To my loved ones…

Perceptions of Practices and Partnerships in Museum Education: A Case Study

The Graduate School of Education

of

İhsan Doğramacı Bilkent University

by

Aysun Çadallı

In Partial Fulfilment of the Requirements for the Degree of

Doctor of Philosophy in the Program of Curriculum and Instruction

İhsan Doğramacı Bilkent University
Ankara

October 2019

İHSAN DOĞRAMACI BILKENT UNIVERSITY

GRADUATE SCHOOL OF EDUCATION

Perceptions of Practices and Partnerships in Museum Education: A Case Study

Aysun Çadallı

October 2019

I certify that I have read this doctoral dissertation and have found that it is fully adequate, in scope and in quality, as a dissertation for the degree of Doctor of Philosophy in Curriculum and Instruction.

Asst. Prof. Dr. Jennie Farber Lane (Supervisor)

I certify that I have read this doctoral dissertation and have found that it is fully adequate, in scope and in quality, as a dissertation for the degree of Doctor of Philosophy in Curriculum and Instruction.

Prof. Dr. Margaret K. Sands (Examining Committee Member)

I certify that I have read this doctoral dissertation and have found that it is fully adequate, in scope and in quality, as a dissertation for the degree of Doctor of Philosophy in Curriculum and Instruction.

Prof. Dr. Dominique Selin Tezgör (Examining Committee Member)

I certify that I have read this doctoral dissertation and have found that it is fully adequate, in scope and in quality, as a dissertation for the degree of Doctor of Philosophy in Curriculum and Instruction.

Prof. Dr. Müge Artar, Ankara University (Examining Committee Member)

I certify that I have read this doctoral dissertation and have found that it is fully adequate, in scope and in quality, as a dissertation for the degree of Doctor of Philosophy in Curriculum and Instruction.

Prof. Dr. Gaye Teksöz, Middle East Technical University (Examining Committee Member)

Approval of the Graduate School of Education

Prof. Dr. Alipaşa Ayas (Director)

ABSTRACT

PERCEPTIONS OF PRACTICES AND PARTNERSHIPS IN MUSEUM EDUCATION: A CASE STUDY

Aysun Çadallı

Ph. D. in Curriculum and Instruction

Supervisor: Asst. Prof. Dr. Jennie Farber Lane

October 2019

The current study describes how case study methodology, using a phenomenographic research approach, gained insights into the perceptions of teachers and museum staff about museum education and field trips. The case involved one private middle school in Ankara, Turkey and its local museums. The primary source of data for this study was interviews conducted with museum staff and teachers. The data from the teacher interviews were supplemented with a questionnaire. Most museums in Ankara were visited and seven staff members were conveniently selected for interviews based on their work with schools and their availability. All 31 teachers in the case study school participated. During the museum interviews, one institution offered to provide an orientation session for participant teachers. Nearly all the case study teachers participated in the session and they shared their perceptions about it via a questionnaire and during follow up interview questions. It became clear during the literature review and data analysis that for museums and schools to work together for student learning it is important they be partners. Therefore, this study used an analytical framework to explore the level of partnership between the case study school and its local museums. The findings reveal that there is weak level of cooperation between the institutions which can be improved with communication and better definition of roles, and it is best to identify a school staff member who serves as a liaison between the school and the museums, ensuring consistent communication and sharing of ideas.

Key words: Analytical framework, Museum education, Partnerships, School liaison

ÖZET

MÜZE EĞİTİMİNDE DENEYİMLERİN VE İŞ BİRLİKLERİNİN ALGILANMASI: DURUM ÇALIŞMASI

Aysun Çadallı

Doktora, Eğitim Programları ve Öğretim

Tez Yöneticisi: Dr. Öğr. Üyesi Jennie Farber Lane

Ekim 2019

Bu araştırma, durum çalışma yönteminin, öğretmenlerin ve müze personelinin müze eğitimi ve gezileri ile ilgili algılarını fenomenografik araştırma yaklaşımı çerçevesinde nasıl anlamlandırdığını incelemektedir. Durum çalışması, Ankara, Türkiye'de bir özel ortaokulu ve yerel müzeleri kapsamaktadır. Bu çalışmada birincil veri kaynağı müze personeli ve öğretmenlerle yapılan görüşmelerdir. Görüşmelerden elde edilen veriler öğretmenlere gönderilen anketlerle desteklenmiştir. Ankara'daki müzelerin bir çoğu ziyaret edilip, yedi müze personeli okullarla olan çalışmaları ve uygunlukları doğrultusunda seçilmiştir. Durum çalışmasının yapıldığı okuldaki 31 öğretmenin tamamı çalışmaya katılmıştır. Müze personeli ile yapılan görüşmeler sırasında bu kurumlardan birisi, durum çalışmasına katılan öğretmenlere tanıtım programı düzenlemeyi önermiştir. Durum çalışmasına katılan öğretmenlerin çoğunluğu bu programa katılabilmiştir. Öğretmenlerin program ile ilgili görüşleri, anketlerle ve takip eden görüşmelerdeki sorularla değerlendirilmiştir. Literatür taraması ve veri analizleri sırasında açıkça görülmüştür ki müzelerle okulların öğrencilerin eğitimi için yaptıkları ortak çalışmalarda işbirliğinin paydaşları olmaları önemlidir. Bu nedenle, durum çalışmasına katılan okul ve yerel müzeler arasındaki işbirliği düzeyinin belirlenmesi için bu çalışmada bir analitik çerçeve kullanılmıştır. Bu çalışmanın bulgularına göre kurumlar arasındaki işbirliği yetersiz seviyededir. Yardımlaşma düzeyindeki işbirliği iletişim ve görevlerin daha iyi belirlenmesi ile geliştirilebilir. Bu çalışmanın bir başka bulgusu ise bir okul çalışanının müze ile okul arasında arabulucu olarak görev yapmak üzere belirlenmesinin, kurumlar arasında tutarlı bir ilişki kurulması ve fikir alışverişi sağlanması açısından daha iyi olduğudur.

Anahtar Kelimeler: Analitik çerçeve, Müze eğitimi, İş birliği, Okul-müze arabulucusu

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my advisor Asst. Prof. Dr. Jennie Farber Lane for her inspirational guidance and constant encouragement during this study. I feel privileged for having worked with her.

I especially thank Prof. Dr. Margaret K. Sands for her guidance since the beginning of my doctoral study and for her advice for me to pursue the topic of this dissertation. I admire her as a role model for me and for all students and teachers with her positive attitude and great discipline.

I extend my gratitude to Prof. Dr. Dominique Selin Tezgör for her inspiration, guidance and feedback. She always advised me to see the light at the end of the tunnel and think about the future endeavors after the doctoral program.

I am grateful to Asst. Prof. Dr. Lane, Prof. Dr. Sands, and Prof. Dr. Tezgör for serving as my committee throughout the years as this study has been progressing. I extend my sincere gratitude to the other members of my defense committee, Prof. Dr. Müge Artar from Ankara University and Prof. Dr. Gaye Teksöz from Middle East Technical University for their time and deliberation.

Special thanks to Prof. Dr. Alipaşa Ayas for letting me use his office quite frequently to complete this dissertation. His guidance and fatherly attitude motivated me for a disciplined study.

Many thanks to all the administrators at my school especially to our school principal Ms. Oya Kerman for her understanding, great support and feedback. I would like to thank my colleagues and all the staff of the museums in Ankara who participated in this study for their support, time and understanding.

I am indebted to Çiğdem Karasu from İDV Bilkent Middle School for her constant technical support in preparation of online questionnaires. Many thanks to Asst. Prof. Dr. Armağan Ateşkan, Dr. Servet Altan, and Dr. Lynn Çetin for proofreading my manuscript, contributing with their precious contribution and being my friends. I am also thankful to other members of Graduate School of Education; Asst. Prof. Dr. İlker Kalender, Asst. Prof. Dr. Necmi Akşit, Nuray Çapar, and Burcu Yücel for their support and making the environment more pleasant.

I feel privileged to be a member of Bilkent community both as a teacher at İDV Bilkent Middle School and as a student at the Graduate School of Education. I am thankful to İhsan Doğramacı Foundation for giving me the opportunity to work and study at the same time and for their financial support.

Many thanks to my parents and my sister for their patience, encouragement, and constant support throughout my studies. I would not be so interested in museums without my father's guidance, interest, help and real stories he has told me.

Finally, I would like to express my deepest gratitude to my husband for his endless support, patience, encouragement, and love.

TABLE OF CONTENTS

ABSTRACT ……. iii

ÖZET ……..…… iv

ACKNOWLEDGEMENTS ……... v

TABLE OF CONTENTS ……...…… vii

LIST OF TABLES ……..……..… xii

LIST OF FIGURES ……..……..… xiii

CHAPTER 1: INTRODUCTION 1

Introduction 1

Background 2

Museums and museum education in Turkey 5

Problem 8

Purpose 10

Research questions 11

Significance 12

Definitions of terms 13

CHAPTER 2: REVIEW OF THE LITERATURE 15

Introduction 15

Overview of museum education and related research 15

Teacher professional development and museum education 18

Research about school and museum partnerships – institutional theory 22

Frameworks for collaboration 25

CHAPTER 3: METHOD 26

Introduction 26
Research design 26
Context 31
Participants 32
Instrumentation 36
Method of data collection 39
Part 1 40
Part 2 40
Part 3 41
Museum orientation session and details about the host museum 41
Method of data analysis 43
Phase 1 data – Interviews 43
Phase 1 data – Main questionnaire 44
Ancillary questionnaire and interview data 44
Phase 2: Analytical framework 45
CHAPTER 4: RESULTS 47
Introduction 47
Phase 1, part 1: Museum staff and teachers' perceptions and experiences 47
Educational background of museum staff participants 48
Museum education staffing and training 50
Defining museum education 52
Student learning and school visits 54

Opinions about teachers and school visits: Experiences, resources, and suggestions 59
Phase 1, part 2: Teacher questionnaire 61
Teacher perceptions of museum education and school visits – questionnaire responses 61
Phase 1, part 3: A closer look at teachers' perceptions – Teacher interviews 71
Perceptions of museum education 71
Practices in museum education – field trips 75
Challenges to conducting field trips 77
Opinions about museum staff and their roles 79
Perceptions of partnerships between the school and museums 80
Ancillary research component results: Museum orientation session 81
Expectations for the session 82
Workshop questionnaire responses 83
Further insights into teacher perceptions of the museum orientation session (interviews) 86
Positive comments – potential to change perceptions and practices 86
Critical comments – suggestions for improvement 88
Field trips conducted after the museum orientation session 90
Phase 2: Level of partnership by using Weiland and Akerson's framework 93
Application of Weiland and Akerson's framework to phase 1 data 93
Communication 93
Duration 94
Formality of partnership 95

Objectives 96
Power and influence 98
Resources 99
Roles 100
Structure 101
Conclusion 102
Motivation 102
Conclusion 104
CHAPTER 5: DISCUSSION 106
Introduction 106
Overview of the study 107
Major findings 108
Findings related to museum educators' perceptions and practices 108
Findings related to middle school teachers' perceptions and practices 112
Findings regarding the partnership between a school and local museums 115
Teachers' perceptions of a half-day museum orientation session were mixed 117
Implications for practice 118
Implications for further research 122
Limitations 123
Conclusion 124
REFERENCES 127
APPENDICES 143
APPENDIX A: List of Museums in Ankara 143

APPENDIX B: Interview Questions for All Museum Staff 146
APPENDIX C: Information about the Participant Museums 147
APPENDIX D: Teachers and Their Subject Areas 148
APPENDIX E: Permission from the Ministry of Education 149
APPENDIX F: Focus Group- Museum Staff Interview Questions 150
English version of the interview 150
Turkish version of the interview 151
APPENDIX G: Interview Questions for Teachers 154
English version of the teacher interview 154
Turkish version of the teacher interview 155
APPENDIX H: Main Questionnaire for Teachers 157
English version of the questionnaire 157
Turkish version of the questionnaire 166
APPENDIX I: Workshop Questionnaire for Teachers 175
English version of the questionnaire 175
Turkish version of the questionnaire 178
APPENDIX J: Weiland and Akerson's Framework 181
APPENDIX K: Sample Activities from the Museum Workshop 182
VITA 184

LIST OF TABLES

Table		Page
1	Types of museums in Ankara ……...…	33
2	Labels of the museum and participant information ……..…	34
3	Subject areas taught by teachers…….....…	35
4	Teachers' work experience and years at case study school…..…	35
5	Interest in museums ……...……...…	48
6	Definitions of museum education ……...…….	53
7	The reason why teachers plan a field trip to a museum…….....	62
8	Teacher perceptions about challenges to museum field trips.....	64
9	Teachers' roles in the field trip(s)…….	65
10	Pre-visit classroom activities for a museum field trip……...	66
11	Teachers' level of experience field trip activities…….	67
12	Teachers' perceptions of support from museum staff……...	70
13	Teachers' responses about the workshop……..	84

LIST OF FIGURES

Figure		Page
1	Research design ……..……..	31
2	Timeline for phase 1 ……. ……..……	40

CHAPTER 1: INTRODUCTION

Introduction

This research study is an explanatory case study that used a phenomenographic approach to investigate perceptions and practices of museum staff and teachers about museum education. Furthermore, this approach applied an analytical framework to gain insights into partnerships between schools and museums. The case study focuses on the school where the researcher teaches. She therefore introduces this study by explaining the problem from her perspective.

The researcher enjoys visiting museums whenever she has the chance to visit different cities or countries. She currently lives in Ankara and since museums change their exhibitions or expand them over time, she has visited the same museums many times. Her father was a great influence on her desire to visit museums and historical places. He took her to cultural sites and told stories as he explained the artifacts. He grew up in Cappadocia, a very well known tourist place in Turkey. Then, he became a military officer and her family had opportunities to travel around Turkey. Some of the places they lived in were small towns but with rich cultural sites, such as Gallipoli.

She remembers going on school field trips while she was a student in Gallipoli, but not while she studied in Ankara. The field trips left a great impression that she remembers to this day. One thing was that the school group mainly walked around the sites. A few years ago, however, the researcher learned there were more

interactive ways to visit museums. While in London, she visited the British Museum. There, she saw a group of children about six years old checking the exhibition. They were drawing what they saw in the paintings and their teachers were guiding them. She learned that one of the teachers was the museum educator of the museum. It was a great revelation for her and she thought, “Why don’t we have the same opportunities for the kids in Turkey?”

The researcher is currently a teacher in a private middle school in Ankara, Turkey. She knows from personal experience that even though Turkey is a rich country in term of history and cultural heritage, field trips are not a common occurrence in her school. She has also seen that when field trips do occur, students are not engaged in ways she witnessed in museums in other countries. This issue sparked her interest to learn more about museum education in Turkey, what was taking place and what was being taught and learned. In particular, the researcher asked these questions: Do we have museum educators in our museums? How are they helping teachers? Do they have a set curriculum to follow? Are the museums in contact with the schools? Do schools have a field trip policy? Is there a partnership between schools and museums?

This is how her story about museums started. The following section provides further background about museums and museum education.

Background

Museums were founded as educational institutions; they aim to enhance visitors’ understanding and appreciation of the museum collections. According to Kratz and

Merritt (2011) museum education (also called museum learning) is essentially the learning within a museum. Other researchers have noted that museum education is interdisciplinary (Okvuran, 2012) and helps individuals to understand their cultural heritage associating past, present and future (İlhan, Artar, Okvuran, & Karadeniz, 2014). Findings show that museums are helpful for learners to develop their critical thinking, synthesis information, think creatively and collaborate (Griffin and Symington, 1997).

Kratz and Merritt (2011) believe that the next era of museum education may be driven by life-long learners drawing on a variety of resources, both traditional and non-traditional, to promote sharing, collaboration and use of educational resources. As Kelly (2007) notes, museums educate society and they have proven to be very valuable and memorable learning experiences. Moreover, through these experiences individuals have a chance to learn about themselves and museum education addresses a number of important community social needs and concerns (Duclos-Orsello, 2013).

There are exemplary institutions around the world that showcase the role museums can play in community education. The American Association of Museums states that museums are committed to education and community service is essential to museum practice (Hein, 1998). The Guggenheim Museum in New York City organizes tours and professional museum educators who have completed extensive training guide these tours. They aim to foster active learning, engage students, and development critical-thinking and language skills. They adapt the tours as necessary to suit students with special needs (School and Educator Programs, 2015).

Another institution, the Smithsonian, is composed of sixteen museums and galleries which offer education programs that demonstrate how museums can be powerful learning environments. They encourage visitors to use analytical and deductive reasoning skills to understand their history and culture. They offer pre-visit materials, museum guides, and teachers' guides, including curriculum sets that are prepared by classroom educators in cooperation with museum curators and scientists. They organize seminars to educate teachers, parents, and museum staff from around the world (Craig, 2002).

It is clear from these examples and others that museums are unique arenas for learning. Dewey, an innovative and pragmatic leader in education was noted to advocate museums for experiential learning (Hein, 2004; Monk, 2013). Today, museum education includes many different forms of learning (Hooper-Greenhill, 1994). Schools frequently organize trips to museums, often as part of the curriculum, so students may learn about their culture, history, and environment by seeing and experiencing actual artifacts and models.

Nichols (2014) writes that museums and schools have rubbed shoulders for years and, as Dewitt and Storksdieck (2008) assert, having a field trip to a museum has the potential to make learning memorable. Through field trips to museums, teachers relate what students learn in the classroom to the local community (Behrendt & Franklin, 2008; Falk & Dierking, 2000; Farmer, Knapp, & Benton, 2007; Larsen, Walsh, Almond, & Myers, 2017). Karadeniz (2014) explains that museums have a responsibility to communicate with every sector of society about their housed

artifacts and resources; she emphasizes that partnerships with schools where students can learn actively are especially important and valuable. During school field trips students have the chance to learn actively. Teachers have an important role as guiders or facilitators, and museums may therefore also have a vital role in training educators for experiential learning.

Museums and museum education in Turkey

Museums in Turkey have similar roles to museums around the world; they house valuable artifacts and exhibitions that have national importance for history and culture. These institutions have been recognized as a resource for learning (Bennett, 1995). There are 18 places in Turkey that are currently listed as UNESCO World Heritage Sites, with 78 others being considered (see http://www.unesco.org.tr/Pages/125/122/UNESCO-Dünya-Mirası-Listesi).

In the Ottoman Empire, the first museum was established in 1846 by Damat Ahmet Fethi Pasha. The first school museum was founded 22 years later in 1868, at Galatasaray High School (Atagök, 2003). Establishing museums gained importance and momentum after the Republic of Turkey was established in 1923. When Dewey visited Turkey in the early days of the Republic, he advocated including museums as interactive experiences (Monk, 2013). In today's Turkey, there are some museums that have notable programs for community education. In Istanbul, the Rahmi M. Koç Museum has different educational programs according to different age groups and different types of schools. It has prepared different education programs and resource packets that supplement the curriculum in accordance with the requirements of the National Education Ministry and with the support of the Istanbul Region of the State

Education Department (Rahmi M. Koc Museum-Museum Education, 2012). Another museum, in Ankara, Çengelhan Rahmi M. Koç Museum, offers programs for visitors, especially for students.

There are institutions of higher education in Turkey that include education programs related to museums. The first Museology Department in Turkey was founded in 1989 at Yıldız University. In 1997, the first Museum Education Department was established at Ankara University (Hopper-Greenhill, 1999). Today, Ankara University is the only university in Ankara that has a museum education department and it is the only university in Turkey that offers a postgraduate program on Museum Education (Ilhan, 2009).

Museum eduction has also been researched in Turkey (Çıldır & Karadeniz, 2014; Demircioğlu, 2007; Karadeniz, Okvuran, Artar, & İlhan, 2016; Şahan, 2005; Taş, 2012; Taşdemir, Kartal, & Ozdemir, 2014; and others). These studies highlight the importance of museums for learning. On the other hand, there are also studies that acknowledge that there are challenges to conducting field trips to museums. Isik (2013), for example, surveyed and interviewed history and social sciences teachers from a small Turkish community. According to the results, most participants felt they lacked the capacity to properly educate their students during museum field trips. Isik noted that none of the teachers reported receiving museum education during their teacher education programs. As with other studies conducted around the world (e.g, Kisiel, 2003), Isik (2013) concluded that teachers need professional development regarding field trips in general and museums in particular to ensure students receive meaningful education experiences when visiting historical and cultural venues.

School trips are included in the curricular materials produced by the Turkish Ministry of Education. They state that school field trips can be organized by the schools to support students' learning. For school field trips to occur, at least one administrator and two teachers should accompany students (MONE, 2017).

New approaches in museum education, social fuction of museums, changing roles of museum educators have been discussed by Karadeniz, Okvuran, Artar, and İlhan (2015). In 2019, the Ministry of Culture and Tourism announced that they have supported many projects about museum education in Turkey for teachers, students and academicians. The ministry aims to educate more than 100,000 teachers in the upcoming years. They organized a workshop about collaboration between museums and schools in İstanbul focusing on the role of museums. Ankara University's Department of Museum Education and Yıldız Technical University's Faculty of Arts and Design worked with the Ministry of Culture and Tourism to develop a museum education program. Two books were published as an outcome of this program: *Museum Education Teacher Handbook* and *Museum Activities Book*.

Moreover, more recent developments show that greater importance has been given to museum education. The Minister of National Education, Ziya Selçuk, announced in 2019 that an agreement between the Ministry of National Education and the Ministry of Culture and Tourism has been signed. This agreement includes collaboration between museums and schools. For this purpose, the General Management of Teacher Training and Development started a museum education certificate program that aims to increase student awareness of museums and to carry the learning

environment from classrooms to museums. This certificate program plans to educate 15,000 teachers in two years. Another important step to improve museum education in Turkey was taken by the ministry when there was an agreement between İstanbul's Ministry of National Education and the Ministry of Culture and Tourism. According to the signed contract, 80 teachers from different districts in İstanbul were chosen to be educated by pedagogues and specialists in practices about museum education.

To be successful, school trips to museums should be organized in collaboration with museum educators and administrators. Ideally, staff should be museum educators who are knowledgeable about pedagogy as well as the museum content. Teachers should have both the capacity and time to prepare and implement field trips. More importantly, the trips should be well organized and integrated into the school curriculum make learning more meaningful and relevant. In this way, school visits to museums should be "museum education programs" rather than "field trips" (the latter may connote walking through an institution with minimal learning). As this study learned, however, school visits rarely occur to the desired extent that ensures successful learning experiences for students, and therefore the term field trip is retained in the current study.This term also is commonly used in the literature and was familiar to the participants in the study.

Problem

Field trips provide wonderful opportunities for students to experience learning in different settings. At museums they can see artifacts and examples of concepts they study in school. This idea has been supported by many researchers including Falk

and Dierking (2000), who claimed that field trips positively affect students' thinking in many contexts, including the cognitive and sociocultural context. Despite the recognized benefit of school visits to museums, the researcher—who is a classroom teacher—has observed that teachers often avoid or resist conducting field trips. Other researchers found this to be true for their situations and settings, too (Anderson, Kisiel, & Storksdieck, 2006; Anderson & Zhang, 2003; Michie, 1998).

Unfortunately, too often, teachers are asked to participate in field trips when they have no background in museum education and worse, do not appreciate the value of museum education for student learning. They may view the trip as a burden or may not take an active role in facilitating student learning. In other cases, teachers may not conduct field trips at all because they lack the confidence to consider planning one. With no professional development in this area, there is the chance the field trips will be poorly or ineffectively organized. The planners may not make effective communication with museum staff and educators to plan the program. They may not realize the importance of providing museum educators with information such as students' age and learning needs.

Such communication relates to another issue in that museum educators also need to be prepared to work with schools and provide meaningful educational experiences for students visiting their site. Therefore, more than investigating if and how the barriers to field trips found in other studies is true for the current research setting, this study sought to gain deeper insights into the perceptions and practices of teachers and museum staff. In particular, the researcher wanted to learn how representatives from the institutions of schools and museums perceive each other.

Purpose

The purpose of this research is to examine the perceptions and practices of teachers from various subject areas within a private middle school in Turkey and selected museum staff in the city about museum education. Through an explanatory phenomenographic case study, the research investigated the nature of partnership between representatives from two institutions: schools and museums. According to Yin (1994), an explanatory case study is used to explain the presumed causal links in real-life interventions. The phenomenographic research methods used in this study included analysis of interviews to gain insights into the participants' past experiences, including successes and failures, and their attitudes and opinions (Booth, 1997; Larsson & Holmström, 2007).

The researcher visited the museums in Ankara and learned about museum staff's perceptions and experiences regarding school visits to their venues. Seven conveniently selected museum staff were interviewed to learn about their further perceptions, practices, training background and responsibilities. Two sources of data were used to gain insights into teachers' perceptions and practices: A questionnaire and in-depth interviews. Teachers also provided perceptions of an orientation session to a museum that was provided by one of the museum staff participants. An analytical framework developed by Weiland and Anderson (2013) was used to gain a deeper understanding of the nature of the partnership between teachers and museums. This analysis helped the researcher identify attributes of school and museum partnerships and their implications for more effective museum education.

Research questions

The research was guided by the following research questions:

1. What are museum educators' perceptions of and practices related to museum education?
2. What are middle school teachers' perceptions of and practices related to museum education?
3. What is the nature of the partnership between a private middle school in Turkey and museums in the community?
    a) What indicators can be used to describe levels of professional partnerships (cooperation, coordination, collaboration) between teachers and museum educators for planning and conducting museum education experiences?
    b) Using these indicators, what is the level of the partnership between the case study school and museums in Ankara?
    c) What strategies can be used to improve the partnership between schools and museums?

During data collection, a local museum staff offered to conduct what she called a workshop for the teachers at the researcher's school. The workshop was a half-day session that oriented teachers to the museum and its resources. The researcher decided to incorporate this experience into the case study. Therefore, the following ancillary research question was added to the study:

Ancillary research question: What are teachers' perceptions of an orientation session provided by a local museum to increase awareness of its resources for student learning?

Significance

As a part of this study, a research paper (Ateş & Lane, [in press]) has already been generated and submitted to the journal *Education and Science* (in *Eğitim ve Bilim*). Writing this paper helped the researcher highlight important outcomes of the current study. A key finding of the paper and this study is that it is important to have advocates within schools and museums who actively take steps toward building and sustaining a partnership. Within schools, one teacher can serve as a liaison between the school and local museums. A school liaison can assist both sides and help them to improve their communication. Ideally, schools will have a field trip policy and this liaison can ensure the policy is followed and implemented. A key goal of the liaison will be for the school to have a museum education program instead of field trips. In particular, the liaison will facilitate more, and more effective, museum education experiences for the school.

Museums are the places that children and adults learn about the past, present, and to some extent, the future. They give students a chance to learn more about their culture, to understand their heritage, and to connect this culture and heritage with their lives today. Through their artifacts and exhibits, museums introduce and enhance visitors' understanding of a culture's beliefs, social values, religions, customs, traditions, and language. Turkey is a country full of valuable cultural

heritage generations need to learn the value and meaning of these artifacts and resources.

It is hoped that through this study, schools and museums will have a greater awareness of policies and strategies needed to implement develop, strengthen, and sustain their partnerships. Through these partnerships, they can ensure students in Turkey have opportunities for meaningful and worthwhile museum education experiences.

Definitions of terms

Field trips: are seen as short-term experiential education (Scarce, 1997). They are the trips that are generally organized by schools for an educational purpose to venues, which provide interaction and engagement (Morag & Tal, 2012). See Museum education program.

Liaison: In education, these are people who are more knowledgeable about educational needs, education law and regulations. They are familiar with school procedures, whose responsibilities include handling educational barriers that may affect student learning (Zetlin, Weinberg & Kimm, 2004). In this current study the term liaison is used for a teacher whose responsibility is to help teachers and museum staff to have a better partnership, assist teachers to plan and conduct field trips to museums, and reduce the number of challenges and barriers for both parts.

Museum education (also called museum learning): happens during a field trip that schools can organize for students to learn about their culture, history, and

environment by seeing, and experiencing (Karadeniz et al., 2015; Kesner, 2006; Suina, 1990).

Museum education program: is an educational program that promotes effective learning and teaching in museums and to facilitate avenues for different learning strategies (Wolins, Jensen, & Ulzheimer, 1992).

Museum educator: is a person who is a professional educator who received the necessary training to be able to teach and guide visitors in a museum (Falk & Dierking, 2000).

Partnership: is a continuum of relationships between agencies. It is about services, sharing, information, accountability, and communication (Morrison, 1996). According to Weiland and Akerson (2013) there are three levels of a partnership. *Cooperation* is a short-term relationship; the partners are focused only on one single task and they may or may not work together. *Coordination* is a longer relationship and can be more formalized. The partners have understood expectations, and their roles may overlap a bit. The final and the most desirable level of partnership is *collaboration.* At this level the relationship is long-term with each partner having defined and understood roles. They work together to develop, implement, and sustain multiple activities.

Phenomenography: is a study of a situation by considering participants' perceptions and practices (Megel, Langston, & Creswell, 1988).

CHAPTER 2: REVIEW OF THE LITERATURE

Introduction

This chapter provides an overview of museum education and establishes the theoretical framework of the study, which is based on institutional theory. The literature review investigates studies that have explored aspects of museum education around the world and in Turkey. In particular, studies that focused on school-museum partnerships are featured. The review concludes by introducing the study by Weiland and Akerson (2013) that provides the analytical framework was used for the current research.

Overview of museum education and related research

As museums became a recognized as a venue for school field trips, educators and researchers began investigating the costs and benefits of school trips to museums (Falk & Dierking, 2000; Hooper-Greenhill, 1994; Nichols, 2014; Osborne & Dillon, 2007). On the positive side, Pica (2013) emphasizes the role of museums in educating the public about their cultural heritage as students have the opportunity to become engaged in the history and traditions of their community. Caffrey and Rogers (2018) advocate for museums being venues for students to gain agency in defending justice.

Regarding challenges to museum education, Griffin and Symington (1997) stated that despite the rich educational resources museums offer, student learning may not take place. They found that teachers may not be sure of their learning objectives and

miss opportunities to link the museum content to their curriculum. Furthermore, teachers provide students with little preparation prior to the museum visits. They suggest that museum educators and teachers communicate more to better relate learning in schools to museums. Griffin (2004) noticed that adults visiting museums often have more meaningful learning experiences than school children. She concluded that children need guidance on what to look for and how to learn best during their museum visits.

Some researchers have accessed a different perspective to gain insights into effective learning in museums; they are exploring the actions and skills of the museum educator (Bailey, 2006; Cunningham, 2009; Ji, 2015; Munley & Roberts, 2006; Reid, 2013). Tran (2007) observed that museum educators recognized students' learning needs and developed strategies to make instruction relevant and interesting to them. Some museums have staff who are responsible to leading tours and teaching the public. While these educators may be skilled and passionate about the topic, they are often self-taught and learn how to deal with visitors on the job. Professional development and a set curriculum would enhance the teaching capacity of such non-formal educators (Allen & Crowley, 2014; Bevan & Xanthoudaki, 2008; Castle, 2006). Pica (2013) expressed concern that museums lacked a well-developed curriculum or plan for educating school children. After surveying 25 museums in Italy and conducting in-depth interviews with education staff in three of them, she concluded museums rarely have an educational methodology for their programming. She recommended that museum staff need professional development in pedagogy and how to improve communications with schools to evaluate their programs.

Although some museums do have staff responsible for public education, Wright-Maley, Grenier, and Marcus (2013) assert that teachers need to take the lead in learning what a museum has to offer and to make their expectations clear to their contacts. They surveyed teachers and conducted in-depth interviews to identify effective questions teachers could ask museum staff when planning field trip. Wright-Maley et al. (2013) encourage teachers to develop collaborative relationships, playing an active role in the museum visit while providing museum staff with the information they need to design effective learning experiences.

Given the role teachers must play in field trips to museums, teacher perspectives have been investigated in many studies related to museums (Anderson et al.,2006; Anderson & Zhang, 2003; Kisiel, 2007; Nichols, 2014). Other researchers have researched barriers and facilitators regarding teachers and field trips (DeWitt & Storksdieck, 2008; Olson, Cox-Petersen, & McComas, 2001; Taş, 2012). Findings from these studies and others identify barriers such as funding, time, the overloaded curricula, student behavior, and safety issues.

To ensure effective learning during museum visits, researchers have made a variety of suggestions for teachers. Ash, Lombana, and Alcala (2012) recommend that teachers integrate aspects of action research into their practice and become more aware of the constructivist learning needs of students. Jones (2014) highlights how the Columbus Museum of Art in Ohio developed and implemented a new framework to better involve teachers and their students in learning during museum visits. They noted it was important to integrate twenty-first century skills and to persist in building collaborative partnerships with teachers. Ng-He (2015) explains that

museums can use the new Common Core State Standards (www.corestandards.org) to foster connections between schools and museums. These standars are set for preparing America's students for success. The standards are research and evidence based, clear, understandable, consistent, and aligned with college and career expectations. They are based on rigorous content and the application of knowledge through higher-order thinking skills.

Teacher professional development and museum education

Offering professional development workshops for teachers is another practice that has been used to improve relationships between schools and museums. Several studies have found that such programs address learning and pedagogical needs of teachers and also benefit the museum (Aaron & Chiu, 2018; Grenier, 2010; Lau & Sikorski, 2018; Melber, 2007; Melber & Cox-Petersen, 2005).

Museums often offer programs for teachers. One reason for this service is to better ensure teachers can educate their students during school visits. In their article, Cooper, Baron, Grim, and Sandling (2018) emphasize that institutions, such asb those at historic sites, can play an important role for teacher education. They describe using Q-methodology to ascertain how teachers perceive and value the learning experience they received through the Monticello Teacher Institute (MTI), in Virginia. In this program, teachers visit the home of one the founding fathers of the United States, Thomas Jefferson, and use the resources there to conduct research. One outcome of their study was to gain a stronger appreciation that museum educators need to align their resources to the classroom practice needs of teachers.

Their study emphasizes the importance of museum staff purposefully and thoughtfully working on professional development opportunities for teachers.

As with other studies, Marcus (2008) points out the reasons why teachers have interest in visiting museums with their students. Unfortunately, teachers may conduct these visits without prior consultation with museum staff and there may be a gap in understanding how to relate what the museum houses to the school curriculum. Marcus declares that "it is the responsibility of both teachers and museum staff to bridge this gap through collaboration" (p. 72).

> . . . teachers need to acquire the knowledge and skills to expertly incorporate museum visits into their curriculum, and museum staff members need to understand the needs of both students and teachers. Most teachers have expansive content knowledge and an expertise in formal pedagogy, but many may have a more limited knowledge of the specific content focus of a museum and may have minimal training or expertise about how to successfully incorporate museum visits into the curriculum and how to structure museum visit activities. (p. 65)

Marcus also emphasizes that museum staff may need to make an extra effort to design programs for teachers. They need to "reflect and share in a way that makes them vulnerable" (p. 68). They need to be able to provide background information of exhibits and be willing to take the time to assess teachers' interests and work requirements.

Grenier (2010) affirmed that there are a variety of reasons why teachers choose certain venues for professional development. As with programs offered at other institutions, teachers are looking for ways to enhance their curriculum and support

their content knowledge. Museums play a unique role in providing cultural, geographical, and historical context to their professional growth. In Grenier's study, teachers also attended summer institutes because of personal interest and the reputation of the museum. She commented on the opportunity for teachers to develop communities of practice with peers who have similar interests and goals. Clearly, these communities can include collaborative partnerships with museums. She advocated further research about museums as sources for adult education.

Fortunately, there have been studies that have explored the efficacy of teacher professional development experiences at museums (Cooper et al., 2018; Melber & Cox-Petersen, 2005). Following are two examples.

In their two-part study, Phillips, Finkelstein, and Wever-Frerichs (2007) learned what kinds of programming museums in the United States offer schools and, in-particular, the types of professional development opportunities offered to teachers. Nearly three-quarters of the museums in their sample provide services to schools in their communities. Of these, around 60% provide professional development programs for teachers. The types of program include one day and multiday workshops, internships to conduct research, and lectures on special topics. Despite these offerings, the respondents said the programs were under-utilized and many could easily double the number of teachers they serve. When the researchers asked museum staff who offer professional development for teachers about the content of their services, many (74%) indicated the purpose was to orient teachers to the museum resources and how they can be used in the classroom. The study noted that most teachers who attend the workshops are veteran teachers and programs for novice or pre-service teachers are

limited. Many of the museum staff have teaching degrees. The researchers note that "[the] primary goal of most of [the] programs is to increase teachers' content knowledge, but improving pedagogical knowledge is also important" (p.1504). They conclude that the programs for teachers have effective professional development features, such as extended contact time (over 25 hours). Furthermore, they provide teachers with hands-on experiences they can transfer to the classroom. Most notably, being institutions with resources and artifacts, they provide teachers with unique ways to help improve their students' learning. Similarly, museum education programs and projects have been taken into consideration in Turkey recently. As a part of these programs a museum education teacher handbook and a museum education activities book were published to support teachers' development in terms of museum education (İlhan, Artar, Bıkmaz, Okvuran, Akmehmet, Doğan, Karadeniz, Çiğdem, & Kut, 2019). The *Museum Activities Book* includes useful sample activities that can be used for pre-school students, primary school students, middle school students and high school students. Each sample activity is described in detail to be helpful to teachers. Furthermore, each activity is enriched with useful links and appendicies.

A long-running collaboration between the New York City public school system and informal science institutions, such as museums, has shown improvements in urban students' science achievement (Weinstein, Whitesell, & Schwartz, 2014). This collaboration includes extensive professional development for teachers, providing them with hands-on experiences in science research at the institutions. Partner schools also receive resources from the institutions. The professional development experiences facilitate teachers connecting with museum staff. Desired outcomes of

the professional development are to promote teacher use of inquiry-based instruction and to implement formative assessments to ascertain students' science learning. While the study was unable to definitively attribute student outcomes to teacher professional development, all the students came from schools who have collaborative partnerships with museums and with at least one teacher who had received professional development through the collaboration.

On review of these studies and others, it is apparent that there is a direct or indirect intention to develop better collaboration between museums and schools. Marcus (2008) notes one of the benefits of this partnership:

> By working closely with museum staff and maintaining an open and continuous dialogue, teachers can draw on the museum staff's content knowledge, experience with other student groups, and understanding of the inner workings of the museum to plan in-class and field trip activities. (p. 72)

Research about school and museum partnerships – institutional theory

It is clear there are a variety of recommendations that museum educators – both museum staff and teachers – can consider to improve how and what students can learn from field trips. Related to what the educators can do is what the educators can do together. In this vein, it is important to investigate the relationships between schools and museums, exploring how to build fruitful partnerships (Griffin, 2004).

School and community collaborations have been found to improve schools (Bulduk, Bulduk, & Koçak, 2013; Anderson-Butcher, Lawson, Iachini, Flaspohler, Bean, & Wade-Mdivanian, 2010; Epstein & Salinas, 2004; Hands, 2010; Sanders & Harvey,

2002). In the 1980s, the *Commission on Museums for a New Century* (1984) recommended that museums develop and sustain partnerships with schools. Unfortunately, more current studies have found that very few partnerships exist (Berry, 1998; Doğan, 2010; Kisiel, 2014; Tal & Steiner, 2006).

While conducting their literature review, Ateş and Lane (in press) learned about institutional theory and its relevance to the current study. Gupta, Adams, Kisiel, and Dewitt (2010) used institutional theory to investigate partnerships between schools and museums. Although the exact definition of institutional theory may be debated, Scott (2008) agrees that this theory is convenient for examining how institutions interact with each other. According to Gupta et al. (2010),

> Institutional theory states that organizations develop structures that correspond to and fit within existing institutional structures in order to be accepted and considered legitimate. In order to sustain themselves as unique contributors to society, they also have to develop novel structures that have social legitimacy. (p. 690)

For the current study, this theory is apropriate as it involves gaining perspectives from two institutions and insights into how they relate to each other. In line with this theory, it is important to understand the players within the institutions and to understand their perceptions and practices.

One example of how this understanding can be facilitated was in a study by Kang, Anderson, and Wu (2010). They conducted an extensive hermeneutic phenomenographic study in China to investigate perceptions of teachers, museum staff, and university science educators about museum education. Phenomenography

is a research approach that includes how people experience a phenomenon or what they think about it. The researchers noted that while there have been a number of studies that explore teachers' views of museum field trips, there have been very few studies that present the perspective of museum educators. As a result of their in-depth interviews with a variety of stakeholders, they learned that the parties involved in building effective collaborations for museum education have attitudes and beliefs that compromise rather than support partnerships. Each side thinks the other needs to take a more active role in appreciating the needs, interests, and abilities of other stakeholders. In their reflection of the China study, Gupta et al. (2010) realized comparable perceptions existed in the United States.

While investigations into the perceptions and comparisons of the actors involved in school and museum is limited, there have been suggestions to improve the relations between these two institutions. A common recommendation is to improve joint planning and communication (Bobick & Hornby, 2013; Hicks, 1986; Wojton, 2009). Hazelroth and Moore (1998) present a web-like, interactive model of interaction among collaborators and contend that it is more robust than a hierarchical, linear approach. They explain that flexibility, inclusion, and interconnections are essential for building collaborative relationships. Wojton, (2009) advises that using an analytical tool, such as a framework, can help describe characteristics of how schools and museums interact. Without this knowledge, there is a chance that plans for programs and strategies for partnerships may not be successful, as they may not address the current needs and expectations of the players in both institutions.

Frameworks for collaboration

A review of the literature found two frameworks that have been used by researchers to examine the relationship between schools and museums. The work of Kisiel (2014) provides a framework that describes what he calls the boundary activities between schools and their community partner. His study identified four factors that provide indication of successful partnerships: capacity, authority, communication, and institutional complexity. Kisiel explains that capacity is "related to the availability of staff, funding, physical space and even time" (p. 353). Authority is "related to rules, entitlement, or expertise" (p. 355). Communication is a key factor for implementing activities. Similar to the discussion of institutional theory above, institutional complexity including issues such as stakeholders, operations, policy, and process can support or compromise collaboration.

The current study chose to apply a framework developed by Weiland and Akerson (2013) to analyze the quality of partnerships between the case study school and local museums. The researcher found that this framework provided the breadth and rigor to capture and analyze a comprehensive set of data. It included logical and descriptive information about each of the dimensions used to analyze the level of the partnership. Further information about this framework is provided in the Methods chapter.

CHAPTER 3: METHOD

Introduction

This chapter presents and explains the research design, the context of the study, participants, instrumentation, the method of data collection and method of analysis. In this study, case study methodology was used to collect and analyze data. Mainly qualitative data, supplemented with some descriptive quantitative data, were collected to answer the research questions of the study. These questions related to perceptions and practices of teachers and museum staff about museum education and to the nature of partnership between the case school and local museums. Aspects of these methods were also described by Ateş and Lane (in press); working on this paper helped the researcher determine that the data collection and analysis of this study took place in two phases. These phases and their details are related from the paper with permission.

Research design

This study used case study methodology to examine perceptions and practices of museum education. In the current study, the case consisted of a private middle school in Ankara, Turkey along with seven museum staff from museums in the city. One focus of the study was to ascertain levels of partnership between the school and its local museums. Case studies have been used in a variety of investigations, particularly in sociological studies but increasingly in education. Stake (2013) defines a case study as the study of the particularity and complexity of a single case; coming to understand activities within important circumstances. According to Yin

(2003), a case study benefits from prior development of theoretical propositions. The investigation relies on multiple sources of evidence and may include a mix of qualitative and quantitative data. Furthermore, Yin (2003) states that that case studies may try to illuminate a decision or set of decisions, including why certain decisions were made, how they were implemented and with what results.

For this study, the decisions involve choices and actions related to museum education. As described by Cohen, Manion, and Morrison (2008), case studies focus on the dynamic and multifaceted connections that arise between human relationships, events and other external factors. Case studies allow for deep insights into the viewpoints of participants by using multiple sources of data (Tellis, 1997). Researchers analyze and interpret sources of data specific to the focus of the study rather than making generalizations based solely on statistics. In this way, case study analysis can help researchers develop theories that may be applied to similar cases, phenomena, or situations.

Various approaches can be used to review and interpret qualitative data. For the current study, a phenomenographic research approach was used to gain insights into teachers and museum staff's perceptions and practices related to museum education. Phenomenography focuses on how we conceive or understand a phenomenon that we have experienced (Marton, 1981; Megel et al., 1988). Larsson and Holmström (2007) explain that with phenomenographic research, the researcher can get information about people's perception about a concept or phenomenon through their sentences and actions. A phenomenon needs to be assigned a meaning and prior knowledge or

experience of individuals of the phenomenon also needed to recognize it (Yates, Partridge, & Bruce, 2012).

In their study, Larsson and Holmström (2007) note that phenomenography is a research approach that is not as well-known as phenomenology. Phenomenography is a useful method to understand people's understanding of a phenomenon. More than studying the event or situation, with this approach the data is somehow plotted or mapped and compared and contrasted. In phenomenographic research, instead of understanding people's perceptions, describing people's ways of seeing, understanding and experiencing the world around are also used phrases. Given the emphasis on analyzing the words and expressions of participants, face-to-face interview is seen as a primary data collection method for this approach (Ashworth & Lucas, 2000). Lewis and Ritchie (2003) see the interviewer as a traveler who enjoys interviewees' stories and seeks to interpret them. The interviews included open-ended questions and participants were able to speak freely about their perceptions and practices.

In the current study, interviews were used according to this approach. Interviews provide the researcher with the opportunity to have detailed investigation about a person's perspective about phenomena. In-depth analysis of the interviews enables the researcher to examine possible connections among insights related to the phenomena. The researcher was the main filter for the phenomenon that was investigated, museum education. She dedicated herself to understanding the participants' points of view by giving full attention to what they were saying or were trying to say.

Although interviews were the main source of data, Stake (1995) endorses the use of multiple sources of data to ensure accuracy (validity) and reveal alternative explanations. Therefore, in the current study, teachers also provided data by responding to a questionnaire. The main aim was not making generalizations about teachers and museum staff around the world, but to analyze the participants' points of view through different sources (Yin, 1994).

In addition to museum education in general, the phenomenon under study in this case was the nature of partnership between two institutions: a school and museums. To help "graph" the perceptions of this phenomenon, the researcher used an analytical framework. After a review of the literature, the researcher identified and selected a framework developed by Weiland and Akerson (2013). This analytical framework was used to compare and amalgamate the responses of museum staff and teachers. This process is described further within the data analysis section.

Both the interviews and the questionnaire were within a first phase (phase 1) of the study design. The analysis using the framework took place in the second phase (phase 2). The research design for this study is presented in Figure 1.

The research design includes an ancillary component: teachers' perceptions of a museum orientation session. During interviews with museum staff, one offered a half-day orientation session (what she called a workshop) for teachers in the researcher's school. Although not a part of the original research design, the researcher decided to add the session because teacher perceptions of the session helped further explore the phenomenon of museum learning.

The research methodology was designed to address the following research questions:

1. What are museum educators' perceptions of and practices related to museum education?
2. What are middle school teachers' perceptions of and practices related to museum education?
3. What is the nature of the partnership between a private middle school in Turkey and museums in the community?
    a. What indicators can be used to describe levels of professional partnerships (cooperation, coordination, collaboration) between teachers and museum educators for planning and conducting museum education experiences?
    b. Using these indicators, what is the level of the partnership between the case study school and museums in Ankara?
    c. What strategies can be used to improve the partnership between schools and museums?

Ancillary research question: What are teachers' perceptions of an orientation session provided by a local museum to increase awareness of its resources for student learning?

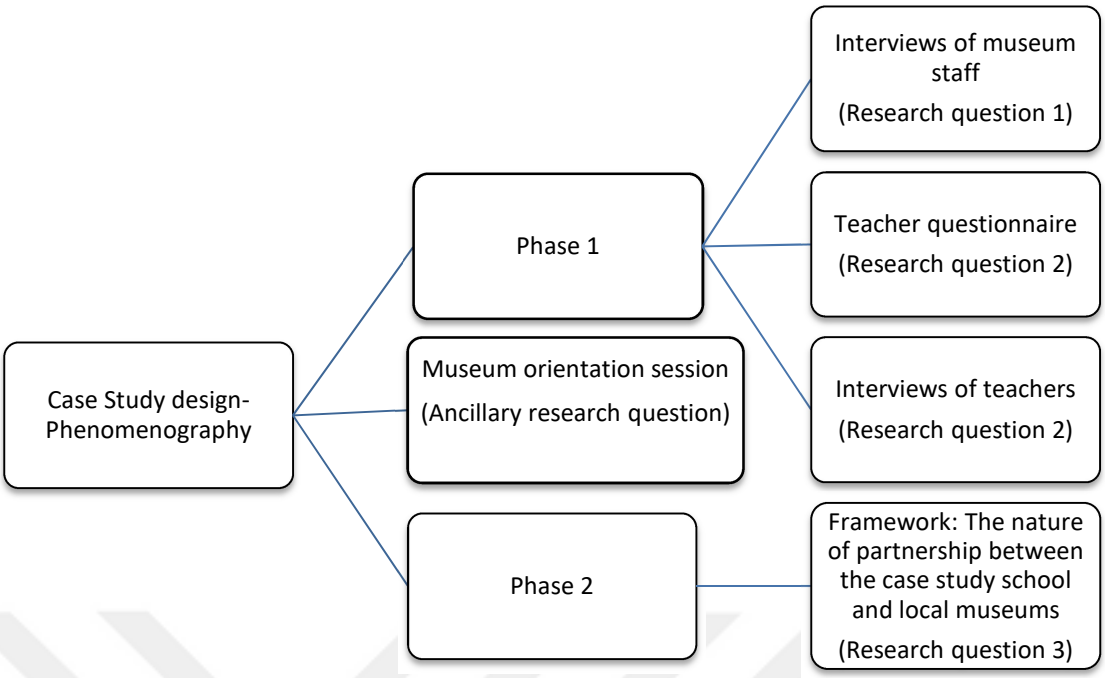


Figure 1: Research design

Context

When the investigations for this case study began in 2015, there were 56 museums, either private or state, in Ankara, Turkey (Appendix A). All these museums are well-known museums and most of them have different purposes according to the artifacts and exhibitions they host. The contact persons from those museums were identified as participants. Further details about choosing the participants are provided in the next section.

In addition to those museums, a private middle school in Ankara was included in this case study. The researcher has been working as a foreign language teacher since 2008 in this school and it was chosen as she is working there. This enabled her to secure necessary permissions, easily contact participant teachers, and arrange times for interviews.

In the year the study was conducted, there were 31 teachers actively working in the school. The school follows the curriculum of the Ministry of National Education as well as an international curriculum. Therefore, the school gives importance to interdisciplinary projects in which teachers from different subject areas can work collaboratively. The student profile is mainly students from upper middle class families whose parents are doctors, engineers, businessmen, teachers, academicians, and university members. The location of the school is within a gated campus and security is strong. The school is able to provide financial support to teachers and students for school activities and outside school activities such as field trips inside the city, to other cities and countries. The school is also able to provide transportation and meals during these trips. There are several international staff who work in the Foreign Languages Department; for this reason the data collection tools were written in English and Turkish.

Another context for the study was an orientation session for the case study teachers that was conducted in one of the participating museums. Further details about the content of the session are provided in the data collection section.

Participants

Participants in this study were seven conveniently selected museum staff and all the teachers from the case study school. Regarding the museums, the researcher learned about potential participants by visiting nearly all the museums in Ankara. See Appendix B for the questions used for these museums. Table 1 categorizes all the museums based on their jurisdiction and management.

Table 1
Types of museums in Ankara

Type of Museums	Number of Museums
Museums that are under the jurisdiction of Parliament	1
Museums that are under the jurisdiction of the Ministry of Culture and Tourism	7
Military museums	9
Private museums	39
Total number of museums	56

The researcher faced many challenges identifying these museums and arranging the visits to select the participants. While most of the museums are listed on the Ministry of Culture and Tourism website, some had limited or missing information; therefore, the researcher had to complete the list by searching multiple websites and asking representatives from other museums. Making phone calls to contact them to arrange a pre-interview visit was the first option. However, this method did not work in general (as she received very few responses); therefore, the researcher often had to simply walk into museums and try to find a contact person to arrange interviews. Even though museum staff were very helpful when arranging interviews, providing time was impossible for many museum staff. Another challenging thing was finding a contact person who could give relevant information about the education-related practices, programs and the staff of museums. The researcher needed to make several visits to the same museums to be able to find the most relevant museum staff person.

After these efforts, the researcher was then able to visit nearly all the museums and briefly interview a contact person from many of them. Based on the results of the visits, seven museums were chosen using convience sampling. They were chosen because they were accessible and willing to participate. Furthermore, they expressed

interest in the study and were eager to share their insights. There was some purposeful sampling involved as these were the museums that frequently hosted school groups and had staff members who played a role in providing museum education programs. Each museum had a staff member who volunteered and were thereby selected to participate in further interviews related to the case study (two male; five females). Participants signed a letter of informed consent prior to their interviews. Table 2 lists the museums; it includes a brief descriptive label, a pseudonym to identify the staff participant, and work experience of the participant. Further information about the case study museums can be found in Appendix C.

Table 2
Labels of the museum and participant information

Description of the Museum	Museum Staff	Museum work experience
Natural history museum	M1	10 years
Industrial and transport museum	M2	10 years
Archaeological museum	M3	24 years
Industrial and transport museum	M4	3 years
Applied cultural museum	M5	8 years
Archaeology and arts museum	M6	1 years
Science and technology museum	M7	12 years

The other participants in this case study were all the teachers from a private middle school (N=31). The researcher is also a staff member of this school but she is not included in the study population. The teachers included five males and 26 females, most taught multiple grade levels (grades 5, 6, 7, and 8). Table 3 provides information about the number of teachers within each subject area. Teachers were labeled T1 through T31; further information about the teachers and their subject areas is provided in Appendix D. The researcher secured permission from the

Ministry of National Education to conduct the study (Appendix E) and all participants signed letters of informed consent.

Table 3
Subject areas taught by teachers

Subject area	Number of teachers
Foreign languages	10
Science	4
Social sciences	3
Mathematics	3
Art	2
Counseling	2
Physical education	2
Turkish language	1
Technology and design	1
Information technology	1
Music	1
Drama	1

Table 4 provides information on the teachers' experience, overall and at the case study school in particular. The school employs experienced teachers and, on average, teachers have been with the school for 12 years.

Table 4
Teachers' work experience and years at case study school

Years of experience	0-1 year	2-5 years	6-10 years	More than 10 years
Overall teaching experience	2	1	6	22
Years at case study school	4	8	6	13

Instrumentation

To learn about museum staff and teachers' perspectives and practices related to museum education and partnerships between the case study school and the museums, the researcher conducted interviews and administered two questionnaires. These multiple sources of data helped the researcher compare and contrast the results. The data sources reinforced the trustworthiness, or validity, of the study by checking for alternative explanations and ensuring accuracy (Stake, 1995; Yin, 1994).

For the interview questions, the researcher reviewed the literature to create a series of questions that addressed the research questions of the study. The validity of the questions was assessed by practicing the questions with experienced colleagues; for the museum instrument the pilot was with an experienced museum employee and for the teacher instrument the interview was practiced with another teacher who did not participate in the study. In both cases, any biased or confusing questions were removed or revised. This flexible strategy was used to facilitate open conversations and to allow for other queries to be added, removed, and changed as needed (Cohen et al., 2008).

As described in the paper by Ateş and Lane (in press), the instrument for the museum staff included 27 main questions (see Appendix F). The aim of the interview questions were to ascertain the educational background of the museum staff, their institutions, their perceptions of museum education, field trips, and partnerships with schools.

The interview questions for the teachers were written in part to provide more insights into results of the quantitative data analysis learned from the questionnaire. There were questions about conducting field trips, museum education, school support for museum education, and school-museum partnerships (see Appendix G). As the interviews happened to be conducted after a museum orientation session for the teachers, they were also asked to provide any additional perceptions of the session at this time. Their responses were included in the ancillary component of the research design.

There were two questionnaires used in this study: a main questionnaire and an ancilliary questionnaire. The main questionnaire was part of the original research design and was administered to assess teachers' perceptions and reported practices related to museum education. The ancillary questionnaire was designed to ascertain teacher expectations and perceptions of a museum orientation session.

Regarding the main questionnaire, this instrument was adapted with permission from an instrument used by one of the museums (Çengelhan Rahmi M. Koç Museum). To address the research questions of the study, the researcher added items from questionnaires of two other studies with permission (Ateşkan & Lane, 2016; Bhatia, 2009) and also created seven new questions. In total, there were 60 items (see Appendix H).

The first eight items gathered demographic information. Teachers provided information about museum education background and experience planning and leading field trips through short answers. There were 35 Likert-type items that asked

teachers to what extent they agreed with reasons to conduct field trips, to what extent they agreed with what may discourage them from planning field trips, and to what extent they felt confident conducting certain field trip related activities. Among these questions, teachers were asked about their confidence in contacting museum staff and their perceived support from museum staff. In the open-ended questions, teachers commented on their museum experiences, roles, and expectations. The questionnaire was provided in both Turkish and English.

To review the face validity of the instrument, it was sent to three teachers from different schools, the teachers commented on clarity and content of the items in the tool. The process also helped to determine how long the questionnaire took to complete. Minor revisions were made to the instrument based on their comments. The reliability check with Cronbach's alpha resulted in the score of .83.

In the main questionnaire, two questions are added at the end to ascertain teacher expectations of the forthcoming museum orientation session. Since the museum described this session as a "workshop" this term was used in the questionnaire.

The ancilliary questionnaire was designed by the museum that conducted the orientation session (this instrument is also called a "workshop questionnaire"; see Appendix I). Only three items from the instrument were used in the current study (one about expectations being met, one about awareness of artifacts, and one about access to the venue) as these gave indications to teachers' perceptions. The others alluded to changes in behavior and practice which was not an aim of the study and also not a realistic goal for a half-day orientation session.

It is important to note that the main and ancilliary questionnaire were different from each other and had different purposes; they were *not* designed as a pre-post assessment of teachers' knowledge or competencies in relation to their "workshop" experience. In other words, the orientation session was not an intervention that was assessed through experimental design. The literature shows that changes in teacher beliefs and practices are minimal and short-lived after brief interventions such as workshops (Capraro, Capraro, Scheurich, Jones, Morgan, Huggins,...Han, 2016; Guskey & Yoon, 2009; Lane, Wilke, Champeau, & Sivek, 1995). The items that were designed to assess teachers' perceptions and practices related to museum education in general are in the main instrument and are the key focus of the current study.

Method of data collection

Data collection for this study has three parts: 1) interviews with museum staff, 2) teacher questionnaire, and 3) interviews with teachers. These three parts took place within Phase 1 of the study as depicted in Figure 2. Not included in this figure are an ancillary component (the museum orientation session) and the second phase (further analysis of the data from Phase 1).

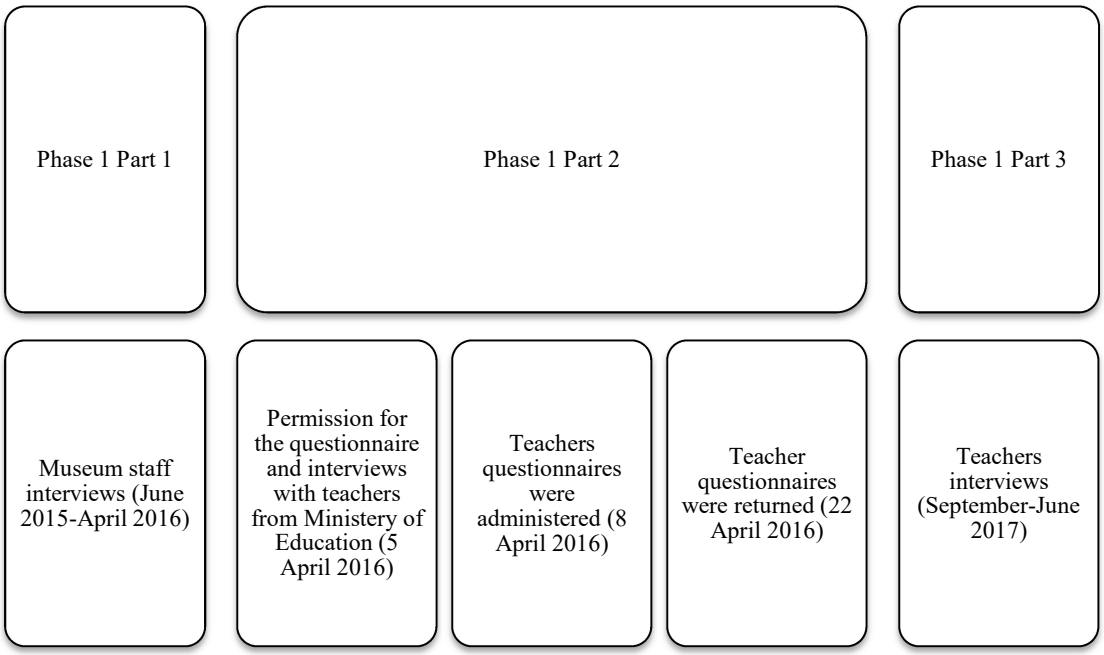


Figure 2. Timeline for phase 1 (adapted from Ateş and Lane, in press)

Part 1

Part 1 involved interviewing the museum staff. Identifying and selecting the participants for this part of the study was challenging, as described above. Each session lasted around 45 to 60 minutes. The interviews were conducted in Turkish either at their institutions or the places that were convenient according to their schedules.

Part 2

Part two consisted of administering the main questionnaire. As mentioned under instrumentation, this instrument was designed to assess teachers' perceptions and practices related to museum education in general.

The main version was administered to teachers in early April 2016 and they were given two weeks to respond. It was sent to all the teachers via the school's group email listserv. After a reminder, all the teachers in the school (N=31) participated.

Part 3

The third part of phase 1 was the teacher interviews. They lasted around 20 minutes and took place after the workshop. Almost all teachers (N=28) in the school participated. All the interviews were held in the school environment and were conducted in Turkish or in English.

Museum orientation session and details about the host museum

The museum orientation session took place between parts 2 and 3 of phase 1. This session was not part of the original research design, but was suggested by one of the museum staff participants during the interviews. After conferring with her school administration and the museum, the orientation session was offered by the host museum. The museum labeled this session as a "teacher workshop" and therefore this term is used to describe the session below.

This workshop was held at Çengelhan Rahmi M. Koç Museum, (www.rmk-museum.org.tr/ankara/ana-sayfa) which is the first industrial and transport museum in Ankara. It is a private non-profit museum that opened in 2005. The exhibitions and collections in the museum include industrial and engineering objects. The building is located across from the Ankara Citadel and is also a historical building itself. The museum aims to inform, inspire and delight the general public by housing, preserving and exhibiting numerous collections, which include Atatürk and Ankara,

Aviation, Maritime, Toys, Agriculture, and many others. The public, including school groups, are encouraged to visit.

The main aim of the three-hour workshop, led by Çengelhan Rahmi M. Koç Museum, was to share ideas and widen teachers' perspectives about museum education. All the teachers from the case study school, except one who was ill, attended (N=30). The workshop leader arranged a variety of artifacts around a room for teachers to examine. The workshop began with an icebreaker activity where teachers tried to find an artifact starting with the first letter of their names. This introduced teachers to the museum educator and also to the artifacts around them. After the fun introduction part, teachers walked around the workshop area and chose an artifact to prepare a lesson plan about this artifact. By developing and sharing these lessons, teachers were able to see how different disciplines had similar and unique approaches to incorporating museum content into their lessons.

As this orientation session provided teachers with an opportunity to learn about museums, the researcher decided it was another source of data to gain insights into teacher perceptions about museum education. Prior to the session, teachers were asked to share their expectations for the workshop (these items were added to the main teacher questionnaire). The ancillary or workshop questionnaire was emailed after the workshop and almost all teachers (N=30) in the case study participated. Teachers were also invited to share perceptions of the workshop during the Part 3 interviews.

Method of data analysis

Data analysis for the current study took place in two phases. The first phase involved the data from parts 1, 2, and 3: the interviews and the questionnaire. In phase 2, the data from all three parts are combined and analyzed using a framework.

Phase 1 data – Interviews

Museum and teachers interviews were analyzed in the same manner. Interviews generally took place at a location where participants work; therefore, in-depth interviews were more accessible to potential participants (Ritchie, Lewis, Nicholls, & Ormston, 2013). With permission, the interviews were audio-recorded. Following the steps recommended by Cohen et al. (2008), the recordings of the interviews were listened to several times to gain a comprehensive understanding of the teachers' responses, and then transcribed for further analysis. Transcribed interviews were color-coded to identify similar and different terms to determine key themes related to museum education. Interviews with international teachers were conducted in English. An external reviewer was invited to examine the transcripts and determine if the identified themes were valid. Any differences were checked with the researcher until consensus was reached.

As discussed in the research design, a focus of the interviews was to ascertain how participants understood a particular phenomenon, in this case museum education. Although transcriptions of the interviews were made, the key to the phenomenographic approach is being attentive during the interviews and continuing to listen to the recordings, noting the participants' intonation and how they stress some words, phrases or sentences. By listening multiple times, the researcher tried to

gain a clear idea about the participants' thoughts and meanings. The researcher's notes about their actions including body language were also used as a part of this approach. Participants openly expressed their thoughts when answering the questions and the researcher grouped the similarities and differences. Thus, the researcher worked on participants' ways of understanding and identified how they understood the phenomenon and what they understood from this phenomenon.

Phase 1 data – Main questionnaire

Data from the questionnaire was automatically entered into an Excel spreadsheet via the online instrument. Descriptive statistics were used to calculate frequencies and means for Likert and multiple choice items. Open-ended responses were compiled and key terms were highlighted (coding). These terms were organized based on common meanings and implications (themes). To check the reliability of the analysis, an external reviewer was asked to examine sections of the data and highlight and categorize terms. The two versions were compared and any discrepancies discussed. Once themes were agreed upon, the research continued to review and compile the data.

Ancillary questionnaire and interview data

Similar to the main questionnaire, data from the ancilliary (or workshop) questionnaire was entered into an Excel spreadsheet to calculate response frequencies. Likewise, interview questions were analyzed in a manner similar to that described above.

Phase 2: Analytical framework

The next step of the analysis involved using a framework to further examine participant perceptions. Using a framework to analyze qualitative data is a common approach in phenomenographic studies (Cope, 2004 as cited by Tight, 2016). Other researchers recommend having an analytical framework for qualitative studies in general (Maxwell, 2012; Miles, Huberman, Huberman, & Huberman, 1994; Lewis & Ritchie, 2003). Wojton (2009) suggested that an analytical tool, such as a framework, can help review and characterize how schools and museums collaborate. The data was therefore used to gain insights into the partnership between the case study school and its local museums.

To identify a framework for the current study, the researcher reviewed the literature to find other models and recommendations (e.g., DeWitt & Osborne, 2007; Hazelroth & Moore, 1998; Hord, 1986; Kisiel, 2014). The researcher selected and applied a framework developed by Weiland and Akerson (2013). In their framework, Weiland and Akerson examined a number of studies related to educational partnerships. In the end, they decided to combine attributes of frameworks cited in their study (Buck, 1998 and Intriligator, 1992 as cited in Weiland and Akerson [2013]). The framework as finally constructed consists of eight dimensions to determine the level of the partnership between two institutions partnerships are cooperative, coordinated or collaborative – with the latter being the strongest. These dimensions are Communication, Duration, Formality of partnership, Objectives, Power and influence, Resources, Roles, and Structure. Using these dimensions in the current study helped validate the usefulness of the framework. A copy of the framework as used in this study is found in Appendix J.

Details of how the researcher used the framework to analyze data from phase 1 are described in the study by Ateş and Lane (in press). The process involved learning about the framework from the paper by Weiland and Akerson (2013) and their literature review. In particular, descriptions of each dimension were reviewed carefully so the researcher could use the dimension during content analysis. Then the researcher combined and compared data from all three parts of phase 1. The researcher identified key terms associated with each of the dimensions and then used these terms to deductively code the data, looking for exact matches and synonyms (Hsieh & Shannon, 2005; Mayring, 2014). Terms that did not related to any of the dimensions were put into a separate category. A colleague was given selected portions of the data and asked to use the analytical framework to verify the results. The results of the researcher's and colleague's analysis were compared and any descrepancies were discussed until consensus was reached.

CHAPTER 4: RESULTS

Introduction

This chapter presents the findings of the data that was collected and analyzed in two phases. The first phase includes the following three parts: interviews of museum educators (Part 1), the results of teacher questionnaires (Part 2) and the interviews of teachers (Part 3). The results a workshop questionnaire that was administered as part of an ancillary component of the research is also provided. This questionnaire was designed to gain teachers' opinions about a museum orientation session the teachers attended. Furthermore, there were some interviews questions that allowed the researcher to gain deeper insights into teachers' perceptions of this session. In phase 2, the results from Phase I data were compared and contrasted using an analytical framework. Phase 2 served to gain deeper insights into the attributes of the case study school and its partnerships with local museums.

Phase 1, part 1: Museum staff and teachers' perceptions and experiences

The first phase of the study includes three parts. In the first part, conveniently chosen museum staff (N= 7) were asked to talk about their institutions and about visits to their institutions by teachers and their students. In particular, they were asked questions to address the first research question of the current study about museum staff perceptions of museum education. Information about the museums, pseudonyms of museum staff corresponding to M1 through M7, and interviewees' experiences have been provided in Chapter 3.

Educational background of museum staff participants

The interviewees had various backgrounds regarding museums and they were all devoted to learning about museums, either formally or informally. Table 5 identifies key experiences mentioned by each staff member that launched their museum journeys.

Table 5
Interest in museums

Museum staff	Reason for interest in museums
M1	During my bachelor's degree, one of my professors supported me about working at museums.
M2	I am an archaeologist. I was interested in this field since childhood. This was the job I dreamed of.
M3	I always liked history. I wanted to study archaeology and when one studies archaeology, consequently he likes museums. One of the main components of archaeology is museums. Through museums people learn about their past and shape their future.
M4	It started at an early age, parents are very important and my parents affected me a lot. I grew up in Antalya, which is an open museum in a way and my curiosity started like that.
M5	During the last year of college, some of our instructors talked about the museums in America and Europe. They said they had drama activities, museum theaters in which one could see their culture and customs. Since our history extends far earlier than theirs and we did not have examples in Turkey at that time, I decided to work on a similar project in my country.
M6	The course I took was about museums in the last year of college.
M7	I was interested in historical places when I was a high school student. Then I studied at the archaeology department, which is closely related to museums, and during my education I visited the museums around quite often.

The findings show that only M1 had formal undergraduate education related to museums. The courses she took included Museum Education and Application, Development of Museums, Historical Museums, Museology, Cyber Museums, and Special Education Methods (this last course included museum visits and discussion of adjusting museums to meet the needs of learners with disabilities).

Even though they did not have formal undergraduate education about museums, the museum staff M3, M4, M5, and M6 received museum-related courses during their graduate education. M3 and M4 received their Master's degrees from the same institution but during different decades. When listing his courses, M3 cautioned that while the names of the courses are still the same, the content may have changed over time. His coursework included Museum Education Applications, Curriculum Development in Education, History of Science, Science Applications at Museums, and Nature and History Museums courses. M4 listed several of these courses and emphasized the importance of culture and creativity in her professional development. In this vein, she added that she took courses called Creativity in Museum, Cultural Studies at Museums, Museums and Development of a Child. M5 received her doctorate in museology and although her research was about museums, none of her coursework was related to education. M6 is just starting her Master's degree in museology.

The museum staff M2 and M7 are archaeologists and museum education was part of their graduate work. M2 acknowledged that she learned about museums on the job: "I learned about museology and museum education here at the museum while

working and visiting other museums all around the world. There was no museology course at the archaeology department."

Although M7 did not receive courses about museums during her archaeology education, she explained that she did learn about museums:

> I did not take any museum education related courses during my formal education; however, our archaeology instructors talked about museum education and one of these instructors shared his personal experiences with us since he had worked at a museum before.

The educational background of the museum staff participants showed that personal interest in museums, history and historical places, parents, childhood, instructors and professors led to their museum-related careers. The participants who were interested in museums received further museum education after their undergraduate studies in general (except M1 who studied archaeology but took museum education related courses during her undergraduate study). The responses indicate that museum education is an area that needs to be considered seriously and separately, even if it is related to history or archaeology.

Museum education staffing and training

In the current study, only M2 and M6, who were trained as archaeologists, described themselves as museum educators. They also indicated that they served as museum administrators or curators. In fact, most of the participants indicated that the lack of staff, both in numbers and competencies, was an issue regarding school visits.

Rather than having a regular museum educator in their museum, M1 said that there were managers from engineering departments who tried to help with museum education activities. She also added that they only had one so-called museum specialist who fills the missing position of a museum educator. Similarly, M3 mentioned that in his museum there were three museum specialists who were archaeologists and researchers and do not consider themselves as museum educators. During the interviews, the staff also emphasized the importance of training and support for museum education. M5 agreed that it was important to train their staff in terms of drama and museum education. She explained that all their staff received drama education that helps them become more dynamic museum educators.

When asked why they pursued a job working in a museum, “Life dragged me into museums!” exclaimed M2. She did not start out her career thinking she would be in museums. As an archaeologist, she instead imagined herself out in the field. She started to find herself spending more and more time in museums and realized that museums had become her passion. She stated that working in a museum was her dream job.

The museum staff M1, M4, M6 and M7 started working in museums because of their personal interests in museums. For M4 it was her parents and for M1 and M5 it was their professors who sparked their interests in museums. M3 emphasized that it was not easy to find a job in a museum after graduation. He said that finding a position at a state museum took him 10 years. M5, who is also an instructor at a university, stated that teaching and museum education were closely related and that was one of the reasons that she chose working in a museum.

The interviewees were all aware of the fact that state museums in Turkey do not have museum educators on staff, but most private museums have at least one such position in their facilities. They explain this is probably because national institutions do not have a dedicated museum education position. One of the staff mentioned that state museums should demand that the government support museum educators in all museums. As M3 mentioned, some museum staff tried to improve themselves to be more efficient with visitor groups, but this effort is mostly on an individual basis and is not widespread. According to the findings, having an educator at each museum is a priority; to achieve this, the participants acknowledge some major changes are needed in employment regulations for state museums. The interviewees also suggested that in the meantime, the government could provide trainings for museum staff to improve their education and outreach skills.

Defining museum education

One of the questions asked of museum staff in order to understand their perceptions was how they defined museum education. Highlights from their answers are given in Table 6:

Table 6
Definitions of museum education

Museum staff	Definition
M1	Museum education primarily provides opportunity for different age groups to learn about the cultural heritage nearby. It provides a medium where learning happens as people have fun. They have the chance to learn by doing and living. It offers an atmosphere that people can internalize.
M2	Museum education is learning in museums. It occurs by seeing, by touching, by feeling. Understanding our history, our culture, ourselves.
M3	Museum education is not just exhibiting the objects. That is why museum education is important. Giving information, using technology, transforming the information, workshops are all parts of the museum education. If all these things are not together, it does not mean anything. Museum education is the best way to connect museums and masses (populations) by improving the visitors' imaginative worlds, aesthetic point of view and the understanding of arts. The main ideal of managing the future by learning the past happens through museum education.
M4	Museum education is being happy at a museum. It is very important to appeal to senses and feelings in education. It is to give the right message that the museum itself aims to give.
M5	Museum education is a kind of communication. It is a bridge to communicate. Museum is an educational institution that tries different ways to give information to the visitors. It is a whole program (package) that includes different methods to transform the information.
M6	Learning in museums is inevitably interdisciplinary situation. It is very important to comprehend the importance of museum education as an essential part of education. It is a discipline that affects all the visitors from young to old; it provides a new vision for them and changes their points of view.
M7	I see museums as active learning places. Museum education gives students opportunity to use all their senses, and experience what they learn theoretically in class. Museums provide physical experience for students so that they can examine objects, ask questions, and learn more about history. All these provide invaluable active learning experience for students.

The definitions that were given by the participants above show how these museum staff are eager for their institutions to play a role in educating the public, including

school children. They are striving to help visitors learn efficiently in their institutions.

Student learning and school visits

All of the interviewees noted the importance of school visits to their museums and five of them said it was a priority of their institutions. Their museums provide students with different sources of learning and they all highlighted that they aim to increase students' interest and learning. Each participant explained what students learn in their museums: M1 stated that students can learn about nature of history, formation of the universe, vertebrate and invertebrate animals, history of mining, and valuable stones. She was proud of the projects that they had worked on so far. She mentioned how projects encourage students to learn more about the subjects that they work on. M2 emphasized that students learn about the importance of a museum, collecting objects and having collection and it is very valuable for them. They learn about their past and have the chance to compare with the current living. Students are able to learn about vehicles, transportation, space and many other daily objects from current and historic lives as M4 explained. The participant M6 was excited about the workshops that they had arranged. She said that, in those workshops students learn about mythological heroes, they learn about their lives and old time clothing. They also learn how to make bread or coins. The participant M7, who is an archaeologist, works in a museum where there is no dedicated museum educator. He mentioned that whenever he has time, he tries to answer students' questions. He also emphasized that if reservations were made prior to bringing student groups to their museum, the staff could be more helpful and they would be more able to offer educational

programs. However, because of the limited number of staff and the condition of the venue, they cannot offer those programs to groups all the time.

The interviewees mentioned that the lack of a museum educator or not having enough number of staff in a museum causes some difficulties both for museum staff and visitors. On the other hand, it is obvious that the museum staff see museums as an important part of education and they are all aware of the positive effects of museums on people.

All the interviewees emphasized the importance of museum education and they all agreed that they plan activities to foster students' learning. The participant M4 mentioned the activities that they have offered to different visitor groups:

> Every Tuesday and Thursday we had sessions for different age groups, but now it is summer time and our staff has other duties such as working at the excavations. We worked with primary, high school students as well as university students. Some of our programs were for disabled students who had mental disabilities or physical disabilities. We offered programs for prisoners, hyperactive students, and blind people. Teachers need to prepare a file for these projects and then we can guide them.

This comment shows how difficult it is to have continuous school programs in a museum if there is not enough staff or qualified staff to handle students from different age groups. In his answers, M4 also complained about the limited number of schools that they usually work with. In addition, he mentioned the important role of teachers in museum education.

Another issue that staff raised was students' attitude, behavior and interest during their visits to their museums. The participant M2, who is trained as an archaeologist but works as the director of a museum, explained that

> . . . most children are not conscious about museums. They do not know how to visit a place. The rules should be given before their visit. They should learn these rules and internalize them to be able to visit a place efficiently. Teachers should teach them in class by using drama activities or taking them to field trips more often. We have cases that students damage our exhibits in the museums. They hit the glasses, they run, they push their friends, they shout. They act as if they are playing outside. There is a huge disciplinary problem for teachers and for us as museum staff. I also worked as a teacher so I understand how desperate teachers feel in this situation.

M2 was unique in her empathy with teacher frustration, as most of the other staff criticized teachers and felt they should take more responsibility. They acknowledged, however, that many children have limited experience going to museums and that if their first visit is during formal schooling, they may be overwhelmed with the experience. They staff fear some children are not being educated at home or school about the need to respect museums and this is reflected in their behavior during the visit. Several staff noted that if children had more opportunities to visit and value museums, they would be more disciplined during their visits.

In her defense of children's behaviors, M2 said that parents need to learn how to respect museums and guide student actions when visiting a museum.

> It could be social psychology, but children seem to cause more problems when they are with their parents. One of the parents wanted to close the lid of a huge terracotta vase in the

> exhibition by thinking that his child could get hurt if he enters in it. Adults tend to cause more damage.

This comment points out that museum education is necessary for everyone; not just for children. It is can also be inferred from the participants' answers that background and interests of parents affect their children.

Some staff members acknowledged that the design of museums needs to change if they want to allow interactive learning. Typically, museums goers expect to see "do not touch" signs; and indeed there have been problems with visitors damaging exhibits. While there are some precious resources that cannot be handled, several staff mentioned the giving visitors an opportunity to handle artifacts is an important learning opportunity. The participants M5 and M6 described some hands-on activities that now have in their museums and how these experiences can foster students' learning. In this way, students learn by seeing, touching, and listening. They also noted that they have workshops for children where they create artifacts and this helps them produce something and apply their learning.

During the interviews, it was clear to see that museum staff devote their lives to museums. They are all willing to see how visitors including students enjoy and learn their venue. They all know that students gain some form of information or experience from their museums. They expressed their feelings about students learning while answering the question about how they knew students learn in their museums. The participant M2 concurred and joyfully recalled that, "[the children] want to contribute by bringing some old objects to our exhibitions or they want to start collecting objects."

The participant M4 said that, “Students show their feelings clearly, for instance, whether they want to leave the museum or stay. I can see it in their eyes.” Similarly, M6 stated that children were very direct in terms of expressing their feelings. “They react right away; we receive feedback during their visit or after their visit.” Another participant M7, who is an archaeologist, receives some formal feedback by using questionnaires or before and after pictures for young groups.

The participants discussed the importance of student learning and stated that the greatest challenge was the size of the school groups. The participant M3 explained how they try to solve the problem of large groups visiting their museum:

> We are fortunate that we can bring in staff from our other museum in town. We divide the students into smaller groups and each staff member focuses on a different topic. Then the groups are switched between the staff to focus on a new topic.

It was noted by other participants that not all museums have enough staff to deal with crowded groups of students. The participant M4 said that it is common for a group of 70 students to tour through the museum. M5 expressed his experience, “Students come to our museum and take some photos in front of the objects without even looking at them or without investigating what they really are. The situation is the same for some teachers too.” M6 recalls groups of 200 or 300 students visiting their museum. Both M4 and M6 questioned the quality of learning taking place in such large groups. Even a group of around 25 visitors has its challenges according to the participants.

Museum staff reported that uncertainty about their roles in terms of dealing with student groups decreases their motivation. In addition, issues with leading a group are exacerbated when the teachers treat the visit as free time and leave the museum staff in charge of the group. More discussion of perceptions of teachers is given below.

Opinions about teachers and school visits: Experiences, resources, and suggestions

All the museum staff who were interviewed advocated for teachers taking a lead role in museum field trips to make them successful. For the most part, unfortunately, they had many negative comments and opinions about teachers who bring students to the museum. M4 noted that it is not uncommon for teachers to show up with a group of students with no appointment or notification. Another issue is that some teachers come without preparing their students for what they are to learn; this causes many serious problems for museum staff and student learning is compromised. The participant M1 stated that most teachers come to their institution with no preparation or planning:

> I will criticize teachers mercilessly: 95 out 100 prepare nothing. They only tell students they are going to a museum. Other than that, the students do not know what to expect or what they are to learn. Once they arrive, they do not control students . . . If it is planned, it works better. We create a different vision when we reach these teachers. They know what they want to do in the museum and how it may result. When teachers come to us with their projects to work on with, it is easier.

A few interviewees were able to describe positive experiences they had with teachers and their visits. For instance, M2 who is the manager of a museum stated that one of

the teachers who visits their museum regularly contacts the museum at least one month before the planned trip takes place. She stressed that they would like to see more teachers and schools that are better planned for their museum trips.

The interviewees shared their ideas to deal with these issues. They had some valuable suggestions that museum staff could have a stronger partnership with the community members including students and teachers. The participants M3, M6 and M7 also mentioned the value of volunteers in the museums to deal with visits from school groups. Even though it is not common practice to work at museums voluntarily in Turkey, teachers, university students or even high school students can be encouraged to be a part of museum education.

There were museum staff who did view teachers as valuable sources for museums since they know the pedagogical approaches to teach and guide students. The museum staff shared ideas and experiences regarding training teachers and working collaboratively with them to be more useful for students. Among the interviewees, M1, M2 and M4 work in museums that develop and offer professional development programs for teachers. These programs are in the form of workshops that orient teachers to the museum exhibits and provide guidance on how to lead field trips. These interviewees reported that the outcomes have been effective. M1 explained that:

> Teachers can be trained as potential museum educators so that there can be more collaboration between schools and museums. Also, museum pedagogy has gained importance for effective museum education. This is true for both for teachers and museum staff. For example; one of my staff questions his role in museum education; he claims that he is

> an archaeologist not an educator and was not qualified to lead hundreds of students through our museum.

Phase 1, part 2: Teacher questionnaire

A questionnaire was administered to teachers to gain insights into their perceptions of museums, museum education, and student learning at museums. This main questionnaire contained items to address the study's second research question and are related to teachers' practices and perceptions about museum education and field trips to museums.

Teacher perceptions of museum education and school visits – questionnaire responses

As noted in Chapter 3, all 31 teachers from the case study school responded to the main questionnaire. This questionnaire included items designed to gain insights into how school staff viewed museum education, conducting field trips, and working with museum staff. Demographics of the teachers were provided in the previous chapter within the Participants section. Following are frequencies and means of the responses to selected items in the questionnaire. At times, teachers chose not to respond to an item so the response rate is less than 31. In addition, there were open-ended and short answer questions designed to ascertain teachers' perceptions of museums and field trips.

Interesting, beautiful, excitement, history, past, tiring and insufficient. These are a few of the words teachers listed when asked to provide one that comes to mind when they think of taking students on a field trip to museums. These words indicate that

some teachers see a field trip to museums as a positive experience while a few think negatively.

The respondents agreed that there are benefits of field trips to museums, including gaining lifelong learning (N=31; 100%). Almost all (N=29; 94%) of the teachers mentioned that museums provide students with a new learning environment. Responses to other items in the questionnaire are provided in Table 7.

Table 7
The reason why teachers plan a field trip to a museum

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Making connections to the curriculum (N=31)	17	10	2	1	
Experiencing a historic place (N=31)	17	13	1		
Gaining lifelong learning (N=31)	23	8			
Exploring a novel place (N=31)	24	6	1		
Increasing student interest in culture (N=31)	23	8			
Enjoying the environment and exhibitions (N=30)	19	10	1		
Increasing motivation (N=30)	23	7			

In their open-ended responses, they indicated that museum field trips can help students appreciate different point of views, see things differently, and make the learning memorable. Other potential benefits of taking students to museums supplied by teachers include the following:

- It is a first-hand experience for the students; they experience and live what they have seen in theory in the classroom, makes learning experiences more memorable as it is learning by being involved.
- Museums are a connection to a unit of inquiry and yet a mind-break at the same time. Can also get some students more interested in a topic if done prior to a unit.
- Through museums seeing is learning. Children learn more when they experience something.

Table 8 shows the reasons that discourage teachers for not conducting field trips to museums. It is apparent from the results that learning about and working with the museum and its staff is important. Some barriers noted in other studies were not a major concern to the case study teachers. Namely, funding was not reported as an obstacle, most likely because the private school has a budget for field trips. Teachers indicated that parental permission for field trips was not seen as an obstacle by teachers in the past. At the time of this study in 2016, however, there were unfortunate events in Turkey that were making parents less supportive of sending their children on trips. Because of these situations, school administrators were canceling trips amidst concerns about student safety in public and tourist sites.

Table 8
Teacher perceptions about challenges to museum field trips

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Making connections to the curriculum (N=30)	12	9	2	4	3
Acquiring parental support (N=31)	7	12	7	5	
Securing parental permission (N=30)	9	13	6	2	
Administrative concerns (N=30)	6	10	9	4	1
Children's safety (N=31)	20	5	4	2	
Need to allocate time to take the students to the field trip (N=31)	21	5	4	1	
Need to be familiar with Museum program (N=30)	10	11	6	3	
Lack of personal training to conduct the field trip effectively (N=31)	9	8	10	4	
Developing student activities for the trip (N=31)	12	11	1	5	2
Managing student behavior during the trip (N=30)	17	7	5	1	

Over half (N=17; 55%) of the respondents reported that they have taken their students to museums. Among the participants, 28% of them (N=8) stated that they never visit the same museum within an academic year; while most of them (N=19) may visit the same museum, but only once. Only a small number of teachers, less than 1% of them (N=2) have taken their students to museums more than five times during a typical academic year. Very few teachers (N=2) claimed that they visit the same museum twice in an academic year. However, only 28% (N=8) of the 29 teachers who responded to this question stated that they were the lead teachers and organizers. Instead they mainly accompanied other teachers and provided support services (see Table 9). In addition, most of the 27 participants who responded to this question (N=17; 63%) reported that during a typical museum field trip, they spend one to two hours at a museum. Only three teachers said that they spend three or four hours at a museum. There are some teachers who stated that they spend less than only one hour at a museum.

Table 9
Teachers' roles in the field trip(s) (N=29)

Role	Number of teachers
Leader	8
Co-leader	9
Participant	5
No role	3
Other	4

Teachers were asked how they prepare students before a trip (see Table 10). Teachers stated that relating the curriculum unit with the trip is essential and before their visit they work on the link between their unit and the museum. They also said that they prepare students by having them do research about the venue and the exhibitions. They work in groups and then share their reports with the class. Some

students draw pictures about a specific artifact while the others answer questions related to the artifact. Another way of preparation for the museum visit is informing students about how to visit a museum and the rules.

Table 10
Pre-visit classroom activities for a museum field trip

	Always	Often	Sometimes	Seldom	Never
No pre-visit activity (N=27)	3	2	3	4	15
Class work (written or drawn) (N=30)	7	8	10	4	1
Slide show/film (N=29)	7	10	7	3	2
Class discussion (N=29)	6	11	6	4	2
Guest speaker from a museum (N=30)	1	2	7	6	14

There were only 14 teachers (44%) who expressed confidence planning a museum field trip. The rest agreed or strongly agreed they lacked confidence or did not provide an opinion. Responses to specific items about museum preparation, planning, and implementation experience are provided in Table 11.

Table 11
Teachers' level of experience field trip activities

	Very experienced	Somewhat experienced	A little experienced	Not experienced	Not sure
Choosing a location (N=30)	4	7	12	6	1
Obtaining administrative support (N=30)	3	15	6	5	1
Contacting museum staff to arrange the field trip (N=31)	6	6	7	10	2
Building partnerships with experts from museums (N=31)	4	4	10	11	2
Involving parents or guardians on trip (N=30)	2	8	11	8	1
Enhancing student inquiry (N=31)	9	14	3	5	
Managing student behavior (N=31)	11	15	1	4	
Assessing student learning (N=30)	7	14	4	5	
Evaluating the field trip effectiveness (N=31)	8	12	5	6	

Table 11 (cont'd)
Teachers' level of experience field trip activities

	Very experienced	Somewhat experienced	A little experienced	Not experienced	Not sure
Helping students relate the field trip experience to classroom learning (N=30)	10	11	4	5	

Teachers' responses pointed out that the challenge for teachers begins with choosing the right museum for their students; for one thing, they are not very knowledgeable about the locations of the museums in the city. Among all participants only 6% (N=2) indicated that they received training related to museum education. However, most (N=29; 94%) were open to attending a workshop or other professional development opportunity.

When asked if they thought contacting museum staff was a challenge, nearly 75% of the respondents strongly agreed or agreed. Nearly half of the participant teachers (N=15; 48%) lack experience of contacting museum staff to arrange a field trip. A similar number (N=22) also agreed that collaborating with museum staff was a barrier. This could be because the teachers played a supportive role rather than leading the trip; however, museum staff comment that sometimes teachers arrive without contacting their institution. It appears that only three teachers do not agree that contacting museums is a barrier and two indicate that communication is not an obstacle. These may be the teachers who are more experienced conducting field trips and may have regular contacts with a museum staff.

Among the items in the questionnaire, there were a few that asked teachers about working with museum staff. They reported that museum staff played the following roles during their field trips: guiding, giving information, directing, and providing support. They also indicated the extent to which they agreed that museum staff were supportive (see Table 12). According to the responses, most teachers (N=20; 69%) think that museum staff are supportive when they direct questions to them. Furthermore, 36% (N=10) of the teachers reported that museum staff are involved in assessing the field trip. These results show that teachers find museum staff supportive during their trips.

Table 12
Teachers' perceptions of support from museum staff

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Museum staff are very involved in planning the trips (N=29)	6	9	7	6	1
Museum staff are very responsive to my questions (N=29)	9	11	8	1	
Museum staff are supportive of student trips to museums (N=29)	7	12	7	3	
Museum staff are involved in assessing the field trip (N=28)	4	6	8	8	2

The findings also indicate that 12 (39%) teachers had no experience of building partnerships with experts from museums. None of the case study teachers were currently partnering with a museum. The responses to these were notable and resulted in including follow up questions about school and museum partnerships in the interviews. The interview findings, presented in the next section, also revealed concerns and hesitations regarding working with museums. These findings lead the researcher to recognize that a deeper exploration of the level of partnership between the case study school and museums was needed. This deeper analysis involved

identifying and applying a theoretical framework that is presented in phase 2 of these findings.

The results of these questions showed that 94% (N=29) of the teachers have not received any professional development in museum education. There were 29% (N=9) of the participants who received drama courses during their education. The researcher added this item to the questionnaire at the suggestion of one of the museum staff participants who believes that drama education can contribute to being a museum educator. Indeed, teachers who responded positively to this question pointed out that drama education helped them to plan creative activities in and outside class. One of the participants, T8, mentioned that he led many workshops related to creative drama.

Phase 1, part 3: A closer look at teachers' perceptions – Teacher interviews

In addition to the questionnaires, the second research question was addressed by analyzing data from teacher interviews. These questions were used to gain a deeper insight into teachers' understanding about museum education, teachers' experiences with museum staff and collaboration with museum staff. Much of the information teachers shared during their interviews confirmed the findings of the questionnaire.

Perceptions of museum education

All teachers believe that museum education is very important for students to learn culture and life. As participant T8 stated, museum education helps students to produce ideas by looking at an object, improves their creativity. It helps them to be sensitive individuals and thinkers. Participant T10 indicated that museums provide

beautiful things but at the same time all these places show the mistakes that were made in history. She thinks that museums are places that guide people for the future as well. She stated that museums are important places for civilizations and people can develop their personality in their own culture if they know their cultural heritage well.

On the other hand, most teachers believe that necessary attention has not been given to museum education. Participant T1 mentioned that even though we have many museums, the concept of museum education is vague and Participant T9 stated necessary attention is not given to that precious culture and history.

The main reason for not knowing much about museum education was also mentioned by participant T3 during the interview. She said that there is only one university that has museum education department. She believes that having more programs and departments that offer museum education would increase the number of students who would be educated in this field. There are very good examples all around the world that show how museum education works efficiently. For example, participant T4 explained it with her own experiences.

> I have visited many museums in other countries. They give so much importance to museums and the education there. They receive training very often; teachers, students and museum staff. When I think of my own educational and professional life, I have only visited museums twice or three times.

Some teachers, such as T5, recognized that there are museums that offer training for teachers and students. As a person who grew up in a small town she noted that the opportunity of such education can be obtained mostly in big cities.

> We used to go to the museums in my home town for our social science lesson. It was joyful to go to these places and it motivated me as a student, but we were not guided there. We just went, spent some time then returned. There was nothing that made the students active there, just looking at the objects. Also, other subject teachers rather than social science teachers could take us to the museums and give no information. It could give us another dimension to see the objects from different points of view.

Visiting a museum is seen as a summer holiday activity for some teachers. They did not think previously that they could use museums in their lessons. As participant T6 stated people are not very knowledgeable about museum education.

> I do not know much about museum education in Turkey. Museums are the places that we visit on holidays in general. Of course they are beneficial places to learn but they should be used efficiently. Both teachers and museum staff should be competent enough to guide and direct students.

T7 mentioned that to understand the concept of museum education and the importance of it, the whole public should be informed and museum awareness should be increased. Participant T15 supported this comment by saying that she was not aware of what museum education was and had no related training before.

Teachers who are interested in visiting museums also shared some personal experiences during the interviews. Participant T17 compared Turkey with Italy and frankly shared her own experience;

> In a museum in Italy, children were sitting in the corridors and drawing something, writing something. They have the education system that allows these little ones to be with museums, to live in museums at that early age. We do not do that and I did not spent time in museums when I was a child, maybe because of that now I am not really willing to add museums in my plans as a teacher.

Participant T22 gave a similar example by saying that in the US, students visit museums very often but it is not the case in Turkey. “There are many museums in Turkey, too. However, we (teachers) do not know much about them.”

A different view came from participant T18. She thought that this is like a habit and it comes from parents. “It is something cultural. Parents do not go to museums with their children and school is the first place that some students encounter with museums.”

As some teachers mentioned during their interviews, they are not aware of the museums around them. Participant T21 frankly accepted that she does not even know the number of museums in the city and she could count not more than five of them even though there are 56 museums in the city.

Not all teachers were pessimistic about museum education in Turkey. Participant T8 said that one of the universities in Ankara offers related courses and he took some of them. He described this experience as very joyful and useful. In addition, participant T25 said that every other day her awareness about museum education was expanded.

Practices in museum education – field trips

During the interviews, teachers were asked to reflect about conducting field trips with students. They discussed their practices, as well as perceptions of barriers and challenges.

Teacher comments also imply that teachers decide which museums to visit with their students according to their personal interests and preferences. Participant T5 reported that she would like to take her students to the museums that include interactive exhibits. She also mentioned that scientific or technological exhibitions attract her more. “I took my students to a museum where we could see Da Vinci’s drawings since I am impressed with his work.”

Another teacher, T12, indicated that it is helpful if teachers themselves enjoy and value museums. She shared that,

> I know some of my colleagues do not see going to a museum as necessary or fun in their own life. It is something obligatory for them to go there. Once, one of my colleagues asked me why I visited a museum on my holiday. I could not imagine her planning a museum field trip for students, when she doesn’t have any interest in going on her own.

Many teachers (N=19) reported that field trips helped them reinforce their students’ learning and that students’ enthusiasm for the trips was a positive experience.

In some departments, planning for field trips involves all teachers, but several are not satisfied with the process, as there are disagreements and conflicts. For instance, participant T12 reflected that her ideas were not taken into consideration by other

members of the department, although she was very enthusiastic about the field trip. She said she offered to investigate the exhibition, to guide her students, and show them how to look at the paintings. She was not merely planning to take her students to the museum and spend some unproductive time there; she reported that she had great ideas for the trip.

One of the teachers who has no plans for future field trips explained the reasons as not having enough time and being too busy. “I teach 28 hours a week no time to take my students to a museum and spend some hours there. I teach different levels at primary and middle school and I cannot take all of them there.”

T13 reported that he never had the responsibility to accompany students to a museum, and never planned a trip by himself to a museum. He thought that it was not related to his field at all but he was optimistic that finding a connection to his field can make it possible to plan and conduct a trip.

T21 and T22 had similar experience about visiting a museum. They accompanied another subject teacher and her students during a trip but they did not take part in planning or do anything like educating students there.

For some other teachers, like T10 and T11, planning a field trip is not possible because they are school counselors and not classroom teachers. They both think that their field is not directly related to museums. Moreover, those counselors do not have specific teaching hours and that is one of main reasons for not planning a field trip. They (T10 and T11) both mentioned that it creates a problem for them to plan a trip

even if it is a few hours long. “Since we do not have our specific teaching hours, we (the counselors) always need to use the class time of other subject teachers and it usually creates problems. They have their own curriculum to complete and they do not want to lose their teaching time.”

Challenges to conducting field trips

During the interviews, teachers expressed their ideas about the obstacles that they have experienced to conduct field trips. Participants T3 and T4 mentioned that the whole procedure for receiving permission from parents and organizing the transportation was complicated. T4 raised her concern about extra planning and covering teachers’ other lessons who take students to trip. “It is extra workload for other teachers who cover the lessons. If some students do not go to these trips we have to plan another lesson for them and I feel embarrassed to make my colleagues work harder in these situations.” Participant T7 also reported that it is quite challenging to plan a field trip to a museum. Participant T9 said that teachers have different challenges.

> Before conducting a trip coordinating with a museum or people at the museum is challenging and if we pass this obstacle, handling students’ behavior there is another obstacle. We have serious discipline issues. Also, budget could be an obstacle but we are lucky that we have a budget for that and our school supports that kind of endeavors.

Teachers who do not have the experience to take students to a museum hesitate to plan one. T5 explained that she needed help from experienced teachers to plan a field trip. She also mentioned that controlling students during visits, arranging the teachers who could accompany and planning budget could be challenging.

Students' behaviors were mentioned as a challenge by many interviewees (T13, T15, T20, T21, T22, and T25). In addition, some teachers (such as T24) indicated that it is a huge responsibility to take students to museums because of their unpredictable behavior. During the interview, participant T25 even suggested that teachers should take only those students who are predictable and responsible on field trips. ParticipantsT10 and T11 mentioned that dealing with students who come from different backgrounds can be challenging. "They and their parents are not coming from the same level of education and their cultural infrastructure can be very different. Their perspective of visiting a museum can affect their interest, too."

Interview responses showed that taking too many students on a field trip could be very challenging for teachers. Participant T14 expressed her feeling about this

> We have 109 students so the challenge was whether to take all the students on the same day or do it on two separated days. The teachers who company the field trip have their own lessons and they had to have their classes submitted. The main problem was working with a big group and asks for additional teachers to support. It is difficult to control what our students do if we separate them into groups.

Even though some teachers are willing to take their students to museums and they devote their free time for this trip, it does not work all the time. Participants T16 and 17 told about their experiences to take many students to a trip.

> We know that we should take students in groups of 20 but we have too many students and not that much time and taking 70 students at once is not beneficial at all. Time and number of students are the biggest challenges for us. We could not plan a museum visit this year because we could not fit it into our schedules. Again time is not enough but we tried to find a

> solution. We suggested taking the kids there at the weekend but they did not want it.

For some other teachers, such as participants T18, T19, T20 and T21, planning is challenging because all before, during and after visit activities should be planned carefully and they all need to be relevant to their units. For some teachers (such as T3), managing their time is a big problem. They are obliged to complete the units in their curriculum. Therefore, they hesitate to spend their lesson time outside school.

Teachers' perceptions were different than the views of museum staff regarding communication. Almost all teachers expect museums to contact them and promote their museums. Participant T23 said in a cynical way that he had never been contacted by a museum in his 20-year professional teaching life; he was the one who always initiated the contact with the museums.

Opinions about museum staff and their roles

One of the interview questions asked teachers about their perceived roles in museum education and field trips. Similar to the questionnaire responses, the teachers shared that they were unsure about their roles and the role of the museum staff. The findings do indicate that teachers have high expectations about what museum staff should do regarding field trip preparation and implementation. One of the teachers (T2) shared her own experience where the museum staff played a very important educational role for her students.

> We need the museum staff to guide us and students not just showing the way or direction. When they tell stories about the artifacts, share their personal experiences related to these objects in the museum, students enjoy it a lot and listened to

> the person carefully. Once one of the museum staff stood in front of an object and told the story of it and gave information about the object. It was really effective.

Teachers want museum staff to be in charge of almost everything related to students just after their arrival. Participant T23, however, acknowledged that a museum staff cannot take all the responsibility during a school visit. Other teachers also recognized the importance of being well-planned for both parties; museums and schools. Participant T26 reflected that they immediately saw the results of well-planned trips. These comments allude to the need for a better collaboration between museum staff and teachers. In the next section, phase 2, the data from the museum staff and teachers were further analyzed to investigate the level of collaboration between schools and museums.

Perceptions of partnerships between the school and museums

Nearly all the teachers reported that the level and quality of the partnerships between their schools and museums were minimal and needed to be improved. While most teachers had positive experiences during field trips, they acknowledged that the education within a field trip could be improved. Participants such as T2 raised his concern about not being informed about exhibitions as a teacher. He said that

> Teachers cannot follow the exhibitions all the time so museums should inform the schools about their museums in general and the contents of their exhibitions. I have not received any emails or brochures from the museums even though we have many in Ankara. They can send posters to schools. There is a special week called Museums Week but we are not informed about it either.

Participant T8 likened the partnership between a school and a museum as having theoretical and practical parts, and one part needs to support the other. He said

> To have a good partnership today museums try harder than before. Museums are trying to develop themselves and they have started employing museum educators. There were not any museum educators in the past and museums had no intention to develop and advertise themselves but their effort nowadays is worthwhile.

Teachers have varying opinions about the importance of partnership between museums and schools. On the one hand, some teachers are not even aware of the concept of partnership. On the other hand, some teachers such as T15 suggested having a guide book that is prepared by museums according to curriculum to improve the partnership between a museum and a school. “This guide book can show which museums and exhibitions can be visited according to curriculum units to support our lessons.” Although at times, teachers indicated they wanted museum staff to lead field trips, others such as T18 recognized that teachers need to be responsible, too.

> Museum educators should spend some time and interact with students, not lecturing, but showing interest and interesting things to them. They need to be good educators and good communicators. Teachers play a very important role in child’s education but at the same time museum staff should be educators as well.

Ancillary research component results: Museum orientation session

This section includes results that address the study’s ancillary research question related to teacher perceptions of a museum orientation session. The main version of the questionnaire included two questions to ascertain teachers’ expectations for this

museum orientation session. After the session, a workshop questionnaire administered. As explained in Chapter 3, this workshop questionnaire was designed to assess teacher perceptions of the session. While the teachers may have been asked to share their impressions about how the session may affect their practice, the researcher did not expect any actual behavioral change. Therefore, to be clear, the session was not an intervention or treatment and the questionnaire was not designed to assess pre- post- changes of teachers. As mentioned in Chapter 3, studies show the effects of workshops are often short-lived; although the interviews in the current study did provide some indications that the session might have longer effects.

Expectations for the session

There were two questions in the main questionnaire that specifically asked teachers about the upcoming museum orientation session. In the questionnaire, the session was called a workshop because this was how the museum staff described it. In their responses, the teachers shared the following expectations:

- how to organize museum visits
- how to plan, apply and evaluate an effective field trip
- how to plan activities prior to museum visits
- classroom management techniques during a museum visit
- collaboration strategies for museums, teachers, and schools
- motivating students before and during a visit
- how to use museums actively as a part of education
- how to incorporate creative drama and fun activities during a museum visit
- teachers' needs in order to conduct a field trip to a museum

Teachers also reported that they expected to increase their awareness and understanding of the importance of museum education. They expected to see some useful sample activities and lesson plans, which are applicable to different subject areas.

In general, the responses indicated that teachers were very open to learn about museums and were motivated to receive training about the subject. One of the teachers said that she had never experienced museum education and was excited about the idea of a new training. Another teacher expressed that she would like to see how to fit the field trip to the curriculum and to increase students' inquiry about the artifacts. Several teachers (N=6) also noted that they needed support on how to contact museums and were interested in learning how to collaborate with museum staff.

Workshop questionnaire responses

In the workshop questionnaire, teachers were asked to what extent their expectations about the museum orientation session were met. This session was called a workshop in the questionnaire and will be referred to as such in the following results. These results are given in Table 13. The same table shows the results of the questionnaire item which is about the inadequacy of the museum orientation session.

Table 13
Teachers' responses about the workshop

Responses	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The workshop met my expectations (N=30)	3	14	6	7	
The workshop was inadequate (N=30)	2	5	8	14	1

Over half (56%) of the participants strongly agreed or agreed that the workshop met their expectations. Nearly a quarter (23%) disagreed and six of the teachers had no opinion. Although it seems that expectations were met by many of the teachers, it is interesting to note that half also expressed that the workshop was inadequate. Further discussion of the perceived shortcomings of the workshop is provided below.

The teachers had some positive comments about the workshop. Many (63%; N=19) found it entertaining. The length of the workshop was stated as good by 53% (N=16) and it helped them (N=15) to improve themselves as teachers. The responses to another item indicated that 63% (N=19) of the teachers felt more competent organizing a field trip after the workshop. In addition, half of the group 50% (N=15) agreed that the workshop helped them to integrate field trips into their lessons and curriculum. This shows that field trips are applicable to the available lesson plans and curricula.

Half of the teachers (N=15) thought that the workshop changed their point of view about artifacts in the museum and they felt more competent about museum education after the workshop. Teachers shared that the following were the most useful parts of the workshop:

- Planning an actual field trip to a museum.
- Working with teachers from different subject areas.
- Relating artifacts in a museum to lesson plans and the curriculum.
- Seeing that planning a field trip is a feasible project.
- Planning trips together and sharing ideas.

As noted above, there were teachers felt the workshop did not meet their expectations. For another item in the questionnaire, 33% (N=10) mentioned that the workshop did not change their perception of museums and it was not found very educational by a number of teachers (N=8). One of the teachers expressed her ideas as follows:

> Visiting the museum during the workshop and seeing the content of it was nice. Also, it was useful to discover the artifacts that I could integrate into my lessons. However, there were some inadequacies in terms of organizing the whole workshop and specifying the aims of it. I could not receive answers for some of my questions.

Even though teachers liked having the workshop somewhere outside the school environment, there were opposing ideas.

> Part of the workshop could be different, perhaps the part where we shared our lesson plans was too long; as we were standing around and most people lost their attention due to the length of the feedback. It could have been shared in smaller groups, then reporting summarizing what we had learned about others' ideas.

Although the workshop did not meet all expectations, all teachers who attended the workshop responded positively on the questionnaire that museum education is necessary and they all would like to receive further training about museum education.

Further insights into teacher perceptions of the museum orientation session (interviews)

Positive comments – potential to change perceptions and practices

In the questionnaire, only around half the participants indicated the workshop met their expectations. Of the 28 teachers interviewed, however, 24 reported that the workshop changed their perceptions about museum education. There have been studies that indicate face-to-face interviews might result in people being less candid about their opinions compared to more anonymous questionnaires (Duffy, Smith, Terhanian, & Bremer, 2005). Participants T1 and T2 commented that they had considered taking students on field trips to museums, but lacked ideas on how to best involve students; the workshop provided them with teaching activities. The best part for them was to see how their colleagues generated new ideas about museum field trips and activities. They explained that during the group discussions, "ideas created new ideas and the workshop was effective."

The workshop helped some participants to understand the concept of museum and museum education. Participant T16 said that she received museum education for the first time in her life.

> The concept of museum is clearer now. For the first time I had a workshop about museum education. It was the first

> time that I could put ‘museum’ and ‘education’ together. I found it very meaningful. I realized that can benefit a lot, in different ways from a museum. First, I was wondering if each and every teacher could find something to teach there and everyone found.

A general misconception about visiting a museum is that one should try to see each and every artifact or exhibition. As the museum educator who led the workshop stated it is not effective or beneficial to spend the whole time trying in a hurry to see everything in the museum. Teachers need to decide where and what to focus according to the learning objectives of their trip.

One notable finding was how teachers from different subject areas realized that they could relate their objectives from their curriculum to museum resources and artifacts. Before the workshop, some teachers reported that because of their subject area they thought they would never organize a field trip to museums. One teacher, T13, even announced out loud this at the beginning. After the workshop, however, he commented that that he may change the role he plays during museum trips.

> I used to just accompany other teachers to museum field trips and try to control student behavior; I did not guide or give any information. Now I am more interested in teaching during the trip but I still need to know how to look at an artifact though.

Participant T20 had similar comments about being able use museums for different subject areas. “Seeing that a mathematics or music teacher is also able to have a lesson in a museum changed my idea that the museums can be used only by social science and history.” Participant T15, a language teacher, also became more aware of the interdisciplinary nature of museums.

> I had the idea that only social science and history lessons could be done in museums but we saw that there could be many different and beneficial activities for Language and Literature and we even started planning. ...I discovered how a museum can be turned into a classroom. I learned how to guide students. We were students for a while so I put myself into my students' shoes and tried to discover the venue. This will help me a lot in my planning.

Other teachers noted that their confidence at guiding students increased because of the workshop. Participant T14 admitted that she was really reluctant to take the kids to any museums due to the difficulty of dealing with all students and their possible behavior issues, but she added the workshop changed her point of view. She realized that a trip to the museum was more than leading a group through the institution. With planning, she could divide the class into groups, and give them responsibilities to investigate different exhibits.

Critical comments – suggestions for improvement

A few teachers thought that the workshop was not as effective as they had expected and it did not change their opinions about museum education much. Mostly these teachers are the ones who had some experiences in terms of planning field trips to museums, participating in some activities at the museums, or having drama courses. Participant T5 stated that the workshop did not change her idea about museum education or enrich her knowledge, but it changed her point of view in terms of planning. After the workshop, she thought it was not that difficult to plan a field trip to museums for her lessons. She also added that she preferred to know beforehand what the participants were going to do during the workshop. This could give her a better idea about the workshop: "I could feel much more ready for the workshop if

there were some pre-activities to see our readiness. So that it could have been more useful."

Participant T6 also agreed with the idea that the workshop was not productive enough, even though she stated that she had some new ideas about how to use the museums in teaching process. She stated "It gave some clues but it did not give much information. We did what we knew so it was partially helpful." Similar to participant T5, she mentioned that she preferred to know about the particular museum and the activities before coming to the workshop. She also added her complaints about the organization of the workshop:

> It could be planned better. Standing for a long time was tiring and we started very motivated but I lost my motivation in time. Our presentation at the end of the workshop became shorter and shorter; the educator gave less and less feedback. We could have the workshop within each subject group rather than as a whole.

Participant T12 reflected that she would like to learn and see more activities that she could use with her students. She emphasized one of the activities helped her to empathize with blind people (further information about the workshop activities can be found in Appendix K). In this activity, participants worked in pairs. One of them closed his/her eyes and the other one described a chosen object in the museum it in detail. This activity could be challenging for some students but it helps them empathize with others and describe an object in different ways by using their creativity.

Some teachers found the duration of the workshop too short and would like to have a longer session. Participant T15 suggested “The workshop could be a few days long. We could learn more in this way.”

The non-Turkish speaking participants of the workshop criticized the language policy of the museum because the workshop was totally in Turkish. They required translation during some activities and the other teachers were translating for them. Participant T19 described the workshop as a positive experience, having the workshop in the museum rather than at his school was enjoyable; however, he stated that it was difficult to follow the Turkish comments when the others shared their ideas and plans. “I lost my focus; it took so long to share all the ideas. We could manage the time better.”

Teachers who had the experience of working with museums were able to give more detailed information about the workshop. Participant T8 was one of these teachers who had been working with museums for a long time and had professional drama education. He evaluated the workshop as useful but he said that a clear purpose was missing. On the other hand, he added that most of his colleagues had no experience in this field at all and with this in mind he frankly explained why the workshop did not change his opinion about museum education: “My opinion would have definitely changed if I had not had any experiences in this field.”

Field trips conducted after the museum orientation session

The researcher interviewed 28 teachers and only six reported taking students on field trips after the session. Among these, three said they planned and led the group, and

the other three said they played supportive roles. Therefore, most of the participants (N=22) did not conduct a field trip to museums after the workshop. Among these teachers, most of them (N=14) said they would like to conduct a field trip sometime in the future.

Teachers provided a number of reasons why they were unable to conduct a field trip. Some of the teachers (N=7) claimed that the main reason was the events that occurred in Turkey in the summer of 2016. Teachers T4, T9 and T14 hesitated to take their students to the touristic places due to security reasons. Participant T4 said that she had a plan to take her students to museums at least once for each semester; she explained why she had not conducted one yet.

> Because of the terrorist attacks in the country and especially in the big cities, I did not think of taking students outside the school. It was difficult to get permission from the parents. The museums are in the city center which is considered as risky area.

Some other teachers reported that they wanted to plan field trips, but they had to change their plans because of time inconveniences. Participant T16 explained that when they planned a field trip it should be related to their curriculum unit and they needed to include this trip to their plans. Teachers have to finish their planned unit in a specific time period and most of the time they do not have enough time for field trips.

Interviews indicated that for some teachers (such as T6, T7, and T10) the museum orientation session was the only museum trip that they had experienced in their lives. As planning or conducting a field trip to a museum was never part of their teaching,

they did not see it as a teaching activity for their lessons and they admitted it was not a priority.

Even after the workshop, some teachers, such as participant T23, hesitated to plan a field trip. “If there is already an organized visit, I can participate and help but I do not have my own plan to take my students to a museum.” He explained that it was because of his subject area, which was design and technology. He added that he could take his students to some specific design exhibitions but not to a museum.

On the other hand, the museum orientation session had some potential contributions. After seeing the museum and spending some time there during the museum education workshop, some teachers started brainstorming for their next year plans. Participant T18, whose subject area is Informational Technology (IT), thought it could be possible to use the materials in the museum while teaching three dimensional (3D) design. “We did not think of any field trips for this year because of starting a new educational program and planning it from the scratch, but it can be advantageous to see different designs and the organization of the houses/models.” At that time there was an exhibition for different types of 3D house models in the museum.

As noted, some teachers had planned trips but they were canceled. They explained that even this planning process was beneficial. One of those teachers T14 explained their planning phase as follows:

> We planned a trip to Museum of Anatolian Civilizations. We were doing a unit about ancient civilizations and we were

> looking at how people lived in the past compared to how people live today so we planned to take our students to a few exhibitions not the whole museum. We as teachers enjoyed the planning session, unfortunately we could not take our students to the museums, but at least the teachers visited the museum to plan an effective trip.

Phase 2: Level of partnership by using Weiland and Akerson's framework

In the current study, the third research question of the study was addressed using an analytical framework designed by Weiland and Akerson (2013) to examine the nature of the partnerships between a private middle school in Turkey and museums in the community. The framework is comprised of the following eight dimensions of a partnership: Communication, Duration, Formality of partnership, Objectives, Power and influence, Resources, Roles, and Structure. The framework itself with further explanation of these dimensions can be found in Appendix J. The following section presents the results of the analysis using the framework. Each subsection features one of the dimensions with related findings from phase I, along with exemplary quotes from both teachers and museum staff.

Application of Weiland and Akerson's framework to phase 1 data

Communication

According to this framework, the first dimension is *communication*. The results of the questionnaires and interviews show that communication between museums and teachers in this case study occurs only as needed for planning a specific trip. These findings match the cooperation level of the framework.

Exemplary quotes:

- M6: It is not unusual for teachers to show up without contacting us first.
- T23: I have been teaching at this school for 20 years and no museum has ever contacted me.

More advanced partnerships would involve ongoing communication and discussing other educational opportunities. They would use multiple means of sharing information and keeping each other updated on plans and progress.

Duration

In line with the limited communication, the next dimension *duration* was also found to be short-term. Teachers did mention that they have taken students to different museums over several years, but for the most part they only take one trip a year and they visit the same museum and follow the same program. They point out that time schedules, exam schedules, curricular demands are some of the reasons for not being able to visit the same museums more than once a year. Some museums have created programs and offerings to promote longer participation, but at least for teachers in the case study school, they are unaware of these opportunities. Therefore, when we consider the duration of the partnership, it is at cooperation level.

Exemplary quotes:

- M5: Teachers bring their students as a huge group, they enter the museum then exit, I wonder if student learn anything.

- T16: There are yearly requirements that we need to complete. If we spend one day in a field trip that means they will lose at least two hours from my lesson and from many others from different subjects. Other teachers do not want to lose any lesson either.

Partnerships that are more collaborative have a history of working together. They take steps to ensure that they maintain their connection. They likely are involved in working on long-term projects together.

Formality of partnership

The *formality of partnership* domain relates to how institutionalized the interactions between the school and museum are. For the current study, this dimension was analyzed based on how teachers arrange field trips with schools. Although there are typical steps a teacher should go through to secure permission for the trip, contact the museum, and arrange the visit, there is no formal policy or protocol in the case study school. Teachers reported that contacting museums is a challenge, sometimes they do not know whom to contact and when they try, the person is not available. Furthermore, the museums do not have a regular outreach program for visiting schools. In some cases, their job description limits their availability to collaborate with schools. The formality of partnership between institutions is not institutionalized. However, the school administrators took an action to have a field trip policy. Considering this serious action the duration level falls in between cooperation and coordination levels.

Exemplary quotes:

- M7: There are many teachers who visit our museums without any appointment and this causes some serious problems when they arrive at our venue. We have a lot of responsibilities as museum staff. We are not only specialist in our field but we are administrators at the same time. We are not museum educators though but we have archeologists and some engineers as administrators here. When student groups come with an appointment, I feel responsible to guide the groups as well.
- T14: I was surprised that there was no museum educator in the museum. When I called them to inform about our visit, they said we did not even need to make reservation for the groups.
- T9: We planned our trip and we wanted to see the exhibition and the venue first. When we arrived there was no museum educator or tour guide to lead us; but by chance we met the vice-manager of the museum who was also a museum educator and an archeologist. It was amazing to listen to him during our visit, but I know he will not always available there to guide our students.

A formal partnership would be institutionalized with necessary protocols and policies. In other words, they would have routine and systematic practices regarding planning programs and projects.

Objectives

It is apparent that the museum and the schools lack understanding of each other's educational *objectives.* In the current case study, museum staff believe that teachers

should know the museum and its content and teachers' expectations of museum staff is very similar. Furthermore, they are unaware of what the other institution expects as far as planning in organization. Some teachers believe they bring students to the museum to hand over to the staff, while museum staff desire more teacher involvement. As the objectives of the two institutions in this case study do not overlap, the partnership level is cooperation.

Exemplary quotes:

- M4: Sometimes teachers are very knowledgeable, they know what they are teaching, they are very well prepared; but this is very rare. There are teachers who see the time as leisure time; so while students are running around they can have their coffee or tea in the cafeteria rather than guiding their students.
- T21: I do not know what to do when I go to a museum with students. I have never planned a trip, I just accompanied the social science teacher and my duty was to control student' behaviors.

The framework explains that more advanced exhibitions of this dimension would involve on-going strategies to develop shared goals. There would be members from both institutions who take the time to learn about each other's learning objectives. They would identify ones already in common and explore ways to address ones that may be unique to each institution.

Power and influence

Power and influence appear to be a non-issue for the case study school and the museums since the partnership is limited to occasional field trips. Each institution is doing its own thing with very little interaction, therefore issues with what Weiland and Akerson (2013) call "turf" or property management does not come into play. In other words, power and influence is at cooperation level.

Exemplary quotes:

- M6: Teachers take their students to our museum once a year, the next lesson they take another group so the same group never visits the same museum more than once.
- M3: We do not have a partner school but schools visit our museum regularly.
- T8: Museums have been trying to develop themselves recently and some of them have museum educators. However, the partnership needs to be improved between schools and museums. Both parts need to work on it, there is a theoretical desire to have a partnership but there is not much in practice.

More advanced partnership should include more interaction between the institutions. Members from each institution should have a clear locus of control. They respect the resources and expertise each institution has to offer and acknowledge each other's contribution.

Resources

The findings showed that *resources* are not used collaboratively by the institutions. The participant teachers from the private school have a generous budget for extracurricular activities, such as field trips. Therefore, funding for transportation, food, and release time is not a limitation. Unfortunately, funding for transportation, food, and educational tools that can be used during a partnership is not available to most of the public schools in Ankara. According to the framework, because of the attributes of the case study school, the partnership is at the cooperative level because each institution has its own source of funds and there is no effort to seek funds collaboratively.

Exemplary quotes:

- M1: We know that there are schools that have financial problems to organize trips, but our museum is free to students. It is a teacher's initiative to organize the trip. They can use municipalities to provide transportation, for example.
- T1: Our school supports us to organize field trips. The school provides the transportation and food, but I cannot imagine the state schools that provide these easily.

Although the school may have sufficient funds to visit museums, in a more collaborative partnership the institutions might work together to write grants to fund special projects for student learning. Furthermore, there would be more of an awareness of the resources available from each institution. One of the aims of the Museum orientation session, in fact, was to increase teachers' awareness of museum

artifacts that can be used for student learning. These resources would be shared and easily accessible by both parts for a long period of time.

Roles

Some museums in Ankara offer teacher workshops, therefore *roles* is one area of the framework where the partnership reflects a higher level of partnership (coordination). Other than this effort, there is little evidence that the two institutions pool their human capital to enhance their museum education efforts. The partnership level falls in between cooperation and coordination levels.

Exemplary quotes:

- M2: If we are informed about the student group beforehand, we can plan a workshop for them but we cannot organize it for more than 20 students.
- M5: I am an archeologist, not a tour guide, teacher, or museum educator. I do not know how to handle students if the teachers are not in charge.
- T7: When I take my students to a museum I expect the museum staff to offer activities and guide us. They should give information and make the venue more effective.

Members of collaborative partnerships have distinct, but complementary, roles. Ideally, these roles are defined during planning meetings and communications. Partners should trust each other to be able to reach their common goals and objectives.

Structure

The final dimension of the framework is "structure" and the results show there is some cooperation with how the interactions between the institutions are organized. There are museums that offer specific programs and there are teachers who contact museums about a particular exhibit. Since there have been no mutually developed programs, however, the partnership is not collaborative. This matches the cooperation level of the framework.

Exemplary quotes:

- M1: We give seminars and we share our knowledge with other museums. We always consider improving our cooperation with other museums and schools. We work on some projects with teachers.
- T8: I have not received any museum education during my education, but since it was my personal interest I took some courses as special student. I know that there are incredible things to do and learn about in museums. It should be definitely a part of teacher education programs.

With a collaborative partnership, there would be established programs that related to the school's curriculum. Furthermore, both institutions would offer professional development opportunities for each other. As pointed out in Chapter 1 and discussed in Chapter 5, the Ministry of Education and the Ministry of Culture in Turkey have started to take steps to better ensure schools and museums have a common structure to collaborate for student learning.

Conclusion

As reported by Ateş and Lane (in press), the findings of the analysis using the framework show that the level of between the two institutions was *Cooperative.* This level is less involved than partnerships that are Coordinated or Collaborative. Indeed, for the school in this case study, the partnership consisted of one school trip to a museum per year; often with minimal communication. In other words, they interacted only during the school visit but there were no prior or post communications.

Motivation

Motivation is not given as one of the dimensions in the framework. It is the researcher's opinion that this is an important criterion for an effective partnership and should be added to the framework. The evidence for such a statement is given in the teachers' responses. Field trips require extra planning and coordination, teachers are motivated to overcome barriers because museums provide such effective learning venues. Participant T24 described field trips as very tiring but motivational because she sees how students improve their skills during and after their visits. Participant T10 noted that museums were the places that give inspiration; "…they are like time machines, they are not only educational venues but also fun places that spark enthusiasm, children discover what they want there. Museums offer opportunities to children to discover."

Motivation affects museum staff as well. M1 reflected, "Museum education provides opportunity to learn about the cultural heritage having fun. People have the chance to learn, by doing, by living." As discussed in Part 1, while school visits may be a

priority, ineffective communications and class management can be demotivating. Therefore, better preparation, communication, and understanding of roles and expectations could help maintain museum staff motivation for school visits.

Some other participants (T3, T4) think that students find the trips motivational and they learn better while spending quality time with their peers. Participant T3 said "Museums are great places for students to learn better. Also, they communicate and share more during the trips." In addition, Participant T4 reported that it is motivational for both teachers and students; "Our relationship with students is different outside school and I feel it is like taking a break for all of us."

Participant T6 stated "it really motivates me when my students question what I teach in class during our visit in a museum. If there is any contribution to their learning it makes me happy". Moreover, she thought that seeing is more powerful than learning in class. "It is not easy to learn just from books. Seeing makes learning more concrete and efficient" she said. Also, participant T9 expressed her ideas as

> We believe that children learn better by going to museums or any other places that have authentic materials. That is a better experience for them when they have hands-on experience where they see or touch, make connection. I think it is one of the best ways to educate children.

Making connections with class activities and objects in museums is another motivation for teachers. For example, participant T13 indicated that making connection between reality and his lesson is very important and it enhances the quality of his lessons. Similarly, participant T14 believed that visiting a museum should enhance the curriculum, museum visits should not be planned just for fun.

Participant T16 said that students who were born into the 21st century inquire a lot and they question everything. They even question why they are learning and what they are learning. “They see what they are learning and why they are learning in museums. It is more effective just to say ‘That’s why you are learning.’ ”

Teachers dedicate their lives to teach in the best way and students’ happiness is described as the motivational act by participants T21 and T22. “Seeing students happy makes teachers happy” they said. Participant T24 also mentioned that it is very tiring to plan and conduct a field trip but seeing the results is so satisfying for her as a teacher. “They develop a lot of skills during those visits and seeing how effective they are motivates me to conduct more trips.” These comments indicate that motivation may be a good way to overcome barriers.

Conclusion

Based on the two phases discussed above, the findings of the research showed that it is important that there is an effective guide in museums who can support student learning. This guide provides students with background information and interesting stories about the exhibitions in museums. Ideally, these guides are museum staff who have time to meet and communicate with teachers and students. Given that museum staffing and time is limited, it may be up to teachers to learn how to conduct tours and give interpretive talks. Participants in this case study made a variety of suggestions to improve museum education; these are incorporated in the implications for practice in the following chapter.

A number of times during the interviews, participants commented on the researcher's passion for museums. They noted that she had increased their awareness of museums in the city and helped them understand the concept of museum education. Teachers appreciated it when the researcher provided tips, suggestions, and supports for their field trips. Implications for the researcher's role in museum education are also discussed in the next chapter.

Using a framework to determine the nature of partnership between the case study school and a local museum was useful. Weiland and Akerson's framework provided a clear way to understand the level of partnership according to each dimension. The collected data showed that the partnership level was not collaborative even though some comments showed that a few dimensions were at the coordination level (such as roles and resources). The researcher was able to realize that an additional dimension, *motivation* needs to be added to the framework.

CHAPTER 5: DISCUSSION

Introduction

The purpose of this study was to explore the perceptions and practices of museum staff and teachers about museum education. A key focus of the investigation was to gain insights into the nature of the partnership between a private middle school in Turkey and museums in the community. The following research questions guided this study:

1. What are museum educators' perceptions of and practices related to museum education?
2. What are middle school teachers' perceptions of and practices related to museum education?
3. What is the nature of the partnership between a private middle school in Turkey and museums in the community?
    a) What indicators can be used to describe levels of professional partnerships (cooperation, coordination, collaboration) between teachers and museum educators for planning and conducting museum education experiences?
    b) Using these indicators, what is the level of the partnership between the case study school and museums in Ankara?
    c) What strategies can be used to improve the partnership between schools and museums?

    Ancillary research question: What are teachers' perceptions of an orientation session provided by a local museum to increase awareness of its resources for student learning?

The data for this study were collected through interviews and questionnaires. In chapter 4, findings were compiled and analyzed and in this chapter the meanings of the findings are discussed in accordance with the research questions.

Overview of the study

The impetus for this study began when the researcher became aware of teachers' attitudes towards visiting museums in Turkey. While the researcher enjoys visiting museums, especially during holidays, she learned her colleagues rarely visited them. When discussing the value of museums for student learning, teachers tended to point out the challenges rather than the benefits of school field trips. Among the comments they mentioned was lack of support from museum staff during their visits. These comments caused the researcher to launch a study to learn more about teachers' thoughts about museums and museum education.

This research used case study methodology with a phenomenographic approach to gain deeper understanding of perceptions and practices related to museum education. In order to gain insights from both teachers and museum staff, in-depth interviews were conducted with multiple representatives from museums around Ankara, Turkey and with almost all the middle school teachers in the case study school. To support this qualitative data, some quantitative data were also collected through questionnaires. Multiple sources were used to obtain data to strengthen the validity of the findings. In addition, there were instruments designed for teachers to provide opinions about a museum orientation session that was offered during the study.

During the preliminary analysis of the data, it became clear that both museum staff and teachers perceived challenges when working together to plan and conduct field trips. Based on the literature review, the researcher identified an analytical framework that was used to re-examine the qualitative and quantitative data, comparing perspectives from the museum staff and teachers. The major findings from the interviews, about perceptions of professional development needs, and analysis of the school-museum partnership are summarized below.

Major findings

Findings related to museum educators' perceptions and practices

These findings address the research question 1: What are museum educators' perceptions of and practices related to museum education?

- While museum staff value school groups learning in their museums, they find the visits challenging. The institutions lack a dedicated position for a museum educator on staff and they have limited time and resources to plan and conduct student activities.
- Museum staff believe teachers should take a stronger lead when conducting field trips in museums. They support the idea of professional development in museum education for teachers.
- Museum staff perceive that the level of partnership with local schools is limited, but some efforts have been taken to improve outreach and educational opportunities for teachers.

Although Turkey has many valuable and important museums, it is rare to find a staff person whose responsibility is solely museum education. For this study, seven museum staff participated in in-depth interviews. Among the staff interviewed, four indicated they played a role in museum education, but acknowledged it was not their main responsibility.

In general, not having a museum educator position in their institutions is a drawback. All the interviewees stated that they are very happy to have many visitors, but they all mentioned that it is impossible for them to fully engage a large group of students.

Unfortunately, according to the findings of this study, museum staff often feel unqualified to host and guide the visits. They said that the main reason for this problem is that museum staff in Turkey are mostly archeologists who do not have educational pedagogy; they are not educators. In Turkey, lack of museum educators in museums causes problems when student groups visit their venues (Ateş & Lane, in press; Türkmen, Zengin, & Kahraman, 2018). Among the problems, the museum staff mentioned teaching and managing students. Museum staff generally expect teachers to take control of students during their visits while teachers expect the same thing from museum staff. Tal and Steiner (2006) found in their study that museum staff prefer to see more involved teachers during field trips.

A solution frequently mentioned by the museum staff was that training teachers in museum education could be helpful to solve students' behavior problems and increase students' awareness. Erbay (2017) reported that even though there were some masters programs on museum education, there were no bachelor's programs in

universities in Turkey until 2009. In the city where the current case study conducted, there is only one museum education bachelor's program. In a country that is full of historical and cultural places, it is odd that there are very few educational programs related to museums in Turkey (Erbay, 2009).

To address this shortcoming of professional development for teachers, some museums have begun to offer workshops for teachers. Some museums send letters to schools to promote the program and provide directions for setting up visits; however, the researcher reflected that she is unaware of her school receiving such a letter. Despite this lack of communication, some of the interviewees insisted that museum education is becoming more established and that museum educators are becoming leaders in community education. They believe teachers have become more aware that museums can be an ideal learning environment for many concepts and have mentioned possible activities that can take place in museums. Other researchers have investigated the impact of teacher workshops. For example, Melber & Cox-Petersen (2005) investigated the impact of professional development workshops on teachers held by a natural history museum. They reported that museum-associated workshops were found helpful, interesting, informative, unique and significant experiences by the participant teachers.

All the interviewees stated that museum exhibitions should be educational and need to be well researched and organized. Falk and Dierking (2018) emphasize that the physical context of a museum always has a strong effect on learning; therefore, the content and design of museum exhibitions are important for visitors. Different styles

of exhibitions give opportunities to different individuals to learn. If the exhibitions are well constructed, visitors learn what the exhibitions intend to teach.

Sometimes parts of the museum are not updated or maintained and this compromises the potential for effective education (Hooper-Greenhill, 1999; Leinhard & Crowley, 2002). During her visits, the researcher personally witnessed that some museums have not updated their exhibitions for years. One museum staff candidly said that museum education is in Turkey is "100-150 years behind the developed countries in Europe and America." He described how these more advanced institutions design exhibits and associated activities for visitors that are suitable to their age and interests. The interviewee expressed with disappointment that museums in Turkey are only "coming and going and seeing and leaving." A related comment provided by several museum staff was the need for financial support and marketing. These funds could be used to update and revise exhibits and to better relate them to the needs of young learners.

Even though all museum staff mentioned the importance of partnerships with schools, only four could provide examples of how they work together. The findings suggest that increased collaboration may provide stronger and effective learning in museums. There have been studies (e.g., Gupta et al., 2010; Tal & Steiner, 2006; Tran, 2007) that have taken efforts to improve partnerships between institutions. These studies also addressed the issue that the partnership between teachers and museum educators is weak and needs improvement.

After data collection and analysis, the researcher visited some of the museums again for personal enjoyment. The museum staff she interviewed were eager to continue their discussions with her about their museums. These follow up meetings with museum staff reflects another finding of the study: That it is important for a school to have a key person who serves as a liaison between the school and the museum. As one staff member stated, “it may be utopian, but there should be one museum educator for each school since not all museums have a museum educator.” Among the responsibilities of this person would be to learn about new innovations and opportunities at museums and communicate this to the school staff. As Anderson and Zhang (2003) reported in their study, teachers prefer that such a contact person or liaison should be from the field-trip venue. They believe that this person could help them and assist them to plan their trips. Alon and Tal (2017) mentioned that teachers mainly play secondary roles in during field trips; however, they observed in their study several examples of greater teacher involvement in teaching outdoors during the field trip. Other findings from the current study further support how a museum liaison in a school can play a key role in strengthening the level of collaboration between a school and museum.

Findings related to middle school teachers’ perceptions and practices

These findings address research question 2: What are middle school teachers’ perceptions of and practices related to museum education?

- Teachers value museum education and the cultural heritage of the country, but they are unaware of the museums in Ankara.
- Only a few of the case study teachers have conducted field trips; teachers feel challenged, lack confidence, and are unmotivated to conduct field trips.

- Teachers need support from museum staff. Teachers believe museum staff should take a stronger lead in conducting field trips.
- Museum education is not a part of teachers' education programs, but teachers are willing to attend trainings.
- Teachers perceive that the level of partnership between teachers and museums is insufficient.

Teachers' interests and motivation affect students' learning. Therefore, if teachers are interested in museums, they can inspire their students to share this interest (Duhn, 2011). In the current study, however, teachers were asked if they recall a trip to a museum during their middle school years and the response rate showed that a large number of teachers (N=13; 43%) did not. One participant noted that parents taking children to museums is not a usual aspect of Turkish culture, despite its rich resources in history and ancient culture. During data collection, the researcher realized that there are many valuable child-friendly museums in Ankara, such as the Ankara University Toy Museum, Ankara University Children Museum, Çengelhan Rahmi M. Koç Museum, Gökyay Chess Sport and Culture Foundation Museum. Falk and Dierking (2000) stated that prior knowledge and interests are essential for interactive learning.

In general, the findings showed that teachers think museum education is important and should be a part of the curriculum. One teacher acknowledged that the Ministry of Education has made efforts to promote school visits to museums.

> They organized museum cards that provide people to pay very small amount of money and then enter countless museums and historical sites but still not many teachers use this opportunity. All teachers should consider taking their students to museums not only social science teachers.

Despite this appreciation of museums, many teachers in the study lacked the confidence and competence to plan, organize, conduct, and assess museum education experiences. According to Bozdoğan (2012), teachers are not qualified and experienced in terms of planning and conducting field trips. The study by Ateş and Lane (in press) found that several teachers indicated that they do not even know whom to contact when they call museums, as many of the institutions do not have a museum educator listed on staff. Nonetheless, the teachers did express the desire to learn about how to contact with museum staff and they appreciate that having efficient means of communication with the museum staff could be helpful for her/him. Studies in the literature highlight the lack of communication between teachers and museums (Tal and Steiner, 2006; Gupta et al., 2010).

The findings of Ateş and Lane (in press) and the current study show that teachers need support from museum staff. They mostly expect museum staff to take the lead role during their museum visits. As shown in other studies, it is not uncommon for teachers to take a passive role during their trips (Faria, Pereira, & Chagas, 2012). It appears that teachers are expecting expertise and leadership from museum staff, while at the same time museum staff believe teachers should be taking more responsibility (Tran, 2007). This study and others have found that there is confusion about roles and expectations of who should lead field trips during museum visits (Kisiel, 2005; Tal and Steiner, 2006; Tran 2007). There is an expectation among teachers that museum staff need to understand pedagogy and like working with

children. In addition, museum educators need to follow all the new approaches in museum education and develop interdisciplinary views and have a multifaceted approach (Karadeniz et al., 2015). All these skills give museum educators and staff new responsibilities and change the definition of their roles.

When teachers arrive in a museum and if they have not planned ahead, they realize there may not be anyone available to guide them. Without this leadership, teachers mostly do not have enough knowledge or confidence to inform students efficiently. What results is an unsuccessful field trip where students may not learn anything and could misbehave and damage artifacts. Student discipline was an issue frequently mentioned by teachers (Cox-Petersen & Pfaffinger, 1998; Ramey-Gassert, Walberg III & Walberg, 1994).

Findings regarding the partnership between a school and local museums

These findings address research question 3: What is the nature of the partnership between a private middle school in Turkey and museums in the community?

- An analytical framework helped to determine that the case study school has limited partnerships with local museums.
- Many dimensions of the partnership need improvement, most notably communication and clarification of roles.
- The analytical framework can be strengthened by adding *motivation* as a dimension.

As discussed in chapter 3, a framework was used to determine the nature of a partnership between the case study school and local museums. Using the framework developed by Weiland and Akerson (2013), this study found that the school is at a "cooperative" level of partnership with area museums (see also Ateş and Lane, in press). In the framework, the next highest level is coordination, the most desirable level of partnership is collaboration. The framework was used to analyze eight dimensions of a partnership: Communication, Duration, Formality of partnership, Objectives, Power and influence, Resources, Roles, and Structure.

Using the analytical framework, the researcher learned that museum staff and teachers most often discussed the dimensions of Communication and Roles. The participants from both institutions noted there was not a system for contacting each other. Even when museums try to reach out and offer workshops to teachers, teachers may never learn these opportunities are available. Unfortunately, most of the teachers indicated that they were unaware of these offerings. In their study, Gupta et al. (2010) found that lack of communication between museums and schools compromised effective partnerships. Related to roles, as discussed elsewhere, similar to the findings of Kang et al. (2010), both parties think staff from the other institution should take the lead in conducting field trips in museums. The analysis also revealed that another dimension could be added to the framework: Motivation (Ateş & Lane, in press). Lack of time, lack of curricular connections, and student behavior could negatively affect both museum staff and teachers' motivation for conducting field trips (Ateşkan & Lane, 2016; Anderson & Zhang, 2003; Michie, 1998).

Teachers' perceptions of a half-day museum orientation session were mixed

> These findings address the ancillary research question: What are teachers' perceptions of an orientation session provided by a local museum to increase awareness of its resources for student learning?

Studies show that museum education requires unique competencies to promote student learning (Hein, 2002; Falk & Dierking 2018; Leinhardt & Crowley, 2002; Falk, Moussouri, & Coulson, 1998). Even though teachers have their expertise in pedagogy and content, they mostly do not have any training about how to make connections between their museum trips to curriculum successfully (Marcus, 2008). In the current study, teachers reported that only two teachers received professional development in museum education and not receiving related education may contribute to lack of confidence to conduct field trips.

Responses of both museum staff and teachers indicated that teachers need continuous training for museum education. As a part of teachers' professional development, a half-day museum orientation was arranged during teachers' seminar week by the researcher. The museum educator who gave the session described it as a first step of museum education. Teachers greatly appreciated that it was held in the museum, rather than a presentation at the school. Teachers reported they learned some unique teaching strategies for museum education, such as choosing only one exhibit or area of the museum and planning lessons and trips around that item. This indicates that teachers may have walked students through the entire museum without learning about any particular items in detail.

On the other hand, not all teachers were satisfied with the workshop. They found too much time was spent on creating and presenting activities and not enough actual experience on how to lead a group of students through a museum. Although some teachers like seeing and sharing teaching ideas, she wondered, “Is all planning and all tasks and all monitoring up to the teacher?” In other words, it is apparent that the role teachers compared to that of museum staff is still not clear to some of the case study teachers. The museum staff who led the workshop acknowledged there should be follow up sessions to improve the connections between teachers and the museum staff.

Implications for practice

The findings of the current study revealed some implications for both teachers and museum staff related to their museum education practice. The study also provides suggestions for strengthening the partnership between the institutions of schools and museums. Both the museum staff and the teachers in this study stressed the importance of field trips being built into the national curriculum. As Marcus (2008) suggests, teachers need to apply museum visits into their curriculum with the necessary knowledge and skills. A key finding is that both museum staff and teachers think a dedicated educator at the museum would be ideal.

Given that many museums in Turkey currently lack an official museum educator who is responsible for working with schools, it may be up to the teacher – especially for the school in this case study – to take the first step in field trip planning. As part of their curriculum development, teachers can develop activities or worksheets for students to complete before, during and after the field trip (Anderson et al., 2006;

Anderson & Zhang, 2003; Krombaβ & Harms, 2008; Storksdieck, 2001). One of the museum staff interviewed in this study recommended that teachers can help students understand the missions of museums by having their classes start their own collection such as coins, stamps and so forth.

Teachers may also keep in mind that they can work collaboratively on field trips. If teachers from different subject areas work together, they can plan the trips with different points of view and sharing responsibilities can decrease the workload of the teachers.

In this study, both teachers and museum staff complained about handling too many students during field trips. Based on her experience, the researcher suggests that a group of about ten students gives educators the ability to provide meaningful leadership and discussions when touring the exhibits. Perhaps having a more manageable group size will help overcome the barrier of student discipline.

Another barrier that was learned in this study is that teachers are unaware of local museums. Through this study, they became more knowledgeable about these institutions and what they have to offer schools. Teachers made the following suggestions to museums to better advertise their programs.

- Create a museum map for the city, including highlights of exhibits and key features. Include a key contact for each institution.
- Provide schools with festivals and seminars to raise the awareness of their exhibitions. Include discussions of expected behaviors during museum visits.

- Develop class presentations that provide students with models of artifacts (instead of the actual item) so that students could touch and feel them.
- Use web-based technologies to help teachers schedule trips and post expectations.

Some of the teachers in the current study noted that exhibits at museums could be more interactive. There were museum staff who acknowledged that their displays could be more innovative. The researcher has seen advanced technology such as informative digital platforms used successfully in museums in Turkey and abroad. For example, teachers, students and museum staff can use smart mobile applications to showcase, review educational programs, and examine the contents of exhibitions.

Another recommendation provided by both teachers and museum staff was professional development. Most of the comments were about teacher education; however there are also implications for the professional development of museum staff. Regarding teachers, the current study did include a half-day museum orientation session for teachers that was developed and offered by a museum. There should be multiple workshops offered throughout the year that build upon each other and help develop the curriculum. The trainings can be offered at the school and the museum. Teachers also made the following suggestions for what to include in future workshops:

- Individual, small, and large group activities where teachers develop and share ideas and experiences.

- Subject area and interdisciplinary focused activities that address the learning goals of the national curriculum
- Practice conversations with museum staff, to learn how to arrange visits and identifying which questions to ask when planning.
- Mock trips, where teachers lead each other through the museum

The effort of teachers and museum staff to learn about each other's institutions is part of the process of developing a viable partnership. As they learn about each other's institutions, they will become aware of and can pool their resources. With this shared mission and collaborative work, the partnership has a chance to become long term and formal (institutionalized).

Both institutions need an incentive for starting and maintaining this communication. One way is through a policy and another way is through advocacy.

Having a school policy can help teachers to feel more confident about planning and conducting field trips. This policy can include protocol for communication along with meetings and goals. Teachers could be given release time for planning and collaborating. Professional development expectations could be outlined in the policy. Funding and transportation could also be included in the policy. It may even include requirements for the number of field trips and when they should take place. A key role of the policy will be to link field trips to the curriculum.

Advocacy for ensuring ongoing communication between schools and museums could take many forms. Ateş and Lane (in press), found that during interviews with both

museum staff and teachers, it was often mentioned that the researcher could take a lead role building the partnership between the institutions. The researcher recognized that she could serve as a bridge or a *liaison* between these two institutions.

Implications for further research

- This study could be replicated in other cities to provide in-depth information about different communities. A nationwide study could collect information about the programs and outreach practices of museums.
- The study could be expanded to include selected international museums to identify activities and actions that could be tested here in Turkey.
- As mentioned in the findings, there are many child-friendly museums in Turkey. Why more Turkish families do not visit museums for fun is a question that can be studied in further research.
- By using the framework designed by Weiland and Akerson, this study helped validate the design of the framework and its application to understanding school-museum partnerships. Other researchers could use this framework to further investigate its effectiveness and rigor. Using another framework to investigate the partnership between a school and its local museums could add further reliability of the outcomes of the study. In turn, the application of the frameworks supported their validity and ensured their effective use by other researchers.
- The current study was designed to investigate perceptions and practices of educators, both from the museum perspective and the school perspective. The study did not include insights from students, mainly because there have been extensive studies about student learning and museums (Bamberger & Tal,

2007; Cox-Petersen, Marsh, Kisiel, & Melber, 2003; Griffin, 2004). Nonetheless, student attitudes regarding the integration of museum field trips in the curriculum could be used when fostering relationships between schools and museums. These attitudes could be assessed through interviews as part of a case study or questionnaires during a more comprehensive quantitative investigation.

Limitations

- The data in this study was limited to a small group of school teachers from a private middle school in a large city in Turkey. Although all the museums in this city were visited, only seven staff were interviewed extensively. Therefore, the ability to generalize the findings from this study will be limited.
- Moreover, as the researcher was responsible for collecting and analyzing all the data collected from these sources, there is potential for bias. Through a variety of cross-checking strategies, the researcher tried her best to ensure the integrity and trustworthiness of the data that was collected and analyzed.
- The researcher was unable to observe teachers' field trips to museums. Observing teachers and museum staff could have provided data to supplement findings from questionnaires and interviews.
- This study did not include data from students. The main reason was relevance to the study's purpose; nonetheless, student insights may have benefited the study.

Conclusion

This case study analyzed the perceptions of a middle school teachers and museum staff about museum education. In addition, understanding the nature of the partnership between the case study school and local museums in the city was explored. Teachers and museum staff were interviewed to collect data and a questionnaire was administered to teachers to understand their perceptions and practices. A museum orientation session became a part of the study as an ancillary component.

The findings indicate that lack of museum staff affect the success of visits to museums and guiding visitor groups. Despite valuing museums and recognizing Turkey's historical culture, teachers have limited time and interest in conducing field trips. When field trips are conducted, there is confusion over the roles of teachers and museum staff when it comes to planning and conducting the visits. It is important to learn if other communities have similar situations.

Based on a framework and findings, the level of partnership between the case study school and local museums was cooperative. It was recognized that having a school liaison can help to improve the partnership level between the case study school and local museums. Key among the liaison's responsibilities would be communication. Museums often promote new and interesting exhibits through brochures, emails, and posters. A school liaison could ensure teachers in the school learn of these announcements (e.g., by postings on a bulletin board or webpage). A role of this liaison could be to become knowledgeable about educational need, regulations and procedures of both institutions and to identify strategies to overcome any conflicts

(Zetlin et al., 2004). The liaison can help teachers connect with the proper contact at museums and warehouse teaching resources relevant to each museum. In addition, a liaison may provide useful resources to guide teachers before, during and after a museum field trip. One resource that the researcher would recommend is the newly published *Museum Activities Book* (2019). This resource includes instructions and activities for museum education and may help teachers be more competent and feel more confident.

It may be possible for the liaison to support other teachers when they plan, implement, and assess field trips. The liaison could eventually become responsible for planning and coordinating the trips for all the teachers in the school. The liaison could organize professional development experiences that motivate teachers to integrate museum field trips into their practice. The words “may” and “could” are used in these sentences because it is important to appreciate that being a liaison will take time. With some preliminary tasks, such as posting announcements and identifying contacts, the liaison’s role can be voluntary. However, to take on more administrative and leadership roles, the position of liaison needs to be officially recognized and supported. One idea is that it could be a joint position, funded in part by both institutions.

The researcher of this study has already taken on some voluntary liaison roles in her school. She has helped teachers connect with museums; especially after the organized orientation session, teachers asked the liaison to help them arrange visits. The researcher also has spoken on community radio about museums in Ankara and school visits to these museums. The program was a national program and was

broadcast online as well. She has made public presentations about her school field trips to museums, conducted seminars about field trips, and taught sessions to pre-service teachers about museum education. If her role as liaison becomes more formalized, she has an idea to begin by building a relationship with just one museum. According to Ateş and Lane (in press),

> with strategies such as workshops and seminars, she hopes to help the museum staff educate teachers about their venue and resources. She will continue to meet with museum staff and teachers to define their roles. Recognizing that motivation was an important facilitator for museum field trips, one of her priorities will be to increase teachers' awareness of the value of museums for student learning.

REFERENCES

Aaron Price, C., & Chiu, A. (2018). An experimental study of a museum-based, science PD programme's impact on teachers and their students. *International Journal of Science Education, 40*(9), 941-960.

Allen, L. B., & Crowley, K. J. (2014). Challenging beliefs, practices, and content: How museum educators change. *Science Education, 98*(1), 84-105.

Alon, N. L., & Tal, T. (2017). Teachers as secondary players: Involvement in field trips to natural environments. *Research in Science Education*, *47*(4), 869-887.

Anderson, D., Kisiel, J., & Storksdieck, M. (2006). Understanding teachers' perspectives on field trips: Discovering common ground in three countries. *Curator: The Museum Journal, 49*(3), 365-386.

Anderson, D., & Zhang, Z. (2003). Teacher perceptions of field-trip planning and implementation. *Visitor Studies Today, 6*(3), 6-11.

Anderson-Butcher, D., Lawson, H. A., Iachini, A., Flaspohler, P., Bean, J., & Wade-Mdivanian, R. (2010). Emergent evidence in support of a community collaboration model for school improvement. *Children & Schools*, *32*(3), 160-171.

Ash, D. B., Lombana, J., & Alcala, L. (2012). Changing practices, changing identities as museum educators. In E. Davidsson & A. Jakapsson (Eds.), *Understanding interactions at science centers and museums* (pp. 23-44). Brill Sense.

Ashworth, P., & Lucas, U. (2000). Achieving empathy and engagement: A practical approach to the design, conduct and reporting of phenomenographic research. *Studies in Higher Education*, *25*(3), 295-308.

Atagök, T. (2003). Müzecilikte yeni yaklaşımlar. In B. Onur (Ed.), *Müze Eğitimi Semineri 1, Akdeniz Bölgesi Müzeleri*. Antalya: Akmed.

Ateş, A., & Lane, J. F. (in press). Analysing school-museum relations to improve partnerships for learning: A case study. *Eğitim ve Bilim*.

Ateşkan, A., & Lane, J. F. (2016). Promoting field trip confidence: teachers providing insights for pre-service education. *European Journal of Teacher Education*, *39*(2), 190-201.

Bailey, E. B. (2006). Researching museum educators' perceptions of their roles, identity, and practice. *Journal of Museum Education, 31*(3), 175-197.

Bamberger, Y., & Tal, T. (2007). Learning in a personal context: Levels of choice in a free choice learning environment in science and natural history museums. *Science Education*, *91*(1), 75-95.

Behrendt, M., & Franklin, T. (2008). A review of research on school field trips and their value in education. *International Journal of Environmental & Science Education, 3*(3), 235-245.

Bennett, J. (1995). Can science museums take history seriously? *Science as Culture*, *5*(1), 124-137.

Berry, N. (1998). Special theme: A focus on art museum/school collaborations. *Art Education*, *51*(2), 8-14.

Bevan, B., & Xanthoudaki, M. (2008). Professional development for museum educators: Unpinning the underpinnings. *Journal of Museum Education*, *33*(2), 107-119.

Bhatia, A. (2009). *Museum and school partnership for learning on field trips*. (Doctoral dissertation). Retrieved from https://mountainscholar.org/handle/10217/21298

Bobick, B., & Hornby, J. (2013). Practical partnerships: Strengthening the museum-school relationship. *Journal of Museum Education*, *38*(1), 81-89.

Booth, S. (1997). On phenomenography, learning and teaching. *Higher education research & development*, *16*(2), 135-158.

Bozdoğan, A. E. (2012). The practice of prospective science teachers regarding the planning of education based trips: Evaluation of six different field trips. *Educational Sciences: Theory & Practice*, *12*(2), 1049-1072.

Bulduk, E., Bulduk, N., & Koçak, E. (2013). The development of museum-education relationship and resource creation in developing countries. *European Journal of Research on Education, Special issue on Art in Education,* 7-11.

Caffrey, G. E., & Rogers, R. (2018). Students taking social action: Critical literacy practices through school-as-museum learning. *Berkeley Review of Education, 8*(1), 83-114.

Capraro, R. M., Capraro, M. M., Scheurich, J. J., Jones, M., Morgan, J., Huggins, K. S., … Han, S. (2016). Impact of sustained professional development in STEM on outcome measures in a diverse urban district. *The Journal of Educational Research*, *109*(2), 181-196.

Castle, M. C. (2006). Blending pedagogy and content. *Journal of Museum Education*, 31(2), 123-132, DOI: 10.1080/10598650.2006.11510539

Cohen, L., Manion, L., & Morrison, K. (2008). *Research methods in education*. London: Routledge.

Common Core State Standards. (n.d.). Common core state standars initiative. Retrieved from www.corestandards.org.

Commission on Museums for a New Century. (1984). *Museums for a new century*. Washington, D.C.: American Association of Museums.

Cooper, L., Baron, C., Grim, L., & Sandling, G. (2018). Teaching teachers onsite: Using evaluation to develop effective professional development programs. *Journal of Museum Education, 43*(3), 274-282.

Cox-Petersen, A. M., Marsh, D. D., Kisiel, J., & Melber, L. M. (2003). Investigation of guided school tours, student learning, and science reform recommendations at a museum of natural history. *Journal of Research in Science Teaching*, *40*(2), 200-218.

Cox-Petersen, A. M., & Pfaffinger, J. A. (1998). Teacher preparation and teacher-student interactions at a discovery center of natural history. *Journal of Elementary Science Education*, *10*(2), 20-35.

Craig, B. C. (2002). "Smithsonian institution, education programs." *Encyclopedia of Education*. Retrieved from http://www.encyclopedia.com/doc/1G2-3403200563.html

Cunningham, M. K. (2009). A scenario for the future of museum educators. *Journal of Museum Education, 34*(2), 163-170.

Çengelhan Rahmi M. Koç Museum. (2019). Retrieved from www.rmk-museum.org/ankara/ana-sayfa

Çıldır, Z. & Karadeniz, C. (2014). Museum, education and visual culture practices: Museums in Turkey. *American Journal of Educational Research, 2*(7), 543-551

Demircioglu, I. H. (2007). History teachers' attitudes towards museum visits: A Turkish perspective. *Teaching History*, *41*(3), 24-30.

DeWitt, J., & Osborne, J. (2007). Supporting teachers on science focused school trips: Towards an integrated framework of theory and practice. *International Journal of Science Education, 29*(6), 685-710.

DeWitt, J., & Storksdieck, M. (2008). A short review of school field trips: Key findings from the past and implications for the future. *Visitor Studies, 11*(2), 181-197.

Doğan, Y. (2010). Primary school students benefiting from museums with educational purposes. *International Journal of Social Inquiry, 3*(2), 137-164.

Duclos-Orsello, E. (2013). Shared authority: The key to museum education as social change. *Journal of Museum Education*, *38*(2), 121-128.

Duffy, B., Smith, K., Terhanian, G., & Bremer, J. (2005). Comparing data from online and face-to-face surveys. *International Journal of Market Research*, *47*(6), 615-639.

Duhn, I. (2011). Towards professionalism/s. In L. Miller & C. Cable (Eds.), *Professionalization, leadership and management in the early years* (pp. 133-146). London: Sage Publications Ltd.

Epstein, J. L., & Salinas, K. C. (2004). Partnering with families and communities. *Educational leadership, 61*(8), 12-19.

Erbay, F. (2009). Müzecilik eğitiminin kırılma noktası. *SAYED: Kültür ve Sanat Dergisi*, *2*, 20-23.

Erbay, F. (2017). Türkiye'de müzecilik eğitiminin üniversitelerde kurumlaşması. *Milli Eğitim Dergisi*, *46*(214), 105-122.

Falk, J. H., & Dierking, L. D. (2000). *Learning from museums: Visitor experiences and the making of meaning*. Lanham, MD: Altamira Press.

Falk, J. H., & Dierking, L. D. (2018). *Learning from museums*. Rowman & Littlefield.

Falk, J. H., Moussouri, T., & Coulson, D. (1998). The effect of visitors 'agendas on museum learning. *Curator: The Museum Journal*, *41*(2), 107-120.

Faria, C., Pereira, G., & Chagas, I. (2012). D. Carlos de Bragança, a pioneer of experimental marine oceanography: Filling the gap between formal and informal science education. *Science & Education*, *21*(6), 813-826.

Farmer, J., Knapp, D., & Benton, G. (2007). The effects of primary sources and field trip experience on the knowledge retention of multicultural content. *Multicultural Education, 14*(3), 27-31.

Grenier, R. S. (2010). "Now this is what I call learning!" A case study of museum-initiated professional development for teachers. *Adult Education Quarterly, 60*(5), 499-516.

Griffin, J. (2004). Research on students and museums: Looking more closely at the students in school groups. *Science Education, 88*(S1), S59-S70.Hooper-Greenhill, E. (Ed.). (1999). *The educational role of the museum*. Psychology Press.

Griffin, J., & Symington, D. (1997). Moving from task-oriented to learning-oriented strategies on school excursions to museums. *Science Education*, 81(6), 763-779.

Gupta, P., Adams, J., Kisiel, J., & Dewitt, J. (2010). Examining the complexities of school-museum partnerships. *Cultural Studies of Science Education, 5*(3), 685-699.

Guskey, T. R., & Yoon, K. S. (2009). What works in professional development? *Phi delta kappan*, *90*(7), 495-500.

Hands, C. M. (2010). Why collaborate? The differing reasons for secondary school educators' establishment of school-community partnerships. *School effectiveness and school improvement*, *21*(2), 189-207.

Hazelroth, S., & Moore, J. G. (1998). Spinning the web: Creating a structure of collaboration between schools and museums. *Art Education, 51*(2), 20-24.

Hein, G. E. (1998). *Learning in the museum*. London: Routledge, 1998.

Hein, G. E. (2002). *Learning in the museum*. Routledge.

Hein, G. E. (2004). John Dewey and museum education. Curator: *The Museum Journal, 47*(4), 413-427.

Hicks Jr, J. W. (1986). *U.S. Patent No. 4,616,898*. Washington, DC: U.S. Patent and Trademark Office.

Hooper-Greenhill, E. (1994). *The educational role of the museum*. London ; New York : Routledge, 1994.

Hooper-Greenhill, E. (Ed.). (1999). *The educational role of the museum*. Psychology Press.

Hord, S. M. (1986). A synthesis of research on organizational collaboration. *Educational Leadership*, 43(5), 22-26.

Hsieh, H.-F., & Shannon, S.E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277-1288.

Ilhan, A. C. (2009). Educational studies in Turkish museums. *Procedia-Social and Behavioral Sciences*, *1*(1), 342-346.

İlhan, Artar, Bıkmaz, Okvuran, Akmehmet, Doğan, Karadeniz, Çiğdem, & Kut. (2019). *Müze etkinlik kitabı*. Ankara: Milli Eğitim Bakanlığı Genel Yayın.

Isik, H. (2013). The effect of education-project via museums and historical places on the attitudes and outlooks of teachers. *International Journal of Academic Research*, *5*(4), 300-306. doi:10.7813/2075-4124.2013/5-4/B.45

İlhan, A. Ç., Artar, M., Okvuran, A., & Karadeniz, C. (2014). Museum training programme in Turkey: Story of friendship train and children's education rooms in the museums. *Creative Education*, *5*(19), 1725.

Ji, J. (2015). *Understanding science museum educators in China and their self-concept as professionals* (Doctoral dissertation). University of British Columbia, Vancouver.

Jones, J. (2014). Examining why: Our work with teacher and schools. *Journal of Museum Education*, *39*(2), 175-186.

Kang, C., Anderson, D., & Wu, X. (2010). Chinese perceptions of the interface between school and museum education. *Cultural Studies of Science Education, 5*(3), 665-684.

Karadeniz, C. (2014). Müzenin toplumsal işlevleri bağlamında Türkiye'deki devlet müzeleri ile özel müzelerde çalışan uzmanların kültürel çeşitlilik ve müzenin ulaşılabilirliğine ilişkin görüşlerinin değerlendirilmesi. *Journal of International Social Research*, *7*(35), 405-422.

Karadeniz, C., Okvuran, A., Artar, M., & Ilhan, A. Ç. (2015). Contemporary approaches and museum educator within the context of new museology. *Egitim Bilimleri Fakultesi Dergisi*, *48*(2), 203.

Karadeniz, C., Okvuran, A., Artar, M., & İlhan, A. Ç. (2016). Müze eğitiminde dönüşümler: Kocaeli müzesi'nde eğiticilerin eğitimi. *Milli Eğitim Dergisi*, *46*(214), 37-59.

Kelly, L. J. (2007). *The interrelationships between adult museum visitors' learning identities and their museum experiences*. (University of Technology, Sydney). Retrieved from https://opus.lib.uts.edu.au/handle/10453/35613

Kesner, L. (2006). The role of cognitive competence in the art museum experience. *Museum Management and Curatorship*, *21*(1), 4-19.

Kisiel, J. F. (2003). Teachers, museums and worksheets: A closer look at a learning experience. *Journal of Science Teacher Education, 14*(1), 3-21.

Kisiel, J. (2005). Understanding elementary teacher motivations for science fieldtrips. *Science Education*, *89*(6), 936-955.

Kisiel, J. (2007). Examining teacher choices for science museum worksheets. *Journal of Science Teacher Education, 18*(1), 29-43.

Kisiel, J. (2014). Clarifying the complexities of school–museum interactions: Perspectives from two communities. *Journal of Research in Science Teaching, 51*(3), 342-367.

Kratz, S., & Merritt, E. (2011). Museums and the future of education. *On the Horizon, 19*(3), 188-195.

Krombaβ, A., & Harms, U. (2008). Acquiring knowledge about biodiversity in a museum—are worksheets effective? *Journal of Biological Education*, *42*(4), 157-163.

Lane, J., Wilke, R., Champeau, R., & Sivek, D. (1995). Strengths and weaknesses of teacher environmental education preparation in Wisconsin. *The Journal of Environmental Education*, *27*(1), 36-45.

Larsen, C., Walsh, C., Almond, N., & Myers, C. (2017). The "real value" of field trips in the early weeks of higher education: the student perspective. *Educational Studies, 43*(1), 110-121.

Larsson, J., & Holmström, I. (2007). Phenomenographic or phenomenological analysis: Does it matter? Examples from a study on anaesthesiologists' work.

International Journal of Qualitative Studies on Health and Well-being, *2*(1), 55-64.

Lau, M., & Sikorski, T. R. (2018). Dimensions of science promoted in museum experiences for teachers. *Journal of Science Teacher Education, 29*(7), 578-599.

Leinhardt, G., & Crowley, K. (2002). Objects of learning, objects of talk: Changing minds in museums. *Perspectives on object-centered learning in museums*, 301-324.

Lewis, J., & Ritchie, J. (2003). Generalising from qualitative research. *Qualitative research practice: A guide for social science students and researchers*, *2*, 347-362.

Marcus, A. S. (2008). Rethinking museums' adult education for K-12 teachers. *Journal of Museum Education, 33*(1), 55-78.

Marton, F. (1981). Phenomenography—describing conceptions of the world around us. *Instructional science*, *10*(2), 177-200.

Maxwell, J. A. (2012). *Qualitative research design: An interactive approach* (Vol. 41). Los Angeles: Sage Publications.

Mayring, P. (2014). Qualitative content analysis: Theoretical foundations, basic procedures and software solution. *Social Science Open Access Repository*. Retrieved from http://nbn-resolving.de/urn:nbn:de:0168-ssoar-395173

Megel, M. E., Langston, N. F., & Creswell, J. W. (1988). Scholarly productivity: A survey of nursing faculty researchers. *Journal of Professional Nursing*, *4*(1), 45-54.

Melber, L. M. (2007). Museums and teacher professional development in science: Balancing educator needs and institutional mission. *Science Educator, 16*(1), 34-41.

Melber, L. M., & Cox-Petersen, A. M. (2005). Teacher professional development and informal learning environments: Investigating partnerships and possibilities. *Journal of Science Teacher Education, 16*(2), 103-120.

Michie, M. (1998). Factors influencing secondary science teachers to organise and conduct field trips. *Australian Science Teacher's Journal*, *44*(4), 43-50.

Miles, M. B., Huberman, A. M., Huberman, M. A., & Huberman, M. (1994). *Qualitative data analysis: An expanded sourcebook*. Sage Publications.

Milli Eğitim Bakanlığı Eğitim Kurumları Sosyal Etkinlikler Yönetmeliği [Ministry of National Education]. (2017). *Regulation for social activities.* (MoNE Publication No. 30090. Retrieved from http://www.resmigazete.gov.tr/eskiler/2017/06/20170608-5.htm

Monk, D. F. (2013). John Dewey and adult learning in museums. *Adult learning, 24*(2), 63-71.

Morag, O., & Tal, T. (2012). Assessing learning in the outdoors with the field trip in natural environments (FiNE) framework. *International Journal of Science Education*, *34*(5), 745-777.

Morrison, T. (1996). Partnership and collaboration: Rhetoric and reality. *Child Abuse & Neglect*, *20*(2), 127-140.

Munley, M. E., & Roberts, R. (2006). Are museum educators still necessary? *Journal of Museum Education, 31*(1), 29-39.

Ng-He, C. (2015). Common goals, common core: Museums and schools work together. *Journal of Museum Education, 40*(3), 220-226.

Nichols, S. (2014). Museums, universities and pre-service teachers. *Journal of Museum Education, 39*(1), 3-9.

Okvuran, A. (2012). Müzede dramanın bir öğretim yöntemi olarak Türkiye'de gelişimi. *Eğitim ve Bilim*, 37(166).

Olson, J. K., Cox-Petersen, A. M., & McComas, W. F. (2001). The inclusion of informal environments in science teacher preparation. *Journal of Science Teacher Education, 12*(3), 155-173.

Osborne, J., & Dillon, J. (2007). Research on learning in informal contexts: Advancing the field. *International Journal of Science Education, 29*(12), 1441-1445.

Pica, V. (2013). The museum experience: Education and meaning making in the Italian national museums. *International Journal of The Inclusive Museum*, *6*(2), 141-151.

Phillips, M., Finkelstein, D., & Wever-Frerichs, S. (2007). School site to museum floor: How informal science institutions work with schools. *International Journal of Science Education, 29*(12), 1489-1507.

Rahmi M. Koc Museum-Museum Education (2012). (n.d.). Retrieved from http://www.rmk-museum.org.tr/en/rmk_museum_education.htm

Ramey-Gassert, L., Walberg III, H. J., & Walberg, H. J. (1994). Reexamining connections: Museums as science learning environments. *Science Education*, *78*(4), 345-363.

Reid, N. S. (2013). Carving a strong identity: Investigating the life histories of museum educators. *Journal of Museum Education*, 38(2), 227-238.

Rennie, L. J., & Johnston, D. J. (2004). The nature of learning and its implications for research on learning from museums. *Science Education, 88*(S1).

Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013). *Qualitative research practice: A guide for social science students and researchers*. London: Sage Publication Ltd.

Sanders, M. G., & Harvey, A. (2002). Beyond the school walls: A case study of principal leadership for school-community collaboration. *Teachers College Record, 104*(7), 1345-1368.

Scarce, R. (1997). Field trips as short-term experiential education. *Teaching Sociology*, *25*(3), 219-226.

School and Educator Programs (2015). Retrieved from http://www.guggenheim.org/new-york/education/school-educator-programs

Scott, W. R. (2008). Approaching adulthood: The maturing of institutional theory. *Theory and Society, 37*(5), 427.

Stake, R. E. (1995). *The art of case study research*. London: Sage Publications.

Stake, R. E. (2013). *Multiple case study analysis*. Guilford Press.

Storksdieck, M. (2001). Differences in teachers' and students' museum field-trip experiences. *Visitor Studies Today*, *4*(1), 8-12.

Suina, J. H. (1990). Museum multicultural education for young learners. *Journal of Museum Education*, *15*(1), 12-15.

Şahan, M. (2005). Müze ve eğitim [Museum and education]. *Türk Eğitim Bilimleri Dergisi, 3*(4), 487-501.

Tal, T., & Steiner, L. (2006). Patterns of teacher-museum staff relationships: School visits to the educational centre of a science museum. Can*adian Journal of Math, Science & Technology Education, 6*(1), 25-46.

Taş, A. M. (2012). Primary-grade teacher candidates' views on museum education. *US-China Education Review, 6,* 606-612.

Taşdemir, A., Kartal, T., & Ozdemir, A. M. (2014). Using science centers and museums for teacher training in Turkey. *The Asia-Pacific Education Researcher, 23*(1), 61-72.

T.C. Kültür ve Turizm Bakanlığı Kültür Varlıkları ve Müzeler Genel Müdürlüğü [Republic of Turkey Ministry of Culture and Tourism]. (n.d.). General management of cultural values and museums. Retrieved from http://www.kulturvarliklari.gov.tr

T.C. Kültür ve Turizm Bakanlığı Kültür Varlıkları ve Müzeler Genel Müdürlüğü [Republic of Turkey Ministry of Culture and Tourism]. (n.d.). Museums. Retrieved from https://muze.gov.tr.

T.C. Milli Eğitim Bakanlığı. [Republic of Turkey Ministry of Education] (n.d.). Müzede eğitim başlıyor. Retrieved from https://www.meb.gov.tr/muzede-egitim-basliyor/haber/18739/tr.

T.C. Milli Eğitim Bakanlığı. [Republic of Turkey Ministry of Education] (n.d.). Müzede eğitim sertifika programı. Retrieved from https://istanbul.meb.gov.tr/www/muze-egitimi-sertifika-programi/icerik/2585.

Tellis, W. M. (1997). Application of a case study methodology. *The Qualitative Report*, *3*(3), 1-19. Retrieved from http://nsuworks.nova.edu/tqr/vol3/iss3/1

Tight, M. (2016). Phenomenography: The development and application of an innovative research design in higher education research. *International Journal of Social Research Methodology*, *19*(3), 319-338.

Tran, L. U. (2007). Teaching science in museums: The pedagogy and goals of museum educators. *Science Education, 91*(2), 278-297.

Türkmen, H., Zengin, M., & Kahraman, Z. (2018). Müze uzmanlarının müzelerin eğitimdeki rolü hakkındaki görüşlerinin incelenmesi. *Eskişehir Osmangazi*

Üniversitesi Türk Dünyası Uygulama ve Araştırma Merkezi Eğitim Dergisi, *3*(2), 30-44.

Unesco Dünya miras listesi. (n.d.). Retrived from http://www.unesco.org.tr/Pages/125/122/UNESCO-Dünya-Mirası-Listesi

Weiland, I. S., & Akerson, V. L. (2013). Toward understanding the nature of a partnership between an elementary classroom teacher and an informal science educator. *Journal of Science Teacher Education*, 24(8), 1333-1355.

Weinstein, M., Whitesell, E. R., & Schwartz, A. E. (2014). Museums, zoos, and gardens: How formal-informal partnerships can impact urban students' performance in science. *Evaluation review, 38*(6), 514-545.

Wojton, M. A. (2009). *A study of a museum-school partnership* (Unpublished doctoral dissertation). Ohio State University, Ohio.

Wolins, I. S., Jensen, N., & Ulzheimer, R. (1992). Children's memories of museum field trips: A qualitative study. *Journal of Museum Education*, *17*(2), 17-27.

Wright-Maley, C., Grenier, R., & Marcus, A. (2013). We need to talk: Improving dialogue between social studies teachers and museum educators. *The Social Studies*, *104*(5), 207-216.

Yates, C., Partridge, H. L., & Bruce, C. S. (2012). Exploring information experiences through phenomenography. *Library and Information Research*, *36*(112), 96-119.

Yin, R. K. (1994). Discovering the future of the case study. Method in evaluation research. *Evaluation practice*, *15*(3), 283-290.

Yin, R. K. (2003). *Designing case studies*. In L. Maruster & M.J. Gijsenberg (Eds.) *Qualitative research methods* (pp. 359-399). London: Sage Publications Ltd.

Zetlin, A., Weinberg, L., & Kimm, C. (2004). Improving education outcomes for children in foster care: Intervention by an education liaison. *Journal of Education for Students placed at Risk*, *9*(4), 421-429.

APPENDICES

APPENDIX A: List of Museums in Ankara

I- KÜLTÜR VE TURİZM BAKANLIĞINA BAĞLI MÜZELER (7 Müze)

- Anadolu Medeniyetleri Müzesi √
- Roma Hamamı Açık Hava Müzesi ve Ören Yeri √
- Ankara Resim ve Heykel Müzesi √
- Cumhuriyet Müzesi √
- Etnografya Müzesi √
- Gordion Müzesi - (Anadolu Medeniyetleri Müzesi Müdürlüğüne bağlı) √
- Şefik Bursalı Müze Evi - (Ankara Devlet Resim ve Heykel Müzesi Müdürlüğüne bağlı)

II- TBMM' NE BAĞLI MÜZE: (1 Museum)

- Kurtuluş Savaşı Müzesi √

III-ASKERİ MÜZELER: (9 Museums)

- Alagöz Karargah Müzesi √
- Anıtkabir- Atatürk ve Kurtuluş Savaşı Müzesi √
- Devlet Mezarlığı Müzesi
- Haritacılık Müzesi √
- Hava Müzesi √
- Jandarma Müzesi √
- Milli Savunma Bakanlığı Arşiv Müzesi √
- Sakarya Şehitleri Anıtı ve Müzesi √
- Topçu ve Füze Okulu Müzesi √
- **IV-ÖZEL MÜZELER (39)**
- **Anadolu Medeniyetleri Müzesi Müdürlüğü Denetimindeki Müzeler: (5)**
- Çengelhan Rahmi M. Koç Müzesi √

- Meteoroloji Müzesi (Meteoroloji Genel Müdürlüğü) √
- ODTU Müzesi (Orta Doğu Teknik Üniversitesi) √
- Tabiat Tarihi Müzesi (Maden Tetkik Arama ve Araştırma Genel Müdürlüğü) √
- Yüksel Erimtan Arkeoloji ve Sanat Müzesi √
- **Etnografya Müzesi Müdürlüğü Denetimindeki Müzeler: (24)**
- AOÇ Müzesi ve Sergi Salonu √
- Anadolu Mimarlık ve Mobilya Kültürel Miras Müzesi ve Araştırma Merkezi
- Ankara Çocuk Müzesi √
- Ankara Üniversitesi Oyuncak Müzesi √
- Ankara Üniversitesi Ziraat Fakültesi Müzesi √
- Ankara Vakıf Eserleri Müzesi √
- Beypazarı Kent Tarihi Müzesi √
- Beypazarı Tarih ve Kültür Müzesi √
- Beypazarı Türk Hamam Müzesi
- Beypazarı Yaşayan Müze √
- Cumhurbaşkanlığı Atatürk Müze Köşk √
- Gökyay Satranç Spor ve Kültür Vakfı Müzesi √
- Mustafa Ayaz Vakfı Plastik Sanatlar Müzesi
- Ankara Olgunlaşma Enstitüsü 100. Yıl Müzesi √
- Prof. Dr. Ülker Muncuk Müzesi
- Sebahattin Yıldız Müzesi
- Toprak Mahsulleri Ofisi Müzesi √
- TRT Yayıncılık Tarihi Müzesi √
- Türkiye Barolar Birliği Hukuk Müzesi
- Ulucanlar Cezaevi Müzesi √
- M.K.E Sanayi ve Teknoloji Müzesi √
- Ankara Somut Olmayan Kültürel Miras Müzesi √
- Keçiören Belediyesi Etnografya Müzesi
- Kızılcahamam Hocalı Müzesi

- **Cumhuriyet Müzesi Müdürlüğü Denetimindeki Müzeler: (10)**
- PTT Pul Müzesi √
- Ziraat Bankası Müzesi √
- TCDD Malıköy Tren İstasyonu Müzesi √
- TCDD Müzesi ve Sanat Galerisi √
- TCDD Kurtuluş Savaşında Atatürk Konutu, Demiryolları Müzesi ve Atatürk Vagonu √
- TED Ankara Koleji Vakfı Müzesi √
- Telekomünikasyon Müzesi √
- Türk Hava Kurumu Müzesi √
- Türkiye Ormancılık Müzesi
- 75.Yıl Cumhuriyet Eğitim Müzesi (Milli Eğitim Bakanlığı) √

√ = **Museums that have been visited by the researcher at least once**

APPENDIX B: Interview Questions for All Museum Staff

1. Do you have any museum educators in your institution/museum? If yes, how many?

_____

2. If yes, where did they receive their education?

_____

3. If no, what are the reasons of not having any museum educators?

_____

4. What kind of activities do you plan to make the visitors visit your works of arts and exhibitions?

_____

5. Do school groups visit your museum/ institution? If yes, how often do they visit? How do you organize their trips? What do you do for them?

_____

APPENDIX C: Information about the Participant Museums

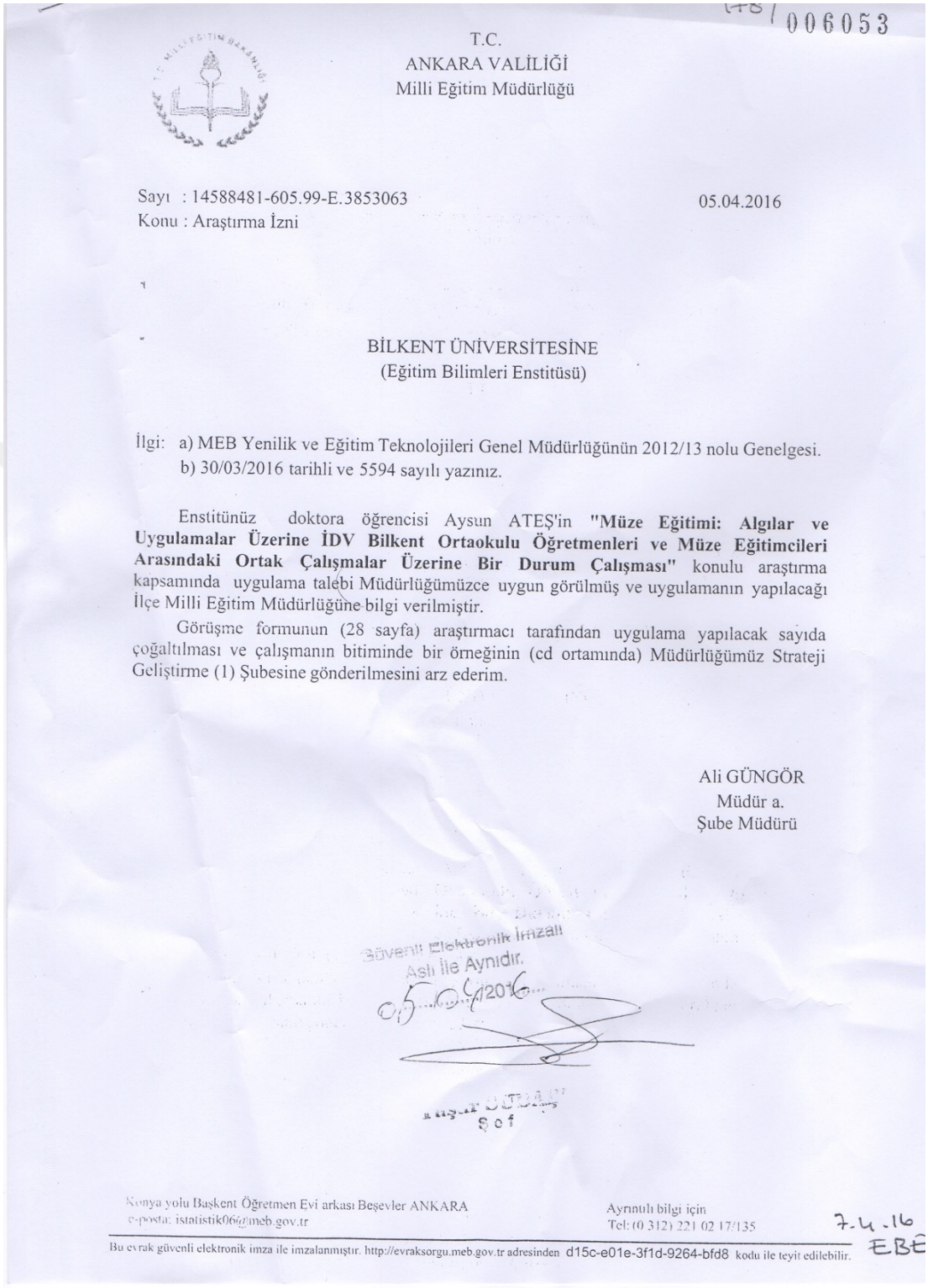
Participant museums

Museums	Brief information about the museum
Museum 1	Natural history museum: The museum was established in 1968 as the first natural history museum. The museum includes more than 5,000 objects, a planetarium, a science tunnel, a special section for blind people, education and application area. Its archive includes more than 100,000 objects.
Museum 2	Industrial and transport museum: The museum was established in 2005 as the first industrial museum. The museum building itself is a historical venue. It is a child-friendly museum with many toys and models.
Museum 3	Archaeological museum: The first museum in Ankara that was established in 1921. The museum exhibits newly-found ancient items as well. The artifacts are from different civilizations and eras such as palaeolithic era. It was chosen as the museum of the year in Europe in 1997.
Museum 4	Industrial and transport museum: The museum was established in 2005 but extended in 2016. The museum includes a large range of objects from the past to today. The sections for industry and engineering were arranged in the museum building to increase the awareness of visitors about the history of industry in Turkey.
Museum 5	Applied cultural museum: The museum was established in 2007as the first applied and cultural museum. It is a small museum that offers many different interactive facilities and drama activities to the visitors. The exhibitions are presented on different platforms to inform visitors about their culture.
Museum 6	Archaeology and arts museum: The museum was established in 2015 as a part of a foundation. This small museum aims to be a central place for both art and archaeology. Recent technology has been incorporated into the museum building for the exhibitions.
Museum 7	Science and technology museum: The museum was established in 2006. The museum includes four different sections: Applied science center, history of science and technology exhibition, history of transportation exhibition and open air exhibition area. The museum is located on a university campus and exhibitions attract audiences of different age groups.

APPENDIX D: Teachers and Their Subject Areas

T1	Social Sciences	T15	Language and Literature
T2	Mathematics	T16	Science
T3	Foreign Language	T17	Science
T4	Music	T18	Informational technology
T5	Mathematics	T19	Foreign Language
T6	Mathematics	T20	Social Sciences
T7	Foreign Language/ Coordinator	T21	Foreign Language
T8	Drama	T22	Foreign Language
T9	Foreign Language	T23	Design
T10	Counseling	T24	Social Sciences
T11	Counseling	T25	Foreign Language
T12	Arts	T26	Foreign Language
T13	Physical Education	T27	Science
T14	Foreign Language	T28	Science

APPENDIX E: Permission from the Ministry of Education



T.C.
ANKARA VALİLİĞİ
Milli Eğitim Müdürlüğü

Sayı : 14588481-605.99-E.3853063
Konu : Araştırma İzni

05.04.2016

BİLKENT ÜNİVERSİTESİNE
(Eğitim Bilimleri Enstitüsü)

İlgi: a) MEB Yenilik ve Eğitim Teknolojileri Genel Müdürlüğünün 2012/13 nolu Genelgesi.
b) 30/03/2016 tarihli ve 5594 sayılı yazınız.

Enstitünüz doktora öğrencisi Aysun ATEŞ'in **"Müze Eğitimi: Algılar ve Uygulamalar Üzerine İDV Bilkent Ortaokulu Öğretmenleri ve Müze Eğitimcileri Arasındaki Ortak Çalışmalar Üzerine Bir Durum Çalışması"** konulu araştırma kapsamında uygulama talebi Müdürlüğümüzce uygun görülmüş ve uygulamanın yapılacağı İlçe Milli Eğitim Müdürlüğüne bilgi verilmiştir.

Görüşme formunun (28 sayfa) araştırmacı tarafından uygulama yapılacak sayıda çoğaltılması ve çalışmanın bitiminde bir örneğinin (cd ortamında) Müdürlüğümüz Strateji Geliştirme (1) Şubesine gönderilmesini arz ederim.

Ali GÜNGÖR
Müdür a.
Şube Müdürü

Güvenli Elektronik İmzalı
Aslı ile Aynıdır.
05/04/2016

Şef

Konya yolu Başkent Öğretmen Evi arkası Beşevler ANKARA
e-posta: istatistik06@meb.gov.tr

Ayrıntılı bilgi için
Tel: (0 312) 221 02 17/135

7.4.16
EBE

Bu evrak güvenli elektronik imza ile imzalanmıştır. http://evraksorgu.meb.gov.tr adresinden d15c-e01e-3f1d-9264-bfd8 kodu ile teyit edilebilir.

APPENDIX F: Focus Group- Museum Staff Interview Questions

English version of the interview

Interview questions for museum educators
Name of the person interviewed:

_____
Email of the person interviewed:

_____
Telephone Number of the person interviewed: _____
Format: Personal communication
Date of interview:

_____

1. What did you study?
2. From which institution did you receive your education?
3. Did you take any coursework about museums?
4. (If yes) what coursework did you take about museums?
5. What is the highest degree you earned?
6. How many years have you worked at museums in total? (What other museums have you worked at?)
7. Would you consider yourself a museum educator?
8. Are there other museum educators on staff at this museum, how many?
9. What sparked your interest in museums?
10. Why did you pursue a job working in a museum?
11. What is museum education according to your thought?
12. Do you know if most museums in Turkey have museum educators on staff?
13. What do you think of museum education in Turkey?
14. What can be done to improve museum education in Turkey so that students learn more?
15. How can museum education be supported?
16. What do students learn in your museums? How?
17. What activities do you plan for students to foster their learning?
18. How do you know they are learning?

19. What do you think of students' attitude, behaviors and interest during their trips to your museum?

20. What are the challenges of dealing with school groups?

21. Do student groups from schools visit this museum? How often?

22. Do schools come multiple times or just once?

23. Which grade level(s) visit the museum? Is there a grade level that visits more often than others? Do you think there is a reason for this?

24. Do you cooperate with any school in Ankara such as Bilkent?

25. Do you follow a program or do you design the activities yourself?

26. How do you find the teachers' preparation and role during their visit to your museum?

27. How would you describe your typical day at work?

* Some of the questions and format are taken from the survey that was prepared by Armağan Ateşkan and Jennie Farber Lane.

I am a doctorate student at Bilkent University- Curriculum and Instruction Department. This interview is a part of my research, which is about museum education in Turkey. I aim to collect data from museum educators, staff and teachers to be able to answer the following questions. Thank you very much for your time and cooperation. I would like to tape record this interview with your permission. Your name will not be used in the research.

Turkish version of the interview

Müze personeli mülakat soruları

Görüşülen kişinin adı soyadı: _____

Görüşülen kişinin e- posta adresi: _____

Görüşülen kişinin telefon numarası: _____

Mülakat tarihi: _____

1. Hangi alan/ alanlarda eğitim aldınız?

2. Hangi enstitü/ yüksek okul/ üniversitede eğitiminizi tamamladınız ?
3. Müze eğitimi ile ilgili hiç ders aldınız mı?
4. Cevabınız evet ise hangi dersleri aldınız?
5. Aldığınız en yüksek eğitim seviyesi nedir?
6. Kaç yıldır müzelerde çalışıyorsunuz? Hangi müzelerde çalıştınız?
7. Kendinizi müze eğitimcisi olarak tanımlar mısınız?
8. Müzenizde müze eğitimcisi var mı? Kaç kişi?
9. Müzelere ilginiz nasıl başladı?
10. Niye bir müzede çalışmayı seçtiniz?
11. Sizce müze eğitimi nedir?
12. Türkiye'deki müzelerin çoğunda müze eğitimcisi var mı, biliyor musunuz?
13. Türkiye'deki müze eğitimi konusunda neler düşünüyorsunuz?
14. Öğrencilerin öğrenmelerini artırmak adına müze eğitimi ne şekilde geliştirilebilir sizce?
15. Müze eğitimi ne şekilde desteklenebilir?
16. Öğrenciler sizin müzenizde neler öğreniyorlar? Nasıl?
17. Öğrenmelerini geliştirmek adına ne çeşit aktiviteler uyguluyorsunuz?
18. Öğrendiklerini nereden anlıyorsunuz?
19. Öğrencilerin müze gezisi boyuncaki davranışlarını, tutumlarını ve ilgilerini nasıl yorumlarsınız?
20. Öğrenci grupları müzenizi ziyaret ediyor mu? Ne sıklıkta?
21. Öğrenci gruplarını müzenizde ağırlamanın zorlayıcı yanları nelerdir?
22. Aynı öğrenci vey a okul grubu sadece bir kere mi müzenizi ziyaret ediyor yoksa bir kaç kere mi?

23. Hangi sınıflar daha çok müzenizi ziyaret ediyor? Sizce bunun bir nedeni var mı?
24. Ankara'daki herhangi bir okul ile işbirliği içinde misiniz?
25. Öğrenciler için bir program izliyor musunuz? Ya da aktiviteleri kendiniz mi hazırlıyorsunuz?
26. Müzenizi ziyarete gelen öğrenci gruplarının başındaki öğretmenlerin hazırlığını ve gezi boyuncaki rollerini nasıl yorumlarsınız?
27. Olağan bir gününüz müzede nasıl geçer?

* Bazı sorular ve formatı Armağan Ateşkan and Jennie Farber Lane'in hazırlamış olduğu anketden alınmıştır.

Bilkent Üniversitesi, Eğitim programları ve öğretim bölümünde doktora öğrencisiyim. Bu mülakat araştırmamın bir parçası olup, Türkiye'deki müze eğitimi ile ilgilidir. Aşağıdaki sorular çerçevesinde müze eğitimcileri, personeli ve öğretmenlerden veri toplamayı amaçlamaktayım. Vaktiniz ve iş birliğiniz için teşekkür ederim. İzninizle mülakatın ses kaydını almak isterim. İsminiz araştırmada kullanılmayacaktır.

APPENDIX G: Interview Questions for Teachers

English version of the teacher interview

Field trip related questions

1. Where did you go on your most recent field trip?
2. What was the purpose of the trip?
3. Why did you go on the trip? Is it part of your school curriculum? (or something extra)
4. Please share with me how you planned the trip; in particular, please tell me about your communications with the museum staff.
5. Tell me about student activities. Did they learn what you intended? Could they have learned this without going to the museum? How were students' behaviors during the field trip?
6. What motivates you to conduct field trips?
7. What are the challenges to conducting field trips

If you have not comducted any field trips? Are you planning to conduct in the near future?

If you are not planning to conduct any field trips at all, may I learn the reason?

(If the have time/interest, ask about other field trips and discuss ones that worked especially well and why)

Museum education related questions

1. What do you think of museum education in Turkey?
2. What are your expectations from museums and museum staff to make students learn better?
3. Was museum education part of your pre-service teacher education? Should it be included?

School support for museum field trips

1. What are your expectations from the school that you work at in terms of conducting and planning an effective trip to museums?
2. How does the school administration support field trips to museums?
3. To what extent does the Turkish curriculum support field trip to museum?

School/museum collaborations

1. How can museum trips be more effective?
2. In your opinion, is the level of collaboration between schools and museums in Turkey adequate?
3. What can be done to improve the collaboration between schools and museums in Turkey

Ancillary event related questions

1. Did the workshop about museums affect your planning at all?
2. How would you evaluate the workshop that you attended?
3. Has your opinion on museum education changed as a result of the workshop?
4. Do you think this workshop was useful for the teachers? If yes, how?
5. Would you like to attend any other training or workshop about museum education or collaboration between schools and museums? Explain please.

Turkish version of the teacher interview

Öğretmenler için mülakat soruları

Okul gezilerine ilişkin sorular

Bu dönem müze gezisine gittiniz mi? (Evet ise aşağıdaki sorular ile devam edilecek)

1. En son okul gezisine nereye gittiniz?
2. Gezinin amacı neydi?
3. Neden bu geziye gittiniz? (Müfredatın bir parçası mı yoksa ekstra bir nedeni var mı?)
4. Lütfen geziyi nasıl planladığınızı anlatır mısınız? (Özellikle müze yetkilileri ile iletişiminiz) (Lojistik, idari, müfredat, pedagoji)
5. Öğrenci aktivitelerinden bahseder misiniz? Amaçladığınız şeyleri öğrendiler mi? Bu gezi öğrencilerin öğrenmelerine nasıl bir katkı sağladı? Öğrencileri bu geziye götürmeseydiniz, öğrenme seviyeleri sizce aynı mı olurdu?
6. Okul gezisi düzenlemede sizi motive eden etkenler neler?
7. Okul gezisi düzenlemede zorlayıcı olan etkenler neler?

Eğer bir geziye gitmediyseniz henüz gitmeyi planlıyor musunuz?

Eğer geziye gitmeyi planlamıyorsanız sakıncası yoksa nedeni nedir?

(Eğer vakitleri varsa diğer okul gezilerini sor ve özellikle iyi olarak tanımlananları ve nedenini)

Müze eğitimi ile ilgili sorular

1. Müze eğitimi sizce faydalı mı? Neden- nasıl?
2. Türkiyedeki müze eğitimini nasıl buluyorsunuz?
3. Öğrencilerinizin daha iyi öğrenmesi için sizin müzelerden ve müze personelinden beklentileriniz neler?
4. Müze eğitimi öğretmenlik eğitiminizin bir parçası mıydı? Sizce müze eğitimi öğretmen eğitiminin bir parçası olmalı mı?

Müze eğitimi için okul desteği

1. Etkili bir müze gezisi planlamak ve düzenlemek için çalıştığınız okuldan beklentileriniz nelerdir?
2. Okul idaresi müzeleri gezileri ne şekilde desteklemektedir?

Türkiyedeki müfredat müzelere gezileri sizce ne ölçüde desteklemektedir?

Okul/ müze işbirliği

1. Müzelere geziler ne şekilde daha etkili olabilir?
2. Türkiye'deki okullar ile müzeler arasındaki işbirliği yeterli boyutta mı sizce? (Geliştirmek adına ne yapılabilir?)

Eğitim sonrası alınan eğitime ilişkin sorular

1. Eğitim sonrasında müze eğitimi ile ilgili fikriniz değişti mi?
2. Sizce bu eğitim faydalı mıydı? Evet ise ne açıdan?
3. Müze eğitimi ile ilgili eğitim sizin planlamalarınızı bir şekilde etkiledi mi?
4. Katıldığınız eğitimi nasıl değerlendirirsiniz?
5. Müze eğitimi veya okullarla müzeler arası işbirliği ile ilgili bir başka çalıştay yada eğitime katılmak istermisiniz? Açıklayınız lütfen.

APPENDIX H: Main Questionnaire for Teachers

English version of the questionnaire

Teachers' Questionnaire: A questionnaire of teachers' perceptions and practices regarding museum education

I am a doctorate student at Bilkent University, Graduate School of Education. My dissertation topic is about museum education and I aim to collect data from museum educators and teachers. This questionnaire is a part of the data collection process of for my doctorate dissertation. I would like to learn about teachers' perception and practices about museum education with this questionnaire. I would appreciate if you share your honest thoughts and experiences with me. This **questionnaire** is totally volunteer. This questionnaire will take about 20 minutes. Thank you for your collaboration.
If you have any questions, please contact me via email (ates@bilkent.edu.tr)

Sincerely,
Aysun Ates
PhD Candidate
Graduate School of Education
Bilkent University/ Ankara

Optional: If you are willing to be contacted for a follow up interview, please provide

your name and contact information. Your information will be kept confidential.

Name: _____

Email: _____

Telephone number: _____

Section I – Personal

1. Where are you from?

City _____

Country: _____

2. What is your gender? a) Female b) Male

3. Which subject area(s) do you teach?

_____

4. From which institution did you receive your teaching certificate?

_____

5. What year did your receive your teaching certificate? _____

6. What is the highest degree you earned? a) College b) Master's c) Doctorate

7. How many years have you been teaching at your current school?

_____

8. In total, how many years have you been teaching?

_____

Section II – Museum memories and education

9. Do you recall a trip that you took to a museum while you were in middle school? (Circle one that applies)

a) Yes b) No c) Not sure

10. If yes, what memories do you have of this museum trip. (List things that you remember from your trip/s)

a) _____

b) _____

c) _____

11. When you think of a field trip to a local museum for your students, what word comes to your mind? (Use one word)

_____

12. Which museums that you have visited in Turkey or abroad were the most interesting ones? Why?

_____

13. How would you prepare your students before a field trip to museum?

_____

_____

Section III – Perceptions

14. Please complete the sentence with your own words.

Museum education is _____.

15. For each of the following items, please indicate the extent to which you agree it describes the reason why you plan a field trip to a museum.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Making connections to the curriculum					
Experiencing a historic place					
Gaining lifelong learning					
Exploring a novel place					
Increasing student interest in culture					

Enjoying the environment and exhibitions					
Increasing motivation					
Others					

16. For each of the following items, please indicate the extent to which you agree they discourage you from planning a field trip to a museum.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Making connections to the curriculum					
Acquiring parental support					
Securing parental permission					
Administrative concerns					
Children's safety					
Need to allocate time to take the students to the field trip					

Need to be familiar with Museum program					
Lack of personal training to conduct the field trip effectively					
Need to contact with the museum staff					
Collaborating with the museum					
Preparing before and after trip activities					
Developing student activities for the trip					
Managing student behavior during the trip					

Section IV – Practices

17. During a typical academic year that you teach at IDF Bilkent Middle School, how many times do you take your students to museums? (Circle one choice)

0 1 2 3 4 5 6 or more

18. Which museums have you taken your students to?

a)

_____

b)

_____

c)

_____

19. For the most part, what is your role in the field trip(s)?

a) Leader

b) Co-leader

c) Participant

d) No role

e) Other

20. In your role, do you contact and communicate with museum staff to plan the field trip? Yes / No

21. If your answer is yes for question 20, what is the role of the museum staff in the field trips you have conducted?

_____

22. For the trips that you are involved in, please indicate the extent to which you agree with support from the museum staff.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Museum staff are very involved in planning the trips.					

Museum staff are very responsive to my questions.					
Museum staff are supportive of student trips to museums.					
Museum staff are involved in assessing the field trip.					

23. How many times do you visit the **same** museum in an academic year?

0 1 2 3 or more

24. During a typical museum field trip, how many hours do your students spend at a museum?

_____

25. Which of the following pre-visit classroom activities do you use to prepare your students for a field trip to museums? (Check all that apply)

	Always	Often	Sometimes	Seldom	Never
No pre-visit activity					
Class work (written or drawn)					
Slide show/film					
Class discussion					
Guest speaker from a museum					
Others:					

26. Please indicate your level of experience for each field trip activity listed below.

Activity	Very experienced	Somewhat experienced	A little experienced	Not experienced	Not sure
Choosing a location (site)					
Obtaining administrative support					
Contacting museum staff to arrange the field trip					
Building partnerships with experts from museums					
Involving parents or guardians on the trip					
Enhancing student inquiry					
Managing student behavior					
Assessing student learning					
Evaluating the field trip effectiveness					

Helping students relate the field trip experience to classroom learning					
Other activities not included in this list: _____					

Section V– Expectations and professional development

27. Which of the above areas would you like to be addressed in the teacher-training program at Çengelhan Rahmi M. Koç Museum?

_____

_____

28. What are your expectations from the teacher-training program at Çengelhan Rahmi M. Koç Museum?

_____

29. Have you had any professional development in museum education?

_____

30. Have you received any drama education?

_____

Turkish version of the questionnaire

Öğretmen Anketi: Öğretmenlerin müze eğitimi ile ilgili fikir ve deneyimleri üzerine bir anket

Ben Bilkent Üniversitesi, Eğitim Bilimleri Enstitüsünde doktora yapmaktayım. Doktora tez konum müze eğitimi üzerinedir. Bu amaçla müze eğitimcileri ve öğretmenlerden bilgi toplamayı hedeflemekteyim. Bu anket ile öğretmenlerin müze eğitimi konusundaki algılarını ve deneyimlerini öğrenmek amaçlanmıştır. Bu amaçla sizin de katılımınızı rica ettiğim bir anket düzenlemekteyim. Bu ankete katılmak konusunda tamamen serbestsiniz. Kimliğiniz ve kişisel bilgileriniz gizli tutulacak, vereceğiniz cevaplar da isimsiz olarak kullanılacaktır. Bu anket yaklaşık 20 dakika sürecektir. Yardımlarınız için şimdiden teşekkür ederim.

Sorularınız için e-posta adresim olan ates@bilkent.edu.tr aracılığıyla benim ile irtibata geçebilirsiniz.

Saygılarımla,
Aysun Ateş
Doktora Öğrencisi
Eğitim Bilimleri Enstitüsü
Bilkent Üniversitesi/Ankara
İsteğe bağlı: Anket sonrası yapılması planlanan mülakat için iletişim kurulmasını istiyorsanız, lütfen ad ve iletişim bilgileri kısımlarını doldurunuz. Bilgileriniz gizli tutulacaktır.

Ad Soyad: _____
E-posta: _____
Telefon numarası: _____

Kısım I – Kişisel Bilgiler

1. Nerelisiniz?

   Şehir: _____

   Ülke: _____

2. Cinsiyetiniz? a) Kadın b) Erkek

3. Hangi ders/dersleri öğretiyorsunuz?

_____

4. Öğretmenlik sertifikanızı hangi enstitüden aldınız?

_____

5. Öğretmenlik sertifikanızı hangi yıl aldınız? _____

6. Öğreniminizde kazanmış olduğunuz en yüksek derece nedir?

a) Üniversite b) Yüksek lisans c) Doktora

7. Şu anda çalışmakta olduğunuz okulda kaç yıldır çalışıyorsunuz?

_____

8. Toplam kaç yıldır öğretmenlik yapıyorsunuz?

_____

Kısım II – Müze anıları ve eğitimi

9. Ortaokuldayken yapmış olduğunuz bir müze gezisi hatırlıyor musunuz? (Lütfen uyan cevabı işaretleyiniz)

a) Evet b) Hayır c) Emin değilim

10. Eğer cevabınız evet ise, bu geziye/gezilere dair hatırladıklarınızı listeleyiniz.

a) _____

b) _____

c) _____

11. Şehrinizdeki bir müzeye öğrencileriniz için bir gezi düşündüğünüzde, aklınıza hangi kelime geliyor? (Bir kelime kullanınız)

_____

12. Türkiye veya yurtdışında ziyaret ettiğiniz müzeler arasında en ilginç olanları hangileriydi? Neden?

_____

13. Öğrencilerinizi bir müze gezisine nasıl hazırlarsınız?

_____

Kısım III – Algılamalar

14. Lütfen cümleleri kendi kelimelerinizle tamamlayınız.

Müze eğitimi _____.

15. Lütfen her bir öğeyi, müzelere gezi planlama nedenlerinizi ne ölçüde yansıttığına göre işaretleyiniz.

	Kesinlikle katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle katılmıyorum
Müfredat ile ilişkilendirmek					
Tarihi bir yeri deneyimlemek					
Ömür boyu öğrenmenin bir parçası olması					
Özgün bir yeri keşfetmek					
Öğrencinin kültüre ilgisini artırmak					
Çevre ve sergilerin tadına varmak					

Motivasyonu artırmak					
Diğer :					

16. Lütfen her bir öğeyi, bir müze gezisi planlamanızda ne derece cesaretinizi etkilediğini düşünerek işaretleyiniz.

	Kesinlikle katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle katılmıyorum
Müfredat ile ilişkilendirmek					
Veli desteği görmek					
Veli izni temin etmek					
İdari endişeler					
Çocukların güvenliği					
Öğrencileri geziye götürmek için zaman ayarlamak					
Müze programına aşina olmak					

Etkin bir gezi yapmak için kişisel eğitimin eksik olması					
Müze personeli ile irtibata geçmek					
Müze ile işbirliği yapmak					
Gezi öncesi ve sonrası aktiviteler planlamak					
Gezi için aktivite geliştirmek					
Gezi boyunca öğrenci davranışlarını kontrol etmek					

Kısım IV – Uygulamalar

17. IDV Bilkent Ortaokulunda öğretmenlik yaptığınız bir eğitim-öğretim yılında kaç kere öğrencilerinizi müzeye götürüyorsunuz? (Bir seçenek işaretleyiniz)

0 1 2 3 4 5 6 veya daha fazla

18. Hangi müzelere öğrencilerinizi götürdünüz?

a)

_____

b)

_____

c)

_____

19. Genel olarak gezilerdeki göreviniz nedir?

a) Lider
b) Yardımcı lider
c) Katılımcı
d) Rolüm olmaz
e) Hiç biri

20. Göreviniz gereği bir gezi planlamak için müze personeli ile iletişim kuruyor musunuz?

Evet / Hayır

21. 20. soruya evet cevabı verdiyseniz, düzenlemiş olduğunuz gezilerde müze personelinin rolü neydi?

_____

22. Katıldığınız müze gezilerinde müze personelinin desteğini lütfen her bir öğeyi işaretleyerek değerlendiriniz.

	Kesinlikle katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle katılmıyorum
Müze personeli gezi planlamasına çok katılır.					

Müze personeli sorularıma karşı çok ilgilidir.					
Müze personeli öğrencilerin müze gezilerinde çok destekleyicidir.					
Müze personeli gezinin değerlendirmesinde yer alır.					

23. Bir eğitim-öğretim yılı boyunca **aynı** müzeyi kaç kere ziyaret edersiniz?

0 1 2 3 veya daha fazla

24. Olağan bir müze gezisinde, öğrencileriniz müzede kaç saat geçirirler?

_____

25. Öğrencilerinizi geziye hazırlamak adına, hangi gezi öncesi aktiviteleri müze gezisi öncesi kullanırsınız?

(Uyan hepsini işaretleyiniz)

	Her zaman	Sık sık	Bazen	Nadiren	Asla
Hiç bir aktivite kullanmam					
Sınıf aktivitesi (yazılı veya çizim)					
Slayt gösterisi/film					

Sınıf müzakeresi					
Bir müzeden misafir konuşmacı					
Diğerleri:					

26. Lütfen deneyiminizin derecesini aşağıda listelenmiş her bir gezi aktivitesi için işaretleyiniz.

Aktivite	Çok deneyimli	Oldukça deneyimli	Biraz deneyimli	Deneyimsiz	Kararsız
Bir mekan/yer seçmek					
İdari destek almak					
Gezi düzenlemek için müze personeli ile iletişime geçmek					
Müzeden uzman kişilerle ortaklık kurmak					
Veli ve gözetmen olacak kişileri dahil etmek					
Öğrencilerin sorgulamasını artırmak					
Öğrenci davranışlarını kontrol etmek					

Öğrencilerin öğrenmesini değerlendirmek					
Gezinin etkili olup olmadığını ölçmek					
Gezi deneyimiyle sınıfiçi öğrenmeyi ilişkilendirmede öğrencilere yardımcı olmak					
Listede yer almayan diğer aktiviteler: _____					

Kısım V– Beklentiler ve mesleki gelişim

27. Çengelhan Rahmi M. Koç Müzesinde gerçekleşecek öğretmen eğitimi programında yukarıdaki hangi alanlara değinilmesini istersiniz?

_____

_____

28. Çengelhan Rahmi M. Koç Müzesinde gerçekleşecek öğretmen eğitimi programından beklentileriniz nelerdir?

_____

29. Daha önce müze eğitimi konusunda herhangi bir mesleki eğitiminiz oldu mu?

_____

30. Daha önce drama eğitimi aldınız mı?

_____

APPENDIX I: Workshop Questionnaire for Teachers

English version of the questionnaire

Teachers' Questionnaire: A questionnaire of teachers' perceptions regarding the museum education workshop for teachers

If you have any questions, please contact me via email (ates@bilkent.edu.tr) or call (532) 224 0575. I would be happy to answer your queries.
I am a doctorate student at Bilkent University, Graduate School of Education. My dissertation topic is about museum education and I aim to collect data from museum educators and teachers. This questionnaire is a part of the data collection process of for my doctorate dissertation. I would appreciate if you share your honest thoughts and experiences with me. Your ideas are very important for this study. Thank you for your collaboration.
Sincerely,
Aysun Ateş
PhD Candidate
Optional: If you are willing to be contacted for a follow up interview, please provide your name and contact information. Your information will be kept confidential.

Name: _____
Email: _____
Telephone number: _____

1. For each of the following items, please indicate the extent to which you agree about the museum education workshop that you received at Çengelhan M. Rahmi Koç Museum.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The workshop met my expectations.					
After the workshop I felt more competent organizing a field trip to museums.					
The workshop helped me to integrate field trips into my lessons/ into the curriculum.					

This workshop has changed my perception of museums.					
The workshop was very educational.					
The workshop was entertaining.					
The workshop duration was good.					
The workshop helped me to improve myself as a teacher.					
The workshop has changed my point of view about artifacts in the museum.					
I am able to plan an educational trip to museums.					
The leaders of the workshop were professional.					
The workshop was inadequate.					
The venue was susceptible.					

I feel more competent about museum education.					

2. Which part of the workshop did you like the most or did you find the most helpful for your teaching? Why?

_____

_____

3. What do you see as the potential benefits of taking students to museums?

_____

_____

4. Anything else you want to share? What else should be included in this training? Do you have anything to add?

_____

Turkish version of the questionnaire

Öğretmen Anketi: Öğretmenlere verilen müze eğitimi sonrası öğretmen görüşleri anketi

Ben Bilkent Üniversitesi, Eğitim Bilimleri Enstitüsünde doktora yapmaktayım. Doktora tez konum müze eğitimi üzerinedir. Müze eğitimcileri ve öğretmenlerden bilgi toplamayı hedeflemekteyim. Bu anket ile öğretmenlerin müze eğitimi konusundaki algılarını ve deneyimlerini öğrenmek amaçlanmıştır. Bu amaçla sizin de katılımınızı rica ettiğim bir anket düzenlemekteyim. Bu ankete katılmak konusunda tamamen serbestsiniz. Kimliğiniz ve kişisel bilgileriniz tamamen gizli tutulacak, vereceğiniz cevaplar da isimsiz olarak kullanılacaktır. Bu anket yaklaşık 20 dakika sürecektir. Yardımlarınız için şimdiden teşekkür ederim.

Sorularınız için e-posta adresim olan ates@bilkent.edu.tr aracılığıyla benim ile irtibata geçebilirsiniz.

Saygılarımla,
Aysun Ateş
Doktora Öğrencisi
Eğitim Bilimleri Enstitüsü
Bilkent Üniversitesi/Ankara
İsteğe bağlı: Anket sonrası yapılması planlanan mülakat için iletişim kurulmasını istiyorsanız, lütfen ad ve iletişim bilgileri kısımlarını doldurunuz. Bilgileriniz gizli tutulacaktır.
Ad Soyad: _____
E-posta: _____
Telefon numarası: _____
1. Çengelhan M. Rahmi Koç müzesinde müze eğitimi ile ilgili katılmış olduğunuz

çalıştayı her bir öğeyi işaretleyerek değerlendiriniz lütfen.

	Kesinlikle katılıyorum	Katılıyorum	Kararsızım	Katılmıyorum	Kesinlikle katılmıyorum
Çalıştay beklentilerimi karşıladı.					
Çalıştay sonrası müzelere gezi planlama konusunda daha yetkin hissettim.					

Çalıştay, gezileri derslerime ve müfredata dahil etme konusunda yardımcı oldu.					
Bu çalıştay müzeler konusundaki algımı değiştirdi.					
Çalıştay çok eğiticiydi.					
Çalıştay eğlenceliydi.					
Çalıştayın uzunluğu iyiydi.					
Çalıştay öğretmen olarak kendimi geliştirmeme yardımcı oldu.					
Çalıştay müzelerdeki eserler konusundaki görüşümü değiştirdi.					
Müzelere eğitim amaçlı bir gezi planlayabilirim.					

Çalıştayın liderleri uzman kişilerdi.					
Çalıştay yetersizdi.					
Çalıştayın yapıldığı yer elverişliydi.					
Müze eğitimi konusunda kendimi daha yeterli hissediyorum.					

2. Çalıştayın en faydalı kısmı hangisiydi veya hangi kısım sizin öğretmenliğiniz için en faydalıydı? Neden?

_____

_____

3. Öğrencileri müzelere götürmenin olası faydaları sizce nelerdir?

_____

_____

4. Paylaşmak istediğiniz herhangi başka bir şey var mı? Bu çalıştaya başka neler katılabilirdi? Eksik olan kısım var mıydı?

_____

_____

APPENDIX J: Weiland and Akerson's Framework

Dimension	Cooperation	Coordination	Collaboration
Communication	Occurs only for the purpose of task at-hand	Frequent communication that occurs outside of task-at-hand	Frequent and open communication; level of comfort allows for honesty and disagreements
Duration	Short term	Intermediate term	Long term
Formality of partnership	Informal (not institutionalized)	Slightly formal	Formal (institutionalized)
Objectives	Objectives may or may not overlap	Complex single task; common goal; shared rewards	Long-term; complex multiple tasks; success dependent on partnership; common goals and mission; shared rewards
Power and influence	Locus of control rests with individual educators; disagreements about turf are not an issue	Locus of control rests with individual educators; disagreements resolved by "majority rule"	Locus of control rests within the partnership; disagreements resolved using consensus building process
Resources	Supported with discretionary funds controlled by one of the individual agencies; provided on a one-time-only basis resources kept separate	Supported with dedicated funds from the individual agencies that remain within control of the individual agencies; shared resources	Supported by pooled resources that are largely within the control of the collaborative interagency unit; resources provided for an extended period of time; shared resources
Roles	Roles, do not overlap; each individual has specialized expertise that their partner does not or cannot offer	Roles, overlap a bit; individuals areas of expertise may overlap, bur programming is greatly enhanced by partnership	Roles, overlap significantly; each individual trusts their partnership to successfully execute and reach goals and objectives
Structure	Can be done alone or together; separate entities	Cannot be done alone; but still two separate, co-dependent entities	Separate entities unite to form a new structure

APPENDIX K: Sample Activities from the Museum Workshop

Activity 1: Empathy

Teachers paired up and one of the teachers closed her eyes. Then the other one chose an object in the museum and tried to explain the object without naming it. This activity was given to understand the blind visitors. An adaptation for deaf people was also mentioned.

Activity 2: Purpose and steps of a field trip

Teachers worked in their subject area groups to plan a field trip. They prepared a poster to share their ideas. Each department shared the purpose and the steps of their field trips. Some ideas were given below.

Foreign language teachers planed a trip related to the book that they were teaching 'the Secret Garden'. The aim was to find the model house that is the closest to the one that the main character in the book lived. The second idea was about comparing and contrasting the schools today and in the past by looking at the artifacts in the museum. Designing posters, timelines, and writing slogans were also mentioned.

Mathematics teachers planned a trip related to area and volume through using the model houses in the museum. Another possible plan was using the pharmacy section in the museum to teach ratios and proportions.

Music teacher mentioned the absence of music in the museum and she preferred to plan finding the right music for each section in the museum.

Social science teachers planned a field trip to explain the World War II to students. They also said that trade at that time could be their focus.

Language and literature teachers planned a trip for writing practice. Students choose a model house and describe it. The rest of the class try to find the house according to this description. Another activity was using the transportation exhibit in the museum

and finding similarities with Jules Verne's ideas in his book 'Twenty thousand leagues under the sea'.

Activity 3: One object for each trip

Each teacher chose only one object in the museum and planned a visit that fit their curriculum. The ideas were shared and interdisciplinary unit lesson plans were mentioned.

VITA

Aysun Çadallı was born in Kırklareli, Turkey, on January 3, 1974. After her graduation from the Department of Philosophy at Middle East Technical University in 1997, she attended a seven-month Certificate Program in American Language Studies at Rutgers University in New Jersey, U.S.A. In 2000, she was accepted to the Bilkent University Graduate School of Education to earn her Master of Arts degree in English Teaching. As a part of this program she observed and taught lessons in Ted Ankara College, İhsan Doğramacı Foundation (İDF) Bilkent Primary, Middle and High School (Ankara), Bilkent University Laboratory and International School (Ankara), and Robert College (İstanbul). This program included a Fulbright scholarship from the U.S. Embassy of Ankara and Bilkent University that supported a two-month visit to Ames, Iowa, U.S.A where she attended university classes and taught lessons at a local school (Ballard High School). She completed her degree in 2002. Since graduation, she has been employed as an English teacher at Bilkent University's Music Preparatory Schools, Bilkent Erzurum Laboratory School (an İDF Eastern Schools Project), and İDF Bilkent Primary and Middle Schools. She started her doctoral study in 2012 within the program of Curriculum and Instruction at the Graduate School of Education, Bilkent University. She is currently working as an English language teacher at İDF Bilkent Middle School.