“I Protect Nature with My Family” parents views on the eTwinning Project*

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Abstract: The main purpose of the study is to express the views of the "Protecting Nature with My Family" eTwinning project, according to parents and parents’ views, on the change of attitudes and behaviors of students towards nature. This research is qualitative and is a case study. Research data collected in May, the second semester of the 2018-2019 academic year. With the information obtained from the field summer scan, a semi-structured interview form developed by the researcher was created and the data of the research were collected by conducting face-to-face interviews with 24 parents who were participants of the research. According to the data obtained from the research, the changes in the feelings, attitudes and values related to nature were determined and recorded in the parents involved in the project. Parents who participated in the study stated that they experienced awareness of nature and that their behavior to contribute to recycling increased, while their children observed an increase in interest in nature and an increase in the desire to spend time in nature.

Keywords: Nature, child, project, eTwinning

INTRODUCTION

Today we live on a planet where natural resources are destroyed, water is scarce and energy is expensive. The consumer society, whose needs are changing with the increasing world population, is ignoring its unity with the nature to meet its needs and increasingly damaging nature. Humanity tries to take only without giving anything to nature and proceeds with a consumption oriented mindset. For all these reasons, protecting nature is a basic necessity for today’s people. Being the main source of nature problems, human is at the focus point in solving problems with the need to change attitude and consciousness towards nature (Baylan, 2009; Göktuğ, Deniz, & Kilçasan, 2018). On the other hand, this required change can only be achieved through education. In order for individuals to create awareness about nature, they need to receive nature education from a young age, not earlier than when they encounter disasters (Raven & Berg, 2006).

Education covers all experiences in the school-child-family triangle. What is important at this point; It is the skill of preparing and applying educational applications where the school can reach its goals, meet the educational needs of the child and find the expectations of the family (Temel, Kandır, Erdemir, & Çiftçibaşı, 2004). When we examine the features of today's child, it turns out which direction they need education. With increasing the use of concrete in cities, children are imprisoned inside, isolated from opportunities offered by nature and do not have a safe open space. For this reason, children spend most of their daily lives with digital games between four walls and cannot benefit from the opportunities offered by nature (Talay, Aslan, and Belkayalı, 2010). Childhood is critical. Because it is the most important period of social and spiritual development. In this context, childhood is a period when the love of nature and the achievements to protect nature and intense interaction with the child will have positive results (Köşker, 2019). Children are born with the desire to learn and discover due to their creation. They become instinctively open to learning with the need to explore the environment. The rich variety offered by nature to the child reveals the desire to discover in the child and increases the desire to play in nature. Supporting this, Chawla (2007) states that natural materials attract children's attention and have a desire to interact. Time spent in nature is valuable for the children’s development (Louv, 2018).

Nature education is explained by the fact that the individual realizes the nature and creates awareness, attitude and behaviour changes towards nature and nature problems (Erdoğan, 2011;
Erdoğan and Özsoy, 2007). The fact that the individual gives importance to his own species and other living species, protects the nature and being aware of the problems related to nature depends on his relationship with nature (Kahyaoğlu, 2016). The way to be successful in achieving the purpose of nature education is to create positive attitude, behaviour, thought and consciousness in the individuals who make up the society. Various studies related to the subject were found in literature studies. (Aslan, Sağır ve Cansaran, 2008; Erol ve Gezer, 2006; Özdemir, 2010; Şama 2003; Uzun ve Sağlam, 2006; Ürey ve Yeşiltaş, 2009; Yilmaz, Boone, ve Andersen, 2004; Yücel ve Morgil, 1998). These studies have revealed that activities using active learning methods and techniques in nature are effective in developing attitudes and awareness towards nature.

There are researches that show that nature education facilitates the transformation of the knowledge gained when it is carried out in nature with field studies, is more permanent, and provides positive attitudes and values towards nature. (Erten, 2004; Farmer. Knapp ve Benton, 2007; Ozaner, 2004). It is stated that in nature and environmental education, which is conducted in a way detached from nature, it is not sufficient for students to know nature and to behave consciously towards their environment. (Özdemir, 2010). Individuals who do not observe nature and do not spend enough time in nature should not be expected to understand the integrity and function of nature and perceive nature's importance in living and human life. (Kahyaoğlu, 2016). Unfortunately, technological developments, education system that is insensitive to nature, urbanization, and decrease in nature areas are moving away from nature every day (Özdemir, 2010). In this context, nature education strengthens the bond of love by bringing children closer to nature and rebuilding the broken connection. It has been revealed by various studies that educational experiences based on nature experience in childhood facilitate the close connection of the child with nature. It increases their awareness about nature, and that active experiences in children are more effective than learning experiences carried out in the classroom environment in the right perception of their natural environment. (Crain, 2001; Malone, 2007; Nicklasson ve Sandberg, 2010; Rickinson, 2001; Phenice ve Griffore, 2003; Delay, 2001; Kansu, 2012, Louv, 2018; Özdemir, 2010; Uzun, Sağlam ve Uzun, 2008; Uzun ve Sağlam, 2006; Yılmaz, 2017). It is also stated that the nature education provided is effective in the formation of ecological selves. (Wilson, Kimler ve Krauerhase, 1996).

Nature education programs in Turkey for the first time since 1999, the Scientific and Technological Research Council of Turkey (TUBITAK) was introduced by (Kahyaoğlu, 2016). These programs, which include teachers, prospective teachers, graduate students, were later expanded to include students at primary, secondary and high school levels. In addition, some organizations such as the Ministry of National Education, the Ministry of Environment and Forestry, and some non-governmental organizations, the Nature Association, the Foundation for Environmental Protection and Research, have carried out nature education programs under some beneficial projects (Erdoğan, 2011). Within the scope of eTwinning projects, nature trainings are carried out in accordance with the programs. The eTwinning activity is a European Commission-supported activity that supports the curriculum of the participating countries and aims to improve knowledge sharing and cross-cultural dialogue by enabling teachers and students of different European countries, where information technologies are widely used, to develop joint projects over the internet.

Haktanır (2007), He states that the five basic objectives to be gained in scientific studies on environmental education are “awareness, knowledge, attitudes, skills, participation”. With the “I Protect Nature with My Family” eTwinning project, it is aimed that children who continue their pre-school education and primary school education, and their families, to participate in the project activities in a collaborative manner, to raise awareness of nature protection and to become a true nature lover; While achieving this goal, it is aimed to ensure that the school cooperates with the family and that their parents become adults who are sensitive to nature. In the project, among the four walls, the "generation Z", which is disconnected from nature and tries to get to know nature by only seeing it on the screens, by providing students with real nature experiences, establishing their connection with nature, developing a consciousness of preserving a nature based on love, as well as its development in the "2023 Education Vision" document. It is
aimed to develop the ecology literacy skill, which is among the 21st century skills. Within the framework of these goals, the change of attitudes and behaviours of students and parents about protecting and loving nature was tried to be revealed through research. In this research carried out within the scope of the “I Protect Nature with My Family” eTwinning project, the main aim is to reveal the opinions of the eTwinning project on the change of students' attitudes and behaviours towards nature according to the parents’ and parents' views. Within the framework of this basic purpose, answers to the following questions are also sought:

1. What are the views of parents who participated in the “I Protect Nature with My Family” eTwinning project regarding changes in their attitudes towards nature at the end of the project?
2. What are the views of parents who participated in the “I Protect Nature with My Family” eTwinning project regarding the changes that occurred in their behaviour at the end of the project?
3. According to the parents' opinions, what are the changes regarding the attitudes towards the nature at the end of the project?
4. According to the parents' opinions, what are the changes that occur in the behaviours towards nature at the end of the project?
5. What do the parents who participate in the eTwinning project “I Protect Nature with My Family” think about the project?

METHODS

Design of the Study

In this study, one of the qualitative research approaches, case study method was used. Case studies are a research method that provides an opportunity to investigate a case or event that the researcher cannot control based on how and why questions. (Yıldırım ve Şimşek, 2016). According to Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz and Demirel (2014) case studies, are a distinctive approach to answer scientific questions. Case studies investigate real life, a current context or situation in an environment (Yin, 2009). In case studies, the aim is to understand the situation as it exists by making detailed descriptions about a situation. In these studies, one or more events, environments, programs or interconnected systems are examined in depth. (Gall, Borg ve Gall, 1996; McMillan, 2000). In the research, the project “I Protect Nature With My Family” was considered as a case, a literature review was made about this situation, then a semi-structured interview form was created, data was collected through the interview and the results were revealed.

Project Implementation Process

The eTwinning project, which is internationally protected, “I Protect Nature with My Family”, aims to develop a love of nature, sensitivity to nature and awareness in children from a young age, and also to ensure similar development in families by including families in the project. In addition to this basic goal, the awareness of recycling and the use of cloth bags in parents and children, the development of basic self-confidence skills in children, the development of ecological literacy skills, project-based learning process and making children more active in the educational process, collaborative working skills and scientific process skills. It is aimed to provide development in many areas such as increasing responsibility, taking responsibility, productivity, and gaining a different perspective. In order to achieve all these goals, cooperation was made with parents in all activities during the project. 44 teachers from public and private educational institutions affiliated to the Ministry of National Education participated in the project voluntarily. Turkey has provided more than one teacher participation in the implementation of the project in some schools. Project partner teachers; 24 of them are preschool education teachers (54%), 18 of them are class teachers (40%), 1 is english and 1 is guidance teacher (6%).

Project abroad Romania, Italy, Estonia, Poland, Macedonia and Bulgaria, with 9 teachers from various cities in Europe and Turkey conducted a total of 53 teachers. Participation in the
More than 20 activities involving nature education were designed in the project, these activities were planned monthly and spread over the period covering the closing of schools on February 5, 2019, from February 5, 2019. As project activities, in February, poster and logo development studies were carried out, with the poster selection questionnaire created through Google forms, voting was conducted by children and their parents on the principle of democratic participation, and the works were started by selecting the poster of the project. In March, in the classes where the project was implemented, flowers and various plants were planted according to the students' preferences, and the students undertook the care of the flowers during the project. Changes were made among students by making seed balls. With the project, artistic activities such as theater and drama were carried out in schools participating in the project within the scope of “Forest Week”. In addition, thousands of saplings were planted in the areas allocated to schools with official permits with the participation of parents and students in the same week, thus, it was aimed to instill the love of nature and trees for both children and their families.

In April, in the classes in which the project was implemented, recycling activities and recycling awareness, with the participation of parents, the development of nature awareness through nature trips, the ecological literacy skills of both students and parents with the education of garbage gathering in the nature and school garden and around the school, and family trainings with expert participation. Various studies have been conducted to increase Benefits of forests in classrooms, water transformation, climate change etc. Experimental studies were carried out by addressing issues that raise consciousness towards nature, and students' awareness was increased. To reduce the use of sachets, parents can use unused fabrics, etc. They designed cloth shopping bags with materials, and the communication and cooperation was increased by making gifts among the project partner teachers. Family participation activities were carried out in classrooms and school gardens, which participated in various days such as “International Water Day” and “International School Out Day”. In May, recycling exhibitions were held in the city centers, thereby aiming to expand the project. In addition, an original rhyme was written by the students with the participation of all the partners of the project.

Data Collection Tools

Interview in qualitative research is a very powerful method used to reveal people's perspectives, experiences, feelings and perceptions. (Bogdan ve Biklen, 1998). In the research, firstly, literature review was made. A semi-structured interview form was created by the researcher as a qualitative data source with the information obtained from the screening. This form was submitted to the expert opinion in terms of validity, and it was confirmed that the interview questions were compatible with the research questions. The semi-structured interview form consists of two parts. In the first part, data regarding the demographic characteristics of the parents were gathered by obtaining information about their gender, age and educational background. In the second part, changes in parents' attitudes and behaviours towards nature at the end of the project and changes in their children's attitudes and behaviours towards nature at the end of the project were investigated. In this context, a semi-structured interview form was applied to 24 parents, who were the participants of the research, and the data of the research were collected in the form of face-to-face interviews. Interviews were made with each parent in a period of 20 to 30 minutes, the interviews were recorded with the permission of the participant, then interview transcripts were written and analysis studies were started.

Participants

The participant group of the research consists of 24 parents participating in the eTwinning project 'I Protect Nature with My Family'. Both parents and students participated in most of the activities of the project under the guidance of teachers and other partners. However, at the meetings with parents before starting the research, it was understood that parents hesitated about the students' participation in the research. This is why the participants of the research actively participate in the project. Criterion sampling and maximum diversity sampling method
were used in the selection of participating parents. The basic understanding of the criterion sampling method is the inclusion of situations that meet a predetermined set of criteria. (Yıldırım ve Şimşek, 2016). The main criterion in this research is that all participants within the scope of the research participated in the research voluntarily by participating in all activities in the ‘I Protect Nature With My Family’ project. In addition to this, diversity was provided with the participation of parents from schools in other cities carrying out the project. During the interviews with the participants, demographic information of the participants was also requested, and it was visualized by being tabulated.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Demographic features</th>
<th>Frequency (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Woman</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24</td>
</tr>
<tr>
<td>Age</td>
<td>21-30 year</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>31-40 year</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>41-50 year</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>50 years and older</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24</td>
</tr>
<tr>
<td>Education status</td>
<td>Primary school</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Middle School</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Secondary education</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>High education</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>24</td>
</tr>
</tbody>
</table>

Participants were evaluated in terms of gender, age and educational background. According to the gender variable, 87.5% are women (21) and therefore 12.5% are men (3). According to age, 8% of the participants have ages between “21-30 years old”, 71% between “31-40 years old” and 21% between “41-50 years old”. There is no parent with ages of “50 and over”. According to their educational status, 4% of parents have “primary school”, 12% “secondary school”, 38% “secondary education” and 46% “higher education”. According to this study, it is seen that the participants are mostly in the “41-50 age” group and the most are in the “higher education” group in terms of education (Table 1).

**Data Collection Procedure and Analysis**

The research data were collected in the second semester of the 2018-2019 academic year in May. The data collection process was carried out in a quiet environment at a convenient time determined by the parents and theirs. Interviews 20-30 min. It lasted around. In addition to the basic questions, probe questions were also included to open the answer given when necessary. The researcher also took notes during the interview.

The qualitative data collected through the semi-structured interview from the participating parents were analyzed and interpreted using descriptive analysis technique. In this process, the interview sound recordings and the notes kept in the interview were analyzed in detail, they were systematized, interpreted and evaluated through theming and coding. For ethical reasons, during the analysis and reporting of the research data, the opinions of the parents were added with the codes “V1, V2, V3”. In qualitative research, the data obtained in the data analysis section are described, explained and themed and interpreted. The data analyzed through descriptive analysis were organized and interpreted within the framework of themes compatible with the research questions. In the reporting section, it is usual to define the phenomenon within the framework of concepts and themes, and direct quotations, and direct quotations are also included in the research (Yıldırım ve Şimşek, 2016).

In order to ensure the validity of the research, some studies are carried out to present the research questions to the expert opinions, analyze the data obtained from the interviews, get support from an independent expert in the coding and theming processes, and record all the
collected data both in writing and as a sound recording. Within the framework of these studies, support was received from two experts who have mastered the qualitative research pattern, the feedback from the experts, the coding and theming process was reviewed and necessary corrections were made. Then, in order to provide reliability in the research, the calculation method proposed by Miles and Huberman (2014) (reliability = number of compromises sayısı compromise + number of compromises) was used for data analysis, coding and theming processes. It was found above. In the research, it is also aimed to ensure the reliability of the qualitative data by frequency and to include some data obtained from the participants in the findings section through direct quotations. In addition, ethical rules were followed in the research.

RESULTS

The research data were themed and analyzed in accordance with the research questions and these themes were examined under 5 headings.

1. "I Protect Nature with My Family" Opinions of Parents About the Changes They Have attitude towards Nature at the End of the Project with the eTwinning Project.

In order to reach the first sub-problem of the research, what kind of changes did you experience in your attitudes towards nature with the eTwinning project "I Protect Nature with My Family"? The question "explain" was asked, and a total of 4 codes were determined as a result of the analysis of the answers given. These codes are awareness of nature, increased sensitivity, awareness of nature, protection of nature, love of nature and living things.

Table 2. Findings regarding the change of attitudes of participating parents towards nature

<table>
<thead>
<tr>
<th>Codes</th>
<th>Frequency (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of nature</td>
<td>24</td>
</tr>
<tr>
<td>Increased Sensitivity to Nature</td>
<td>21</td>
</tr>
<tr>
<td>Awareness of responsibility towards nature</td>
<td>20</td>
</tr>
<tr>
<td>Love for nature and living things</td>
<td>19</td>
</tr>
<tr>
<td>Total Participants</td>
<td>24</td>
</tr>
</tbody>
</table>

If the direct opinions of the participating parents are included in the research, the parents say the following about the project process and, as a result, the changing feelings, attitudes and values towards nature:

A significant part of the participants mentioned that the nature sensitivity increased with the project (f = 21) and that they have awareness in this direction (f = 20). A few of them did not address this issue, they made explanations in different directions (V12, V8, V2).

This sensitivity of the participants towards nature is an example for their children. As stated in the project, it is understood from the expressions of the participant parents of the research that the perspective of nature changes in both families and children, it is directed towards the nature-centered rather than human-centered understanding, the development of responsibility awareness and the increase of awareness. Again in this direction, V4, V5, V7 and V10 expressed their views as follows;

"Yes, my views about nature have changed. For example, we grasped how much pet bottles and sachets, which are difficult to recycle in nature, cause harm to nature and we have made our children aware of this issue. As far as we can, we tried to stay away from actions that would harm nature. "(V4)

"I'm a teacher too. In the trainings I provided, I included mostly nature and environmental activities. I think that my students have created a little more awareness of nature and even their families. We also shared more about the nature and the environment in the family. "(V5)
“We participated in this project with my child who went to kindergarten. Previously, we had works for nature, but we realized that there was much to do to leave a better living space for future generations under the guidance of our teacher.” (V7)

“Our attitudes towards nature have changed positively for both me and my wife. We were also curious about the natural awareness that was developing in my child and we read some books, talked to our teacher and actively participated in the project. Frankly, I think I am much better than before in respect of living things and their rights.” (V10)

It is possible to look at nature from another point of view, to understand nature, to be sensitive to the system that works in a uniform manner in nature, to try to understand, but only by getting closer to nature and spending time in nature. V13 says this on the subject:

“I no longer just watch nature, I see, I observe nature. While spending time in nature with my kids, I try to be aware of the circle around me. How humble are we human beings for our own comfort against nature. We take away the right to life as if they came to our living space. But aren’t we the ones who occupy their living space. Now I am more careful with the insect that came to my house, at least I try to release it without killing or even hurt. My habits and perspective have changed a lot. I try to make this change happen to other people. I share what I learned with others and do research to learn new things. I was also impressed with this. I created an area of interest in myself. While I was browsing social media, I tried to get important information about the project.” (V13)

“Our trainer who came to our school with the project created very important awareness in me. While he was telling, I also thought about it and realized many mistakes. As a family, we decided to spend time in nature and change some of our attitudes.” (V24)

2. “I Protect Nature with My Family” Opinions of Parents about the Changes in Their Behavior at the End of the Project with the eTwinning Project

Regarding the second sub-problem of the research, what kind of changes did you experience in your behavior with the eTwinning project, "I Protect Nature with My Family"? Explain by giving examples. “The question was asked, as a result of the analysis of the data obtained from the answers, a total of 7 codes were determined. These codes are; contributing to recycling, spending time in nature, caring about environmental cleanliness, respect and love of living things, abandoning the use of products that harm the nature, avoiding waste, switching to the use of cloth bags.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Frequency (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contributing to recycling</td>
<td>23</td>
</tr>
<tr>
<td>Spending time in nature</td>
<td>20</td>
</tr>
<tr>
<td>Concern for environmental cleanliness</td>
<td>20</td>
</tr>
<tr>
<td>Respect and love behavior of living things</td>
<td>19</td>
</tr>
<tr>
<td>Stop using the products that harm the nature</td>
<td>18</td>
</tr>
<tr>
<td>Avoid waste</td>
<td>17</td>
</tr>
<tr>
<td>Switching to the use of cloth bags</td>
<td>16</td>
</tr>
<tr>
<td>Total Participant</td>
<td>24</td>
</tr>
</tbody>
</table>

If the direct opinions of the participants are to be included in the research within the framework of the codes given in Table 3, the participating parents say the following about the changes in their children’s project process and their behavior; “It caused important changes in my project behavior. As a family, we have become more sensitive about fruit beans, cloth bags and garbage separation waste batteries and our behavior has changed” (V1).
“When we shop in the market, we started using cloth bags instead of nylon bags, so if we tried to reduce the use of long-lasting nylon bags, we can leave a livable world for our children in the future and we are now taking care to buy rechargeable batteries." (V4)

Participating parents stated that they acquired the behaviors of recycling awareness (f = 23) and using environmentally friendly products (f = 18), reducing the use of environmentally harmful products (f = 20), and adopting behaviours against nature (F = 16), they mentioned what they won. Participating parents mentioned the compost study, another important organic waste recycling activity in V6, V7 and V11;

“I realized that if I think about the activities that our teacher has done during the year, for example, I do not have enough information and awareness about compost making. I learned a lot of information about how the compost work was done. We sent our organic waste at home to the school for a long time, we collected it. And I was very happy to be a part of this work” (V6)

“We want to have a hobby garden in the future. Hopefully, we will also make compost and evaluate our waste foods and plan to make a garden in this way. We realized how important zero waste is in this project. We were already sorting paper waste; however, we gained sensitivity in decomposing plastics and not pouring oils into sinks. I would like to thank our teacher who guided me and my child in this project. “(V7)

“As a family, we contribute to the compost making by taking the decaying household trash that we used to throw in the trash directly to the school and leaving it in the compost area we created in the school yard. We realized that our behaviour was very pleasing to our child” (V10).

“Our use of bags has been significantly reduced in our daily lives. I started using bags made of materials that do not harm nature. Also, my daughter makes warnings and reminders from time to time. I like it very much. I think it is very important that the awareness of nature has been formed and it is noticed at a young age. “(V11)

Participating parents have given answers in their children and themselves as there are developments in overcoming their echopobilies, showing that they have been informed and conscious about the importance of many living creatures that they previously had difficulty in tolerating;

“From the simplest; In the past, I was picking up the allure of flowers and trapping the vase in the house. Now I act knowing that they must stay in place for the cycle of nature. So “It is beautiful in the branch of flowers.” I understand and live his word better. I also learned new things like “compost”. With the fruit and vegetable waste we sent to the school, it entered our lives with a new meaning. Maybe I can’t compost at home, but - I hope there will be room in the future - at least I made cleaning materials with fruit peels. Next is to sow the seeds of the fruits we eat with my daughter as a summer event. So we do not throw it, we evaluate it; we are both conscious and spend quality time. Oh, and an "insect hotel"; "ayyy" is a project that describes the value and value of living things we escaped by saying "iyiy" (V13)

“I sent vegetable, fruit and nuts waste to the compost area created as a project activity almost every day. In this way, our garbage has decreased, so the number of bags we use for garbage has also decreased. In fact, I observed how beneficial soil was formed by the transformation of waste that we dumped. We no longer throw the seeds of fruits and vegetables in the trash, but we collect them. I plan to make seed balls next spring and leave them with my kids. I only use vinegar as a household cleaning material. I even make my own vinegar myself. “(V14)

“I had a lot of information after the project. For example, I didn't know what compost was. I realized that the greens we throw from our kitchen as garbage every day are not rubbish and I can produce fertilizers in my backyard by evaluating my waste.” (V15). “We are now taking care to leave the environment cleaner at the picnics we visit. We started using cloth bags. We
endeavor not to use plastic products. We strive to use more natural, organic products and avoid waste."(V17).

“As a family, we are now taking care to use cloth bags in our shopping. We use natural products, we use cleaning products of vegetable origin. We reduced makeup and perfume use. It was important for us to be informed with the trainings within the scope of the project, I wish there were more trainings."(V23)

3. Parents’ Opinions about the Changes in Attitudes towards Nature at the End of the Project by Students Participating in the eTwinning Project “I Protect Nature with My Family”

Regarding the third sub-problem of the research, what kind of changes did you observe in your child’s attitudes towards nature with the "I Protect Nature with My Family" eTwinning project? Explain by giving examples."The question was asked, as a result of the analysis of the data obtained from the given answers, a total of 5 codes were determined. These codes are; Increasing curiosity in nature, being happy in nature, increasing love of nature, developing awareness towards nature, developing awareness of responsibility towards nature.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Frequency (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in curiosity to nature</td>
<td>23</td>
</tr>
<tr>
<td>Being happy in nature</td>
<td>23</td>
</tr>
<tr>
<td>Increased love of nature</td>
<td>21</td>
</tr>
<tr>
<td>Awareness development towards nature</td>
<td>20</td>
</tr>
<tr>
<td>Establishing a sense of responsibility towards nature</td>
<td>20</td>
</tr>
<tr>
<td>Total Participant</td>
<td>24</td>
</tr>
</tbody>
</table>

In the research, the opinions of the participating parents about the changing emotions, attitudes and values towards the nature observed in their children during the project process and as a result are as follows;

“Her curiosity towards nature has increased. He wasn’t that curious before. He began to ask more questions about living things in nature. “(V1). “The feeling of curiosity increased in my child, he started to ask frequent questions about nature in our environment.” (V3)

“My daughter is a real nature lover right now. When we go out, he hugs the trees, kisses them, talks to them. Every time we go out to the park, he is very interested in insects, ants, birds, and talking to them. I have also undergone a huge change thanks to this project. I got good habits. I gained a lot of awareness. I took great lessons. I still get warnings from my daughter. It warns me to be careful all the time. It says please don’t harm nature. From nature like plastic or throwing it etc. Thank you for taking part in this project.” (V2)

The changes observed in children’s behavior after the project activities attracted the attention of their parents. The love that emerges with curiosity and rapprochement in children is quite promising. The participants expressed this change in their children as follows:

“After the work in the project process, I felt there were visible differences in my child’s behavior. I observed positive changes. I realized that he started to look at nature, plants and animals with a very different eye than before. He used to be a child who was afraid of harming nature and animals, but I realized that his sensitivity increased much and he tried to do his best to avoid harm to nature. “(V6)

“As I said before, they became more sensitive. Is it plastic or additives in products when we go to the market? Looking. He says that perfumes are harmful to nature, it doesn’t make us use them. We do not sow the seeds of the fruits he eats, we bury them in the soil or we collect them later. “” (V8).

“The bird and cat houses built in the school raise awareness of my daughter in respect of animals and their natural life. He also shares with us about this at home. It allows us to act
Participating parents mentioned that their love for both animals and plants increased in their children and that they developed a consciousness to protect living things, and expressed the behaviors they observed in children as follows:

"Children actually achieve harmony with nature better by nature. They are full of love for every living thing. This project; I think it is a guide that contributes to their existing harmony, leads them, and increases their awareness. My daughter says we should warn everyone in line with what she learned. I have to admit, my awareness of not tearing the flowers started with my daughter’s warning. He does not separate his garbage from his side until he finds a garbage bin. He was sensitive to the hunger - toughness of the animals. Together we put water containers in front of our house." (V13)

“Our child's curiosity towards nature has increased. He became more sensitive. The interest in the environment and trees increased. Questioning, observing. We move away from the city, we often go out to nature together, we want to make it a habit. He wants to investigate the causes of the events he saw and realized in nature. This interest in him makes me and his mother very happy." (V20)

4. Parents' Opinions about the Changes in the Behavior of the Students who Participated in the eTwinning Project “I Protect Nature with My Family” at the End of the Project

Regarding the fourth sub-problem of the research, what kind of changes have you observed in your child’s behaviour towards nature with the eTwinning project, "I Protect Nature with My Family"? Explain by giving example. These codes are; increase in the desire to spend time in nature, acquire environmental cleaning habits, increase in nature protection behaviour, increase in observation skills in nature, increase in creativity and creative thinking, decrease in ecophobia.

<table>
<thead>
<tr>
<th>Codes</th>
<th>Frequency (f)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased desire to spend time in nature</td>
<td>23</td>
</tr>
<tr>
<td>Acquisition of environmental cleaning habits</td>
<td>22</td>
</tr>
<tr>
<td>Increase in nature protection behavior</td>
<td>20</td>
</tr>
<tr>
<td>Increased observation skills in nature</td>
<td>19</td>
</tr>
<tr>
<td>Increased creativity and creative thinking</td>
<td>17</td>
</tr>
<tr>
<td>Decrease in ecophobia</td>
<td>15</td>
</tr>
<tr>
<td>Total Participant</td>
<td>24</td>
</tr>
</tbody>
</table>

When Table 5 is examined, it is seen that the highest frequency "increase in the desire to spend time in nature" appears. They say that with the increase in the desire to spend time in nature, children's curiosity towards nature and life forms they see in nature have increased (V1, V10). The participants expressed this issue as follows; "I believe that the project contributed to my son’s creation of more creative and interesting ideas. However, he wants to go out to nature, he wonders and questions the various plants and mushrooms he sees in nature." (V1)

"My daughter no longer throws the fruit kernels she eats, she accumulates, she wants bread in the ground. When we go out to nature, he examines his surroundings. Wondering which plants are there, he was not so sensitive to his environment and the creatures around him. My daughter's perceptions have opened up, she is curious about plants and animals, especially she has become interested in birds, we ask and answer questions about them." (V10)
“My child warns us about the use of water at home and waste. He talks about the importance of water for humans and living things, and the importance of clean air. He explained what he learned from his teacher at school about plastic waste. He talked about the damages to nature and even developed suggestions by thinking, we spend more time together in nature and tell me.” (V12)

“My daughter, who was afraid of insects but couldn’t get close to her even though she was very curious, was encouraged by the things she brought about nature, and now she has no fear of insects, I realized when we went to the forest together.” (V14)

“My child has learned that the flowers are alive and that we should not break them, respect the creatures, the love of trees has developed, and he often wants us to plant trees.” (V15)

“Even the game contents at home have changed. He played games such as planting seeds, planting seedlings or dealing with plants like a gardener. To me, his father and his friends that people should not harm nature; When this happens, he began to constantly explain that animals and plants would not be harmed.” (19)

Based on the participants’ discourses, it is possible to say that the window of curiosity towards nature is opened in children with the project and that learning about nature has increased in children based on the thought that learning begins with curiosity.

5. The Opinions and Suggestions of Parents Participating in the eTwinning Project “I Protect Nature with My Family” About the Project

Regarding the fifth sub-problem of the research, parents were asked to evaluate the eTwinning project “I Protect Nature With My Family”. Parents in their answers; They mentioned the benefits of the project by stating that cooperation with parents in project activities, enabling parents and children to spend quality time in nature, positive changes in children and themselves, and that they and their children gain awareness and awareness towards nature. The practices of the project targeting the development of the child especially attracted the attention of the parents, all of the parents whose opinions were taken expressed the different aspects of the project and expressed their satisfaction with the results and developed various suggestions.

“I like to brainstorm with my child for the same purpose, thinking about what he can do to protect nature with my child.” (V6)

“Our time was very fast since we started the second term of the project, but even in such a short time it was very effective on my daughter.” (V8)

“When my son is washing his hands and brushing his teeth, he turns off the water when he has no job. It warns me not to buy packaged things when we go shopping. And he tries to throw the garbage we find on the ground into the garbage.” (V9)

“The inclusion of all schools of our district in the project and the cooperation with other institutions of the district will make the project more widespread. I think such projects should become widespread and increase.” (V3)

“I think the project should take longer to be more effective. I think that students should be responsible for establishing a botanical garden and growing plants in schools. In addition, mini zoos can be created in schools. Thus, our children study in a school intertwined with nature.” (V12)

“Children unfortunately grow up far from nature. In this sense, it is important that administrators and teachers are given seminars and trainings on subjects such as ecological schools, education in nature, and teachers are helpful to students and parents in line with the education they receive. If only there were schools that provide integrated courses in nature in each province, if supported by the state. If our children learn by respecting nature. I think our project should be continued.” (V24)

The participants talked about the positive effects of the project and mentioned both the necessity of the project to become widespread and various suggestions for the development of the project. Suggested thoughts and suggestions show that the desired result was achieved in the project, and that awareness and sensitivity towards nature were created in both students and parents.
DISCUSSION and CONCLUSIONS

With the research, it is aimed to reveal the effect of the “I Protect Nature with My Family” eTwinning project on the attitudes and behaviours of the students according to the parents’ and parents’ opinions. Within the framework of this main purpose, five research questions have been created and answers to these questions have been sought through the data obtained from the parents who participated in the project through the questions asked in the semi-structured interviews.

When we look at the answers given to the first research question, in which parents’ views on the change of attitudes towards nature are aimed, it is seen that awareness of the parents is experienced (f = 24) and sensitivity to nature is increased (f = 21). Kınık Topalsan, which aims to instill the love of nature and provide environmental education to disadvantaged children, has revealed that there is an increase in nature awareness in children as a result of the “I Do Science in Nature” project for children in need of protection. It is believed that nature-oriented projects develop awareness and awareness among students. In addition, studies reveal that nature education enables the development of perception, attitude awareness and value judgments towards nature (Ayaydın, Acar Şeşen, Usta Gez and Camcı Erdoğan, 2018; Budak, 2008). With the second research question, various answers were obtained by taking the opinions of the parents about the changes that occurred in the behaviour of the parents towards the nature as a result of the project. According to the opinions of the parents, it was seen that the highest frequency was “contributing to recycling” (f = 23) and “spending time in nature” (f = 20). With the project, parents designed recycling boxes at home with their children and put them in front of their apartments and made cloth bag designs. As a result of these activities, it can be said that the awareness of recycling has increased. It can be stated that nature love and spending time in nature may be revived with nature trips within the scope of the project. According to the third research question, according to parents’ opinions, it was tried to reveal how students’ attitudes towards nature were changed as a result of the project. As a result of the data obtained from the interviews, “increase in curiosity towards nature” (f = 23) and “being happy in nature” (f = 23) has emerged as two codes.

In the research carried out by Temiz and Karaaslan Semiz (2019), it was stated that education in nature or education outside the classroom offers an experimental, active learning environment for individuals, today, children who are deprived of nature should re-establish their relationships with nature and teachers have important duties in this regard. These findings of the research support the findings that emerged as a result of the project “I protect nature with my family. In the research, according to the fourth research question, according to the opinions of the parents, it was tried to determine how the students’ behaviours related to nature changed as a result of the project. As a result of the data obtained from the interviews, “an increase in the desire to spend time in nature” (f = 23) and “acquiring environmental cleaning habits” (f = 22) intensity is observed in their behavior. Nature offers children unique experiences and makes learning more permanent (Temiz & Karaaslan Semiz, 2017), in order to strengthen their ties with nature and to be aware of their responsibilities towards environmental problems they will face in the future and to know their natural environment closely (Collado, Staats and Corraliza, 2013), it is stated in the studies that the child should spend time in nature and gain responsibilities towards nature (Öğurlu, Türkoğuz and Aksu, 2018). With the fifth research question, it was tried to reach parents’ opinions and suggestions about the project. All parents who participated in the research stated that they are satisfied with the project. The suggestions listed are stated that the project should be expanded and continued.

Environmental pollution is one of the most important problems we face today. In order to prevent this pollution in our country, it is aimed to recycle plastic materials and their derivatives, especially waste materials (Zero Waste - T.R.Ministry of Environment and Urbanization), through works such as the “Zero Waste” project put forward by the Ministry of Environment and Urbanization. In addition, on various social media platforms, we come across activism activities aimed at environmental problems of young people every day. This situation shows us that the young population is concerned with environmental problems and they are aware of them.
However, it is essential to develop a collective awareness, in this context, they need to be more concrete in this regard by coming into prominence in their schools. From this point of view, every attempt made in schools to provide children with love, respect and awareness of nature is very valuable. In this context, it may be suggested to increase the number and qualifications of nature-based projects in order to achieve the objectives mentioned. In our country, educational studies carried out in nature are rare (Güler, 2009).

In addition to the projects, it may be suggested to plan various activities outside the school in the educational process and to ensure that children interact with nature. Supporting parents’ participation at school and out-of-school activities planned by the teacher is also important for the children to have different nature experiences with their parents. This study will shed light on future projects, practices and researches by teachers, administrators, academics and researchers interested in the field.

REFERENCES


