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Analysing School-Museum Relations to Improve Partnerships for Learning: A Case Study

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Abstract

Field trips to museums can improve student learning by providing them with opportunities to see first-hand concepts they learned in the classroom. Unfortunately, perceived and real barriers may discourage partnerships between schools and museums for education. The current paper describes how case study methodology was used to examine relations between a school and museums. Through this case study, a phenomenographic research approach was used to gain insights into museum educators and teachers' perceptions and practices related to museum education. The research was conducted in Ankara, Turkey, involving teachers from a private school and seven staff from local museums. This study utilized quantitative data to support qualitative data. Through interviews, questionnaires, and an analytical framework, the results revealed the importance of identifying roles associated with museum education and strengthening pathways for communication. Based on the results of the study, the authors provide suggestions to improve partnerships between a school and local museums. One strategy is to identify a school staff member who serves as a liaison between the school and the museums, ensuring consistent communication and sharing of ideas. Future research ideas for consideration are identified.

Keywords

Analytical framework
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Introduction

The International Council of Museums (ICOM) is an organization that includes representatives from museums from around the world. Their definition of museums has evolved over the years and they currently define them as non-profit public institutions with the mission of promoting public awareness of natural history and cultural heritage. Education is among the ways they list to serve the public (ICOM, n.d.).

Museum education enhances the emotional state of individuals and aims to support the school education. It improves learning, motivates students and has a variety of techniques to support conventional education (Mercin, 2017). Indeed, it was not long after museums came into existence that teachers started bringing students to the institutions to illustrate concepts taught in class (Hooper-Greenhill, 1994). Dewey has been noted to support museums as a source for experiential learning (Hein, 2004; Monk, 2013). Other researchers have noted that museum education is interdiciplinary (Okvuran, 2012) and helps individuals to understand their cultural heritage associating past, present and future (İlhan, Artar, Okvuran, & Karadeniz, 2014). Through field trips to museums, teachers extend 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).

Along with using museums for learning, scholars and researchers have investigated the merits and challenges of school trips to museums (Falk & Dierking, 2000; Hooper-Greenhill, 1994; Nichols, 2014; Osborne & Dillon, 2007). Some studies have focused on what students learn during museum visits and how to make the field trips more effective (Griffin, 2004; Kratz & Merritt, 2011; Rennie & Johnston, 2004). They report that museums can support constructivist learning and advocate for the first-hand experiences and self-guided instruction. Researchers have also investigated what motivates and discourages teachers to conduct museum field trips (DeWitt & Storksdieck, 2008; Olson, Cox-Petersen, & McComas, 2001; Taş, 2012). Findings from these studies include limited school funding, lack of time, overcrowded curricula, standardized tests, student behaviour, and safety issues. Griffin (2004) noted that in addition to these investigations, it is important to examine the relationships between schools and museums to help build effective partnerships. Karadeniz (2014) emphasizes that museums have the responsibility to communicate with every sector of society about their housed artefacts and resources; she notes that partnerships with schools are especially important and valuable.

In their discussion of issues related to school and museum partnerships, Gupta, Adams, Kisiel, and Dewitt (2010) mention institutional theory as a lens to investigate the relations. Scott (2008) points out that many scholars have defined and debated institutional theory. He describes that despite these ambiguities, researchers have been able to relate the theory to understanding the formation of institutions.

The current study referred to institutional theory and the literature to develop the following research question: What is the nature of the partnerships between a private middle school in Turkey and museums in the community. The lead author is a teacher who works in this school and recognized that many teachers in her school were reluctant to take students on field trips to museums. Knowing that museums provide students with valuable learning experiences, the authors were keen on learning how the school and museums did and did not work together for education. Facilitating partnerships necessitates understanding the actors within the institutions and gaining insights into their perceptions and practices.

Overview of Museum Education and Related Research

Simply put, museum education is the learning that takes place in a museum. When museum education is purposeful and well-designed, it increases the ability of the museum to convey its message to the public (Hooper-Greenhill, 1994). Duclos-Orsello (2013) states that museum education addresses the most critical social needs of the community. By learning about their culture, society learns about itself (Kelly, 2007). Museums provide students with opportunities to witness, and in many cases experience first-hand, what they are learning in schools (Monk, 2013).

In an effort to understand what makes museums effective learning venues, some researchers have begun investigating the role and skills of the museum educator (Bailey, 2006; Cunningham, 2009; Munley & Roberts, 2006; Reid, 2013). In her study, Tran (2007) observed that museum educators were responsive to students' learning needs and devised strategies to make instruction meaningful and interesting to students.

The viewpoints of teachers have been the subject of numerous studies related to museums and other non-formal learning experiences (Anderson, Kisiel, & Storksdieck, 2006; Anderson & Zhang, 2003; Kisiel, 2007; Nichols, 2014). Kisiel (2003) found that many teachers question the efficacy of student learning within museums. He noted that while teachers are very confident in the classroom environment, they feel more insecure with museum field trips. He suggests that museum educators can mentor teachers and help develop teaching competencies within museum settings. Kisiel (2003) asserts that more research is needed to make museum experiences more valuable for school groups.

School and community partnerships have been found to improve schooling (Anderson Butcher et al., 2010; Bulduk, Bulduk, & Koçak, 2013; Epstein & Salinas, 2004; Sanders & Harvey, 2002). Near the end of the 20th century, the Commission on Museums for a New Century (1984) recommended that museums build and maintain partnerships with schools. It is acknowledged that these partnerships face challenges as schools and museums may have differing or conflicting expectations and understandings. Unfortunately, more current studies have found that these challenges persist (Berry, 1998; Doğan, 2010; Gupta et al., 2010; Kang, Anderson, & Wu, 2010; Kisiel, 2014; Tal & Steiner, 2006).

Museums and Museum Education in Turkey

According to Turkey's Ministry of Culture and Tourism website (www.kulturvarliklari.gov.tr), there are 370 museums in Turkey, nearly half of these are private (183) and the rest are under the direction of the ministry. Çetin (2002) reports that when Turkey became a republic in 1923, its founder Mustafa Kemal Atatürk emphasized the importance of Turkish culture and history. Upon the request of Atatürk, a Hittites Museum in Ankara was established. It was the first archaeological museum in Turkey. In 1967, the museum was renamed as the Museum of Anatolian Civilizations in consideration of the diversity of the works in the museum. Atatürk is credited with establishing 15 more museums in the country.

As with many museums, Turkish museums have been created to house incredible artifacts and exhibitions that are important to the history and culture of the country. These institutions, as with museums around the world, have been recognized as a resource for learning (Bennett, 1995). With its rich cultural heritage, Turkish museums have many resources and opportunities for teachers and their students. In his paper, Hein (2004) discusses Dewey's advocacy for museums in student learning. Dewey supported museums because they provide opportunities for students to relate their learning to real life. Hein discusses many of Dewey's connections with museums in the United States and around the world, including a visit to Turkey in 1924 soon after it became a republic. Dewey valued the impressive archaeology in Turkey and recommended stronger ties between museums and institutions of learning. Indeed, the Turkish Ministry of National Education (MoNE) requires school fieldtrips at least once a year.

Although limited, there are studies related to museum education in Turkey (e.g., Çıldır & Karadeniz, 2014; Dilmac, 2016; Işık, 2013; Şahan, 2005; Taş, 2012; Taşdemir, Kartal, & Özdemir, 2014). Dilli and Bapoğlu Dümenci (2015), for example, remarked about the importance of museums to public education and explained that museum education is more effective when children start visiting museums at an early age. All these studies provide valuable findings about the importance of museums for teacher education and the identification of challenges for conducting field trips to museums in Turkey.

Method

This paper used case study methodology to examine levels of partnership between a school and its local museums. Case studies have been used in a variety of investigations, particularly in sociological studies, but increasingly, in 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. They analyse 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. In the current case study, a phenomenographic research approach was used to gain insights into museum educators and teachers' perceptions and practices related to museum education. The study of phenomenography focuses on how we conceive or understand a phenomenon that we have experienced (Megel, Langston, & Creswell, 1988; Larsson & Holmström, 2007).

Study Population

The participants in this case study were all the teachers (*N*=31) from a private middle school and seven staff members (two male; five females) from selected museums located in Ankara, Turkey. The teachers included five males and 26 females, most taught multiple grade levels (grades 5, 6, 7, and 8). Table 1 provides information about the number of teachers within each subject area. On average, teachers have been with the school for 12 years. Some of them have taken their students on field trips in the past, while others have not. The researchers secured permission from the Ministry of National Education to conduct the study and all participants signed letters of informed consent.

Table 1. Subject Areas Taught by Teachers

Subject Area	Number of Teachers
Foreign languages	10
Science	4
Social sciences	3
Mathematics	3
Art	2
Counselling	2
Physical education	2
Turkish language	1
Technology and design	1
Informational technology	1
Music	1
Drama	1

To identify the museum staff participants, the lead author visited nearly all the museums in Ankara (see Table 2). Based on the results of the visits, the authors identified seven museums to participate in the case study (see Table 3); these are museums that frequently hosted school groups and had staff members who played a role in providing museum education programs.

Table 2. The Distribution of Museums in Ankara

Type of Museums	Number of Museums
Museums that are under the jurisdiction of the 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

Table 3. Pseudonyms for Museum Staff and Type of Museums

Museum Staff Labels	Type of the Museum
M1	Archaeological museum
M2	Industrial museum
M3	Applied cultural museum
M4	Industrial museum
M5	Science and technology museum
M6	Natural history museum
M7	Archaeology and arts museum

Data Collection Tools

To learn about museum staff and teachers' perspectives and practices related to museum education and partnerships with schools, the researcher conducted interviews and administered a questionnaire. Having these multiple sources of data helped the researchers compare and contrast the results. They supported the trustworthiness, or validity, of the study by ensuring accuracy and checking for alternative explanations (Stake, 1995; Yin, 1994).

The teacher questionnaire was adapted with permission from an instrument used by one of the museums (Çengelhan Rahmi M. Koç Museum) to evaluate teacher workshops in museum education. The researchers also included items from questionnaires of two other studies with permission (Ateşkan & Lane, 2016; Bhatia, 2009). Finally, seven questions were developed by the researchers and school administrators to address the research question of the study. In total, there were 60 items. The first eight questions collected demographic information. Through short answer items, teachers provided data about their background in museum education and experience conducting field trips. The 35 Likert type items 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 they were asked about their confidence in contacting museum staff and their perceived support from museum staff. In open-ended questions teachers commented on their museum experiences, roles, and expectations. The questionnaire was provided in both English and Turkish. To review the face validity of the instrument, it was sent to three teachers from different schools to determine how long it took to complete. The teachers also commented on clarity and content of the items in the tool. Minor revisions were made to the instrument based on their comments. The reliability check with Cronbach's alpha resulted in the score of .83.

For the in-depth interviews with the museum staff and teachers, the researchers created instruments that addressed the purpose of the study and could guide the discussions. Questions were developed based on a review of the literature and piloted to ensure the meaning and flow of the questions was clear. The museum interview was piloted with a museum manager who has collaborated with schools for over five years. The teacher interview was practiced and reviewed with a teacher from

a different school. In both cases, any ambiguous or misleading questions were omitted or edited. An open-ended flexible approach was used to support candid conversations and to allow for questions to be added, omitted, and reordered as needed (Cohen et al., 2008).

The interviews with the museum staff included 27 core questions. Interview questions asked about the educational background of the museum staff, museum education and their institutions, their thoughts and expectations related to museum education and school visits and partnerships.

Interview questions for the teachers were grouped into four categories: conducting field trips, museum education, school support for museum education, school-museum partnerships. In addition to asking questions related to their perceptions of museum education, teachers were asked to discuss facilitators and barriers to field trips. Some questions were designed to provide deeper insight into results of the quantitative data analysis learned from the questionnaire. Each category had around five questions; however, questions may have been changed or added according to the flow of the interviews.

Procedure

The methods for this study took place in two phases. The first phase has three parts: 1) interviews with museum staff, 2) teacher questionnaire, and 3) interviews with teachers. The questionnaire (part 2) was administered before teachers attended a one-day in-service sponsored by a local museum. After the workshop, teachers were expected to take their students on a field trip to a museum in the community (they did not have to go to the museum that sponsored the field trip). The interview (part 3) served as a follow up to the questionnaire and to learn more why teachers did and did not conduct field trips. Teachers were also asked about their perceptions of the workshop, the results of which are discussed in another study. A timeline for phase one and its parts, and the date of the workshop is presented in Figure 1. The second phase uses an analytical framework to comprehensively examine the results of the data analysis from the first phase.

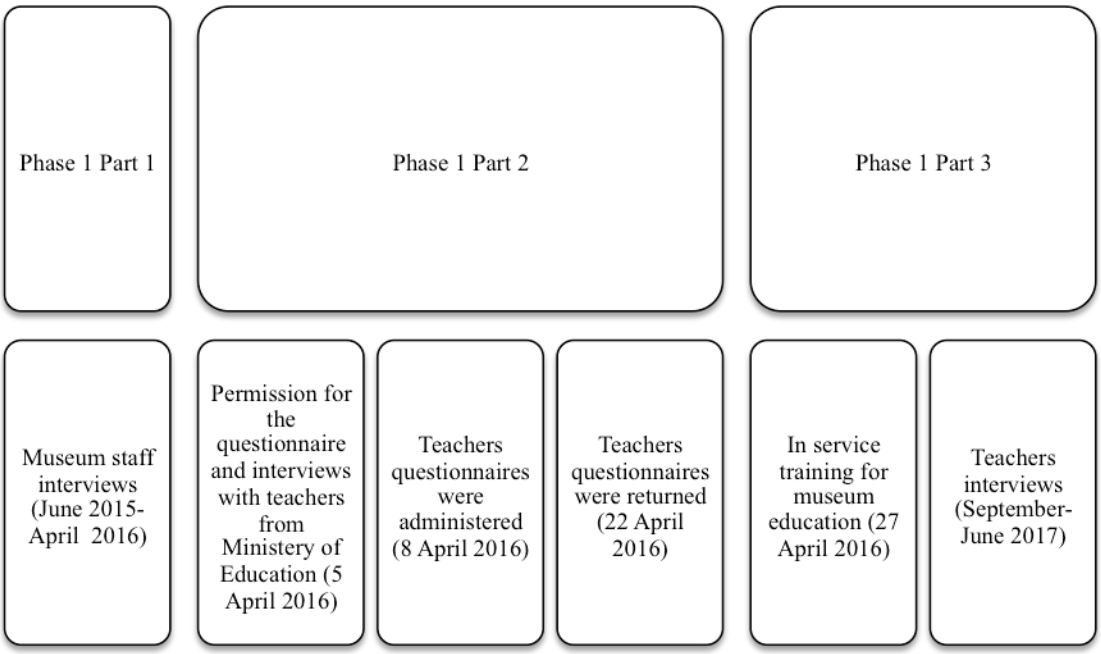

Figure 1. Timeline for Phase 1

Phase 1, Part 1

Scheduling the interviews with the museum staff required persistent and repeated efforts of the lead author. After several emails and phone calls and sometimes simply just showing up, the researcher was able to conduct all the interviews. Despite the difficulty contacting the staff, once the meetings were successfully scheduled the staff were informative and forthcoming in their responses to the questions, providing comprehensive information about their museums and roles. Each session lasted around 45 to 60 minutes.

Phase 1, Part 2

Teachers were sent the instrument online and given two weeks to respond. After a reminder, all the teachers in the school (N=31) participated. Descriptive statistics were used to calculate frequencies and means for the questionnaire responses. Open-ended responses were compiled and organized based on common meanings and implications. The organization was compared with the compilations created by an external reviewer. The authors discussed discrepancies and revised their analysis if needed.

Phase 1, Part 3

The teacher interviews took place after the questionnaire, during the academic year following an in-service about museum education. After this workshop, teachers were encouraged to take students on field trips to museums. The interviews were conducted in the same manner as the conversations with the museum staff, and had a slightly different focus. Nearly all the teachers (N=28) in the school were interviewed (three left the school or were on leave and unavailable). Each interview lasted around 20 minutes. All interviews were held in the school environment in which the teachers worked.

Interviews with both museum staff and teachers were conducted in Turkish except with the four international teachers for whom English was used. 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. An external reviewer was invited to examine the transcripts and concur if the identified themes were valid. Any differences were discussed with the authors until consensus was reached.

Phase 2

The next step of the methods involved using a framework to further analyse participant perceptions and gain insights into the partnerships between the school and its local museums. Wojton (2009) suggested that an analytical tool, such as a framework, can help review and characterize how schools and museums collaborate. When considering frameworks for this study, the authors reviewed the literature to learn of existing models and recommendations (e.g., DeWitt & Osborne, 2007; Hazelroth & Moore, 1998; Hord, 1986; Kisiel, 2014).

The framework used for the current study was developed by Weiland and Akerson (2013) based on their review of the literature. They examined how other studies distinguished cooperative, coordinated, and collaborative levels of partnership. As a result, their framework consists of eight dimensions that provide a basis to interpret the level of the partnership between two institutions (e.g., school and museum). 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 Weiland and Akerson's (2013) framework. Furthermore, the results of the investigation revealed an additional dimension to make the framework more comprehensive.

In this study, after becoming familiar with the terminology for each dimension, the researchers, compiled, reviewed, and compared data from all three parts of Phase 1. The analysis involved identifying key words associated with each of the dimensions, and then using these words to deductively code the data, looking for exact matches and synonyms (Hsieh & Shannon, 2005; Mayring, 2014). The authors moved back and forth between the data received from museum staff and teachers to clarify and distinguish their points of views. If there were comments that did not fit into any of the dimensions, these were noted and compiled to determine if the framework itself needed to be revised. In addition to gaining insights into various aspects of the partnerships, the researchers also learned which dimensions were emphasized the most by the participants. This was based on how many participants discussed the dimension, how often they related to it, and length of discussion. The analysis was conducted primarily by the lead author. The second author verified the findings by taking selected translated data and repeating the process. If any discrepancies were found they reviewed the data more deeply to become more compliant. An external reviewer examined the transcripts in Turkish and related them to the dimensions in a process similar to the first author. Any differences in the findings were discussed with both authors and resolved. The results of the analysis, discussed in the findings, helped the lead author in particular decide which dimensions needed the most work to strengthen the partnership between her school and local museums.

Results

Phase 1, Part 1

During the interviews, seven museum staff (designated as M1 to M7) were asked to talk about their institutions and visits by teachers and their students. Although Turkey has many valuable and important museums, it is rare to find a staff person whose responsibility is solely museum education. In most cases, their primary job is not related to community education, but they have to offer these services when schools visit and often they feel unqualified. Only M2 and M6 described themselves as museum educators; they also indicated they serve as museum administrators or curators. In fact, most of the participants indicated that lack of staff, both in numbers and competencies, was an issue regarding school visits. M3 and M7 mentioned the value of volunteers in the museums to deal with visits from school groups.

All of the interviewees noted the importance of school visits to their museum and five of them said it was a priority of their institution. They discussed the importance of student learning and stated that the greatest challenge was the size of the school groups. M4 said that it is common for a group of 70 students to tour through their museum. M6 recalls groups of 200 or 300 students visiting their museum. Both interviewees questioned the quality of learning taking place in these large groups. Even a group of around 25 has its challenges. M5 expressed his experience; “Students come to our museum and take some photos in front of the objects without looking at them or without investigating what they really are. The situation is the same for some teachers too.” 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 leaders to learn a new topic.

They all advocated for teachers taking 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 school. M6 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.

Other staff mentioned that teachers often do not make any appointments before their visits to museums. On the other hand, a few interviewees shared positive experiences. For example, M2 said that one of the teachers that visits their museum regularly always contacts the museum at least one month before. M1 emphasized the importance of prepared teachers by saying:

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.

Among the interviewees, only two (M1 and M4) work in museums that develop and offer professional development programs for teachers. These workshops orient teachers to the museum exhibits and provide guidance on how to lead field trips. They report 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 therefore was not qualified to lead hundreds of students through our museum.

The interviewees frequently mentioned the need for ongoing collaboration to support these efforts. M4 shared that

> It may be utopian, but there should be one museum educator for each school since not all museums have a museum educator. Teachers bring their students but unfortunately do not cooperate much. There should be collaboration between schools and museum so that controlling the students and managing the trip can be easier.

Even though all museum staff mentioned the importance of partnerships with schools, only four could provide examples of how they work together. M1 said they send letters to schools to promote the program and provide directions for setting up visits. The lead author reflected that she is unaware that her school has received this letter. In general, the staff believed that more strategies were needed to improve and increase partnerships between the museums and schools.

Museum staff reported that uncertainty about their role 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. In summary, the museum staff noted that the following issues can affect their motivation:

- Museum staff are not informed about the coming groups.
- Museum staff need to host large groups of students.
- The school visits are not organized.
- Teachers are not prepared for the trips, they are not knowledgeable about the venue.
- Teachers are unwilling to take an active role in the education activities.
- Teachers and museum staff have issues controlling students' behaviours.

Phase 1, Part 2

The teacher questionnaire results provided insights into how school staff viewed museum education, conducting field trips, and working with museum staff. Regarding their own museum education experience, just over half (*N*=16; 52%) could recall any trips that they took to a museum when they were in middle school. Several shared that they could remember their first trip, but it was the novel experience rather than memories of the artifacts or exhibits that came to their minds.

Over half (*N*=17; 55%) of the respondents reported that they have taken their students to museums. However, only 26% (*N*=8) stated that they were the lead teacher and organizers. Instead they mainly accompanied other teachers and provided support services. 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. Only 6% (*N*=2) indicated that they received training related to museum education and most (*N*=29; % 94) were open to attending a workshop or other professional development opportunity.

Table 4 shows the reasons teachers reported 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. Nearly half of the participant teachers (*N*=15; 48%) lack experience contacting museum staff to arrange a field trip. In addition, 12 (39%) teachers had no experience of building partnerships with personnel from museums. In fact, only five teachers indicated that contacting museums is not a barrier. None of the case study teachers, however, were currently partnering with a museum.

Table 4. The Distribution of Discouraging Facts for Teachers Not to Plan A Field Trip to A Museum

Items that discourage teachers from planning a field trip to a museum	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Need to allocate time to take the students to the field trip (n=31)	21	5	4	1	0
Managing student behaviour during the trip (n=30)	17	7	5	1	0
Unfamiliarity with the museum program (n=30)	11	11	6	2	0
Challenges contacting the museum staff to plan the trip (n=29)	8	13	5	2	1
Challenges collaborating with museum staff to conduct the trip (n=29)	10	12	5	1	1

Some barriers that have been noted in other studies were not a major concern to the case study teachers. 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, but recent, unfortunate events in Turkey are changing that perception. School administrators have cancelled trips amidst concerns about student safety in public and tourist sites.

Teachers agreed that there are benefits of field trips to museums, including supporting student learning (*N*=7; 23%). Around a quarter (*N*=8; 27%) of the teachers mentioned that museums provide students with a new learning environment and help them connect what they learn in school to their lives. In their open-ended responses, they indicated that museum experiences 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:

- They see first-hand what they learn as theory in the classroom
- Learning becomes more memorable when they gain hands-on experiences

- Museums promote inquiry and curiosity for new or reviewed topics
- Provide a change of pace from classroom learning

Many of the results from the questionnaire raised questions that were asked during the interviews. There was the issue around half of the teachers (*N*=15; 48%) reported that they have never been in contact with museum staff, even when they participate in a trip. This could be because they played a supportive role and did not coordinate the trip; however, as mentioned by the museum staff it is not uncommon for school groups to show up without an appointment or a plan.

Phase 1, Part 3

Interviews were used to gain a deeper understanding of teachers' understanding about museum education and their experiences with museum staff. Participant teachers were designated as T1 to T29. Much of the information they shared confirmed the findings of the questionnaire. The interviews also served to learn if teachers had conducted field trips after the in-service workshop they attended the previous year. By the end of the interviews, the researchers learned that only two teachers successfully planned and conducted a field trip with their students, another three teachers participated in these trips but provided a supportive rather than leading role. There were five teachers who planned field trips to museums, but because of security issues in Turkey, cancelled them. There are 10 teachers who want to conduct field trips in the coming school year. The rest (*N*=11) admitted they had no intention of conducting field trips to a museum and have rarely done so in their teaching career. T18 commented that "not all teachers are aware of the museums in the area that they live in." One teacher, T12, indicated that it is helpful if teachers themselves enjoy and value museums.

Nonetheless, many teachers reported that field trips helped them reinforce their students' learning and that students' enthusiasm for the trips was a positive experience. 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.

When asked to discuss their conceptions of museum education, most of the teachers simply said it was learning that takes place in museums and did not provide any other detail. Nonetheless, even teachers who do not conduct field trips noted museums are important part of a community; but they said that museum education is relatively a new concept in the country. All of the participants acknowledged that their school supports professional development and would welcome sessions on museum education.

Nearly all the teachers reported that the level and quality of the partnerships between the school and museums was minimal and needed to be improved. While most teachers had positive experiences during field trips, they acknowledged that the education could be improved. T19 he said that

> 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.

They also reiterated responses made in the questionnaire regarding challenges contacting and communicating with museums. During the interviews, several teachers provided suggestions for supporting museum field trips and partnerships with museums.

Discussion

By applying the framework to the results of the data analysis (Phase 2), the researchers determined that the level of partnership between the school and its local museums was primarily cooperative (i.e., less involved than coordination or collaboration). Interactions between the two institutions primarily took place only once a year, during the field trip. The dimensions of *Communication* and *Roles* were most often discussed by the participants.

Both museum staff and teachers expressed concern about the lack of protocol for contacting each other. Related to communication is promoting awareness of museum events and offerings. The museum staff reported they have had professional development opportunities for teachers and special exhibits related to school programming. 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.

The participants mentioned both planning and implementation when discussing roles. Similar to the findings of Kang et al. (2010) and other studies, both museum staff and teachers think the other institution should be more responsible for student learning during the field trip. A few teachers mentioned that the administration should take a stronger role in promoting school and museum partnerships. T15 mentioned that "not only students but also teachers need guidance at museums...teachers need guidance for some activities. If there is a need museum staff should step up and show teachers what to by modelling."

As teachers were expressing the need for museum education preparation, another issue was often discussed that led the authors to consider an additional dimension for the framework: Motivation. Hein (1998) has pointed out that motivation is one of the essential elements of learning and Kisiel (2005) described teacher motivation as essential for a planning and conducting a field trip. It became clear that some teachers in the current study were simply not motivated to conduct field trips with their students, especially to museums. Similar to past studies, barriers such as time, curricular connections, and student behaviour were often cited (Ateşkan & Lane, 2016; Anderson & Zhang, 2003; Mitchie, 1998). A few teachers had little experience going to museums during their lifetimes (T6, T13, T18) and therefore, did not value visits to these institutions.

Even though field trips require extra planning and coordination, teachers are motivated to overcome barriers because museums provide such effective learning venues. T24 described field trips as very tiring but motivational because she sees how students improve their skills during and after their visits. 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.

Conclusion and Suggestions

This study confirmed that it is important for student learning to have an effective guide who provides background information and interesting stories about the exhibits. Ideally, these guides are museum staff who are allowed time to meet and communicate with teachers and students. Given that museum staffing and time is limited, teachers can receive training on how to conduct tours and interpretive talks. Teachers in turn need time to better integrate aspects of the museum education into the curriculum. Their ability to conduct field trips and relate museum content to their curriculum will be ensured if it is a part of their professional development. Teacher education programs and universities could make museum education a mandatory course.

Through this study, the authors investigated the partnerships between two institutions: museums and schools. An analytical framework was applied to learn that the school has a cooperative partnership with museums. The study revealed that improved communication and identification of roles may help to strengthen the partnership. Schools and museums need a policy that includes protocols for when and how staff should keep connected.

In addition to gaining insight into what areas needed to be worked on to improve relationships, the researchers recognized the importance of having a liaison between the two institutions. The lead author became aware that she could play this role when teachers told her she had increased their awareness of museums in the city and helped them understand the concept of museum education.

Using the results of the framework, one of the first things that the lead author as liaison will work on is strengthening the communication between the two institutions. She can work with school administration and museum staff to establish protocols for 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. The liaison can organize professional development experiences that motivate teachers to integrate museum field trips into their practice. One idea is to begin with building a relationship with just one museum. 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.

Finally, further research is needed to identify strategies to enhance the school-museum partnership. Investigations about the role of technology in promoting effective collaborations will be especially important. For example, school teachers, students and museum staff can use smart mobile applications to showcase, review educational programs, and examine the contents of exhibitions. As a first step, however, technology can play a role in basic communication, such as scheduling trips and setting learning objectives. Today's children are chatting with astronauts on a space station; it can be equally exciting for them to use technology to connect with archeologists and museum staff working in their local museums.

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