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Determination of Turkish Prospective Teachers' Past Field Trip Experiences and Examination of Their Self-Efficacy Beliefs in Planning and Organising Educational Field Trips Regarding Various Variables

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The aim of this study is to determine the prospective teachers' past field trip experiences and examine their self-efficacy beliefs in planning and organizing field trips with an educational intent regarding various variables. The study was carried via cross-sectional design and the data of the research study was gathered from total 366 prospective teachers. During the collection of data, the questionnaire form and teacher self-efficacy belief scale for organization of educational field trips (SSOET) designed by the researcher were used. The research findings revealed that only one-third of them participated in field trips and most of these trips were organized by the schools. In addition, it was revealed that prospective science teachers mostly joined the field trips with an educational intent. Moreover, a significant difference was discovered between the departments where prospective teachers studied, participating in educational field trips in their previous experiences, and receiving training on planning and organizing trips and their self-efficacy beliefs. On the other hand, the prospective teachers who participated in educational field trips in their previous experiences stated that they gained new knowledge which they did not know before and they materialized their theoretical/abstract knowledge and their retention increased. The prospective teachers stated that the educational field trips which they attended enhanced the training they received in the schools and added that their interest in various topics/events increased and they raised awareness.

Introduction

Today education activities have become a lifelong process which uses all the resources not only in schools but also in the environment. These resources which promote education in schools and are called informal education environments include many social fields. Some of them area mass media, zoos, botanical gardens, forestland, museums, libraries, aquariums, planetariums, government agencies, factories, harbours, earthquake zones, natural monuments, and science centres (Demir, 2007a; Gerber, Cavallo & Marek, 2001; Hannu, 1993; Howe & Disinger, 1988; Özgen, 2011). When compared to the instruction given in schools, these environments are more natural, flexible, and fun and they provide learning opportunities with regard to individuals' fields of interest and their learning pace with variety of activities Furthermore, these environments provide opportunities for students to

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gain different experiences, they are rich teaching materials which prevent education from being dependant on books and class atmosphere and they promote training in the schools (Demir, 2007a; Özgen, 2011; Ramey-Gassert, 1997; Tatar & Bağrıyanık, 2012; Taylor & Caldarelli, 2004).

These places which are called non-school environments offer students experiential learning opportunities, give them chance to use their five senses, and provide opportunities for their permanent learning (Yavuz & Balkan Kıyıcı, 2012). The research studies conducted reveal that students preferred flexible non-school settings to the disciplined class environments (Noel, 2007) and it was determined that knowledge and experiences which they retained most were formed as a result of learning actualized due to the trips organized to the non-school environments because the trips organized to these places increased student motivation and offered opportunities for learning with fun when compared to the traditional classroom environments (Krakowka, 2012). Many studies conducted reveal that non-school environments have positive effects on students' cognitive learning (Anderson & Lucas, 1997; Miglietta et al., 2008; Orion & Hofstein, 1994), affective learning (DeWitt & Storksdieck, 2008; Lai, 1999; Orion & Hofstein, 1994) and psychomotor learning (Houser et. al., 2011; Morag & Tal 2012). In addition, it is identified in these studies that non-school related trips foster students' thinking skills, enhance awareness, prepare a substructure for future learning (DeWitt & Storksdieck, 2008; Orion & Hofstein, 1994) and develop social skills (Houser et. al., 2011; Morag & Tal, 2012).

School trips organized to non-school environments have a lot of advantages within this framework and it is important that organization, implementation, and evaluations processes of the trip should be overemphasized to reach their aims (Bozdoğan, 2007, 2012; Demir, 2007b) because very few teaching tools can facilitate learning which a well-planned and organized school trip connected to the school curriculum can offer (Coughlin, 2010; Hurley, 2006; Kisiel, 2005; Pasquier & Narguizian, 2006; Tal, Bamberger & Morag, 2005). Moreover, the research studies conducted reveal that well-planned and orchestrated trips will reach their aims (Bozdoğan, 2007, 2012; DeWitt & Storksdieck, 2008; Güler, 2011; Lakin, 2006; Orion & Hofstein, 1994; Özgen, 2011; Tatar ve Bağrıyanık, 2012; Yavuz ve Balkan Kıyıcı, 2012). Well-designed trips make contributions to social and personal development of students because they work collaboratively (Dillon et. al., 2006) and help them to build relationship between reality and theory at a high level (Krakowka, 2012). Moreover, it was discovered that students acquired more scientific thinking skills in rich non-school environments (Gerber, Cavallo & Marek, 2001).

Within this scope, teachers play a dominant role in organizing non-school environments to promote education in the school. Teachers must actively participate in the process of planning and organizing educational trips to non-school environments and they must make an effort for a successful trip (Demir, 2007a). However, the research studies conducted reveal that although teachers know that trips which are organized to non-school environments will yield effective results on students, they do not prefer such activities much (Carrier, 2009; Moseley, Reinke & Bookout, 2002; Orion et. al., 1997; Simmons, 1998; Smith-Sebasto & Smith, 1997; Tatar & Bağrıyanık, 2012; Türkmen, 2010). The reasons why teachers do not prefer non-school environments much are that they are pedagogically unqualified (Griffin & Symington 1997; Kisiel 2003; Michie, 1998; Olson, Cox-Petersen & McComas, 2001; Tal & Morag, 2009; Tal & Steiner, 2006), they are not actively engaged in the process of trip, and they do not have any knowledge about the process of planning and organizing trips (Anderson, Bethan & Mayer-Smith, 2006; Bozdoğan, 2012; Demir, 2007b; Ferry, 1993; Tal,



Bamberger & Morag, 2005). The studies conducted reveal that not only teachers but also prospective teachers do not have enough knowledge and experiences regarding planning and organizing trips (Bozdoğan, 2012; Demir, 2007a; Wunder, 2002). However, it is pointed in the research studies conducted that the training prospective teachers received during their university years about designing trips to non-school environments yielded successful results. For example, in a study conducted, the prospective teachers were given a chance to practice the training they received about organizing trips on their students and prospective teachers' views within this context of implementation were taken. Most of the prospective teachers stated that this experience made positive contributions to them regarding planning a trip, coordination of students, time management, and collaboration with the other teachers. Moreover, prospective teachers stated that they realized the importance of non-school settings in terms of education and they would use field trips as a means of education when they became a teacher (Krahenbuhl, 2014). There are similar results in the literature (Catherine & Catherine, 2011; Chin, 2004; Munakata, 2005).

As it is indicated, the studies conducted reveal that both teachers and prospective teachers encountered various problems regarding planning and organizing educational school trips which were particularly connected to the course and it was also found that professional training must be given to provide solutions to these problems. For that purpose, prospective teachers specifically should receive such training during their university education and this will make contributions to them to use non-school environments effectively and efficiently in their professional life. However, before prospective teachers take part in the process, identification of their self-efficacy beliefs and discovery of their attitudes will provide a viewpoint to the instructors of the course. The instructor should do planning in the light of this data, organize instructional process, and overcome the deficiencies which are very important for the professional development of prospective teachers.

The Purpose of the Study

The purpose of the study is to determine the prospective teachers' past field trip experiences and examine their self-efficacy beliefs in planning and organizing field trips with and educational intent with regard to various variables. The research sought answers to the following questions.

- (1) Do prospective teachers consider themselves qualified to plan and organize field trips with an educational intent?
- (2) Is there a significant difference between total self-efficacy scores of prospective teachers about planning and organizing a field trip and gender, their state of joining educational field trips and receiving training on organizing an educational field trip in their past experiences?
- (3) Is there a significant difference between the prospective teachers' genders and their state of joining educational field trips, their training on organizing a trip, their preferences for the trips and the variables related to the individuals/ organizations that designed the trips which they participated in?
- (4) Is there a significant difference between the departments where the prospective teachers studied and their attitudes towards attending educational field trips, their preferences for the trips, receiving training on planning and organizing trips, and the variables related to the individuals/ organizations that designed the trips which they attended?

- (5) What contributions did field trips with an educational intent make to the prospective teachers?

Methodology

In the research, a cross-sectional survey design, one of the quantitative research methods, was used. This method is conducted to make evaluation in line with standards, and to reveal the possible relationships between the events. The main purpose of such research is to identify and explain the case which is examined in detail. This method was used in the study because it was considered that both prospective teachers' past field trip experiences would be determined and their self-efficacy beliefs in planning and coordinating educational field trips would be examined and described with regard to various variables.

Participants

The research study was carried out in 2013-2014 academic year. Out of total 366 prospective teachers who participated in the study and were in their fourth year of studies, 148 of them are males and 218 of them are females. Out of 366 prospective teachers, 114 of them were studying in Science Teaching Department, 113 of them in Social Studies Education Department, and 139 of them in Primary School Teaching Department. They were randomly selected from four different Educational Faculty in Turkey. The ages of the prospective teachers ranged from 22 to 27.

Data Collection Tools

During the process of data collection, questionnaire form and teacher self-efficacy belief scale for organization of educational field trips (SSOET) developed by the researcher were used. The questionnaire form consists of 3 close-ended questions and 1 open-ended questions. SSOET which is composed of total 30 items, 17 positive and 13 negative items, is a 5 point Likert type scale. The scale's Cronbach's Alfa reliability coefficient was calculated to be 0,931 (Bozdoğan, 2015).

Data Analysis

Frequency, percentages and arithmetic average, which are descriptive statistical methods, were used for the statistical analysis of data collected for the sub-problems whose answers were sought within the framework of the general purpose of the research and t-test and one-way ANOVA were benefited from to determine the differences between the independent variables. One open-ended question in the questionnaire were analysed via content analysis. As a result of content analysis, the reliability of the research was calculated with the formula suggested by Miles and Huberman (1994) (Agreement /Agreement + Disagreement) and nearly %89 agreement was found.

Findings

The total SSOET points of prospective teachers were examined regarding various variables and presented in Table 1.



Table 1. Examination of prospective teachers' total SSOET points regarding various variables

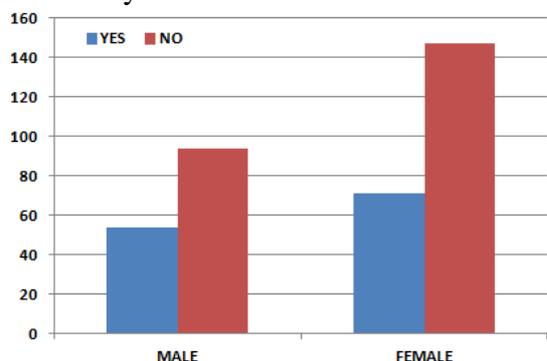
Variables	f	Min.	Max.	M(SD)	Values	p
Gender						
Male	148	2.07	4.98	3.77(.580)	1.432	.153
Female	218	2.30	4.97	3.69(.493)		
Attitudes towards participating in educational field trips						
Yes	125	2.60	4.98	3.87(.508)	3.780	.000*
No	241	2.07	4.93	3.65(.528)		
Attitudes towards receiving training on planning and organizing field trips						
Yes	32	3.50	4.98	4.14(.409)	4.758	.000*
No	334	2.07	4.97	3.68(.524)		
Department						
Science Teaching ¹	114	2.07	4.98	3.79(.570)	4.757	.009**
Primary School Teaching ²	139	2.77	4.87	3.62(.449)		
Social Studies Education ³	113	2.30	4.93	3.79(.565)		

*n=366, total M(SD)=3.72(.531) for t-test df=364, for Anova df=2-363, significant difference according to Post Hoc test 1-2 and 3-2, * $p < .001$, ** $p < .05$.*

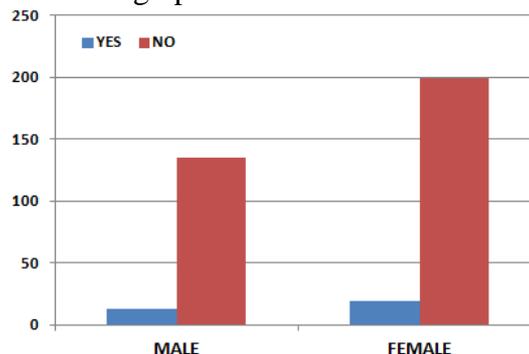
It was found that the prospective teachers considered themselves qualified to plan and coordinate field trips with an educational intent ($M=3.72$). When the prospective teachers' self-efficacy scores regarding the variable of gender was examined, it was revealed that male prospective teachers' averages were higher than female prospective teachers, but there was not a significant difference between them ($p=.153$). In addition, it was discovered that 34.7 % of the prospective teachers participated in educational field trips in their previous experiences and it was found that there was a significant difference between the self-efficacy scores of the prospective teachers who participated in educational field trips in their past experiences ($M=3.87$) when compared to those who did not join such trips ($M=3.65$). Considering this point it can be stated that the experiences of prospective teachers who participated in educational field trips in the past made contributions to regard themselves more qualified to plan and organize trips. Still another important finding is that only 8,7 % of the prospective teachers received training (elective course, course, seminar, and etc.,) on how to design and organize an educational field trip in their university education. A significant difference in favour of prospective teachers who received training was determined ($p=.000$) between the self-efficacy scores ($M=4.14$) of the prospective teachers who received training on planning and organizing educational field trips and those prospective teachers who did not receive training ($M=3.68$). When the prospective teachers' self-efficacy scores of designing educational field trips regarding the departments in which they studied are examined, it is revealed that the scores of prospective science teachers and prospective social studies teachers were ($M=3.79$) and the scores of prospective primary school teachers were ($M=3.62$). When these scores were taken into consideration, it was determined that there was a significant difference between the self-efficacy scores of the prospective teachers with regard to the departments they studied ($p=.009$). The results of the Post Hoc analysis demonstrated that this difference was in favour of prospective science teachers when the prospective science teachers and primary school teachers were compared and it was in favour of prospective social studies teachers between the prospective social studies teachers and primary school teachers.

The relationship between the prospective teachers' attitudes towards joining educational field

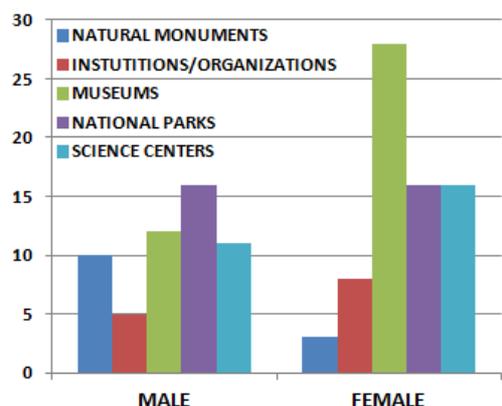
trips, their receiving training on organizing a trip, their preferences for the trips and the variables related to the individuals/ organizations and their genders and the departments where they studied was examined and it was presented in graphics below.



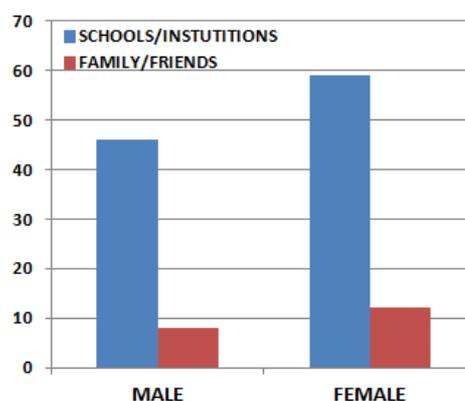
Graphic 1. The graphical display of the relationship between the prospective teachers' genders and their attitudes towards participating in educational field trips in their past experiences



Graphic 2. The graphical display of the relationship between the prospective teachers' genders and their training on planning and organizing educational field trips



Graphic 3. The graphical display of the relationship between the prospective teachers' genders and the educational field trip sites which they went on in their past experiences



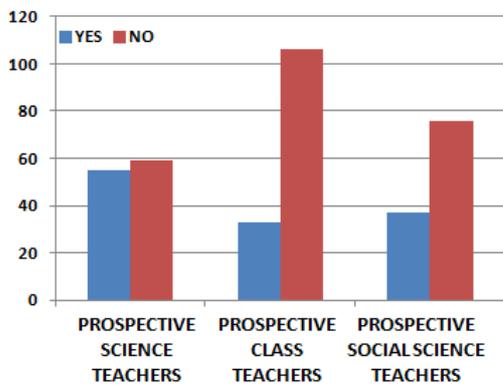
Graphic 4. The graphical display of the relationship between the prospective teachers' genders and the individuals/organizations that organized the field trips which they participated in their past experiences

For Graphic 3 and Graphic 7 ;

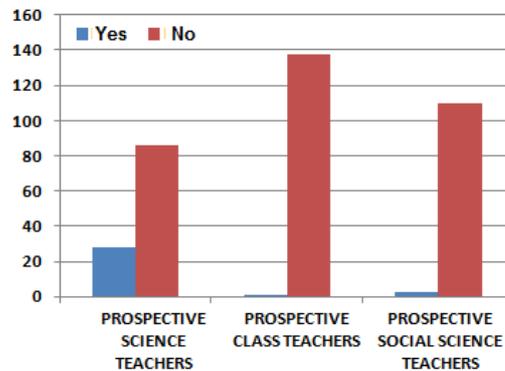
Natural Monuments: Karaca Cave, Fairy Chimneys, , Tuzluca Salt Mine. **Organizations/ Corporations;** The Atatürk Dam, The Hirfanlı Dam, The Altinkaya Dam, Directorate of Meteorological Service, The Çayeli Copper Mine, Ömerli Water Treatment Plant, Afyon Marble Factory. **Museums;** The Topkapı Palace, The Mausoleum of Atataturk, Catalhoyuk Open Air Museum, Giresun Museum, Aslanteppe Tumulus, Panorama Museum, Antakya Archaeology Museum, Ephesus Open Air Museum, Miniaturk, The Sumela Monastery, Ani Ruins, Maras Museum. **National Parks;** Gelibolu National Park, Ilgaz National Park, Nene Hatun National Park Ayder National Park, Uzungol and Sera Golu. **Science Centers;** Feza Gürsey Science Centre, Energy Park

It was determined that out of 148 male prospective teachers who participated in the research, 54 of them joined educational field trips in their past experiences and out of total 218 female prospective teachers, 71 of them attended educational field trips in their past experiences (Graphic 1). There is not a significant difference between the prospective teachers' attitudes towards participating in field trips with an educational intent and genders [$\chi^2(1)=0.602$; $p>.05$, $p=0.438$]. Moreover, it was found that out of total 148 male prospective teachers and 218 female prospective teachers, only 13 males and 19 females got training on planning and

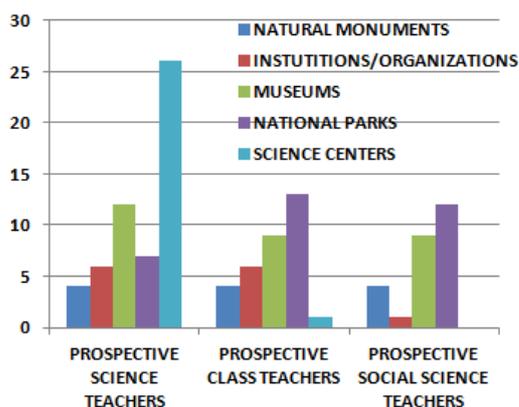
organizing educational field trips in their past experiences (Graphic 2). A significant difference was not identified between the prospective teachers' state of receiving training and genders [$\chi^2(1)=0.001$; $p>.05$, $p=0.982$]. In addition, it was discovered that out of 54 male prospective teachers who participated in the field trips, 16 of them preferred national parks, 12 of them museums, 11 of them science centres, and 10 of them natural monuments. Out of 71 female prospective teachers, 28 of them preferred museums, 16 of them national parks, and 16 of them science centres (Graphic 3). There is a significant difference between the trip sites which prospective teachers went to and their genders [$\chi^2(4)=9.654$; $p<.05$, $p=.047$]. In this context, what draws attention is that when compared to male prospective teachers, female prospective teachers often prefer the trips to the indoor areas such as museums and science centres. Moreover, it was revealed that out of the male prospective teachers and female prospective teachers who participated in the field trips, 46 males and 59 females preferred the trips which were organized by the schools (Graphic 4). There is not a significant difference between the individuals/ organizations that organized the trips and the prospective teachers' genders who attended these trips [$\chi^2(1)=1,186$; $p>.05$, $p=0.553$].



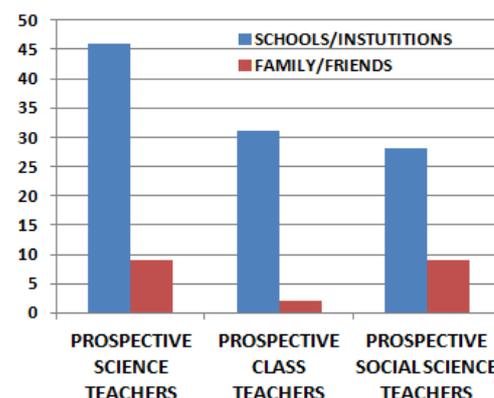
Graphic 5. The graphical display of the relationship between the prospective teachers' departments where they studied and state of participating in an educational field trips in their past experiences



Graphic 6. The graphical display of the relationship between the prospective teachers' departments where they studied and their state of receiving training on planning and organizing field trips in their past experiences



Graphic 7. The graphical display of the relationship between the prospective teachers' departments where they studied and the educational field trip sites which they went on in their past experiences



Graphic 8. The graphical display of the relationship between the prospective teachers' departments where they studied and the individuals/organizations that organized the field trips which they participated in their past experiences

It was revealed in the study that out of 114 prospective science teachers, 115 prospective social studies teachers, and 139 prospective primary school teachers, 55 prospective science teachers, 37 prospective social studies teachers, and 33 prospective primary school teachers joined field trips with and educational intent before (Graphic 5). A significant difference was determined between the prospective teachers' participation in educational field trips and departments where they studied [$\chi^2(2)=16.868$; $p<.05$, $p=.000$]. It was revealed that this difference was in favour of prospective science teachers, in other words, prospective science teachers experienced field trips more than the others. Moreover, it was found that out of the prospective science teachers, social studies teachers and primary school teachers who took part in the study, only 28 prospective science teachers, 3 prospective social studies teachers, and one prospective primary school teacher had training on planning and organizing field trips with an educational intent in their past experiences (Graphic 6). A significant difference was determined between the prospective teachers' training and departments where they studied [$\chi^2(2)=52.217$; $p<.05$, $p=0.000$]. It was revealed in the analyses that this difference was in favour of prospective science teachers, in other words, prospective science teachers had more training on planning and organizing a field trip with an educational intent. It was found that prospective science teachers received this training by participating in a seminar held in their university. There is a significant difference between the preferences of prospective teachers who attended an educational field trip and their departments [$\chi^2(8)=48,072$; $p<.05$, $p=.000$]. In this context, it was revealed that out of the prospective science teachers joining field trips, 26 of them visited science centres and 12 of them went to the museums. Furthermore, among the prospective social studies teachers, 19 of them visited museums and 12 of them preferred national parks and out of primary school teachers, 13 of them preferred national parks and 9 of them visited museums (Graphic 7). These results reveal that prospective teachers mostly preferred field trips which were connected to their majors. Another finding which drew attention is that none of the prospective social studies teachers who took part in the study did not participate in a trip organized to science centres. In addition there is a significant difference between the departments of prospective teachers where they studied and the individuals/ organizations that organized their trips [$\chi^2(4)=13,735$; $p<.05$, $p=.008$]. It was found that among the prospective teachers who participated in educational field trips, 46 prospective science teachers, 28 prospective social studies teachers, 31 prospective primary school teachers went on the trips which were organized by the schools (Graphic 8). These findings reveal that prospective primary school teachers did not prefer their families or friends in educational field trips at a meaningful level.

The content analysis of the open ended question “What contributions did educational field trips to the non-school environments make to you ?” asked to the prospective teachers within the content of the research was presented in Table 2.

Table 2. Prospective teachers' views on the trips they went on (n=125)

Prospective Teachers' Views	f
1. They enabled me to gain new knowledge which I did not know before	51
2. They materialized the theoretical / abstract information we learned in the school and promoted its retention	34
3. They created awareness by enhancing my interest in various topics/ events	13
4. They taught me how to plan and organize a field trip with an educational intent	11
5. They provided opportunities to investigate the things which I was curious about	10
6. They made me gain various experiences	3
7. They made contributions to our social interaction	3

Fifty-one prospective teachers stated that with the educational field trips, they learned new



knowledge which they did not know before. For example, the prospective social studies teacher who participated in a field trip to Gallipoli Peninsula Historical National Park located within the borders of Çanakkale said;

“I saw the places where the Battle of Gallipoli took place. I learned how the battle progressed and on which fronts the war was fought. I visited the museum and I, personally, saw the things used in the battle. I also saw the statue of Corporal Seyit(Seyit Onbaşı). Our guide told us the war. I have never forgotten what happened there and I can still visualize them. I had an opportunity to see and learn what happened in the war (M₄)”.

Moreover, a prospective primary school teacher who participated in a trip to the Salt Mine in Tuzluca, Iğdır stated;

“We went to a salt mine. I haven’t had any idea before that it took years for the formation of salt and I learned it. Because the inside of the cave was cool, it cured some respiratory diseases such as asthma (M₇₄)”.

Another prospective science teacher who went on a trip to the Ataturk Dam said;

“I found the answer to the question how electricity is generated. I gained information about how the dams work and how they produced electricity (M₃₄₄)”.

In addition, a prospective social studies teacher who participated in a trip to Antakya Archaeology Museum in Turkey stated;

“I had an opportunity to learn which period the mosaics exhibited in the museum belonged to and their features (M₁₃₅)”.

Thirty –four prospective teachers stated that thanks to the educational field trips, they materialized the theoretical and abstract knowledge they gained in the schools and field trips enhanced knowledge retention, so the trips promoted training in the schools. For example, a prospective social studies teacher who participated in a trip to Göreme Open Air Museum located in Cappadocia Region said;

“It was really nice and educational to learn the region and its structure concretely. What we learned during the lesson became more permanent (M₂₀₁)”.

Still another prospective social studies teacher who participated in a trip to the Gallipoli Peninsula National Historical Park said;

“We were generally given theoretical information about the events and the locations where the Battle of Gallipoli took place. Seeing the fronts reinforced my knowledge about the issue. I understood the battle in there much better. Thanks to this trip, I gained concrete knowledge (M₁₁)”.

A prospective science teachers who participated in a trip to Feza Gürsey Science Centre in Ankara-Turkey said;

“I reinforced the information I had learned and my knowledge retention increased. I both learned and enjoyed (F₃₃₀)”.

Thirteen prospective teachers stated that their interest in various topics/ events increased with the educational field trips they attended and this created awareness. For example, a prospective science teacher who went to the Energy Park in Ankara stated;

“After seeing the renewable and non-renewable energy sources, I realized which measures to take in the future to have a cleaner environment (M₂₈₇)”.

Eleven prospective teachers stated that thanks to the trips they participated in, they learned how to organize an educational trip. For example, while a prospective social studies teacher who joined a trip to Göreme Open Air Museum in Cappadocia Region said;

“During a trip, I learned how to maintain control, meet the needs, and what we need to pay attention for a trip to reach its aim (F₂₃)”.

In addition, ten prospective teachers remarked that the trips provided them to investigate the things which they were curious about. For example, a prospective social studies teacher who went to Kaçkar Mountain National Park in Rize said;

“We had organized an educational trip to Ayder Plateau. We had an opportunity to study the vegetation, nature and rural life (F₉₄)”.

Another prospective social studies teacher who participated in a trip organized to The Ruins of Ani in Kars said;

“I had a chance to study the historical structures which I had not seen before (F₁₉₄)”.

Finally, three prospective teachers determined that they gained different experiences from the educational trips and three of them expressed that the trip process made contributions to enhance social interaction. For example, a prospective social studies teacher who joined a trip to Gallipoli Peninsula National Historical Park said;

“It made us gain a lot of experiences. There was self-confidence, knowledge, curiosity and endless excitement. It was an experience which made 90% contribution to the development process of an individual (M₁₁₂)”

Another prospective social studies teacher who went to Allahuekber Mountain National Park located between Erzurum and Kars stated;

“Because I visited mostly the historical places, I had moral feelings and I had experience about what to see and learn in which regions (M₁₂₁)”.

Discussion and Conclusion

As a result of the study conducted, the prospective teachers' scores from the self-efficacy scale about planning and organizing a field trip with an educational intent revealed that they considered themselves qualified. It was found that the self-efficacy of prospective teachers did not demonstrate a significant difference regarding gender, but there was a significant difference in terms of departments. In this context, it was discovered that prospective science teachers and prospective social studies teachers regarded themselves more qualified about planning and organizing educational field trips at a significant level when compared to the prospective primary school teachers. It was also revealed that among the prospective teachers who participated in the study, only one-third of them participated in educational field trips in their past experiences and they preferred to visit national parks, museums, and science centres in these trips. As it is viewed, the rate of prospective teachers' participation in field trips is low. There are a lot of research studies in the literature which explain the reasons why field trips are not preferred much. Financial problems (Carr, 2003; McKeown-Ice, 2000; Mc-Lure, 1999; Ritchie & Coughlan, 2004), lack of teacher/administration interest and knowledge, (McKeown-Ice, 2000; Morag & Tal, 2012; Tal, Bamberger & Morag, 2005), strict curriculum (McKeown-Ice, 2000; Goh & Ritchie, 2011), lack of information about the content of the trip, long hours of travel and weather conditions (Goh & Ritchie, 2011) can be listed as the reasons. It is suggested that universities should support the trips financially and various compulsory or elective courses should be included in



the curriculum for the prospective teachers to prefer the field trips and develop themselves professionally. These recommendations can increase the prospective teachers' demands for field trips. Another important finding in the study conducted is that the prospective teachers who participated in field trips in their past experiences considered themselves more qualified about planning and organizing field trips at a meaningful level. This finding reveals that the prospective teachers who participated in field trips in their past experiences gained various experiences in these trips and these experiences had positive effects on their ability to plan and organize field trips. When it is taken into consideration that field trips most frequently provide knowledge retention and experiences (Krakowka, 2012) and an average student in the class who participate in field trips fairly develops his research and inquiry skills (Hefferan, Heywood & Ritter, 2002), prospective teachers' gaining different experiences in such implementations will make contributions to their professional development. For that purpose, the studies conducted reveal that prospective teachers acquire very important experiences about planning and organizing field trips and the details which they need to pay attention due to the field trips they participate in (Bozdoğan, 2012; Munakata, 2005). Still another finding in the study is that there is a significant difference between the prospective teachers' attitudes towards joining field trips and the departments where they study. It was revealed in the study that prospective science teachers most frequently attended educational field trips and prospective social studies teachers and prospective primary school teachers followed them respectively.

Another result in the research is that only 8,7% of the prospective teachers received training (elective course, course, seminar and etc..) on how to plan, organize, and manage educational field trips in their university years. As it is viewed, this rate is rather low. The analysis carried out in this context reveal that the prospective teachers who received this training consider themselves more qualified at a significant level regarding planning and organizing field trips. This result demonstrates that prospective teachers gained different experiences and knowledge with this training during the university years and these experiences and knowledge had positive effects on their ability to plan and organize field trips. When literature is reviewed, there are a lot studies which support this finding. It is specifically identified in the studies conducted that research courses based on field trips included in the curriculum will increase prospective teachers' motivation to do research, they will provide opportunities to them to work collaboratively, and they will also foster their self-confidence in their professional life by developing their scientific skills (Bozdoğan, 2012; Hefferan, Heywood & Ritter, 2002; Tal, Bamberger & Morag, 2005). Moreover, it was emphasized that providing courses and also opportunities to the prospective teachers to perform an application made positive contribution to their professional development regarding planning and organizing a trip, making connections with the course, coordinating students, using time efficiently and collaborating with the other teachers. Furthermore, courses and implementations included in the curricula create awareness within the prospective teachers because it was reported that the prospective teachers realized the importance of the activities they did in the field trips and they stated that they would use the trips as an educational tool when they became teachers (Catherine & Catherine, 2011; Chin, 2004; Chin & Hsiao-Lin, 1999; Krahenbuhl, 2014). It was discovered in the research studies conducted that teachers had a lot of weaknesses about organizing field trips (Kisiel, 2005; Tal, Bamberger & Morag, 2005; Tal & Steiner, 2006). Therefore, it is suggested that teachers should be offered training about planning and organizing educational field trips and the requirement for the frequent use of educational field trips in education should be supported (Ekeke, 2007; Tal, Bamberger & Morag, 2005). Another finding revealed in the study is that considering the departments, a significant difference in favour of prospective science teachers regarding receiving training

about planning and organizing non-school related field trips was determined. It was discovered that prospective science teachers got this training by participating in a seminar held in their universities.

It was found in the study that nearly 85% of the prospective teachers who participated in educational field trips in their past experiences preferred trips organized by the schools. At this point, there are scarcely any prospective teachers who joined field trips with their friends and families. When this result is examined in terms of departments, it is found that prospective primary school teachers do not prefer to be with their families in such trips at a significant level. It is possible to reach similar results in literature regarding preferences of prospective teachers. For example, it was found in the studies conducted that field trips were usually organized to interesting settings by the schools (Morag & Tal 2012); families were not mentioned among the social groups which affected students' participation in the field trips but teachers and class mates had an effect on them (Goh & Ritchie, 2011; Wong & Wong, 2008; Xie, 2004). However, the research studies conducted have revealed that students who attended trips to non-school settings with their families gained more knowledge and scientific thinking skills when compared to other students (Crowley et. al., 2001) and their problem solving skills considerably developed (Carr, 2004).

A significant difference was determined between the prospective teachers' trip preferences and the departments where they studied in the study conducted. In this context, it was discovered that prospective science teachers mostly preferred science centres and museums, prospective social studies teachers mostly went to the museums and national parks, and prospective primary school teachers mostly visited national parks and museums. These results reveal that prospective teachers mostly preferred trip sites related to their majors. Another interesting result is that female prospective teachers preferred the trips to indoor locations more than the male prospective teachers at a significant level. It is pointed in literature that the most important reason for the preferences of field trips is the content of the trip. When it is taken into consideration that most of the students chose field trips because they thought that they were beneficial to their studies and their future careers (Goh & Ritchie, 2011), it is suggested that educators can use field trips as a means in this regard. Moreover, educators must emphasize the importance of the field trips because the implementations of the concepts learned in the classroom will be observed in the real world with field trips. Thus, the question marks in the students' minds related to the purpose of the trip will be eliminated and it will help students to gain positive attitudes towards field trips.

The prospective teachers' responses to the question "What contributions did the educational field trips you attended to non-school settings make to you?" were examined. In this context, 41% of the prospective teachers who attended field trips with an educational intent to non-school settings in their past experiences stated that they learned and gained new knowledge which they had not known before as a result of the educational trips and 27% of them expressed that retention of theoretical/ abstract knowledge which they learned in the school enhanced via becoming concrete; thus field trips promoted education in schools. A well-planned field trip enables students to work collaboratively and establish a relationship between reality and theory at a high level (Krakowka, 2012). It is suggested in the studies conducted that field trips have positive effects on cognitive learning (knowledge, understanding and thinking skills) (Anderson & Lucas, 1997; Houser et. al., 2011; Miglietta et al., 2008; Morag & Tal 2012; Orion & Hofstein, 1994; Pace & Tesi, 2004; Skop, 2009). Moreover, 11% of the prospective teachers stated that their interest in various topics/events increased and this created awareness, 9% of them stated that they learned how to organize a



field trip with an educational intent, and 8% of them remarked that trips provided an opportunity to examine the things which they were curious about. In addition to this, 2% of the prospective teachers stated that they gained different experiences with the trips and 2% of them noted that the trip procedure made contributions to increasing social interaction. The research studies reveal that field trips provide opportunities for more affective learning (feelings and attitudes) and to foster thinking skills, and they set up a substructure for future learning by raising awareness (DeWitt & Storksdieck, 2008; Houser et. al., 2011; Krahenbuhl, 2014; Melber & Cox-Petersen; 2005; Morag & Tal 2012; Orion & Hofstein, 1994). Moreover, the studies demonstrate that field trips increase social interaction (Houser et. al., 2011; Morag & Tal 2012; Pace & Tesi, 2004), develop independent research skills (Skop, 2009), and make contributions regarding planning and organizing field trips, coordinating students, using time efficiently and collaborating with the other teachers (Krahenbuhl, 2014).

When it is taken into consideration that only one-third of the prospective teachers who participated in the study joined field trips in their past experiences and less than one-tenth of them received training on organizing field trips, it is revealed that all the prospective teachers, but, particularly primary school teacher candidates, must be offered training at undergraduate level to create connections between the course and non-classroom settings and use them educationally. Such training which will be offered to prospective teachers must not remain a theory and prospective teachers must gain experiences by practising them. Considering this point, it is important that administrators should provide the necessary financial support for the implementation of such courses. When it is taken into account that most of the prospective teachers preferred locations related to their majors, it can be suggested that educators should use field trips as a tool for their students' professional development. Thus, prospective teachers will gain positive attitudes towards field trips.

Because the sampling of the study is limited, it is required to reach multiple data. Regarding this point, research studies with different study groups consisting of teachers and prospective teachers who can use non-school settings in their courses can be carried out. In addition, experimental studies at undergraduate level and in primary and secondary schools regarding the use of non-school environments can be designed.

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