obstacles that children born in the technological world experience in terms of their interaction with the village or nature?" was asked and the opinions emerging from it were examined. The opinions given to this question are summarized in Table 4 below.

**Table 4. Difficulties and obstacles children have in interaction**

Opinions	Teachers	F
They are afraid of nature	K1, K2, K5, K8, K10	5
They don't know how to move in nature.	K1, K3, K8, K10	4
Nature sounds foreign	K2, K6, K7	3
They stand still	K4	1
Nature doesn't interest them	K9	1

Most of the teachers participating in the study gathered around the view that they fear nature. The answers given by the teachers are as follows;

*"... they are afraid of there themselves, that is, they are constantly worried about living there, because they have passed a life they do not know ..." (P2)*

*"For example, my friend is a person who grew up in the city and ran away when he saw a cat dog. I grew up in a village, I am not afraid if I see bugs in my house, but those living in the city are afraid" (K8)*

The answers given by the teachers show that children are afraid when approaching nature and their approach to nature is more difficult than before. In line with the answer given by K8, an important situation is seen when people who lived in the village and those who lived in the city were compared.

Some of the participants are united around the view that students do not know how to move in nature. Classroom teachers;

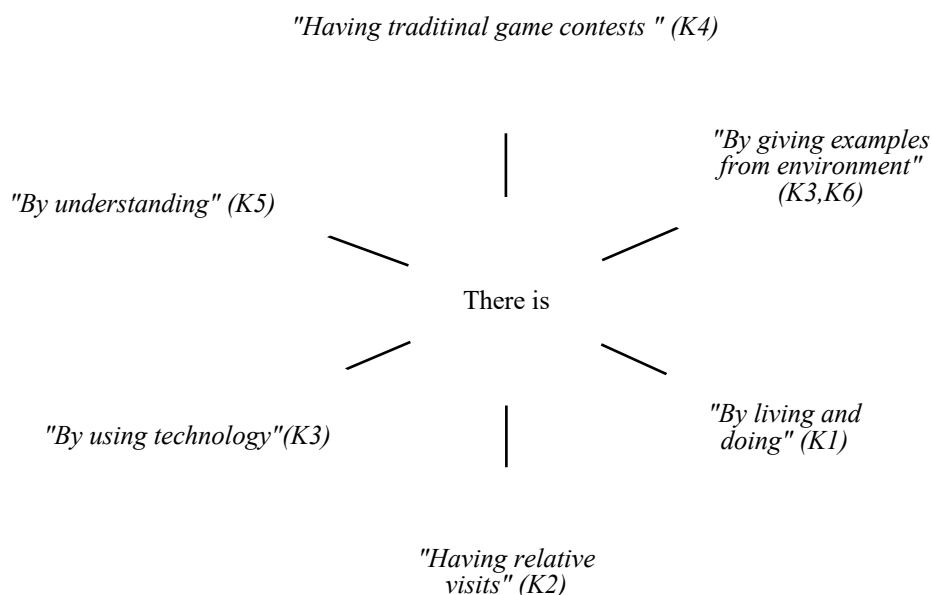
*"Since children born in the technological world are always indoors, city children do not know how to act once they are too strangers to nature..."(K3)*

*"...They are afraid, they have difficulty in getting used to it, and they have difficulty in living ... "(K10) They emphasized that they do not know how to act in nature.*



Some of the participating teachers emphasized that nature is foreign to students. For example P2 "They face obstacles because it is too strange for them to live in village life, is it ok to live here? It can come to them as a wild environment..." and showed how unfamiliar children are to nature.

Parallel to this question, teachers asked, "Do teachers help their students to overcome these obstacles? If so, what are they?" The question has been posed. To this question, six participants said "we have aids". The majority of teachers help their students when they get stuck with these difficulties and obstacles. These aids are summarized in Figure 2 below.



**Figure 2: Aids of teachers**

Within the scope of these views, K3 and K6 say that they help students overcome difficulties by giving examples from the environment. For example, K3 stated that "... by trying to give examples from our environment since I work in more rural areas rather than a place where apartments are more concentrated..." he said that the students are in the rural area and they can be helped by introducing the environment.

A teacher K4: "In recent years, traditional games are played in schools and their competitions are held. Children are starting to retreat to playgrounds and parks... ". With this view, the teacher emphasized that traditional games are encouraged in order to enable children to cope with obstacles.

Other participants, K3, "I try to help by watching videos in natural environments that they do not know", K1 "... we do plant cultivation in the classroom, we often make observations in the green areas in the schoolyard.", K2 "acquiring skills and using them visually or practically..." diversified their aids by stating their opinions.

To this question, four participants said "we have no help". One of the teachers K8: "Since they are in a natural life, we do not do much to internalize them." He thinks that his students internalize nature because the region they live in is in the countryside of the city, and they may not have felt the need to help children with this effect. As a justification, it can be said that children already know nature and they think that there is no need to dwell on the subjects they know by telling them about nature again and again.

Based on all these questions, teachers were asked for their opinions about the adequacy of the program in order to measure what the curriculum brought to students. Accordingly, the teachers were asked "Is the curriculum sufficient for internalizing natural life?" is the question. Seven participating classroom teachers agreed that the curriculum was not sufficient. A few of the answers given around this view are given below.

"It used to be, for example, there were lessons in agriculture, I wish there were lessons like that, now there is theory and no practice. For example, we say "Tell me how to grow tomatoes?" But there is no application. Even if we do, plant trees twice a year does not provide permanent learning. " (K7)

"Not. Because there is nothing in the curriculum like doing this and that in nature, arrange a trip, treat that subject over there. But maybe there is a bean planting in 4th grade. But there is no such thing as being together in the natural environment. ." (K8)

From the statements of classroom teachers, it can be said that the curriculum is not sufficient. Teachers stated that the school environment was insufficient and it is obvious that there is no practice garden in our schools at the moment. Theoretically, it was stated that the cultivation of a product based on rote does not provide permanent learning, and this view was supported by the agriculture lesson that was previously included in the curriculum. It was expressed that the bean experiment in the curriculum is not sufficient for students unless they enter the natural environment.

Two teachers defended the view that the curriculum was sufficient. K6: "There are necessary activities in the curriculum. The important thing is for the practitioner to do these "and emphasized that the curriculum is sufficient and that there will be no problems within the activities of classroom teachers who are practitioners.

As a different answer, a teacher K1: "We have a subject in many curricula about natural life in our theoretically sufficient subjects, but in terms of practice, we do not offer many opportunities, that is, we do not offer the opportunities to take our students to places where there is natural life." He stated that the curriculum is theoretically sufficient but not sufficient in practical terms.

In part C of the interview with primary school students, parallel to the question of the curriculum, "Would you like to be introduced to village life more?" The question has been asked. In this question, all the students agreed and expressed their own views. For example students gave below replies;

- *I could understand nature (Ö8, Ö9, Ö10)*
- *I could play games (Ö1, Ö4, Ö6)*
- *Since I can not go to village (Ö7)*
- *I want to cut the trees (Ö16)*

When looking at the answers of primary school students and classroom teachers together, it can be seen that the curriculum is not sufficient to internalize and understand nature.

Questions of "Organic markets were established in some of our villages. Do students have enough information about these markets? Do you provide information about growing products?" were asked. The answers to this question have been analyzed in 2 parts. First, "Do students have enough information about these markets?" part of it has been examined. To this question, four participants stated that primary school students had information, four participants said that they had more or less information, and two participants said that students did not.

Uniting around the notion that they have knowledge, teachers stated that they generally inform their students and some families produce products in this market. For example, K3 supported the view by saying: "... I also have student families producing products in that market, so I think they have enough knowledge ...".

The opinion of one of the participants who argued that they have half knowledge K10: "... some of them sell their families, some have knowledge and some do not have enough. But there are more or less. " He said that the children of the family who grow the product have knowledge compared to the others and that half of the class has knowledge.

In the second part of the question, "Do you inform teachers about growing products?" The question has been asked. The answers to this question are summarized in Table 5.

**Table 5. Information about products raised**

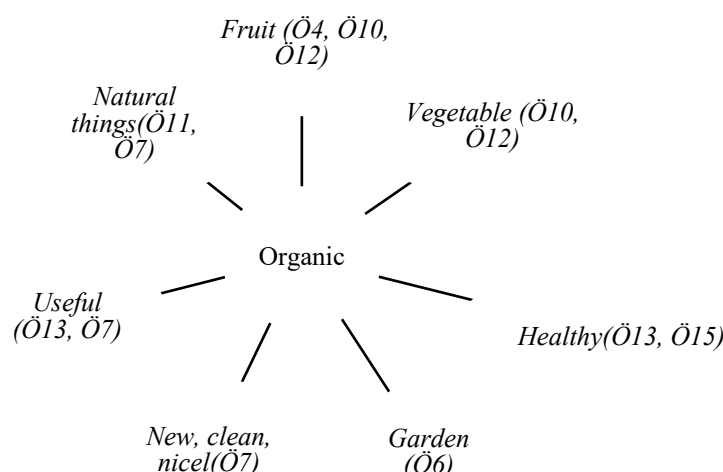
Opinions	Teachers	f
We do not inform	K3, K5, K10	3
I did not give information, gave advice	K4, K7, K8, K9	4
We inform	K1, K2, K6	3

The opinion of one of the teachers who are united around the view that we do not inform. K5: "I also learn that organic markets are established. I've seen it on TV. I did not know you were in Bafra. I did not give any information, I will do it from now on. "

Teachers agreeing on the statement that they did not provide information but gave advise have stated opinions as follows: K7: "...I advise them to purchase products raised in village ..." and K9: "... products we raise are healthier and we must get our nourishment from them... we are always warning them not to shop from markets and similar places. We explain that food cooked by our mother is healthier...". Based on these answers, children were not informed about the term meaning of the word organic, organic products, and the cultivation of these products, but these concepts were made to be felt by the students with the recommendations given.

K1, one of the participants who gathered around the view that we are informing: "We provide information to the students on this subject, how are organic products grown, what are the benefits of these products and where they are sold and where they are produced, we inform our children. We do not have the opportunity to go to the markets "and said that he informed the students about the meaning of the word organic and where it is produced.

In addition to this opinion of the teachers, students "What does the word Organic mean to you?" The question has been posed. It turned out that 10 students heard the word organic for the first time. Eight students stated that they had heard the word organic before. The answers given by these students are summarized in Figure 3.



**Figure 3. What the word organic reminds**

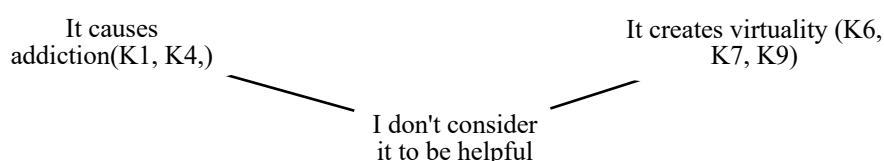
Four of the teachers agreed with the majority around the view that primary school students do not have information about the word organic, two have more or less information, three do not give information to the students, and four do not give information but give advice. When the answers given by the students are examined, it is seen that more than half of the class does not have information about the word organic. This also supported the teachers' views.

Considering that children are constantly with technology wherever they are, teachers were asked questions from games about agriculture in the virtual world such as "Do you find the agricultural games on the internet useful for children? Why is that?" and they are summarized in the table below.

**Table 6. Benefits of agricultural games in virtual world**

Opinions	Teachers	f
I don't find it useful	K1, K4, K6, K7, K9	5
It may be useful	K2, K5, K8	3
I do not find enough	K3, K10	2

Participants who argued that agricultural games on the internet do not benefit children were united around two views. These opinions are detailed in Figure 4.



**Figure 4. Reasons why agricultural games are not considered to be helpful**

The teachers who came together under the view that I do not find it useful came together under two different responses as can be seen in the table. The opinions of the teachers who argue that the agricultural games on the internet make virtual are as follows:

*"I don't find. Children think that many products grow like that. I think it would be better if they could grow peppers in pots." (K6)*

*"No. This is why we started to live everything technologically and not live our normal lives." (K7)*

*"... He goes to distract the child with something unreal, he encounters him on the computer screen in a way he would not have encountered in real life. He encounters the things he encounters virtually, which directs him to another world, showing another world in his head" (K9)*

Considering the answers given by the teachers, it is seen that the games on the internet make the students virtual.

The answers from teachers who defend the view that agricultural games on the Internet are addictive are as follows:

"...These agricultural games are more addictive than introducing agricultural products to children, I say as I have tried it myself. I think these games are just addictive to games and disrupt life."(K1)

"...I do not recommend games that are virtual. So that they don't habitually connect to the computer" (K4)

Looking at the answers, it is seen that the teachers definitely oppose virtual games and agricultural games when we go to private. Considering what K1 tells with his own experience, it can be seen that the agricultural games on the internet keep students away from the real world and become computer addicts.

The answers of teachers who defend the view that it may be useful are as follows:

"It may be useful. At least the village kids might not pay much attention, but they might attract the attention of the city kids. At least he can see such information on television or on the internet about how a vegetable or fruit is grown. That is how it works.

"It can be useful, but it's better by doing and living. It is necessary to touch the soil."(P5)

"It may be useful. There was a game I played too. The team, they reap and sell."(K8)

Considering the answers of the teachers who participated in the study in this question, the teachers did not use a certainty statement in the benefit part. At this point, it can be said that teachers think that agricultural games on the internet are not only beneficial but also harmful.

Finally, in the study, the opinions of the participant teachers on what kind of suggestions they can bring to the students about the internalization of natural life were asked, and the data obtained were analyzed and presented in Table 7.

**Table 7. Recommendations of teachers**

Recommendations	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10
Trips should be organized	.		.			.		.	.	
Curriculum should be organized							.			.
Practice gardens				.	.					
By doing						.			.	
Scout work								.		
Transportation problem must be solved	.									
Nature protection and cleanliness		.								
Planting trees				.						

As summarized in the table, among the suggestions of the teachers who participated in the study about internalizing nature, the most repetitive suggestion is "trips should be organized". In this regard, K9 expressed his opinion as "... picnics can be arranged, you can go to historical areas, various trips are organized to regions where both nature and air are clean, such things can be useful for children.

Again, looking at the table, "curriculum should be organized" can be seen as an important suggestion. One participant (P7): "Those who managed the business had lessons in agriculture for the past, there were lessons that we took our children to somewhere, if you convey them, maybe they will convey them to other places. I want those lessons to be included in the curriculum." And he has expressed his opinion in this way.

Other participants, on the other hand, suggest that practice gardens should be opened, children should practice by living by doing, scout studies should be carried out, transportation problem should be solved, studies should be carried out in order to clean the environment and protect natural beauties, and spread trees.

In the C part of the interview with the students, the students "What do you think should be done to get to know village life? The question has been asked. Primary school students answered this question in parallel with the suggestions of the teachers. Students' suggestions are summarized in Table 8.

**Table 8. Recommendations of students**

Recommendations	Students	f
Nature trips	Ö3, Ö4, Ö5, Ö6, Ö8, Ö10, Ö11, Ö12, Ö13, Ö14, Ö15, Ö16, Ö17	13
Let them walk around and tell	Ö8, Ö9	2
Let the villagers show you	Ö7	1
Let's visit the village houses	Ö2	1

Looking at the table, most of the students think that trips should be organized. T7 gave a very different answer and suggested that people living in the village should take a tour.

## DISCUSSION, CONCLUSIONS AND SUGGESTIONS

When the findings obtained from the study are examined, according to the participant teachers, the readiness of the students regarding nature is high. Children's perception of nature is based on the limited experiences and observations they have with their own environment (Avan, Çetinkaya & Yılmaz, 2019; Birinci, 2013). It is thought that the perception of nature is high because the place where children live is close to the countryside of city life.

According to the findings, the growth, growth and nutrition of living creatures are among the subjects that students wonder about nature. In the study of Soran and Kutlu (2012), it is seen that when the students are called nature, most of them evoke living things, animals and plants are mentioned among them, living areas as well as living things are also in nature associations. The finding obtained in this study is in parallel with the finding in the study of Soran and Kutlu (2012).

It has been observed that teachers consider out-of-class activities appropriate for students to internalize nature. In addition, teachers help students to understand and comprehend nature by practicing. It is important for students to be outside the classroom in order to learn to learn about the diversity and nature with their own experiences. School gardens can be used and designed for students. Thus, practices that will enable children to understand and internalize nature may become possible (Köşker, 2013). Nature studies conducted in schools should be taken out of the classroom as much as possible and should be integrated with nature observation and investigation activities (Özdemir, 2010). Learning in the natural environment is more attractive to students and makes them more active (Birinci, 2013; Gülgün, Yılmaz, Avan, Ertuğrul-Akyol & Doğanay, 2019). Learning should not be limited to the classroom. Because every area of life needs to be transformed into a learning environment (Aykaç, 2011). When the literature is examined, the studies support outdoor activities. In the study of Berberoğlu and Uygun (2012), it is seen that out-of-class education is too important to ignore in general education. In the study of January and Korkmaz (2018), it is seen that teachers' out-of-school learning environments offer concrete experiences to students, and activities that take place by doing-living provide permanent learning. The findings obtained in the study are similar to the related literature.

It is among the findings that students do not know nature and are alienated from nature. With technology and industrialization, the individual has begun to alienate from nature. As a result, after a while, human beings go away from their own nature completely (Altındağ, 2010). Students should be encouraged to participate in open spaces and nature trips so that they can get to know nature. (Cengiz & Doğtaş, 2015).

Among the findings obtained from the students are the reasons for students to prefer the village. Among these reasons, it is seen that the playgrounds in the village are large, playing games in the village is more attractive, and they can do more activities in nature. In the study conducted by Cengiz and Doğtaş in 2015, it is seen that 3rd grade students want to spend time outdoors and play in large green areas. The literature regarding the findings obtained in the study is partially similar.

According to the majority of teachers participating in the research, the current curriculum is not sufficient to increase children's interaction with nature. Looking at the findings, most teachers agreed that the curriculum was not sufficient. Aykaç's (2011) study also supports this view. Aykaç (2011) found in his study that the travel method was used only in one activity during an academic year and stated that this situation was not suitable for the purpose of life studies lesson. When the guidebooks used by the teachers were examined, he stated that the books do not include active application and that trips, observations and examinations should be made. He stated that students should be given the opportunity to examine and observe real objects in natural life. He argued that students should be able to learn by doing and living in concrete environments and that application areas should be created in schools for students to internalize nature. In this sense, it can be said that the literature regarding the findings is similar.

The majority of teachers do not find it beneficial for students to stick to virtual games. They stated that these games disconnected students from the real world, virtualized them, and forced them to think virtual. Again, teachers argued that they could be useful, useful but not sufficient. When the literature is examined, it has been observed that virtual games support the child's desire, sense of achievement, progress and development need to a certain extent. It is also seen that virtual games provide problem solving skills. However, it is seen that virtual games reveal addiction, physiological and psychological problems. It causes retardation in social relations and body development. It is also observed that it affects academic success and personal development negatively (Gürcan, Özhan, and Uslu, 2008).



Directing students to scouting activities is another finding obtained from the research. In the literature, nature camps are encountered. Through nature camps, students can communicate better with natural creatures. It has been revealed that children raised in urban areas along with children raised in the countryside have increased their awareness thanks to nature camps. In order for students to perceive nature and its surroundings better, the number of nature camps and participation should increase in order to internalize nature (Özdemir, 2010).

Based on the findings of the research, it was deemed appropriate to make the following suggestions as a result of the evaluation of classroom teachers and primary school students on increasing the interaction of students with nature.

\*Different species of creatures should be introduced to students, current issues related to nature should be explained, and activities related to them can be made.

\* Excursions for children can be organized in historical areas, green areas, and playgrounds.

\* Application gardens can be established. Thus, elementary school students can get the opportunity to learn about nature by living, touching applied and concrete materials.

\* It may be appropriate to study scouting activities for children.

\* Relaxing rules can be introduced to the transportation problems faced by classroom teachers during trips.

\* Various projects can be done. Environmental cleaning, environmental protection and tree planting projects can be done and work with students.

\* Village houses and village life can be explained by people residing in the village through village visits outside of school, especially for students to get to know village life.

\* It may be suggested that the study should not be done in a part of the city center close to the countryside, but in a part of the city center and close to technology.

### Ethics Committee Approval Information

This research was conducted in accordance with all ethical rules. There is no financial or moral conflict of interest between researchers. Research data were collected in 2019. Therefore, ethics committee approval was not required.

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