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An Investigation of Elementary School Teachers' Experiences about Outdoor Education Activities Project *

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Abstract

This research with the title of the project called "Outdoor Education Activities for Elementary School Teachers" was carried out within the framework of TUBITAK (Scientific and Technological Research Council of Turkey) 4005 Innovative Education Implementations Support Program. The aim of the applied project carried out for 10 days with 28 elementary school teachers working in Ankara was to enable elementary school teachers to enhance their knowledge and skills about planning and administering out of school activities. By organizing trips to Rahmi Koç Musem, Ali Dayı Children's Library, Feza Gürsey Science Centre, Şehit Cuma Dağ Natural History Museum, Gordion Museum, Beypazarı and Salt Lake, it was aimed that teachers would learn the characteristics outdoor education activities via experiential learning and the implementations were supported with the theoretical principles of outdoor education. Both qualitative and quantitative data collection tools were used in the process which was completed with the teachers' development of their own outdoor education activities. "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" and "An Evaluation Form on Outdoor Education Activities Project for Elementary Teachers" were administered to the teachers at the beginning and at the end of the process. At the end of the project, semi-structured interviews were carried out with 5 elementary school teachers. The results obtained revealed that teachers' self-efficacy beliefs about planning and organizing educational trips to out of school settings increased. Moreover, teachers comprehended the importance of planning outdoor education activities and the qualities of planning process at the end of the process and in addition to this, it can be stated that the

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participants' awareness about the definition of outdoor education and characteristics increased, their prejudices about the feasibility of outdoor education decreased and thus their motivation to organize trips could have raised. In order to promote the applicability of outdoor education in elementary schools, projects and in-service training should be organized to increase elementary school teachers' knowledge and skills about this subject and the courses in undergraduate studies should include education outside the class. Thus, the applicability of this process must be provided by enriching it with establishing relationship between disciplines via rich materials and teaching methods such as drama.

Introduction

In today's conditions, children, who are confined between four walls in their homes or schools, are often limited to abstract stimuli and abstract experiences in getting to know the natural and social environment and learning the interactions there. But learning is defined as the product of life and permanently traced behavioural changes (Ertürk, 1998). Considering this definition, it is viewed that learning is an activity which occurs as a result of the learner's experience. Experience is explained as "the traces of an event on the individual gained through his interaction with other individuals and his environment." (Demirel, 2005). Thus, it can be stated that in order to realize learning, the individual must have rich experiences, and this depends on his constant interaction with other people in his life and objects. To provide more permanent learning, the individual in learning environment must be exposed to variety of stimulants which appeal to many senses as long as possible. Because it is not always possible to bring various and a lot of stimulants to isolated school settings and classrooms surrounded by walls, it is required to go out of school. Learning activities that take place traditionally in classrooms are confined within four walls and are mostly carried out with verbal stimuli. This causes students to memorize the information contained in the books without understanding it and then repeat it. The confinement of learning activities within the walls of the classroom encourages students to repeat the meaningless verbal crowd without combining them with concrete experiences. However, taking learning activities out of the classroom creates a more meaningful and comprehending chance of learning and increasing permanence (Martin, 1999). According to Dewey, it is very important to have active experiences at the center of experimental education. Experimental education is based on structuring the knowledge, skills and values of the student by having one-to-one and concrete experiences. These experiences should include on-the-job training, internship studies, fieldwork, outdoor work and outdoor training activities (Kime, 2008).

Ford (1986) defines outdoor education as "education in, about and for outdoors". This definition gives information about where the learning takes place, the topic to be taught, and the purpose of the activity. Out of school learning could occur in any outdoor setting to serve the purpose of learning from natural parks, forests in a natural environment to factories or dams in an organization or in museums, art galleries in anywhere. The content of outdoor education activities is outside the school. No matter what the learning domain is including biology, mathematics, history, and geography, their real objects are found outside the school setting. Education outside the class offers a holistic approach to the individual about learning subjects which are both products of nature and human beings. "For" tells the purpose of learning-teaching activities. Considering the main purpose of school and education, it is a known fact that this purpose equips the individuals with knowledge, skills, and attitudes that are required in real life conditions. The content used to realize this type of purpose is outside the class and learning must occur outside the class as long as possible.

Going outside the classroom offers the student a much different learning environment than what is provided in the classroom. When the child is outside the walls, they have more space and

freedom to explore and experiment. At the same time, it is a more dynamic and changeable environment outside the classroom, with a wide range of learning materials. Even just the school garden, weather conditions, temperature, change of daylight, change of seasons, movement of clouds, etc. offers the chance to observe events. Outside the classroom, it allows the learner to use all his senses. Sensory stimuli that can reach the classroom are limited and manipulated. Outside the classroom, children may encounter more and more various stimuli to hear, see, smell, taste and touch (Tovey, 2007).

For children, going outside walls has always been an attractive activity. For most adults, outdoor activities have been the most remembered activities throughout their learning lives, due to their originality and support of a sense of curiosity and discovery. The purposes of the activities carried out outside the classroom seem more realistic and more concrete to the learners than the activities carried out in the classroom. These types of activities are fun and allow them to interact more with their peers than in the classroom. For this reason, out-of-class activities not only provide the acquisition of knowledge, but also the comprehension of information, the development of skills, and the support of individual and social development and support learning (Kimber & Smith, 1999).

Outdoor education activities are carried out with educational purposes under the guidance of a leader or an educator usually in small groups for personal development outside the school walls (Halligan, 2006). According to Fitzpatrick (1968), outdoor education activities have the following purposes in addition to personal development:

- To help individual's use all his cognitive, physical, and affective potentials.
- To use sources outside the school as learning stimulants to enrich the curriculum.
- To recognize and understand natural environment and human beings' relationships with it and to raise awareness about them.
- To have individuals become self-confident outside the classroom walls.
- To have individuals acquire and develop knowledge, skills, attitudes, and values required to spend their spare time more efficiently.
- To develop democratic relations and understanding of democracy through collaborative work.
- To support citizenship education through the use of social, national and universal resources.
- To increase professional competence through on-the-job training activities.
- To support aesthetic development.

Outdoor education can be especially used to provide permanent learning and also to develop a lot of knowledge and skills that are important today, such as aesthetic tastes, citizenship awareness, and sensitivity to nature.

The studies carried out reveal that outdoor education makes contributions that support the mentioned goals. It was revealed that students could understand the subjects which they had difficulty in understanding when explained verbally, their learning became permanent, and they learned with fun, their interest and curiosity in the lesson increased, and their academic achievement and their level of associating the subjects to the daily life increased (Bozdoğan & Kavcı, 2016; Ertaş, Şen, & Parmaksızoğlu, 2011; Sontay, Tutar, & Karamustafaoğlu, 2016; Tatar & Bağrıyanık, 2012). In addition to cognitive contributions of outdoor education, the research supported that it made contributions to affective properties such as causing positive changes with students' attitudes towards nature, art, technology and science, and raising environmental awareness (Demir Göloğlu & Yılmaz, 2018; Okur Berberoğlu, 2015).

When we ask where outside the class is, there are basically two different environments. These are natural environment and man-made social settings.

> *"Outdoor education curricula can include subjects such as recognition and creation recreation fields, protection and preservation of historical, cultural, and natural heritage, use of natural resources correctly and equally, and recognition and protection of ecological systems. In addition to this, there are interdisciplinary opportunities outside the class. Outdoor education activities can incorporate creative and constructive studies on nature, fine arts, mathematical assessment and calculations, and many other subjects. This provides big opportunities for the learner for meaningful learning" (Altın & Oruç, 2008, p. 13).*

Museums are one of the out-of-school learning settings which encourage interdisciplinary learning. Within the framework of Ministry of National Education's 2023 vision, a protocol was signed with the Ministry of Tourism and Culture and thus it started Museum Studies Certificate Program within the framework of this protocol. By emphasizing the importance of museums to learn history, geography, and sociology, teacher training is organized via collaboration with the experts. The Ministry of National Education's attempts to get students out of the classroom reveal itself with the agreements made with the Turkish Orienteering Federation and Mountaineering Federation. Nature and orienteering training are planned to be given to the teachers in two years. In addition to these, drama activities in nature and museums and orienteering came to the forefront in teachers' 2019 professional work schedule (Ministry of National Education Ankara In-service Training Institute, 2019).

These attempts started by the Ministry of National Education not only reveals that out-of-class is important in learning process but also suggests that teachers need support about this subject. The studies point that teachers experience some problems about the outdoor education activities. In a study in which elementary school teachers' opinions about school trips were gathered via questionnaire and interviews, teachers stated that they had some bureaucratic obstacles during the process of getting permit and encountered some transportation and financial problems (Demir, 2009). In another study, interviews were performed with twenty elementary and twenty social studies teachers to determine their state of using out of school settings in social studies course and teachers stated that they could not benefit from out of school settings due to some reasons such as over-loaded curriculum, too many students, lack of time and lack of planning (Malkoç & Kaya, 2015). In a study which was carried out with science and technology teachers, the teachers whose opinions were obtained via questionnaire listed the challenges they experienced as follows: limited educational tools and sources, lack of quality curricula to support outdoor education, spending too much time on outdoor education activities, difficulties with providing students' safety outside the class, and lack of willingness due to the time and effort it needs for planning and preliminary preparation, and administration and parental problem (Tatar & Bağrıyanık, 2012). Yıldırım (2012) carried out a study with 143 social studies teachers and teachers stated that 30% of the teachers did not take their students on a trip, they took students on a trip to increase their students' motivation without considering the subject or the unit, they did not do any activity after the trip and observation and the most common problems teachers encountered included undisciplined behaviour of students during the trip, difficulty of managing crowded classrooms, lack of enough time for the trip, and parents' not being able to afford the travel expenses. It is possible to increase the number of studies which emphasize similar results. However, the research presents that teachers lack enough motivation to plan and organize outdoor education activities. It may be possible to relate this to the lack of knowledge and experience to cope with the difficulties experienced by the teachers before and after the trip and while planning the process. In addition to this, it is possible to question the educational values of the outdoor education activities carried out at present. Most schools try to make school trips once or more per year, depending on their means. The excursions made, according to the possibilities of the environment, science center, museum, playgrounds, game parks, natural areas, etc. performed places. However, due to insufficient detailed and good planning before these trips, the learning gains to be obtained from these studies are inadequate and the students do not not gain anything except for getting out of the classroom. Even, because of lack of effective planning, students identify such places and activities as boring and tiring. Moreover, this condition has negative effects on teachers' motivation to organize out-of-class activities.

Elementary school is quite a suitable period to organize outdoor education activities considering the subjects taught such as social studies and science courses. Moreover, such activities could be frequently used with children aged between 7 and 10 considering that students must experience concrete life experiences, feed their interest and curiosity, and engage actively in the learning process. Elementary school teachers must do an effective planning in order to cope with the challenges mentioned while organizing outdoor education activities. The purpose of this project which was carried out in line with TUBITAK (Scientific and Technological Research Council of Turkey) 4005 Innovative Education Implementations Support Program is to promote elementary school teachers' knowledge and skills about how to plan, implement, and evaluate outdoor education activities. During the process of the project, the aim was to develop teachers' knowledge and skills about outdoor education activities with implementations carried out in different places and by having concrete experiences, they were supported especially within the implementation. The main purpose of the study is to investigate the effectiveness of the program, which has been prepared to increase the knowledge and skills of School teachers about outdoor education activities. Within this framework, the study sought answers to the following research questions:

1. What is the effect of the outdoor education activities project on elementary school teachers' self-efficacy to organize trips outside the school?
2. What is the effect of the outdoor education activities project on elementary school teachers' opinions about outdoor education?
    a. What is the effect of the outdoor education activities project on elementary school teachers' opinions about meeting their expectations?
    b. What is the effect of the outdoor education activities project on elementary school teachers' opinions about the importance of outdoor education?
    c. What is the effect of the outdoor education activities project on elementary school teachers' opinions about the definition of outdoor education?
    d. What is the effect of the outdoor education activities project on elementary school teachers' opinions about the planning of outdoor education?
    e. What is the effect of the outdoor education activities project on elementary school teachers' opinions about the feasibility of outdoor education?
3. What are the teachers' opinions about the contributions of outdoor education activities?

Method

Research Method

This research was planned as a mixed method research. The data collection process was collected by taking into account the joining design, which is one of the basic patterns of mixed method research. Qualitative and quantitative data were collected separately. After the results were collected and analyzed, the inferences and results obtained from the data set were brought together in the discussion section. First, the results of the quantitative data, then the results of the qualitative data were reported, and the results of the research were presented by comparing both data sets (Creswell, 2019).

In the process of conducting the research, one of the developed mixed method designs, the intervention design was used.

> *The purpose of the intervention design is to study the research problem by adding qualitative data to the research process through conducting an experiment or intervention trial program (Creswell, 2019).*

In conducting the intervention design, one group pretest-posttest experimental design, which is one of the weak experimental designs, was used. In this method, the effect of empirical operations is determined by the studies conducted on one group. The same assessment tools are used at the beginning

and at the end of the process and the significant differences between the pre-test and post-test are taken into consideration (Büyüköztürk, Çakmak, Akgün, Karadeniz, & Demirel, 2008).

Participants

The participants of the study consisted of elementary school teachers working in an elementary school located in the city centre of Ankara and a research assistant working in this field. This process does not include assignment of any kind of population and sampling. The study group of the project consisted of 28 participants chosen among the teachers who applied for the training project. The project was carried out with 5 male and 23 female participants. The information about the participants was presented in Table 1.

Table 1. Information about Participants' Age and Work Experience

Age Range	f	Years of Seniority	f
25-30	1	1-5	1
31-35	5	6-10	2
36-40	1	11-15	3
41-45	3	16-20	1
46-50	8	21-25	16
51-55	9	26-30	3
56-60	1	30-35	2

Considering the above table, it can be stated that the participants' work experience was accumulated between 21 and 25 years.

Table 2 includes data on the training status of the participants for out-of-class training activities:

Table 2. Participants' Training for Outdoor Education Activities

Getting Training	f	Where	f
I got training	12	Museum Training	2
		Other	6
		Drama training	6
		Nature Training	1
		Scouting	2
I did not get training	14		

According to the Table 2, 14 participants did not receive training, 12 of them did not receive training in parallel with the things in the project content or they participated in short-term training.

Individual semi-structured interviews were carried out with five volunteer participants. The information about the participants was given in Table 3.

Table 3. Information about the Participants Interviewed

	Gender	Age	Seniority
Participant17	Female	46	21
Participant 18	Female	35	11
Participant 20	Male	45	23
Participant 25	Female	34	10
Participant 26	Female	34	12

Looking at the data in Table 3, 5 volunteer participants were interviewed. The distribution of the gender of the interviewed participants is 4 people, women and 1 person men. It is seen that the professional experience of 3 participants is approximately 20 years, and the professional experience of 3 participants is around 10 years.

Data Collection Tools

In order to collect data, Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings, An Evaluation Form Outdoor Education Activities Project for Elementary Teachers and a semi-structured interview form were used in the study.

"Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" and "An Evaluation Form on Outdoor Education Activities Project for Elementary Teachers" were implemented with the participants as pre-test and post-test at the beginning and at the end of the project training.

Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings

"Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" developed by Bozdoğan (2016) was used.

The literature was scanned and "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" developed by Prof. Dr. Aykut Emre BOZDOĞAN was chosen to determine teachers' self-efficacy competences about planning an outdoor education activities. By making contact with Prof. Dr. Aykut Emre BOZDOĞAN, a permission was obtained to use the scale. Bozdoğan (2016) in his article made a statement about the development process of "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings": "A draft scale consisting of 45 items was designed by reviewing the literature and as a result of content validity, the draft scale which was reduced to 39 items was administered to 358 pre-service teachers studying in the Faculty of Education at Giresun University in 2013-2014 academic year. As a result of exploratory factor analysis, nine items were dropped from the draft scale. It was observed that the factor loadings of the scale items without being exposed to rotation were between 0.46 and 0.71. It was found that the scale's item-total correlation coefficients changed between 0.58 and 0.76. It was determined that total variance explained by the remaining 30 items in the scale was 50.97%. The scale's Cronbach Alpha reliability coefficient was calculated as 0,93 and reliability coefficient was found 0,93; Guttmann Split-Half value was calculated as 0.89 and Spearman Brown reliability coefficient was found 0.89" (Bozdoğan, 2016).

An Evaluation Form on Outdoor Education Activities Project for Elementary Teachers

The teachers answered the open-ended questions included in a data form used to evaluate the effectiveness of the project with the open-ended questions called "An Evaluation Form Outdoor Education Activities Project for Elementary Teachers" at the beginning and at the end of the process by writing.

Interview Form

An interview form was created in order to deepen the opinions expressed by the participants in the evaluation form. The data collected with the " Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings " and " An Evaluation Form Outdoor Education Activities Project for Elementary Teachers ", which were previously applied, were analysed and the points that needed to be deepened were determined and interview questions were prepared in this framework. The following questions were included in the interview form:

1. Which activity most impressed you during the project process called "Outdoor Education Activities"? Why?
2. "Which activity did you like least during the project process called "Outdoor Education Activities"? Why?

3. In your opinion, what are the strengths of the project called "Outdoor Education Activities"? Why?
4. In your opinion, what needs to be improved in the project called "Outdoor Education Activities"? Why?
5. What do you think about planning educational activities outside the class with your students?
6. What can you say about your awareness about this project process? Why? (Professional and personal, and etc.,)
7. How do you evaluate the project process? (places, activities, groups, project team and etc.,)

Process of the Project

This research is the output of the project administered within the framework of TUBITAK 4005 Innovative Education Implementations Support Program. The study group of the research was composed of elementary school teachers working in elementary schools located in the city centre of Ankara and one research assistant working in the Department of Elementary Education in the Faculty of Education at a state university. The stages given below were followed throughout the project process:

- The aims of the project, time, and content were announced on the web site of the project. The registrations of volunteer elementary school teachers working in Ankara were recorded and the lists were finalized.
- The program lasted 10 days, from 3 September to 14 September 2018 between 12.30 and 18.30. It was completed in 60 hours.
- The program started with meeting the participants, amalgamation activities, and sharing the program content in Beytepe Campus at Hacettepe University. The pre-test implementations were carried out in this stage.
- Trips were organized to the different places which could be associated with variety of courses in the curriculum including interaction between industry and nature and environmental problems: Rahmi Koç Museum (Science and Technology Museum), Ali Dayı Children's Library (Library), Feza Gürsey Science Centre (Science Centre), Şehit Cuma Dağ Natural History Museum (Natural History Museum), Gordion Museum (Archaeology Museum), Beypazarı-İnözü Valley (Cultural and Natural Features -Eco-tourism), Altınköy (Recreation Field) and Lake Salt.
- Each out of class educational activity was administered as practical applications. Then, a lesson plan was discussed with the teachers in terms of gains, tools, educational background, assessment and evaluation processes, feasibility, preparation processes, and integration with other courses.
- The project coordinator, expert, and educators used mainly drama methods and other teaching techniques and methods such as six thinking hats, station, observation, educational games, and field studies.
- At the end of the process, the studies which would integrate theoretical knowledge related to the out of class educational activities and applications were implemented under the guidance of project coordinator and expert. The problems that would be encountered during the process and suggestions for solutions and preliminary preparation, precautions, planning, implementation, and post-trip activities were emphasized.
- The participants were asked to plan and design an outdoor education activity and the plans were presented and developed with feedback and suggestions in the final stage.
- The evaluation of the process and post-test implementations were actualized in this stage.

Information about the applied outdoor education activities program is given in Table 4.

Table 4. Information about the applied outdoor education activities program

Outdoor Education Place	Subject	Lenght	Learning Outcome Examples Related to the Curriculum	Example Activities
Rahmi Koç Museum	Technology	6 hours	SB.4.4.2. Compares the past and present uses of technological products.	The leader divides the participants into 4 groups. It asks each group to choose an object from their own workspace. He then says that they will display 3 frozen images that describe the use of this object in the past, present and future. When the groups are ready, they present their acts.
Ali Dayı Children's Library	Library	3 hours	T.3.3.25. Relates the content of the text read with the visuals.	Some visuals in the children's picture book to be read by the instructor are distributed to the participants. When the participants see the image that comes to them while the story reflected in the presentation is being read, they remove this image and show it to the participants.
Feza Gürsey Science Center	Science	6 hours	F.4.3.1.1. Performs experiments for force to bring motion to objects and to change their shape.	Participants are given the Feza Gürsey Science Center Worksheet. It is said that they will follow the liquid nitrogen and static electricity experiments for 45 minutes and then travel to the center in line with these instructions. It is gathered after two hours, and the articles are shared.
Şehit Cuma Dağ Natural History Museum	Natural History	6 hours	F.3.6.1.1. She/he classifies the beings as living and non-living by using the samples around her/him.	Participants will find their answer in the museum (What is the carnivore? A riddle about the object that interests you most in the museum.) Individual Study Guides are distributed. They are asked to answer these questions within the given time.
Gordion Museum	Archaeology	6 hours	G.2.2.4. Museum, art gallery, art workshop, archaeological site etc. expresses the importance of places in terms of art.	Participants are divided into 5 groups and each group is given the following topics and concepts: 1. Group: Social and daily life, 2. Group: Political history, 3. Group: Economic activities, 4. Group: Religion and belief, 5. Group: Culture and art The groups save the information about the given subject to present at the end of the period.
Beypazarı-İnözü Valley	Cultural and Natural Features - Eco-tourism	6 hours	SB.4.2.2. Gives examples by researching the elements that reflect the family and the national culture around them.	Participants are divided into groups of 4-5 people. The groups are asked to find someone who lives in Beypazarı and make an interview. Interview questions will be related to the cultural and natural features of Beypazarı. This interview is presented by the groups after necessary preparations.
Altınköy	Recreation Field (Natural-artificial environment, cultural features)	6 hours	SB.4.3.1. Makes inferences about the location of any place in its environment.	Participants are divided into 5 groups. A map of Altınköy is given to each group. The groups are asked to find the places indicated on the map.
Salt Lake	Industry-nature interaction and environmental problems	6 hours	F.3.6.2.6. Proposes solutions by doing research to protect the natural environment.	Participants are told that Salt Lake faces the drying problem. Participants are divided into 6 groups in order to evaluate this problem and the solution suggestions for this problem with the six thinking hats technique, and the task of each hat is explained.

Data Analysis

The data related to the "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" were interpreted by using the percentages and frequencies of the responses given to each item. Moreover, dependent samples t-test was used to control whether or not there was a significant difference between the participants' pre-test and post-test means. Although the study group of the research consisted of 28 people, the analysis was made on 22 people while the t test was performed. The reason for this is that there are losses in the pre and post-test in answering the Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings. Since the Dependent Groups t Test is a hypothesis test that tests the significance of the difference of repeated measurements made on the same group, 22 participants who answered both the pre-test and the post-test were identified and analysed.

The responses given to the "An Evaluation Form on Outdoor Education Activities Project for Elementary Teachers" and the data obtained from interviews were transferred to computer environment. The data were exposed to content analysis within the framework of research questions and then they were categorized. For this purpose, the answers given to each question were first read by the researchers. In the next step, the data were encoded with the help of Maxqda software. In the first stage of coding, no classification was made and all detected codes were recorded. At the last stage, the codes were reviewed and the codes that could be collected under common categories were combined. The frequencies of the categories were determined, and the data were presented in tables and as quotes from the participant interviews.

A long-term interaction in a study especially during the qualitative data collection process is a factor that increases the internal consistency of the research (Yıldırım & Şimşek, 2018). In this research, the researchers spent time with the participants during the project process. Thus, a mutual trust environment established between the researchers and the participants increases the sincerity of data obtained from the participants as well as its reality, especially during the interviews. Consistency analysis is a strategy used during the stages of collection and analysis of data to provide reliability of the research (Yıldırım & Şimşek, 2018). In this research, the data were analysed by the two researchers and the final results were obtained by comparing the analysis results.

Results

The findings obtained from the research were presented under the research questions using tables and examples from participants' opinions. Figure 1 exhibits the titles that reflect the presentation of the findings in line with research questions:

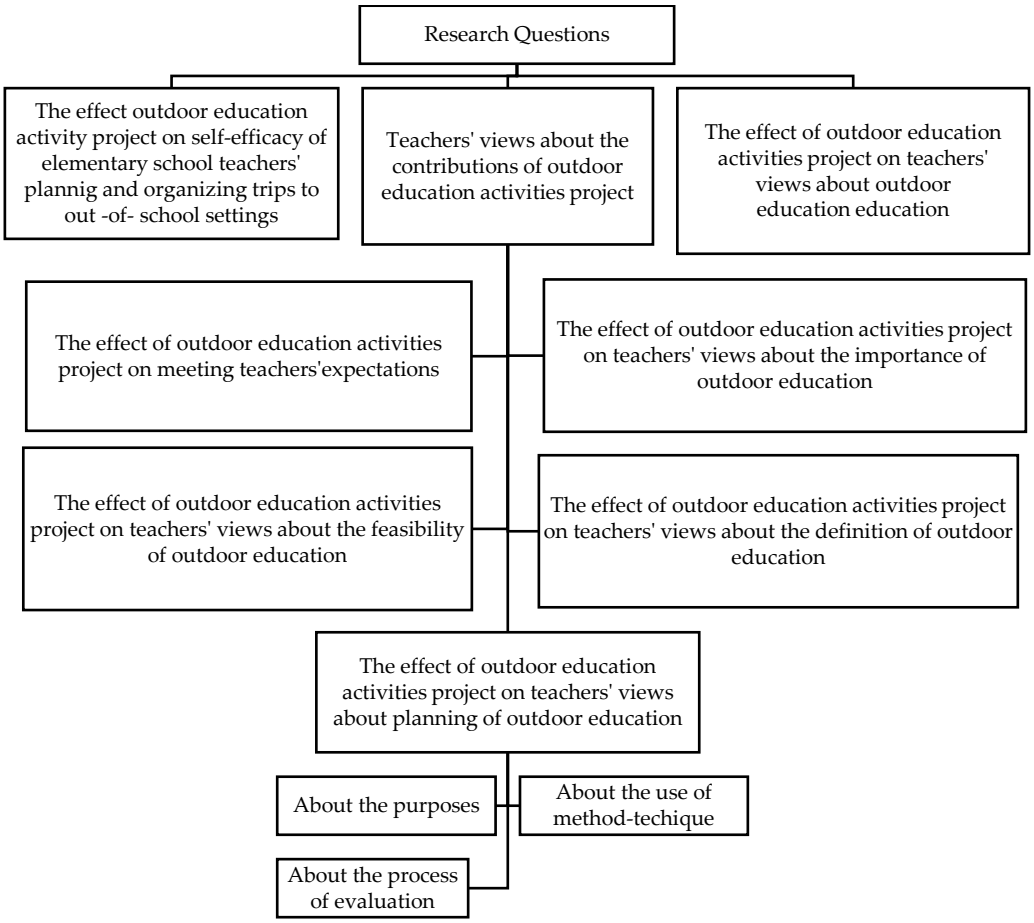

Figure 1. The Presentation of the Findings According to Research Questions

Findings and Interpretation of Research Question "What is the effect of outdoor education activities project on teachers' self-efficacy of planning and organizing trips to out-of-school settings?"

Table 5 presents the distribution of percentages and frequencies of responses given to the "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" in the pre-test and post-test. Considering the data in the table, it is observed that the education given within the context of "Outdoor Education Activities for Elementary School Teachers" generally increased the participants' self-efficacy beliefs. The items given below especially support the self-efficacy beliefs:

- "I can enable students to participate actively in the field trip and thus make them gain practical skills" (Strongly agree) %4.3 in pre-test and 51.9% in post-test.
- "I can enable students to engage in social interactions." (Strongly agree) %26,1 in pre-test and 66,7 % in post-test.
- "I know the necessary stages of organizing an effective trip to out of school settings." (Strongly agree) 39,1 % in pre-test and 81,5% in post-test.
- "After coming back from a trip, I do not have any difficulties with evaluation with my students (discussion, project, composition and etc.,)." (Strongly agree) 26,1% in pre-test and 74,1% in post-test.
- "I can generate effective ideas and opinions for the trips that will be organized later with the experiences and information I gained from the trip." (Strongly agree) 39,1% in pre- and 74,1% in post-test.
- "I think that I am experienced enough to organize trips to out-of-school settings." (Strongly agree) 34, 8 % in pre-test and 74,1% in post-test.

The negative statements that revealed the most significant decrease with the frequencies and percentages of the responses given between pre-test-post-test were exemplified below:

- "I have a difficulty with guiding students in the field." (strongly disagree) 17,4% in pre-test and 59,3 in post-test.
- "I am not sure that I can help students gain concrete experiences." (strongly disagree) 13 % in pre-test and 63% in post-test.
- "I may feel inadequate while making necessary explanations to the students before the trip (why to go, what kind of studies to do, rules to obey, and etc.,)." (strongly disagree) pre-test 34,8 % and 77,8.

Table 5 included the mean and standard deviations for each item of the responses given in the pre-test and post-test of the "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings". While calculating the total points and means, the items including positive statements were graded as "Strongly Agree 5, Agree 4, Undecided 3, Disagree 2, Strongly disagree 1" and the items including negative expressions were graded as "Strongly agree 1, Agree 2, Undecided 3, Disagree 4, Strongly disagree 5". Thus, for example, the mean pre-test score of the item "I have difficulty with guiding students in the field" was 3,78 but its mean pre-test score went up to 4,59. This significant increase can be interpreted that the teachers thought after the training that they could have less difficulty with guiding students in the field. Considering the mean values given in Table 5, it was revealed that the mean scores of all items increased in the post-test. These findings indicate that the training given within the context of "Outdoor Education Activities for Elementary Teachers" increased elementary school teachers' self-efficacy beliefs to plan and organize educational activities to out-of-school settings. The items given below could be given as an example of the items with the highest averages between the pre-test and post-test:

- I have difficulty with having students answer the worksheets in the field." Pre-test $\overline{X}$ 3,52 in pre-test, $\overline{X}$ 4,41 in post-test;
- "I have difficulty with identifying to what extent the purposes of the trip were met." $\overline{X}$ 3,95 in pre-test and $\overline{X}$ 4,52 in post-test;
- "I am not sure that I will be able to have them gain concrete experiences during the trip." $\overline{X}$ 3,91 in pre-test, $\overline{X}$ 4,65 in post-test
- "I think that I have enough experience to plan and organize trips to out-of-school settings." $\overline{X}$ 3,96 in pre-test, $\overline{X}$ 4,52 in post-test;
- "I do not have difficulty with preparing the tools to be used during the trip (advertisement brochure, worksheets, knowledge tests, and so on)." $\overline{X}$ 3,65 in pre-test, $\overline{X}$ 4,07 post-test.

In Table 5, the percentage and frequency distribution of the answers given in the pre-test and post-test to the "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" is given.

Table 5. Distribution of Responses Given to the "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" By the Project Group in Pre-test and Post-test

Order	Items	Strongly agree				Agree				Undecided				Disagree				Strongly Disagree			
		Pre-test		Post-test		Pre-test		Post-test		Pre-test		Post-test		Pre-test		Post-test		Pre-test		Post-test	
		f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
1	I have difficulty with guiding students in the field.	0	0	0	0	3	13	0	0	4	17,4	0	0	12	52,2	11	40,7	4	17,4	16	59,3
2	I have difficulty with having students answer the work sheets in the field.	0	0	0	0	5	21,7	0	0	5	21,7	0	0	9	39,1	16	59,3	4	17,4	11	40,7
3	I can enable students to participate actively in the field and thus have them gain practical skills.	1	4,3	14	51,9	2	87	10	37	1	4,3	0	0	0	0	1	3,7	1	4,3	2	7,4
4	During the trip, I can enable students to interact socially.	6	26,1	18	66,7	14	60,9	7	25,9	1	4,3	0	0	1	4,3	1	3,7	1	4,3	1	3,7
5	I have difficulty with providing opportunities for students for learning with fun.	0	0	1	3,7	4	17,4	1	3,7	5	21,7	0	0	8	34,8	14	51,9	6	26,1	11	40,7
6	Although there are many students, I can control the environment.	3	13	14	51,9	10	43,5	7	25,9	4	17,4	3	11,1	6	26,1	2	7,4	0	0	1	3,7
7	I have difficulty with identifying to what extent the purposes of trip are achieved after the trip.	0	0	0	0	1	4,3	0	0	3	13	1	3,7	13	56,5	11	40,7	4	17,4	15	55,6
8	I know the necessary stages to take while organizing an effective trip to out-of-school settings.	9	39,1	22	81,5	10	43,5	3	11,1	3	13	0	0	1	4,3	1	3,7	0	0	1	3,7
9	I have difficulty with associating the trip in general or the objects to focus on with the course.	0	0	1	3,7	3	13	0	0	0	0	0	0	14	60,9	10	37	6	26,1	15	55,6
10	During the trip, I am not sure whether or not I will be able to have students gain concrete experiences.	0	0	0	0	1	4,3	0	0	3	13	0	0	15	65,2	9	33,3	3	13	17	63
11	During the trip, I can develop students' critical thinking skills.	2	8,7	12	44,4	16	69,6	10	37	2	8,7	1	3,7	3	13	1	3,7	0	0	3	11,1

12	I think that I may not be competent to determine their needs before the trip.	0	0	2	7,4	2	8,7	2	7,4	5	21,7	0	0	12	52,2	9	33,3	4	17,4	13	48,1
13	I have complete belief in myself that I can approach students positively and friendly in the field.	12	52,2	18	66,7	8	34,8	5	18,5	0	0	0	0	2	8,7	1	3,7	1	4,3	2	7,4
14	I think that I can have difficulties with planning before the trip (destination, duration of the trip, means of transport, departure time, number of students, fare. And etc.,)	0	0	3	11,1	1	4,3	0	0	1	4,3	0	0	8	34,8	5	18,5	13	56,5	19	70,4
15	After coming back from the trip, I do not have difficulty with evaluation of the trip with my students (discussion, project, composition, and etc.,)	6	26,1	20	74,1	0	0	5	18,5	14	60,9	0	0	3	13	2	7,4	0	0	0	0
16	I do not have difficulty with preparing the tools to use during the trip (advertisement brochure, worksheets, knowledge tests, and so on).	7	30,4	13	48,1	7	30,4	9	33,3	3	13	1	3,7	6	26,1	2	7,4	0	0	2	7,4
17	I am not sure that I can meet students' accommodation needs for the trips that can last more than one day.	3	13	3	11,1	2	8,7	1	3,7	6	26,1	7	25,9	7	30,	7	25,9	5	21,7	9	33,3
18	I am self-confident about guiding students with different questions and having them reach information.	9	39,1	14	51,9	11	47,8	11	40,7	1	4,3	0	0	2	8,7	0	0	0	0	2	7,4
19	I believe that I can easily plan and organize a trip to out-of-school settings.	10	43,5	18	66,7	7	30,4	8	29,6	4	17,4	0	0	0	0	1	3,7	1	4,3	0	0
20	I can inform the people required before the trip (student parents, school administration and etc.,)	15	65,2	20	74,1	7	30,4	6	22,2	0	0	0	0	0	0	1	3,7	1	4,3	0	0
21	I have difficulty with getting the necessary permission for the trip (student parents, school administration and etc.,)	0	0	0	0	0	0	0	0	2	8,7	0	0	8	34,8	9	33,3	13	56,5	18	66,7

22	I may feel incompetent to make necessary explanations before the trip (why to go, what kind of studies to do, rules to obey, and etc.,)	1	4,3	0	0	0	0	0	0	0	0	0	0	14	60,9	6	22,2	8	34,8	21	77,8
23	I have difficulty with maintaining students' motivation levels high.	1	4,3	0	0	1	4,3	2	7,4	4	17,4	1	3,7	12	52,2	12	44,4	5	21,7	12	44,4
24	I can meet students' nutritional needs for more than one day trips.	7	30,4	13	48,1	9	30,1	7	25,9	5	21,7	3	11,1	1	4,3	3	11,1	1	4,3	1	3,7
25	I have difficulty with the exhibition of photographs taken during the trip on school boards.	0	0	1	3,7	2	8,7	0	0	3	13	3	11,1	7	30,4	8	29,6	10	43,5	15	55,6
26	I can meet the need for a guide before the trip.	5	21,7	10	37	8	34,8	10	37	7	30,4	4	14,8	2	8,7	1	3,7	1	4,3	1	3,7
27	I do not have difficulty with informing students' families about the trip taken.	10	43,5	16	59,3	9	39,1	9	33,3	0	0	0	0	4	17,4	1	3,7	0	0	1	3,7
28	I do not have difficulty with making appointments (if there is) in the field and informing the authorities there (number of students, day of the trip, time and etc.,)	16	69,6	18	66,7	6	26,1	7	25,9	1	4,3	0	0	0	0	1	3,7	0	0	1	3,7
29	I can suggest effective ideas and opinions for the future trips with the experience and knowledge I have gained from the trip.	9	39,1	20	74,1	13	56,5	6	22,2	0	0	0	0	1	4,3	0	0	0	0	1	3,7
30	I think that I have enough experience to organize trips to out-of-school settings.	8	34,8	20	74,1	8	34,8	5	18,5	5	21,7	0	0	2	8,7	0	0	0	0	2	7,4

Table 6 shows the findings regarding the pre-test-post-test scores of the Project Group's "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings", Dependent Groups t Test results:

Table 6. Dependent Samples T-test Results for the Pre-test -Post-test Scores of the Project Group's "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings"

Implementation	N	sd	$\bar{X}$	p
Pre-test	22	21	4.00	0.001
Post-test			4.46	

Examining the project group's "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" Dependent Groups t-test results of total scores in Table 6, it is observed that there is a statistically significant difference between the pre-test scores and post-test scores in favor of the post-test, at the α: 0.01 significance level and 21 degrees of freedom. While the mean pre-test scores of the project group was 4.00, the mean post-test scores was 4.46. Based on this, it can be concluded that the activities and the program prepared and implemented within the scope of the "Outdoor Education Activities for Elementary School Teachers" project helped the elementary school teachers develop positive self-efficacy beliefs in organizing educational trips outside the school environment.

Findings and Interpretations About the Research Question "What is the effect of the outdoor education activities project on elementary school teachers' opinions about outdoor education?

Findings and Interpretations About the Sub-Research Question "What is the effect of outdoor education activities project on meeting teachers' expectations?"

Table 7 included the participants' expectations from the outdoor education activities project:

Table 7. Participants' Expectations from the Outdoor Education Activities Project

Categories	f
Sharing knowledge with students	1
Individual development - gain	8
Making trips fun and effective	5
Sharing what is learnt with colleagues	4
Developing planning skills	22
Others	2

Table 7 included the participants' expectations from the outdoor education activities project. Most of the participants stated that they participated in the project to enhance their knowledge and skills about what they could do while planning outdoor education activities. The examples related to these opinions are given below:

Participant 5: "Life should not be a situation that is learned on school desks. An education that becomes integrated with art and history is important. Thus, I want to fill my bag (activity bag) with the activities that will be realized by visiting/ seeing a museum and nature."

Participant 18: "My primary expectation is to raise my awareness about the subject. I think that the studies carried out with different people, in different places and different brains will change my point of view. I hope that this perspective will be reflected positively on my students.

The data regarding the Realization of Expectations of the Participants from the Outdoor Education Activities Project are given in Table 8.

Table 8. Realization of the Expectations of the Participants from the Outdoor Education Activities Project

My expectations are met	f	Categories	f
Partially	0		
No	0		
Yes	27	Individual gain-awareness	5
		Active learning experiences	7
		Planning principles	13
		Using techniques such as drama	2

Considering the data in table 8, all of the participants who filled in the form stated that their expectations were met. Some participants' views were given below:

Participant 20: "I learned a lot of activities to do outside the class. My awareness raised. I understood the importance of game-group work. I learned more than my expectations. Moreover, it was really great pleasure to meet different brains from one another."

Participant 27: "I can say with peace of mind that my expectations were realized. I learned what to do while taking my students on a trip, how to get prepared, and the materials that I had to use."

Participant 1: "To develop planned, programmed, regular studies in line with their needs. To be able to present group works that will impress my peers (teachers)."

Participant 26: "I actualized my expectations from the outdoor education activities project. All the activities carried out are compatible with the course outcomes and teaching. During the implementation of these activities with the students in the class, learning by doing will become more enjoyable."

These statements reveal that the participants had an opportunity for planning outdoor education activities and active learning techniques via learning through experience.

Findings and Interpretation of Sub-Research Question "What is the effect of outdoor education activities project on teachers' views about the definition of outdoor education activities?

Table 9 included the participants' statements about what outdoor education activities are:

Table 9. Participants' Statements about the Definition of Outdoor Education Activities

Categories	Pre-test (f)	Post-test (f)
Schoolyard	2	2
Activities to do	1	4
Others	8	1
Nature education	2	1
All out-of-school-class activities	11	6
Games	2	1
Exhibitions	1	0
Shows /performances	3	0
Student clubs	1	0
Celebrations and such ceremonies	1	0
Sports activities	2	0
School trips	13	2
Homework	1	0
Learning everywhere		6
Activities supporting in-class learning		6
Places		11

Table 9 included the participants' statements about what outdoor education activities are. Considering the findings, it is revealed that teachers defined outdoor education activities mostly as school trips and activities that are performed outside the classroom or school before the training. However, after the training was completed, it was observed with their statements that they diversified the places such activities could take place and different activities that could be done. Moreover, they included in their statements that these activities could promote school learning and learning was an action that could occur anywhere. This condition reveals the result that participants' awareness about what outdoor education is and how it is done increased. The statements taken from post-test and supporting this view are given below:

Participant 2: "Any efforts and behaviours done outside the class which help gains to be more permanent and effective in line with the subjects learnt in the class. (Trip-observation- discovery-community studies and etc.,)"

Participant 6: "All activities carried out outside the class. Schoolyard, library, hall, museums, parks, hospitals, student hostels, nursing homes for elderly and child-care centres, cafes, institutions and organizations, recreation areas, and etc.,"

Participant 27: "What comes to my mind is a planned learning that occurs outside the class. Let me explain it briefly: A learning environment that is enriched with group work, activity worksheets, preparation, animation, game, brochure, and etc.,"

Participant 10: "Any learning environment created outside the class can be included in these activities. We learned one more time that learning has no place, time and limitation of activities via learning by doing and through experience. Museums, recreation areas, picnic sites, cinema, science centres, theatres, simulation centres, school administration rooms, parental visitations, university gardens, buses (public transport)."

Findings and Interpretation of Sub-Research Question "What is the effect of outdoor education activities project on teachers' views about out-of-class education?"

Table 10 contains the findings of the participants' opinions on the importance of outdoor education activities:

Table 10. Participants' Statements About the Importance of Outdoor Education Activities

Categories	Pre-test (f)	Post-test (f)
Positive student-teacher interaction	3	0
Learning with fun-Motivation	6	9
Providing permanent learning- transfer to life	11	14
Active learning	1	1
Presenting variety of concrete learning opportunities	6	1
Others	6	4
Raising cultural awareness	3	0
Supporting in-class learning	5	2
Developing self-confidence	2	2
Supporting social development	5	2
Supporting different learners		1
Multidirectional development		3
Understood the importance of it with the project		2

Table 10 included the participants' views about the importance of outdoor education activities. Considering the findings obtained, it is observed that teachers think that outdoor education activities are important at the beginning of the project in educational process. Two participants stated that they understood the importance of it with the project. Taking into consideration all statements, it can be

stated that educational process is responsible for increasing opinions such as including more concrete learning experiences outside the class, learning being more fun and permanent, and easy transfer of learning outside the class to life. Such examples can be given from these opinions:

Participant 7: "Education is directly related to life. It is related to anything that a human being in interested in. It is impossible to reduce /fit in everything to the school or class. Maybe information about the gains can be given but gains are not fully achieved. Very-well designed and structured out-of-school activities can develop the courage and ability in the students/individuals to ask, create, and change questions apart from gains."

Participant 8: "It is a process in which learning occurs much more actively. Due to the creation of environments where learning occurs rapidly both with fun and sharing, I think that it is very important."

Participant 22: "If we consider that education does not only occur in the class, we can provide a purposeful learning by making the education outside the school more planned. Instead of giving an unplanned education, I think that out-of-class activities are important to enable students benefit from out-of-class settings and also to perform planned learning."

Participant 18: "School organize trips throughout the year. However, these trips are only travels. I believe that learning through must be the main purpose."

Participant 3: I have known the importance of outdoor education activities before but I learned how effective they were after the project."

Findings and Interpretation of Sub-Research Question "What is the effect of outdoor education activities project on teachers' planning out-of-class education?

Table 11 included participants' views regarding the purposes of outdoor education activities:

Table 11. Participants' Statements About the Purposes of Outdoor Education Activities

Categories	Pre-test (f)	Post-test (f)
Establishing positive relationship	1	4
Learning with fun	3	4
Cultural gains	3	1
Supporting social development	8	5
Supporting individual's development	17	7
Transferring- applying what is learnt in life	4	0
Reinforcing-supporting-sustaining learning-	13	10
Supporting gains	4	12
Active-concrete learning experiences		3
Recognizing environment (natural-social)		3
Others	1	3

Table 11 included participants' views regarding the purposes of outdoor education activities. Considering the data summarized in table 10, the table included more statements such as supporting student development and reinforcing learning before the project. These are general statements and they do not involve details. It was realized after the training that (particularly in relation to expressing the goals of the relevant study after each study and to which gains they serve in different courses in elementary school curriculum), these activities could be used with the intention of supporting and realizing the learning outcomes in the curriculum. The following examples given below are included in the post-test:

Participant 2: "Outdoor education activities contain informative and detailed information and observation about the environment where one lives. An individual who knows the environment where he lives consciously is more self-confident. "

Participant 6: "To enable students to learn by engaging them actively in the process in all courses. Establishing effective communication. Creating a team spirit. Students' knowing themselves."

Participant 8: "With the purpose of acquiring learning outcomes more effectively. Students' getting to know each other. Building up feeling of self-confidence- Raising awareness."

Participant 14: "They can be used during the acquisition of the gains included in the school curriculum."

Participant 17: "To reinforce gains. To increase creativity. To raise awareness."

Participant 23:" To link gains with all courses such as Turkish, Mathematics, Traffic and First Aid, Introduction to Science, Social Studies. To explore nature."

Table 12 included participants' views about the courses using outdoor education activities:

Table 12. Participants' Statements About the Courses Using Outdoor Education Activities

Categories	Pre-test (f)	Post-test (f)
Games and Physical Activities	1	1
Traffic Safety	1	2
Others	3	0
Visual Arts -Music	8	2
Mathematics	9	2
Turkish	9	3
Social studies- Introduction to science	24	8
Physical sciences	17	5
All courses	7	22
Those who specified the subject	15	9

Table 12 included participants' views about the courses using outdoor education activities. The participants specified more courses before the training and stated that such activities particularly were more suitable for social studies- introduction to science-and physical sciences. However, after the training they received, they realized that out-of-class education could be used in each lesson and subject domain and even a single activity would serve the purposes of more than one course. The quotes below were taken from post-test:

Participant 6: "They can be used in Turkish, Mathematics, Physical Sciences, Social Studies, Visual Arts, Music, Games and Physical Activities, and free activities; in other words, they can have benefits for every course and subject."

Participant 8: "I believe that they could be used in all courses. For example, Mathematics: Natural numbers (rhythmic counting, addition and etc.,) Geometry (geometric shapes: forming a square and a triangle): Social Studies: directions (learning the cardinal directions with the rise of the sun in the morning)."

Participant 21: "We can use them in all courses. Out-of-school educational activities can be used in many subjects. Traffic rules, occupations, national struggle period, and etc., are the ones that come to my mind right now."

Participant 20: "They could be used in all courses. I can give examples. Mathematics: Geometric objects such as cylinder, cube in game playground. Turkish: Reading silently, reading comprehension. Science and Technology: Knowing your Body."

Table 13 included the participants' views about the methods-techniques and activities used in outdoor education activities.

Table 13. Participants' Statements About the Methods-Techniques and Activities Used in Outdoor Education Activities

Categories	Pre-test (f)	Post-test (f)
Experiment		1
6 Thinking hats technique		4
Station technique		3
Brain storming	1	4
Question-Answer	1	4
Narratives	0	2
Demonstration	1	3
Collaborative Learning	3	2
Research	3	4
Activity	3	32
Discovery Learning	1	0
Problem solving	4	1
Creative drama	18	30
Observation-trip	10	3
Not a method-technique	17	2
Others	3	2

Table 13 included the participants' views about the methods-techniques and activities used in outdoor education activities. It is observed that before participating in outdoor education activities, teachers used expressions a lot which were not used according to their meaning and were not included in the literature, and were not in fact considered as a method-technique (learning by doing/through experience, seeing, implementing, investigation, visual studies and etc.,). However, after the training, such expressions decreased. Creative drama method is mentioned more. Moreover, different methods and techniques and activities used during the educational process were included more in the responses given in the post-test. It can be interpreted that this condition is due to the training given within the context of outdoor education activities which increased teachers' knowledge about the use of different method-techniques and activities. The first three examples were taken from the pre-test and the other five examples were taken from the post-test:

Participant 8: "Drama, learning by doing/experience, seeing, implementing."

Participant 14: "Trip, observation, research, learning by doing -through experience -visual studies."

Participant 25: "I can count all the methods and techniques that I learned in constructivist approach. The methods serving the purpose and the students' individuality have positive effects."

Participant 2: "Drama (the best one), puzzles, demonstration technique, station technique, six thinking hats technique."

Participant 7: "I can benefit from children's games, competitions, orienteering, animation and many techniques in drama."

Participant 12: "Six hats, still image, animation, preparing a brochure, group dynamics." Participant 21: "Drama, improvisation, writing a story, preparing a brochure, out-door games, station, six hats and etc., are the ones that I can remember. In addition to these, many methods and techniques can be used as outdoor education activities."

Participant 27: "Puzzle, drama (game, impersonation, demonstration, games, direct instruction, group work, station technique, 6 thinking hats technique."

Table 14 included the participants' views about the evaluation process of outdoor education activities:

Table 14. Participants' Statements About the Evaluation Process of Outdoor Education Activities

Categories	Pre-test (f)	Post-test (f)
Observation	7	3
Measurement tools	3	8
Other evaluation activities	11	29
Others	13	5

Table 14 included the participants' views about the evaluation process of outdoor education activities. It is found that before attending the outdoor education activities, the teachers, in fact, mostly used methods which were not exactly an evaluation method and which did not give any concrete clues about how to do evaluation (these ones are put in "others" category in the table). However, the number of such expressions reduced after the training. In addition, the different assessment and evaluation techniques mentioned during the process and the activities carried out were included more among the responses given in the post-test. This condition reveals that the training given within the context of the project increased teachers' knowledge about how to do evaluation of outdoor education activities. In parallel to this finding, the following statements were taken from the pre-test:

Participant 1: "It must be consistent. The problems must be solved in time and with constructive approaches. There must be a close communication with the family. The feedback given must be absolutely evaluated."

Participant 2: "It will be more effective if evaluation is extended over a period of time, not on daily basis."

Participant 7: "Students' evaluation process might be more effective."

Participant 17: "Students might be asked to state their observations, expectations and what they have learned during the training process in writing or orally."

The following statements were taken from the post-test:

Participant 1: "Preparing a brochure and a flash card. Making an object with play dough. Using drama methods. Writing a story poem, and etc.,"

Participant 3: "The process could be completed by students' answers to the form prepared, observation and repeating it in time."

Participant 8: "Drama and silent movie activities could be used. Playing games and question-answers (Orally)… Short multiple-choice questions can be prepared. Short stories and diaries could be written using visuals."

Participant 18: "Within the context of outdoor education activities, the students' evaluation process could be carried out with short question and answers. Today, I learned … ."

Participant 19: "Question& Answer, What I learned, What I realized, Gluing a Post-it on a cardboard."

Participant 26: "Students could be evaluated in the whole educational process within the context of outdoor education activities. The tools such as worksheets given at the end of the activities, tests related to the gains, animation, group work and generating a product about learning, and developing a brochure and a board could be used in assessment and evaluation."

Participant 27: "Group activities (brochure, animation, writing a story, public service ad, news bulletin, clip, poem, and etc.,) could be used for evaluation."

Findings and Interpretation of Sub-Research Question "What is the effect of outdoor education activities project on teachers' views about the feasibility of outdoor education activities?

Table 15 included the participants' views about the feasibility of outdoor education activities.

Table 15. Participants' Statements About the Feasibility of Outdoor Education Activities

Views	Pre-test (f)	Post-test (f)	Categories	Pre-test (f)	Post-test (f)
Applicable	11	22	By getting prepared	1	13
			With a small group	5	2
Some problems with the implementation	11	6	Preparation-procedure	8	0
			Cost	12	5
			Administrator support	6	1
			Crowded groups	2	2
			Lack of suitable education environment	1	1
Not applicable	0	0			
Others	2			2	

Table 15 included the participants' views about the feasibility of outdoor education activities. Considering the data, it can be stated that none of the participants did not regard outdoor education activities as inapplicable. But they stated some problems they encountered during the implementation. They asserted that these difficulties were mostly due to economic cost, preparation and many procedures, and lack of administration support. Nevertheless, the number of teachers who stated that it could be applicable in the post-test and particularly the number of those who emphasized that a detailed preparation was required increased. Based on these findings, it can be stated that teachers' knowledge about how to deal with the obstacles increased with the training they received. The examples from the participants' statements in the pre-test were given below:

Participant 5: "A very serious planning is needed to carry education outside the class. It has cost problems and risks and also such education is considered as sightseeing, not as a learning environment by the school administration. But, if the students join more outdoor activities, their observational skills and ability to transfer knowledge increase significantly."

Participant 8: "Drama can be applied. Because of the long, tiring, and negative procedures required to carry out an activity or implementation in a place outside the school, it prevents carrying out a study."

Participant 9: "Very few of them are carried out in schools. There are fewer out-of-school activities due to parents' economic status, attitudes of the school administration, many procedures about the trip, and physical environmental conditions of the schools."

Participant 25: "The most important point that hinders the applicability of these activities is the limited financial means. If a teacher visits a museum, which can be normally visited in an hour, in only 15 minutes and then leaves there, his aim is to visit 3 or 4 museums in one day because he could find a means of transport and got permission as a result of making serious efforts. I think we still could not adopt the idea "keep it short but concise" or in fact, we have a lot of lack of information about the museums. After security measures are taken and awareness is raised, I don't believe that security will have a negative effect on applicability …"

The following are the examples from the post-test:

Participant 2: "The process continues perfectly with an effective planning and a very detailed preliminary study. It must be transferred to all schools belonging to Ministry of National Education!"

Participant 7: "If outdoor education activities are constructed very well, they can be applied easily. So, literature must be reviewed for this. Teachers are required to read constantly in order not to repeat themselves."

Participant 10: "I don't think that I will have problems with the activities after this training. The only obstacle is the problem of transport and museum fees. Our parents' economic conditions are placed on the top. However, I think that when we move away from traditional education, the value they attach to this education will differ and thus changing the order of priority."

Participant 25: "I don't see any negative sides about the applicability of outdoor education activities. Even a painting student does in the school yard in schools with low socio-economic status will help them to observe the changes in nature. While digging the soil, they can do observation."

Participant 27: "They do not have to go to a very far distance. Implementations can be done in immediate surroundings to reach the target goals. I think that without considering the place to visit as far or close, this place must be known before and a very serious planning and organization must be done."

Some of the teachers whose opinions changed from negative to positive about the applicability of outdoor education activities mentioned that they would make an attempt on planning and organizing a trip with their classes. The examples which emerged from the results during the individual interviews were given below:

Interview 4: "I am planning to do a library activity in the school …"

Participant 17: "….. I saw what contributions I could make to the children. I will start the implementations with the trips. I made a list of the places to visit: Altınköy, Anıtkabir, Rahmi Koç Museum, Ali Dayı Children's Library (We started doing activities in our school library) Intangible Cultural Heritage Museum, The Museum prepared by Çamlidere Municipality…

Participant 18: "I am in norm staffing position in my school. Thus, I was assigned to a special low class. I can use drama here. I share what I have learnt with my colleagues. When I have my own class, I will certainly do such activities."

Participant 25: "…When the weather gets hotter, the first place I will take my students is the Science Centre. ….I'm thinking of planning it in the second term."

Findings and Interpretation of Research Question "What are the teachers' views about the contributions of outdoor education activities project?"

Table 16 included the participants' views about the gains at the end of the outdoor education activities project.

Table 16. Participants' Views About the Gains at the End of Outdoor Education Activities

Categories	**f**	**Sub-categories**	**f**
Professional gains	25	Support for educational process	4
		Communications with students	1
		Motivation	4
		Developing planning skills	6
		Getting to know the learning domain before	1
		Designing activity plan	8
Individual Gains	14	Willingness to join an activity	4
		Gaining a view point	5
		Obtaining information- sharing	4
		Meeting friends-colleagues	3
Others	2		

Table 16 included the participants' views about the gains at the end of the outdoor education activities project. The teachers determined that they obtained many gains with the training they got in this project both professionally and individually. Considering the data obtained, it can be stated that they were willing to do such activities, they gained different perspectives about the educational process, and their ability to plan, organize, and implement outdoor education activities increased. In addition, they said that they wanted to participate in such activities thereafter. The quotes below reflect the participants' opinions:

Participant 1: "Meeting new friends, getting to know our practitioner teachers, experiencing these activities, exchanging information, different perspectives, interpretations in terms of contributions to my personality, thinking broadly … In terms of my profession, making students' trips more fun and conscious, preparing a detailed plan, seeing the places to visit before (available sites)…"

Participant 3: "The training I took within the context of "Outdoor Education Activities for Elementary School Teachers" made me think differently in many ways. My professional motivation increased. If such project implementations are carried out in schools during the seminar period in spare times, they will create very effective changes."

Participant 7: "Many things! I understood again that planning was the most important for the activities. I learned directly that a very well-done preliminary preparations (equipment and tools, worksheets and etc.,) had a direct effect on the quality of the activity. I also understood that I had to read more. Moreover, I figured out that I had to follow the activities /projects announced by the universities and non-governmental organizations on their websites."

Participant 11: "My repertoire about the activities developed. Each individual's different side of creativity enriched the group differently in teamwork. In addition, I realized that the members of the teamwork should consist of different individuals."

Participant 17: "I realized that I had to do a different planning before the trip, I had to plan the activities that must be carried out with students during the trip and do evaluation after it. My trips will be much more different in the future."

Participant 19: "These are the contributions of the project: I must go out of the class. I must be ready and planned for the trip. I must use the drama method. I must develop myself about drama. I must not neglect assessment and evaluation."

Participant 25: "I believe that the gains I acquired in this project will make contributions not only to my professional life but also to my personal development in my social life. I will show my pupils to see more details, and thus they will learn that the knowledge is more permanent."

The participants stated in the interviews that the gains they obtained at the end of the project were quite satisfying both professionally and individually. Even they said that they started using the skills and knowledge they acquired in the educational process. For example, the participants expressed this in interviews 1,2,3, and 5 like that:

Participant 17: "I understood the importance of education outside the class. I am a teacher who does not like museums. I have never liked it since my childhood. …. Also, I haven't visited it. First, I must go and see it. I have to get prepared. I learned this, too. Drama games were very nice, and I really use them. I have my students play the games. I told about the training that I received at the beginning of the term in parents' meeting. I shared with them what I was going to do with my pupils. It was a 40-minute presentation. They all liked it very much."

Participant 20: "We picked up leaves, but we did not catalogue them. I have never come up with such an idea. It was a very original activity. There was such an activity this week. We organized it with my three colleagues with whom I joined the training."

Participant 26: "I am in a norm staffing position in my school. Thus, I was assigned to a special low class. I can use drama here. I share what I have learnt with my colleagues. When I have my own class, I will certainly plan and do such activities."

Participant 25: "My attitudes towards the children have changed. We usually line up students and tell them not to touch around. When we leave, nothing is shared. ….. But now I am trying to have my students get prepared and do such activities in the class."

All the responses given to the "Evaluation Form of Outdoor Education Activities Project for Elementary School Teacher"s were scanned in terms of **the statements about the importance of planning** and while planning was mentioned **13 times in the pre-test**, this number went up to **30 in the post-test.** Similar expressions supporting the same result were encountered during the interviews. The participants' statements from the interviews were given as examples below:

Participant 20: "…Planning impressed me a lot. I believed that planning was half of this impression. After that, I will pay more attention to planning."

Participant 18: "I must know my purposes if I want to show someone round. I must plan my activity in line with my purpose and I must know the place that I am going to visit before my students so that I can teach something to them…"

As seen, teachers had gains which overlapped with the main purpose of the "Outdoor Education Activities for Elementary School Teachers" project and which were related to the acquiring planning skills for education outside the class and the importance of planning. These gains increased both their motivation for planning a trip and overcoming difficulties. In addition, the teachers were convinced about the applicability of these activities.

Discussion and Conclusion

This project aimed at developing teachers' skills and knowledge about outdoor education activities with the implementations carried out in different learning environments. As a result of the research, considering the distribution of the percentages and frequencies of responses given in the pre-test and post-test of "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings", it is observed that the training given within the context of project called "Outdoor Education Activities for Elementary School Teachers" increased the participants' self-efficacy beliefs in general. Looking at the results about the positive statements that completely supports self-efficacy belief, the percentages and frequencies of the options strongly agree and agree given to the items increased significantly in the post-test. Considering the negative expressions included in the scale, it was found that there was a decrease with the percentages and frequencies of the options strongly agree and agree which support positive perceived competence in the post test. Means were calculated for each item of the responses given to the "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings" in the pre-test and post-test. Considering the mean values, it was revealed that means of all items increased in the post-test.

Considering the Dependent Groups T-test total scores of the project groups' "Self-Efficacy Belief Scale for Planning and Organizing Educational Trips to Out of School Settings", it is found that there is a statistically significant difference between the pre-test scores and post-test scores in favor of the post-test, at the α: 0.01 significance level and 21 degrees of freedom. While the mean pre-test scores of the project group was 4.00, the mean post-test scores were 4.46. Based on this, it could be concluded that the curriculum and the activities prepared and implemented within the context of the project called "Outdoor Education Activities for Elementary School Teachers" developed elementary school teachers' self-efficacy beliefs for planning and organizing educational trips to out-of-school settings positively. In the research carried out by İşlek (2017) with 35 art teachers, it was found that there was a significant increase with the teachers' self-efficacy beliefs after the in-service training they received about education outside the school. Gürsoy's (2018) study revealed similar results, that is, after the training given to the pre-service science teachers within the context of learning in out-of-school settings course, positive changes occurred with the self-efficacy beliefs of the candidates about organizing trips to out-of-school settings. Gonzalez and Ortega (2018) conducted a study with science teachers working in basic education in different out-of-school environments such as museums and natural areas, and they found that this type of practice increased teachers' motivation and self-belief in organizing outdoor activities.

There are studies which explore teachers' attitudes towards outdoor education activities or trip-observation activities, views about this subject, or status of carrying out such activities and the reasons. Considering these studies, it is observed that teachers had negative attitudes and they frequently did not prefer to organize such trips. Among the reasons for being unwilling to choose such activities are mostly administrators' negative and lack of supportive behaviours, a very long and heavy procedures of legal permission process, parents' failure to understand the importance of out-of-class activities, thinking that risks and dangers are higher outside the classroom and school, crowded student groups, insufficient time and economic problems (Demir, 2009; Dietze & Kashin, 2019; Tatar & Bağrıyanık, 2012; Tungaç & Coral, 2017; Tuuling, Õun, & Ugaste, 2019; Yıldırım, 2012). In this research, 13 participants stated that they implemented outdoor education activities whereas 12 of them said that they did not implement them. The participants asserted reasons similar to the findings mentioned above about the applicability of outdoor education activities. These challenges are mostly related to the economic cost, a lot of preparation and procedures, and lack of administration support. However, it can be stated that with the training they received, their ability to deal with these problems they experienced before increased. In addition to this, after the training teachers got, they stated that they could organize trips with their students, and they could benefit from the experiences and knowledge they obtained from the training. Işık (2013) carried out a study supported by TUBITAK with 25 history and social studies teachers. After the practical and theoretical training given on museums and historical sites, teachers determined that they could not benefit from such places before the training but by organizing trips, they would use the activities they learned after the project.

Most of the participants stated that they participated in the project to enhance their skills and knowledge about what they could do while planning outdoor education activities and it is revealed that at the end of the project, all of the participants said that their expectations were realized. Participant teachers learned with concrete experiences that outdoor education activities could be carried out about a course and a subject field in any type of learning settings suitable to the learning outcomes. As a result of the training, they developed their planning skills about outdoor education activities. They learned the teaching methods and techniques and assessment and evaluation tools to be used in the process by applying in person.

The main principles of the project called "Outdoor Education Activities for Elementary School Teachers" were to enable elementary school teachers to become aware that outdoor education activities could be carried out with well-planning and to develop their planning skills. It was observed with the data obtained that teachers especially realized that after completing the legal procedures, such trips were not about only visiting and seeing the places and such activities would be effective with long-term and detailed planning. Tuuling et al. (2019), in their research with preschool teachers, concluded that teachers similarly think that out-of-classroom learning activities require more and more careful planning than in the classroom. Atmaca (2012) in his research applied outdoor education activities with pre-service science teachers in different fields. As a result of the study, it was concluded that after joining such activities, pre-service teachers took science activities outside the class more seriously with a professional point of view and completing their inadequacies in theoretical terms and implementation, they became ready to design and carry out totally new applications in the field.

Before the project, teachers defined outdoor education activities as school trips or activities that are done outside the school or class. However, after completing the training, it was observed that they diversified the spaces and places to carry out such training and different activities in their statements and they included statements such as these activities could support school learning and learning is an action that could occur anywhere. This condition reveals the result that the participants' awareness about what outdoor education activities are and how they are done raised. Feille (2017), in her research on five teachers who use outdoor activities effectively, concluded that teachers are aware of the abundance and diversity of learning opportunities outside the classroom. Tuuling et al. (2019) also observed that teachers emphasize the many and diversity of outdoor learning opportunities in their research.

The participants stated that they realized the importance of going outside the class more at the end of the project. Particularly, they became aware that outdoor education was important in terms of

different aspects such as including more concrete learning experiences outside the class, learning being more fun and permanent and easy transfer of what is learnt in the class to real life, supporting students' multidimensional development, supporting and realizing curricula's gains. Svobodová, Mísařová, Durna, and Hofmann (2020) In their research with 18 primary education teachers, teachers stated that extracurricular activities support the development of students in the fields of knowledge, skills, attitudes and social relations. Meydan and Akkuş (2014) in their study received opinions of 32 elementary school teachers about the use of museum trips in social studies course after the implementations intended for museum trips. The candidates determined that museum trips would make what is learnt permanent via learning by doing and through experience, they would increase students' interest in the course, the knowledge would become concrete, and they would be attractive for children.

In addition to the professional contributions, teachers stated that their eagerness to participate in trainings increased, they gained different viewpoints, and they had a chance to establish close relationships with their colleagues and shared their experiences and knowledge with them.

As a result, it can be said that the activities prepared and implemented within the scope of the "Outdoor Education Activities for Classroom Teachers" project and the program provided the classroom teachers' self-efficacy beliefs to be able to organize educational trips to out-of-school environments. When the related literature is reviewed, it is observed that such practical activities increase teachers' self-confidence and motivation to implement outdoor activities (Gonzalez & Ortega, 2018; Gürsoy, 2018; İşlek, 2017). At the end of the study, it was determined that the participants realized the importance of going out of the classroom, their contribution to the students and the learning process, and most importantly, such activities should be carried out with a very good planning.

Suggestions

Based on the research findings, the following recommendations are offered:

1. In-service training programs including such intensive implementations for the teachers working in different levels in Ministry of National Education should be organized. Even with the training of an educator, more teacher trainees must be trained, and more population should receive such trainings in the regions where they work.
2. Such trainings must be practical, must be integrated with different courses, subjects, and disciplines, and must be enriched with effective learning methods like drama and different tools.
3. Such projects must be popularised to reach the large masses and address teachers at different levels and branches.
4. Courses intended for outdoor education must be included and focused on in education faculties and teacher education programs.
5. Teaching courses included in elementary school education undergraduate programs in the Faculty of Education must be linked to the out-of-class learning experiences.
6. The content of in-service training which will be organized for elementary school teachers must be determined with needs analysis and then a training on outdoor education should be organized for elementary school teachers.
7. Studies should be conducted to collect data from a large sample in order to determine the difficulties teachers in all branches experience in going out of the classroom and school.
8. Studies should be conducted to prepare and test the effectiveness of such training programs for teachers addressing different subject areas or age groups.
9. Studies should be carried out to investigate the effects on academic, achievement, affective, social development, etc. by preparing programs based on out-of-class educational activities in parallel with the curriculum and applying them with students of different ages and socio-economic levels.

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