

Supporting student learning...

**Supporting student learning at history museums:
The practices and beliefs of secondary teachers and museum professionals**

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I. Introduction

Each year thousands of students around the United States visit history museums¹ with their teachers. However, we know surprisingly little about what teachers' goals are for these trips, about how they prepare students, or about the specific activities students participate in while on these visits (Noel & Colopy, 2006). We also have little knowledge about how museum educators plan for student visits and the types of activities they engage in with students. What do teachers and museum educators do? Are they successful in meeting their goals for student understanding of history? Do teachers and museum educators collaborate, and if they do, what does successful collaboration look like? The research presented in this report explores answers to these questions by presenting findings of a study of Connecticut teachers and museum professionals. This report is designed to provide an overview of key findings and does not present the data in their entirety. We are grateful to the Connecticut Humanities Council for their partnership on this project and particularly to Scott Wands for his contributions and support.

Significant research in the past twenty years explains how students develop historical understanding in the classroom through a variety of mediums and methods; nevertheless, there is a gap in our understanding of how students make sense of the past during museum visits. In order to better understand how students learn history during school trips to museums we need to know more about how teachers prepare students for field trips, the types of activities students complete at

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museums, how teachers and museum staff collaborate, and teachers' and museum staffs' attitudes and beliefs about how to support student learning in museums.

To begin to address the gap in empirical research this study investigates the current practices of teachers and museum professionals in working with students. In addition, we seek to discover how teachers and museum professionals perceive the value of museums in the support of students' learning and to explore the ways in which teachers and museum educators collaborate in order to support student learning. From these data we can advance the goals of classroom teachers and the goals of museum educators to better understand formal and informal learning processes, to identify and develop best practices for engaging adolescents, and to prepare students to be successful lifelong learners of history. In addition, we can support the ability of museum educators to reinforce formal classroom learning and we can work with schools and museums to nurture collaboration.

The following sections discuss the methods used to collect and analyze data, provide an executive summary of key findings, present more in-depth data related to each of the key findings, and finally, explore the implications of the study's findings.

II. Methods

The authors, from the University of Connecticut, conducted online surveys of museum professionals and secondary history teachers followed by interviews with select participants from each group.

Participants

Teacher participants included 94 secondary history teachers from public schools in Connecticut and comprised a representative sample accounting for geographic location (drawing from each county in the state), type of school (urban, suburban, rural), and number of years of teaching experience. (See appendix A for a description of teacher participants). From the teacher survey participants 13 were selected for interviews representing type of school, years of experience, and geographic location.

Museum participants included museum professionals who work with school groups, conceptualize and design exhibits, and other relevant staff from all major history-based museums in Connecticut. Museums were chosen based on their focus on history and the number of annual visitors, particularly school groups. Any history museum that regularly serves multiple school-groups and maintains extensive education programs was asked to participate. Other smaller organizations such as town historical societies were also invited to participate. Every single history museum that serves multiple school-groups and maintains extensive education programs participated. Many smaller historically societies also

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chose to participate. The state's humanities council, which is actively involved in the museum community, provided data and advice for the selection process.

A total of 51 museum professionals representing 43 history museums and historic sites completed the survey. (See Appendix A). From the survey participants, 10 were selected for interviews representing regions of the state, type of museum (e.g. living-history, historic home, etc.), historic time period covered at the museum, and participants' years of experience.

Instruments

The survey of teachers included questions about their attitudes and beliefs about museums as representations of the past and about museums as places of learning for students. In addition, the survey asked about their attitudes and beliefs about classroom-based history instruction and about their knowledge of how museums function. Finally, the survey included questions about collaboration with museum staff, about the museums they visit with students (where, when, how often), about what resources they use to support museum visits, and about the pre-visit, during-visit, and post-visit activities and lessons they do with students. The data collected from teachers illustrate patterns in teacher practices related to museum visits and calls into consideration the potential impact on student learning.

A similar online survey was conducted with museum participants. The survey of museum professionals included questions about their attitudes and beliefs about museums as representations of the past and about museums as places of

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learning for students. The survey also asked about their attitudes and beliefs about classroom-based history instruction. Finally, the survey included questions about collaboration with schools and teachers and questions about the development and implementation of programs with secondary students. The survey data provides a broad picture of museum professionals' practices with secondary students and collaboration with teachers as well as examples specific to their institutional context.

Additionally, in-depth interviews were conducted with 23 of the teachers and museum professionals who completed surveys (13 teachers, 10 museum professionals). Purposeful sampling (Patton, 2002) of those surveyed, who agreed to participate in an interview, was used to achieve diversity in geographic location, type of school (for teachers), type of museum – e.g., traditional, historic site, living-history museum (for museum staff), and years of museum or teaching experience. Approximately one-hour interviews, using open-ended questions, were conducted in order to gain an in-depth understanding of how participants perceive the value of museums in the support of students' learning and how teachers and museum educators collaborate in order to support student learning. (See Appendix B for the survey and interview protocols).

Both the survey and interview instruments were piloted with teachers and museum staff, and revised appropriately, primarily around issues of the order of questions, wording of questions, and length of the interview.

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Data Analysis

Survey data were analyzed using both descriptive and inferential statistics. Comparisons were drawn between the practices and beliefs of teachers and museum staff and correlations between the practices and beliefs of teachers and museum staff was checked. Constant comparative analysis (Glaser & Strauss, 1973) was used in the identification of salient themes and patterns (Glesne, 2000; Patton, 2002) from the interviews.

III. Executive Summary of Findings

This section provides an overview of key findings from the study as well as a summary of the implications. Each of these findings is examined in greater detail in the sections that follow with additional context and analysis.

Finding # 1 – The Value of Museums

Both secondary history teachers and history museum professionals in Connecticut place a significant value on museums as unique learning contexts and resources. Teachers noted that students learn history when they go on these visits and that museums are well positioned to develop a sophisticated level of historical understanding in students. Moreover, teachers reported very positive attitudes about the potential value of history museums to contribute to students' understanding of the past. Museum professionals also say museums are excellent resources for helping students develop a sophisticated level of historical understanding. They have tremendous faith in museums as places where the past comes alive for students, allowing them to learn specific content, connect the past and the present, develop historical empathy, interpret evidence, and see multiple perspectives.

Finding # 2 - Field Trips Taken by Teachers

Secondary history teachers strongly support the incorporation of field trips to history museums into their curriculum, but are often unable to overcome the hurdles necessary to actually take these trips and thus do not take as many trips as desired.

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Finding # 3 - Teachers' Views on the Barriers to Taking Students to History Museums

The overwhelming concerns raised by teachers in terms of barriers deterring visits to museums are money and logistics. Teachers agreed that it was difficult to take trips to history museums because of logistical issues and repeatedly cited financial constraints when asked about how they make decisions to attend field trips.

Finding # 4 - Museum Professionals' Views on the Barriers to Taking Students to History Museums

The most significant hurdle faced by museums in creating learning opportunities for students is getting the students to the museum. Museum staff is particularly disappointed by the number of high school visitors. They are aware of many of the barriers teachers face in bringing students to museums, particularly the financial and logistical issues. These museum professionals attribute the problem to time-on learning, standardized testing, budget cuts and transportation costs.

Finding # 5 - Views on Museum Resources

According to teachers, museum resources, particularly websites and lesson plans, are moderately helpful for those who use them or are familiar with them, but could better meet teachers' needs. Meanwhile, museum staff reported mixed results in how often and for what purposes the websites are being used.

Finding # 6 - Professional Development for Teachers at Museums

Forty-eight percent of teachers said they had participated in a museum initiated professional development program. The majority of these teachers attended a workshop offered by one of the larger and more well-known history museums in Connecticut. The teachers also noted that overall they were generally willing to attend professional development focused on museum education and were interested if such programs were offered.

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Finding # 7 - Teacher Practices With Students on Field Trips to Museums

The most common forms of pre- and post-trip activities used by teachers for a field trip to a history museum are to hold a class discussion followed by asking students to complete a reading or review primary sources. Teachers report rarely using museum created lessons plans as preparation and almost never had museum staff visit their classroom in preparation for a field trip or after a field trip.

Finding # 8 - Critically Examining Museums as “Sources”

Students are asked to participate in a variety of activities on field trips, some seemingly more effective than others, but rarely are they asked to challenge the trustworthiness of museums as a way of knowing about the past or at least to problematize museums as a source of information about the past just as they might be asked to evaluate primary sources.

Finding # 9 - Museum Staff Approach to Creating Programming

Museum professionals demonstrated a keen awareness of the need to meet the standards set by the state and district, the learning goals of the teacher, and the approach necessary to engage and often entertain students in a meaningful learning event.

Finding # 10 – Museum Staff Practices With Students on Field Trips to Museums

Museum staff often provide pre-visit materials to teachers and their students but rarely visit schools prior to or following a visit. The use of guided tours and interpreters for student visits is common and museum staff hold positive views about the programs they offer to student visitors.

Finding # 11 - Teachers’ Perspectives of Museum Programs and Staff

The teachers in our study slightly agreed that they are satisfied with museum staffs’ ability to plan effective activities for their students. However, in many cases

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teachers provided a fairly critical perspective of museums' programs for students, as well as museum staff's performance during field trips.

Finding # 12 - Teacher-Museum Staff Collaboration

Teachers report often collaborating with museum staff both to handle logistical issues and to plan specific activities. However, this collaboration appears to be mostly limited to field trip preparation. Within their own domains, teachers and museum staff limit collaboration. Museum staff reported mixed success in collaborating with teachers to plan and run field trips. They found high school teachers more difficult to contact, both in terms of establishing an initial relationship to plan and discuss field trips and for on-going collaboration. They also believe there is significant room for improvement of the quantity and quality of collaboration.

Summary of Implications

Below are a summary of implications based on the findings. The next section discusses these implications in more detail.

- Secondary teachers are not satisfied with the number of visits they actually take, while museum staff report the vast majority of their K-12 visitors were elementary students. Therefore, a key question is: what can we do to promote secondary history classroom visits to history museums and more specifically, what can we do to support history teachers in order for them to plan, run, and design follow-up visits to history museums?
- The findings suggest two strategies for supporting teachers to overcome obstacles to museum visits: arm teachers with a strong rationale for history museum visits, and, provide teachers with the skills to develop effective pre-

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visit, during-visit, and post-visit activities for history museum field trips that advance the goals of historical understanding.

- There needs to be better preparation for teachers during pre-service training, more and better collaboration and outreach between history teachers and museum staff, and expansion of formal professional development opportunities for teachers and museum staff.
- We must seek to cross the boundaries that exist between museum staff and classroom teachers from both sides. One promising area for enhancing teacher/museum collaboration is through the use of websites and the Internet.
- There is a need to expand research that examines student learning during pre-visit, visit, and post-visit activities. We might ask: which activities are most effective? And, do certain types of museums (e.g. living-history museum) better support certain historical thinking skills?

IV. Implications/Discussion

The teachers who participated in this study appear to agree that taking students to history museums offers valuable opportunities to develop historical thinking skills. However, one of the key findings is that these teachers are not satisfied with the number of visits they actually take with many teachers and their students visiting no history museums at all and many others only taking one trip per year. Museum staff report the vast majority of their K-12 visitors were elementary students - in many cases as high as 90% of all K-12 visitors. What emerges from these findings is a key question: what can we do to promote secondary history classroom visits to history museums and more specifically, what can we do to support history teachers in order for them to plan, run, and design follow-up visits to history museums in ways that promote their students' historical thinking in sophisticated ways?

Data indicate significant logistical and pedagogical hurdles faced by teachers. The findings suggest two strategies for supporting teachers. First, arm teachers with a strong rationale for history museum visits. If teachers are convinced that visits to history museums are important for their students' learning both in a specific course as well as for their development as lifelong learners, they may be willing to seek out resources and wade through required paperwork. They will also be better equipped to convince department chairs and principals of the importance of these trips, thus potentially receiving necessary resources as well as logistical and moral support. Too many teachers, parents, and administrators may view

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history museum visits much as they see the use of feature films – as a day off from serious learning or “hard work.” If stakeholders see the value of visits to history museums for students and see the connections between visits and curriculum standards, they may be more willing to streamline logistical hurdles.

Second, provide teachers with the skills to develop effective pre-visit, during-visit, and post-visit activities for history museum field trips that advance the goals of historical understanding – development of historical empathy, ability to analyze historical evidence, etc. With enhanced skills, teachers will be more confident, and perhaps more willing, to take students to history museums. Teachers with superior skills are also more likely to create effective learning experiences for students that can demonstrate the value of history museum visits. This could potentially also address one area finding that was disappointing: the infrequency with which students are asked to evaluate or analyze the way a museum presents the past. Thoughtful teaching practices for museum visits would often include this component.

To accomplish the goal of teachers who possess a strong rationale for history museum visits, as well as the skills to develop effective activities, we need to provide better preparation during pre-service training, encourage more and better collaboration and outreach between history teachers and museum staff, and expand formal professional development opportunities for teachers and museum staff. Such opportunities should focus on pedagogical content knowledge not just for history, but specifically for history museums. This specificity results in a “literacy” for

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history museum visits that explores what is unique about learning about the past at museums and problematizes museum visits.

How can we promote more effective collaboration between teachers and museum staff? Professional development may be most effective if there are opportunities for museum staff and teachers to learn together and from each other. Although these two constituencies agree about the importance of museum visits for students and about the value of museums, and in most cases understand many of the constraints and obstacles they each face, there are unresolved issues that need to be addressed. These issues include how museum staff can better meet the needs of K-12 students, how teachers can better communicate with museum staff, and how they can be more available for outreach.

Both teachers and museum staff strongly indicated they are willing, and even anxious, to attend professional development related to museum education and in conjunction with each other. As Marcus (2008) reminds us, collaboration between museum and school professionals can improve K-12 students' experiences. Both groups are important stakeholders and we must seek to cross the boundaries that exist between museum staff and classroom teachers from both sides. One promising area for enhancing teacher/museum collaboration is through the use of websites and the Internet. Both sides see the benefits of effective websites, but have mixed views about the current value of these sites. Websites offer the opportunity to bring some of the museum experience to the classroom, helping to prepare students for their visits or offering virtual field trip experiences for those unable to visit the museum.

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Secondary history teachers and museum staff are professionals who are interested in what is best for student learning. However, these professionals are often deprived of time, money, resources, and in some cases, necessary knowledge and skills. Although there is one target audience (students), there are multiple, and at times perhaps competing, contributors to the audiences' success. By working together toward common goals, with open minds, and with increased vigor, we can support effective and engaging student learning at history museums now, and for their lifetimes.

Certainly more research is needed to expand what is known about teacher beliefs and practices as well as museum staff perspectives. In addition, we need research that examines student learning during pre-visit, visit, and post-visit activities. We might ask: which activities are most effective? And, do certain types of museums (e.g. living-history museum) better support certain historical thinking skills? Finally, research might explore connections between teachers' learning goals for student visits, museum staff learning goals for student visits, and the latest theoretical frameworks in history education.

V. Full Findings

Finding #1 – The Value of Museums

Both secondary history teachers and history museum professionals in Connecticut place a significant value on museums as unique learning contexts and resources, and reported very positive attitudes about the potential value of history museums to contribute to students' understanding of the past.

Teachers' Overall Attitudes & Beliefs About History Museums

Teachers were asked to discuss their attitudes and beliefs about history museums. Teachers generally believed, as indicated in Table 1, that museum visits should be part of the secondary curriculum.

Table 1 – Teacher Attitudes Toward Museums
n=94
1=Strongly Disagree to 6=Strongly Agree

Statement	Mean
Museums visits should be part of the history curriculum in middle/high school.	5.29
Museums should be used to increase students' understanding of the past.	5.49
Students learn about history when we go on field trips to museums.	5.24

More specifically, the teachers surveyed noted that students learn history when they go on these visits, and that museums are well positioned to develop a sophisticated level of historical understanding in students. Such historical understanding includes helping students to develop historical empathy, interpret evidence about the past, connect the past and present, bring the past alive, and

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expose students to multiple perspectives. Teachers also reported very positive attitudes about the potential value of history museums to contribute to students' understanding of the past. One teacher described it this way: "When you're actually there [at a museum], you get a deeper sense of the history ... you can live it and breathe it."

Teachers' Views on the Contribution of History Museums to Student Learning

According to teachers the potential of museums to contribute to students' historical understanding of the past was significant in that museums offered what often the school could not; a distinctive, evocative experience that linked events and objects of the past with classroom content. The survey results emphasize this point as shown in Table 2.

Table 2 – Teacher Beliefs About Museums
n=94
1=Strongly Disagree to 6=Strongly Agree

Statement	Mean
I take my students to museums to help bring the past alive for them.	5.33
I take my students to museums so they can interpret evidence about the past.	5.13
I take my students to museums to learn specific content.	4.67
I take my students to museums to help them connect the past and the present.	5.14
I take my students to museums to develop their historical empathy.	5.18
I take my students to museums to expose them to multiple perspectives about the past.	4.90

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In particular the teachers' reliance on museums to bring the past alive for students was emphasized in the teacher interviews. Teachers made statements such as: "I think the biggest thing [for students] is the experiential factor. There's something to being there, physically looking at a painting, or being at a reenactment site. This is Fort Trumble, or this is where New London was burned, or this is where Benedict Arnold went through, or George Washington slept." Another noted that: "I think the greatest value [of museums] is for kids to see that it's real. To see artifacts, to see the material. That's the biggest draw and value, because then, once they've seen material it hits them in a way that a picture doesn't. It's a different kind of connection they make to the object. They begin to wonder about the object in a different way...."

Museum Professionals' Attitudes & Beliefs About History Museums

Not surprisingly museum staff strongly believe in the unique abilities of museums to promote student learning. When responding to the prompt: "Students learn about history when they go on field trips to museums," their views were almost identical to teachers, with a mean of 5.26/6 (1=strongly disagree to 6=strongly agree). Representative of all museum staff responses was one person who said: "I think museum programs have a powerful impact on student learning."

Museum professionals say museums are excellent resources for helping students develop a sophisticated level of historical understanding. As shown in Table 3, they have tremendous faith in museums as places where the past comes

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alive for students, allowing them to learn specific content, connect the past and the present, develop historical empathy, interpret evidence, and see multiple perspectives.

Table 3 – Museum Staffs’ Beliefs About Museums
n=51
1=Strongly Disagree to 6=Strongly Agree

Statement	Mean
Museums help to bring the past alive for students.	5.53
Museums help students to interpret evidence about the past.	5.36
Museums teach students specific content.	5.10
Museums help student to connect the past and the present.	5.38
Museums help students to develop their historical empathy.	5.25
Museums expose student to multiple perspectives about the past.	5.08

One common theme discussed by museum staff was the ability of the museum to reinforce and build on, or scaffold, classroom learning while making the past come alive in a way not available in school. For example, one staff member said, “they [museums] can reinforce classroom learning. They can help teachers make the content come alive.” And another staff member remarked, “Museum experiences can reinforce classroom learning and stimulate students to explore subjects in more depth beyond school time.” This aligns with teachers’ views of museums as places that provide positive learning experiences for students. Such scaffolding has been found to enhance student learning after they leave the museum (Falk, Dierking, Foutz, 2007).

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Another common premise put forward by museum staff is museums' unique capacity to provide hands-on objects and primary source documents to complement classroom text and content. Many responses from museum staff emphasized the "objects" museums' possess and how those objects can be used to promote students' historical understanding. For example, one person commented that, "Museums should be a place that brings their textbook and classroom lessons alive, with primary sources and hands-on objects." And another said, "Our main mission is for the kids, if we can support what it is the teacher is trying to do back in the classroom, that's the best case scenario. Often with high school teachers, they'll call and say I'm doing a specific thing in the classroom, what can you do to help tie into that and we'll work one on one with them to customize something."

Such scaffolding is critical if museums are to remain relevant and meaningful to the teachers and schools they serve. Findings from this study point to the sincere commitment and interest museums and their staff have for supporting student learning, but as will be discussed later, secondary teachers do not always see that willingness in the programs and resources offered by museums.

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Finding #2 – Field Trips Taken by Teachers

Despite secondary history teachers strongly supporting the incorporation of field trips to history museums into their curriculum, they are often unable to overcome the hurdles necessary to actually take these trips and thus do not take as many trips as desired.

Even with recognition of the importance of museums in shaping students' historical understanding, teachers reported taking a limited number of field trips to history museums. As shown in Table 4, 40% of teachers reported going on zero field trips to history museums during the 2007-2008 school year while another 46% of teachers took one or two field trips to history museums. Only 4% of teachers report going on more than three trips during the 2007-2008 school year. When asked how many trips they have planned for the 2008-2009 school year 62% of teachers said they planned to take between one and three trips to history museums while only 26% indicate they would take zero trips. The number of trips planned for 2008-2009 is very similar to the number of trips teachers reported taking five years ago. There were no statistically significant differences in the number of trips taken or planned between teachers with different years of experience or by the type of school where teachers work.

**Table 4 - Number of trips taken to or planned for history museums
n=94**

Number of trips taken five years ago	% of teachers	Number of trips taken during the 2007-2008 School Year	% of teachers	Number of trips planned for 2008-2009	% of teachers
0	21	0	40	0	26
1	26	1	32	1	22
2	29	2	13	2	28
3	14	3	11	3	12
4	6	4	2	4	5
5	1	5	0	5	3.5
6	1	6	2	6	3.5
7	1	7	0	7	0
8	1	8	0	8	1

This suggests that at least for our sample, factors such as teacher motivation to take a trip and/or school and district support (logistically and financially) may be a more important factor in whether a teacher takes students to museums than other factors such as overall district wealth or years of teaching experience. Participants from wealthy districts took trips at similar rates as their colleagues in poorer districts. And newer teachers with less experience planning trip activities and dealing with field trip paperwork took trips at similar rates as their more experienced colleagues.

Teachers also responded to a question about which specific sites they take students by indicating on a provided list which sites they visited with students. They report going to a wide variety of sites in terms of content covered (e.g. American Revolution, Industrialization, Immigration) and type of site (e.g.

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traditional museum, living history museum), though most teachers said they would limit trips to sites within 100 miles or within a two-hour trip by bus. For most teachers in Connecticut that allows site visits to New York, Boston, Sturbridge, and all of Connecticut.

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Finding #3 – Teachers’ Views on the Barriers to Taking Students to History

Museums

The overwhelming concerns raised by teachers in terms of barriers deterring visits to museums are money and logistics. Teachers agreed that it was difficult to take trips to history museums because of logistical issues and repeatedly cited financial constraints when asked about how they make decisions to attend field trips.

The overwhelming concerns raised by teachers in terms of barriers deterring visits to museums are money and logistics. Teachers agreed that it was difficult to take trips to history museums because of logistical issues and repeatedly cited financial constraints when asked about how they make decisions to attend field trips. When provided the prompt: “It is difficult to take field trips to museums due to logistical issues” the teachers’ mean was 5.02/6 (1=strongly disagree to 6=strongly agree). In the interviews teachers reiterated the survey findings. The time and planning necessary to organize a fieldtrip was often daunting, and many, such as this teacher wished they could simple hop on a bus and go: “I really wish I could have like just a small van, and [I could say] “alright, we’re gonna hop in” and I can go to the Lebanon Green and we can talk about the Revolution with some local stuff, but just the ordeal of organizing a trip, and getting the buses and the money is a hassle.”

Out of 84 free response answers on the survey asking about how teachers make decisions about which field trips to take, 38 said money was a key factor in

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how they make decisions. For example, typical responses asking how teachers make decisions about field trips include: “cost to students for museum and transportation,” “Can’t go. No money and no time in curriculum,” and “field trips can be difficult due to cost.” Another 23 out of 84 teachers reported that non-monetary logistical issues are important in their decision making about trips (these responses are not mutually exclusive), particularly district support or lack of support. Representative of these responses include teachers who said: “In general, field trips are frowned on by the district because they are ‘disruptive,’” “...I have many more plans and ideas for field trips than what is approved by my administration,” and “My school is not very supportive of them. [Field trips are] viewed as disruptions to other subjects.”

Not surprisingly, teachers slightly disagreed with the statement: “the number of field trips I take with students each year is adequate for meeting my learning goals with students.” Despite teachers’ overwhelming beliefs in the value of history museum visits and the potential of history museums to enhance students’ historical understanding, it is clear from the data that secondary teachers are not taking students to history museums as much as they would like. Financial and logistical concerns appear to be one of the major reasons for the disconnect between beliefs and practices. Kisiel (2005) found that the greatest limitation teachers identified was the number of field trips they could take each year, with over 80% of teachers indicating they had little or no choice in the decision. Funding was cited as a deciding factor. Nearly 30% of the teachers surveyed described the impact of

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funding availability on fieldtrips, with the most commonly cited expense being transportation.

Another factor that may contribute to this disconnect is teachers' prior training. As reported earlier, teachers only slightly agreed that they were confident in their own abilities to plan effective activities for students. In some cases, teachers were unfamiliar with the museums in their state, or more specifically, what those museums offer and how those offerings tie into social studies curriculum. One teacher expressed his lack of familiarity with museums in the state: "I know some of the museums in Southeastern Connecticut, but beyond that I don't know." Teachers also reported they were not necessarily well-prepared through pre-service training to support field trip visits. They slightly disagreed that "I learned strategies for effective field trips in my teacher preparation program." This appears to confirm Kisiel's (2003) suggestion that teachers are "well intentioned novices" who are often inexperienced in developing activities for field trips. Perhaps with additional professional development teachers would be more likely to plan field trips.

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Finding #4 – Museum Professionals’ Views on the Barriers to Taking Students to History Museums

The most significant hurdle faced by museums in creating learning opportunities for students is getting the students to the museum. Museum staff are particularly disappointed by the number of high school visitors. They are aware of many of the barriers teachers face in bringing students to museums, particularly the financial and logistical issues. These museum professionals attribute the problem to time-on learning, standardized testing, budget cuts and transportation costs.

As with teachers, the most significant hurdle faced by museums in creating learning opportunities for students is getting the students to the museum. For example, one staff member discussed her museum’s struggles as, “our numbers are not growing in the way that I would like them to grow, but last year in particular - the last two years in general -but over the last year in particular there’s been a lot of struggle in getting students here.” Museum staff are aware of many of the barriers teachers face in bringing students to museums, particularly the financial and logistical issues. When asked if teachers appear burdened by financial and logistical issues when attempting field trips the mean was 4.63/6 (1=strongly disagree to 6=strongly agree). One museum staff member put it this way, “We find that teachers are often reluctant to visit our facility due to time constraints, curriculum demands, and the high costs of transportation just to name a few,” while another lamented, “Visitation is at an all-time low. The industry attributes this to

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time-on learning, standardized testing, budget cuts and transportation costs.” A number of other museum staff echoed the concern with issues of testing in schools. One focused on the ability to focus on history and commented, “It is becoming increasingly difficult to just provide history as testing takes precedence. The CMTs are just math, language arts and now science. History museums need to stay relevant by integrating math and language arts into pre/ post activities and education programs.” Another expressed exasperation about regular visitors who stopped coming, “This year after 25 years of [name removed for confidentiality] Public Schools 2nd graders visits to our schoolhouse, they did not come. I contacted the head teacher and she said that colonial life was no longer in the curriculum!!! They need to prepare for the science Mastery tests!!!” It is interesting that while teachers also cited logistics, they did not mention testing as an issue for them – most likely due to the fact that secondary teachers participated in the research but museum staff were discussing all K-12 visitors. Elementary teachers may be more likely to face significant testing pressures since their students are tested while social studies/history is not tested at the high school level.

Although elementary teachers may face more testing pressures, they are still the ones more likely to bring students to museums. Museum staff are extremely disappointed by the number of high school visitors. Anecdotal evidence of this phenomenon was a major part of our study’s rationale for focusing on secondary history teachers. One museum staff member commented that, “Basically the only time we see high school students are when they have this one teacher that gives

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them sort of an assignment to write about local history something, and they show up here and I get five or six in one week to do research.” Another museum staff member described their visiting school population this way: “The breakdown is probably not that different from other history museums...about 50% would be the bread and butter, 4th, 5th grade level and then I would say the next biggest group, would be, we do pre – K through 3rd grade...I think our sort of 6th grade through high school, the area that you are most interested in, is probably only about 15% of our overall population...I would say the 15% is almost all middle school. The high school audience is very very small.”

Unlike the teachers, some of whom suggested that museums needed to expand their materials and programs to incorporate more of a focus on older students, museum staff did not mention this as a potential reason for a lack of high school visitors. However, several did comment that they were not even sure how to approach high school teachers/department or how to create new programs for them. For example, one museum staff member said, “I think high school is different, you know, even focusing on high school [thinking about how to approach them], to a certain extent, would be helpful because it’s hard to know how to get in, how to even begin.”

A true test for museums is the ability of these institutions to identify the gaps in their program offerings, find ways to collaborate with teachers that recognizes resources and time constraints of both parties, and the willingness of museums to find innovative ways of overcoming the many barriers to make their

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collections meaningful to teachers, schools, and students. One museum professional put it best when he said: “Museums are terrific laboratories of learning, but old museum models of field trips and gallery lecturing need to be modified and rethought. The culture of learning in schools is very different than in many museums.”

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Finding #5 – Views on Museum Resources

According to teachers, museum resources, particularly websites and lesson plans, are moderately helpful for those who use them or are familiar with them, but could better meet teachers' needs. Meanwhile, museum staff reported mixed results in how often and for what purposes the websites are being used.

Teacher Beliefs About, and Practices With, Museum Resources

One specific area addressed in this study was how teachers determined what museums to visit or what museum resources to utilize with their students. When asked about museum resources teachers agree that museum websites were helpful for planning logistics, though slightly less helpful for preparing students for field trips. For example, while discussing their use of a museum website one teacher stressed what was lacking: “Basically I would just want to know what the museum has to offer, cause even when I go on the website there are still things that are left out. And also I’d like to know where their information is from, the time and research and effort that went into creating those exhibits, where does that come from?” Moreover, teachers described what was missing from museum websites. For example one teacher explained that he wanted to know, “the extent that they can talk about school groups specifically... Not just the material, but how do they work with students, how they work with teachers.” Another teacher offered his idea of how he would like to use a museum website to plan a field trip: “I’d always go to the website first and check out what are your collections, what do you have? What’s

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available? Once I have a sense about, what are 10 things that I'm really interested in, at least from online. Then I'd call and I'll say, what are the possibilities of me coming down? Here are the things I saw. What are the things we can do to customize it and say, is there someone to walk us around those 10 things? Is there someone that would be interested in talking to 9th graders about these 10 things? And what would it mean? And how much would be their fee, and then we go through all the details."

When asked about lesson plans often found on museum websites, the teachers slightly agree that museum-developed lesson plans supported goals for a field trip and that the lessons were appropriate for students, yet the interviews found that although teachers might find the lesson content appropriate, many do not use the lessons in their classes. Teachers either did not use the lessons or modified plans to meet their own needs such as one teacher who commented: "I haven't had such great experience with the packaged lessons [from the museums]. I feel like I can do a better job than the ones I've found."

However, unlike most teacher responses to the prompts where just a handful of teachers marked "I do not know," 16 % of teachers said they do not know if museum websites are helpful and 20% of teachers said they did not know if museum lessons plans supported their goals or were appropriate for students' learning needs. These findings suggest museum resources may be moderately helpful for those who use them or are familiar with them, but could better meet teachers' needs. During interviews with teachers, large, nationally recognized

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museum websites were mentioned as valuable, while smaller, local museum sites were noticeably absent from the conversations. These findings indicate that many teachers do not utilize available resources, are not aware of their existence, and rely on search engines such as Google to find museum resources to use in their classrooms. This may also help to explain why teachers' pre- and post-visit activities are often disconnected from museum materials and resources.

In one of the only studies to directly examine the use of museum created materials by teachers, Noel and Colopy (2006) found that teachers preferred hard copies of materials to use rather than electronic versions and primarily used such materials as preparation for a field trip. The teachers also preferred short activity ideas and background readings. However, the study is limited in that it did not determine if teachers actually used any of the materials they obtained and it was conducted with fourth grade teachers, not secondary teachers.

Museum Staff Beliefs about Museum Resources

Museum staff believe that museum websites “are helpful when planning for logistics” (4.91/6, 1=strong disagree to 6=strongly agree), though slightly less helpful “in preparing students for learning on a field trips” (4.50/6). These attitudes are very similar to the teachers. However, the interviews revealed that many museums across the state are revamping their websites and have taken advantage of grant opportunities to enhance the content and resources accessible through the Internet. Those museums that were not currently working on revisions to their

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websites did express a desire to do more with their sites but were limited by time, staff, and money. As one staff member related, “I think that museum websites can help both teachers and students. Unfortunately, we do not have the funds to develop the kind of website that would help teachers choose field trips and students to gain more information...” Such commitment to developing and enhancing museum sites might be warranted given that multimedia, such as museum websites, have been found to capture a student’s attention and increase his or her learning experience (Horniblow, 2004; Neal, Magazine, & Wormer, 2004, Schaller, et al., 2005).

Museum staff reported mixed results in how often and for what purposes the websites are being used, but many had plans for the development of sites that would draw in both teachers for potential field trips and students looking for resources for class assignments. For example, one staff member described the future of her institution’s website this way: “I’d like it to be a space that teachers can go to for information that they can use in the classroom. I’d like pre-visit and post-visit materials to be there. That there is a site where students can go and get information. We’re putting up our teacher institute lesson plans so those are made accessible for other teachers to use them as well. As we start to gather more from our programming, student work is going up too.”

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Finding #6 – Professional Development for Teachers at Museums

Forty-eight percent of teachers said they had participated in a museum-run program. The majority of these teachers attended a workshop offered by one of the larger and more well-known history museums in Connecticut. The teachers also noted that overall they were generally willing to attend professional development focused on museum education and were interested if such programs were offered.

When asked if they had attended a professional development workshop offered by a museum within the past five years, 48% of the participants said they had taken advantage of such a program.⁴ The majority of these teachers attended a workshop offered by one of the larger and more well-known history museums in Connecticut (e.g. Mystic Seaport, The Connecticut Historical Society, and The Old State House).

Beyond those who did attend, the teachers noted that overall they were generally willing to attend professional development focused on museum education. They “agree” (4.95/6, 1=strongly disagree to 6=strongly agree) that they would attend professional development for teachers offered during the summer by museums where they take their students. (They were slightly less likely to attend the same sessions if offered during the school year [4.47/6]). This was also evident in the interviews. One teacher stated that it would be helpful to attend professional development that focuses on how to make the most of a museum field trip: “I would be interested in how to plan a field trip at [a particular site], and less in general.”

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Another teacher explained her interest in museum-initiated professional development (Grenier, in press) this way: “I like to do stuff that is going to directly affect my classroom teaching. So if it was going to be run by a museum then how do you make this museum work for your classroom teaching.”

Several of the workshops identified by the study participants are known to focus on the learning of specific content, rather than emphasizing pedagogy.

Further study is needed to determine what type of professional development is being offered and the impact on teachers’ ability to plan successful field trips for their students. Smith, McLaughlin, and Tunncliffe (1998) compared trained and untrained teachers who accompanied their students on a zoo field trip and found that students with trained teachers learned more from the experience. Research indicates that teacher participation in museum based professional development provide unique resources and experiences that teachers can transfer to the classroom (Grenier, in press; Melber & Cox Peterson, 2005). We will discuss the issue of teacher training in more detail later in this report.

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Finding #7 – Teacher Practices With Students on Field Trips to Museums

The most common forms of pre- and post-trip activities used by teachers for a field trip to a history museum are to hold a class discussion followed by asking students to complete a reading or review primary sources. Teachers report rarely using museum created lessons plans as preparation and almost never had museum staff visit their classroom in preparation for a field trip or after a field trip.

Pre-Field Trip Activities Reported By Teachers

Teachers reported the types of pre-visit, during-visit, and post-visit activities they plan, offering insight into the potential learning experiences of their students. As indicated in Table 5, the most common form of preparation used by teachers for a field trip to a history museum is to hold a class discussion, which happens “often.” The next most common forms of preparation teachers report are asking students to complete a reading or review primary sources, which are reported to happen between “sometimes” and “often.” Teachers said they “sometimes” asked students to conduct research, watch a film, or visit a museum’s website as preparation for a field trip. Teachers report “rarely” using museum created lessons plans as preparation and almost never had museum staff visit their classroom in preparation for a field trip.

Table 5–Pre-visit Activities with Field Trips
n = 94
1 = Never to 5 = Always

Question: “How often do...”	Mean
Museum staff visit your classroom prior to a field trip?	1.20
Students complete reading assignments as preparation for a field trip.	3.60
Students view a film as preparation for a field trip?	2.88
You hold a class discussion as preparation for a field trip?	3.90
Students review primary source documents as preparation for a field trip?	3.42
Students visit a museum’s website as preparation for a field trip?	2.68
You prepare for a field trip using lessons developed by that museum?	2.26
Students conduct research in preparation for a field trip?	2.83

Teachers’ pre-field trip practices appear to be typical classroom practices in a social studies classroom – discussion, readings, and looking at primary sources. There is no pre-trip activity that emerges as dominant and teachers seem more likely to keep their preparation in-house rather than rely on museum materials and staff.

Moreover, in many of the teacher interviews, class preparation for a museum visit was described as less about the content and more about the proper behavior and etiquette expected of students. One teacher stated: “I definitely talk to the kids about how I want them to behave in public. You know, I tell them they’re representatives of our school, and it’s a reflection of me, and I mean I would be really embarrassed if they did something stupid.”

Prior research indicates that teachers often lack explicit goals for museum visits and are unable to connect the experience to the classroom curriculum (Griffin

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& Symington, 1997; Ramey-Gassert, Walberg III, & Walberg, 1994; Tuckey, 1992). Moreover, students participating in school field trips are often unaware of specific goals for the visit and subsequently may be unprepared for learning in this context (Griffin, 1994; Griffin & Symington, 1997; Orion & Hofstein, 1994; Storksdieck, 2001).

Additional research is required to draw stronger conclusions about the effectiveness of teachers' pre-visit strategies. For instance, a "discussion" could be of varying length, form, and depth. However, survey participants were asked to provide a recent example of a field trip and discuss pre-, during-, and post-visit activities and despite some findings from previous research, it does appear that many teachers who participated in our study are very thoughtful in their pre-visit preparation of students. For example, one teacher had students read diary accounts of those on the Mayflower before visiting Plimoth Plantation. After interviewing re-enactors at Plimoth Plantation, students then had a class discussion and had to write their own journal entry as if they had made the voyage. The pre-visit activity appears to have provided necessary background knowledge as well as the development of historical empathy that enhanced the field trip visit.

Another teacher asked students to read primary sources provided by the Manchester, CT Historical Society as preparation for a trip to the Cheney Mills (Silk Mills in Manchester, CT) about life before, during, and after the mills opened. During the visit students were asked to collect evidence addressing the question "were the Cheney Mills a positive or negative contribution to Manchester?" Using

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the primary sources and the evidence collected, the post-visit activities included answering the question. These two examples are representative of a number of the participants who scaffold field trips with seemingly effective classroom activities.

It may be that teachers find it “safer” to use and develop their own materials designed specifically for their students. The teachers may also not know about or have high opinions of museum lessons and staff programs. However, by not utilizing museum resources teachers may miss the opportunity to take advantage of museum staff expertise as well as to obtain “insider” information about the museum. Teachers may not be aware of their role in creating museum experiences for students and consequently, teachers may not be taking full advantage of museum resources or expertise (Kisiel, 2005).

Regardless of the exact pre-visit activities, the incorporation of such learning prior to the fieldtrip is critical. What students bring to a museum in terms of prior experience, understanding, and learning strongly determines what they do, talk about, and take away from their visit (Anderson et al., 2003; Falk, 2006; Falk et al., 1998; Packer & Ballantyne, 2002).

During- Field Trip Activities Reported by Teachers

With respect to their time spent engaged at the museum site, teachers reported that during field trips students completed specific activities slightly less than “often” and that museum staff provide guided tours slightly more than “sometimes.” Teachers sometimes provided the tour. (See Table 6).

Table 6 – During-visit Activities with Field Trips
n = 94
1 = Never to 5 = Always

Question: “How often do...”	Mean
Students complete specific activities or tasks during a museum visit?	3.64
You participate in activities with your students?	3.89
You serve as a guide during your students’ museum visit.	3.16
Museum staff provide a guided tour during a museum field trip?	3.24
Students explore a museum without a guided tour	2.80
Students watch a film or video during a field trip to a museum?	2.65

As indicated in Table 7, no specific type of museum visit activity stands out as dominating these trips. This may be in part because teachers are taking students to many different types of history museums including living-history museums, more traditional artifact displays, historic sites/homes, art museums, and local historical societies. However, even when accounting for type of museum, the activities vary.

For example, as described above, one teacher asked students to interview role-playing staff at Plimoth Plantation and another asked students to collect data to answer a question. Other teachers report requiring students to do a scavenger hunt, take a docent-guided tour of exhibits, and to complete worksheets or other teacher-designed activities. The one common theme among most during-visit activities is asking students to do something that they cannot do in class. In other words taking advantage of what the museum can offer that is not available in school. This echoes teacher responses in the interviews where they report a primary purpose of museum visits and strength of museums is the ability to offer students

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something more “hands-on” and real that provides students with a way to “experience” history. As one teacher noted: “... listening to me talk doesn’t have the same impact as actually seeing and touching and asking questions and getting a good feel for whatever you try to study.” Kisiel (2005) found that teachers believe that students can gain new knowledge, curriculum related or not, as a consequence of a museum visit and that first hand experiences gained through a museum visit are an important contribution to student learning.

Post-Field Trip Activities Reported by Teachers

Classroom discussions are the most common activity following a museum field trip, with teachers reporting they often hold discussions (See Table 7). Most other activities were reported as never or rarely used as a post-visit activity including asking museum staff to visit the class, showing students a film, visiting a museum’s website, and using lessons from the museum. Meanwhile, completing reading assignments and reviewing primary sources were used slightly less than “sometimes.”

Table 7 – Post-visit Activities with Field Trips
n = 94
1 = Never to 5 = Always

Question: “How often do...”	Mean
Museum staff visit your classroom as follow-up to a field trip?	1.10
Students complete reading assignments as follow-up to a field trip?	2.80
Students view a film as follow-up to a field trip?	2.07
You hold a class discussion as follow-up to a field trip?	3.95
Students review primary source documents as follow-up to a field trip?	2.76
Students visit a museum’s website as follow-up to a field trip?	1.99
You use lessons developed by a museum as follow-up to a field trip to that museum?	2.05
Students conduct research as follow-up to a field trip?	2.42

In their study, Anderson and Zhang (2003) found that participants held uncertainties as to whether teachers or museum staff were responsible for providing at-venue or post-visit experiences. This could partially explain the infrequency of teachers asking museum staff to visit their classrooms.

It appears that post-field trip activities are less common than pre-trip activities, though it is unclear if this is a time issue, a pedagogical decision, or both. Teachers may feel pressure to move on in the curriculum after a trip or may not see the value in a post-visit activity or may not feel comfortable designing a post-visit activity. Whatever the reason it may indicate teachers could do more to assess student learning on a trip and build upon field trip activities. On a positive note several teachers discussed well-developed post-trip activities such as answering the question about the Cheney Mills and completing a Plimouth settler diary entry as

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described above each of which explicitly connected pre-, during-, and post-trip activities. However, many teachers reported simply having an “informal” discussion or no post-trip activity at all.

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Finding #8 – Critically Examining Museums as “Sources”

Students are asked to participate in a variety of activities on field trips, but rarely are they asked to challenge the trustworthiness of museums as a way of knowing about the past or at least to problematize museums as a source of information about the past just as they might be asked to evaluate primary sources.

Students were not asked with any frequency by their teachers to evaluate or analyze the way a museum presents the past, in other words being asked to consider the ideology of the museum, the potential political influence on the museum, and the perspectives included and/or left out by the museum. Teachers report asking students to do this type of evaluation between rarely and sometimes (2.56/5, 1=never to 5=always). Perhaps this is not surprising since when asked if museums' presentation of content is historically accurate, the teachers' mean was 5.32/6 (1=strongly disagree to 6 = strongly agree). In addition, teachers were asked which sources they “trust to most accurately represent the past.” Of nine possible sources such as documentary films, feature films, textbooks, the Internet, and others, museums were the second most trustworthy after only primary sources. It may be that teachers, as well as their students, need to be presented with a more critical look at history museums. In addition, teachers may be unaware of their role in shaping student learning experiences during field trips (Storksdieck, 2001) and thus do not develop more challenging or untraditional tasks for students.

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Museum staff report similar practices around how often students on field trips were asked to evaluate or analyze how the museum presents the past (2.33/5, 1=never to 5=always). Evaluating the sources that illuminate the past is a critical feature of understanding how we know about the past and how we interpret the past in the present. Teachers often ask students to complete this type of analysis with primary sources. Museums are susceptible to social, political, and economic influences that impact what stories they tell and how they communicate those stories about the past (Marcus, 2007). Students' historical understanding could benefit greatly from a more thorough examination of museums as a "source" of knowing about the past.

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Finding # 9 – Museum Staff Approach to Creating Programming

Museum professionals demonstrated a keen awareness of the need to meet the standards set by the state and district, the learning goals of the teacher, and the approach necessary to engage and often entertain students in a meaningful learning event.

Museum staff are very thoughtful in their overall approach to creating programming for students. First, they recognize the need to link tours and programming with state curriculum standards. Museum professionals in the study were very conscious of the standards and the effect of tying a fieldtrip to those standards could have on a district's willingness to support a class visit. Connecticut State Standards call for students to understand competing accounts and interpretations of the past, research historic sources, collect and analyze historic data. Moreover the standards require students to make sense of contradictory information, evaluate sources within their historic, social, political, and economic context, and assess source bias (Connecticut State Social Studies Standards n.d.). One museum staffer summarized the influence of these standards by noting: "I'm thinking about how it's [the field trip] is going to tie into the state curriculum standards, the goal the teachers are trying to fill in a classroom, so that they have a good argument of why they are going to bring their students here, because I know that increasingly that teachers really have to make their case for a field trip."

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The acknowledgement of the critical importance of state standards and scaffolding with classroom learning and content is a promising finding, but it is interesting to note that during the interviews, when asked to give examples of programming they provide to students, museum professionals offered primarily instances of tours and programs for elementary students. This can be linked to our findings that museums are not successful in their attempts to bring in secondary students and teachers' perceptions that museums offer programming for high school classes.

Museum professionals also expressed a general goal of creating exciting and creative programming that meets students learning needs and is hands-on. One interviewee said, "I try to keep the programs fun, engaging and of course educational. I think trying to make connections using historical events and what is happening in the state/world currently is important. Plus showing the "human" side of historical figures is important."

More specifically, when asked how museums develop programs for students, 49 of 51 museum respondents wrote free responses totaling 78 items (criteria were not mutually exclusive): 35% of the responses listed the teacher's goals and curricular goals as the most important criteria (27 responses); 21% of the responses (16) listed the age and/or ability of students as a consideration in program development. Other important criteria for museum professionals developing programs were: that the program be fun and/or engaging (9), based on the museum's strengths and abilities (8), and tied to state standards (7). Overall,

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museum professionals demonstrated in their responses a keen awareness of the need to meet both the standards set by the state and district, the learning goals of the teacher, and the approach necessary to engage and often entertain students in a meaningful learning event. Representative of this is one museum staff member who stated: “We try to select activities that are appropriate for students' grade level and developmental abilities, that reinforce the learning goals of the specific program, that reinforce the objectives of the CT Framework, and that can be supported by the physical space and teaching staff available to us.”

Although museum staff acknowledge the keys to successful field trip programming, they also are aware of the constraints secondary school visits can place on their ability to meet those goals such as problems connecting with teachers and varying curriculum. As stated by one respondent: “Secondary schools are more difficult to connect with to offer program options. The curriculum varies greatly from school to school making program development that is relevant to a maximum number of schools difficult.” Moreover, issues of scheduling, as discussed in Finding #4, can limit the time museum staff have to actively engage students in meaningful and relevant learning. Such constraints might be a reflection of the response in the survey asking museum professionals how often they design activities specific to a group of students based on their curriculum, backgrounds, etc. that indicated that the sometimes customized programming for students based on teacher needs and interests (3.61/5).

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Finding # 10 – Museum Staff Practices With Students on Field Trips to Museums

Museum staff often provide pre-visit materials to teachers and their students but rarely visit schools prior to or following a visit. The use of guided tours and interpreters for student visits is common and museum staff hold positive views about the programs they offer to student visitors.

Pre-Field Trip Activities Reported by Museum Staff

Similar to the teachers, museum staff reported on the types of pre-visit, during-visit, and post-visit activities they do with students at the museums as well as through visits to schools. As presented in Table 8 museum staff do not visit classroom very often prior to student visits nor do they consult a school's website with any frequency. However, they often offer pre-visit materials to teachers and their students and communicate with teachers to plan specific activities. Such pre-visit correspondence varied greatly from one museum to another – from a single confirmation letter acknowledging a scheduled visit to extensive materials such as those sent by one museum whose staff member explained: “We send out a teacher's guide which gives you some great background, an over view on the museum, there's some pre visit activities in there after your visit with cool stuff that you can do, options for different types assignments to get the students involved.”

Table 8–Pre-visit Activities with Field Trips

n = 51

1 = Never to 5 = Always

Question: “How often do you...”	Mean
Communicate with teachers to plan specific activities	3.79
Offer pre-visit materials	3.84
Consult a school’s website to learn about school, teacher, and/or students	2.92
Visit classroom prior to student visit	2.61

Another staffer explained the importance of pre-visit communication: “I believe communication with the teacher/group leader is essential, especially pre-visit, to get a sense of what kinds of activities or themes they would like to see, and maybe find out where this visit fits into their lesson plan – i.e. is this the only historic site they're seeing, or are we part of a larger tour? Knowing that the students have seen/will see other sites allows me to ask targeted questions, or point certain things out, that will let them compare these sites and discover the richness of our region's history.”

Museum staff report utilizing creative methods to engage teachers and their students early on in preparation for the fieldtrip. For example one staff member who explained, “Recently a school group came for a general highlights tour of the Museum. I did an hour-long advance visit with the students in their classroom - showing them some of the images they would see and practicing talking about art. The group came to visit the museum two days later, went on docent-guided tours and then took part in a hands-on art activity.”

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During-Field Trip Activities Reported by Museum Staff

When asked about their work with students while on field trips, museum professionals report both the ways in which they engaged students and how well they perceive their work of supporting students' learning and historical understanding of the past. A significant number of museums in the study report providing a guided tour for fieldtrips (4.22/5), and less frequently was a teacher called upon to serve as a guide (2.00/5). The use of guides and interpreters was a major theme found in the interviews with museum staff members. The ability to serve as a link between the objects, museum context, history and students was foundational. Tours provide not only guidance in how to navigate the building or grounds, but gives structure to large groups of students and fills in the gaps left by labels and brief narratives.

One person described the ability of a costumed interpreter to capture the imagination of students: "I was watching this group and the boys are all like, "Oh this is going to be boring, this is awful." And then he [the interpreter] gets going and starts doing all of these funky 19th century school lessons and they perked right up and they jumped right in and they were asking questions." At another museum tours are a way to promote dialogue and raise questions about history's implications on the future: "One of the things we really try and do is promote dialogue so that our house tour isn't just forty-five minutes of one of our interpreters talking to you, but that we're engaging the visitor in an ongoing

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dialogue.” Likewise, another staff member said: “I’m mindful of the fact that we have to make it relevant to the present so that they’re engaged - that it’s not just we’re talking about a dead person who doesn’t affect them, but you know what it means to them today.” Given these examples and that museum professionals are somewhat satisfied with colleagues’ understanding of students’ learning needs (4.73/6) and view their own ability to plan effective activities for students’ museum visits slightly higher (4.88/6), tours may present a valuable opportunity for museums to serve as “tellers of the story,” particularly with secondary students. These relatively positive views by museum staff conflict with some of the teacher perceptions as shown next in Finding #11.

Post-Field Trip Activities Reported by Museum Staff

With respect to the work initiated by museums staff following a field trip, Table 9 illustrates that museum professionals report a low frequency of classroom visits following a field trip and are only slightly more likely to ask teachers to evaluate how well the visit meet content goals.

Table 9–Post-visit Activities with Field Trips
n = 51
1 = Never to 5 = Always

Question: “How often do you...”	Mean
Visit a classroom as follow-up to a visit	2.09
Ask teachers to evaluate how well the visit met their content goals	2.33

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Follow-up visits are one opportunity to extend the collaborative nature of the teacher-museum relationship that neither group took full advantage of in their work. Often post-visit collaboration involves limited contact with the school and may include an evaluation or, “a post visit lesson, and some additional materials.”

The examples offered by those in the study point to a less hands-on approach to post-visit activities, with no museum indicating that they visit schools or collaborate with teachers following a field trip about specific ways to apply the experience to future classroom activities and content. One staff member said the small museum she works at is trying to find ways to maintain initial relationships with teachers that were developed through field trip bookings and technology is helping: “We were not able to sustain anything because I simply couldn’t keep in contact with the teachers all the time,” but she goes on, “ [and now] there’s a huge change in what teachers can, find off of your website and what we can learn from each other very, very quickly.” Other museums are also utilizing the Web to make post-visit materials available to schools: “I want post visit materials to be there so that I don’t have to print them out and mail them, that they can just get them there, getting them to use them to use them when they want to or not.”

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Finding # 11 – Teachers’ Perspectives of Museum Programs and Staff

The teachers in our study slightly agreed that they are satisfied with museum staffs’ ability to plan effective activities for their students. However, in many cases teachers provided a fairly critical perspective of museums’ programs for students, as well as museum staffs performance during field trips.

The teachers in our study slightly agreed that they are satisfied with museum staffs’ ability to plan effective activities for their students (see Table 10).

Table 10 – Teacher Attitudes Towards Museums
n=94
1=Strongly Disagree to 6=Strongly Agree

Statement	Mean
Museum staff are helpful when planning a field trip.	4.90
Museum staff understand the learning needs of my students.	4.23

However, teachers provided a fairly critical assessment of museums’ programs for students, as well as museum staffs performance during field trips. When asked on the survey to provide “any additional thoughts or comments about history museums,” fifty-three teachers chose to respond. Of those, the most common theme after complaints about logistics and money were remarks about museum staff and programs. Fourteen of the teachers suggested that museum staff and programs are critical to the success of a field trip and that in many cases they were disappointed with their students’ experience. Several teachers commented that too many museum programs are geared toward younger students so when they bring

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secondary students the programs are inappropriate and not particularly meaningful for students. For example, one teacher said: “more sophisticated programs for older students in local museums would increase my interest in taking my classes to museums.” In an interview another teacher commented that: “Museums are geared more towards, middle school and elementary school.” He went on to explain that he would like it “if there’s something of value at the Seaport, if it’s Amistad or what have you, how can they use that with high schoolers, or could they start to incorporate those kind of educational programs [with high school students] versus just elementary.”

A number of teachers also complained about the inability of docents or other staff to relate to students, staff pushing their own agenda despite a teacher’s alternate goals, and/or programs that were too dry and academic for students. One teacher remarked: “my biggest complaint about history museums is that they have no idea how to talk to a high school aged student. Many of the existing programs are geared toward younger kids and the docents speak to 17 year olds as they would to 7 year olds, OR, the displays are overly scholarly, using words that the majority of my students don’t understand.” Another teacher described their experiences this way: “I find museum staff to be well-informed and well-intentioned, but often misguided. Their tours can limit student interest, because the guides want to stick to their interests and schedules. I have found them to be inflexible to student reaction.” Another teacher described in her interview what she has yet to see on a museum field trip, but would love for her students to experience. “If I were at a

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museum, I would like if they took out a primary source, if they had something and they could show kids, whether it was a piece of furniture, whether it was a piece of writing, whatever it was, like a diary or something, then show them how they figure out what this means. Don't show me when it was made; I don't want to hear that. What I want to know is, like, okay how do I know about this. What does this one item tell me about the time period? And kind of teach them that idea of historical thinking. So what do you, what should we ask about this artifact? What should this tell us? And make it more interactive when the kids get to practice being a historian, and say 'okay, now you walk into this room and you find out the history of this item, and you don't know anything about it. How do you go about doing this?'"

Although not all teachers criticized museums for these issues, there were no teachers in the survey who touted museum staff or programs as models of excellence and a very small number did so when asked directly in the interviews about positive museum experiences. Many teachers believe in the importance of visiting history museums with their students, but where some choose to go and the activities they engage in may be limited by actual and perceived deficiencies in museum staff and programs. These findings stress the need for open dialogue between teachers and museum staff. The teachers' perspective on teacher-museum collaboration discussed earlier may also partially explain why teachers do not ask museum staff to visit their classroom as pre- or post-visit activities. These findings also contradict some of the reports by museum staff (see Finding #10) about the

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types of activities they design and run for student visitors, with museum staff expressing a much more favorable view.

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Finding # 12 – Teacher-Museum Staff Collaboration

Teachers report often collaborating with museum staff both to handle logistical issues and to plan specific activities. However, this collaboration appears to be mostly limited to field trip preparation. Within their own domains, teachers and museum staff limit collaboration. Museum staff reported mixed success in collaborating with teachers to plan and run field trips. They found high school teachers more difficult to contact, both in terms of establishing an initial relationship to plan and discuss field trips and for on-going collaboration. They also believe there is significant room for improvement of the quantity and quality of collaboration.

Teacher Perspectives on Collaboration With Museum Staff

There is one aspect of the results, teacher-museum staff collaboration that suggests both promising findings as well as areas for improvement. Teachers report “often” collaborating with museum staff both to handle logistical issues and to plan specific activities. As indicated in Table 11, teachers often worked with museum staff to deal with logistics and slightly less often collaborated to plan specific field trips. One teacher in her interview noted that it was critical for museum staff to, “know what it is we’re looking for when we get there instead of showing us stuff that’s not relevant to our study.” (Museum staff reported similar frequency for joint-work with teachers to plan activities).

Table 11 - Teacher Responses About Collaboration

n = 94

1 = Never to 5 = Always

Question: “How often do...”	
You email or call museum staff to plan logistics for a field trip?	4.00
You collaborate with museum staff to plan specific activities for a field trip?	3.67
Museum staff visit your classroom prior to a field trip?	1.20
Museum staff visit your classroom without a field trip?	1.23
Museum staff visit your classroom as follow-up to a field trip?	1.10

However, this collaboration appears to be mostly limited to field trip preparation. Within their own domains, teachers and museum staff limit collaboration. For example, teachers report almost never having museum staff visit their class prior to or after a field trip, or, having museum staff visit without a field trip. And, museum staff report rarely having classroom teachers serve as a guide during a museum visit. In other words, in school, the teacher calls the shots and at the museum, museum staff dominate activities. It is interesting to note that teachers claim to serve as a guide on a museum visit at a higher rate than reported by museum staff, but that may be explained by teachers acting as informal guides/chaperones during visits as opposed to leading a formal tour as a docent might. Another explanation is that museum staff reported data for all K-12 teachers whereas the teacher sample was 7-12 teachers. Elementary teachers may be less

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likely to act as guides given their focus on all subjects and the secondary teachers' content specific expertise. Anecdotal evidence and the limited data that exist suggest that there is a need to improve collaboration between teachers and museum staff and that teacher practices and museum staff practices are inconsistent (Noel & Colopy, 2006).

Museum Staff Perspectives on Collaborating With Teachers

Museum staff reported mixed success in collaborating with teachers to plan and run field trips. They reported regularly communicating and collaborating with teachers to plan specific activities for students and said that teachers were generally easy to contact (see Table 12). And, as will be discussed later, museum staff relied heavily on teachers' classroom goals to plan activities.

**Table 12 – Museum Staff Responses About Collaboration
n = 51**

1 = Never to 5 = Always	
Question: “How often do you...”	
Communicate with teachers after booking a field trip (via email or phone) to plan specific activities for students?	3.79
Collaborate with teachers to plan specific activities for a field trip?	3.46
1=Strong Disagree to 6=Strongly Agree	
Statement	
It is easy to contact and correspond with teachers to plan and discuss field trips.	3.45

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One museum staff member emphasized the importance of collaboration, specifically to support the ability to design effective museum experiences. She said, “I believe communication with the teacher/group leader is essential, especially pre-visit, to get a sense of what kinds of activities or themes they would like to see, and maybe find out where this visit fits into their lesson plan – i.e. is this the only historic site they're seeing, or are we part of a larger tour? Knowing that the students have seen/will see other sites allows me to ask targeted questions, or point certain things out, that will let them compare these sites and discover the richness of our region's history.”

However, museum staff found high school teachers more difficult to contact, both in terms of establishing an initial relationship to plan and discuss field trips (3.45/6) and for on-going collaboration.

They also believe there is significant room for improvement of the quantity and quality of collaboration. One museum staff member reflected that collaboration between teachers and museum staff could be better and would benefit the students. He said, “The links between what Museums have to offer and what teachers can expect to get out of a visit could be made clearer by all concerned. Many teachers need to know that a field trip experience is building upon their work as a teacher and corresponds to the state standards in the subject area. Having a better understanding of the essential questions and expected outcomes that the Connecticut Mastery Tests are looking for written in a manner that makes sense to Museum people could be a wonderful resource to put teachers and museum

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educators on the same page and working toward common goals and outcomes that are testable. The current state of science curriculum goals is a great model and when the same is completed for history and visual arts, the path to success for all will be clearer.”

VI. Notes

1. For the purposes of this proposal the term *museum* refers to traditional museums, living history museums, historic sites, and other heritage sites.
2. We are grateful to the Connecticut Humanities Council for their encouragement and financial support of the study as well as to Thomas Levine for his review of instruments and assistance with data collection.
3. See for example: Ellen Cochran Hirzy, *Museums and Schools Transforming Education* (Washington, DC: Institute of Museum Services, 1996); Leslie Power and Jennifer Pace Robinson, "Exhibit Development with Schools in Mind," *The Journal of Museum Education* 30 (2005): 19-23; Harold Skramstad, "An Agenda for American Museums in the Twenty-First Century," *Daedalus* 128 (1999): 109; Susan Wunder, "Learning to Teach for Historical Understanding: Preservice Teachers at a Hands-On Museum," *The Social Studies* 93 (2002): 159-164.
4. This statistic may be skewed by the fact that there are numerous Federal Teaching American History grant workshops in Connecticut attended by some of our participants. Many of these grants are working closely with local history museums to provide programs to teachers.

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VIII. Appendices

Appendix A – Participant Demographics

Teacher Participant Demographics n=94

Type of School	Geographic Location of School By County	Number of years teaching
39% Urban School 46% Suburban School 15% Rural School	Fairfield – 18% Hartford- 34% Litchfield- 4% Middlesex- 3% New Haven- 18% New London- 9% Tolland- 11% Windham- 7%	7.7 years (mean)

Museum Participant Demographics n=51

Number of years working at current museum	Number of years working in any museum	Taught in K-12 School
Average 7 years at current museum 48% of participants are within their first three years at current museum	Average 17 years working at a museum	66% - Yes 34% - No

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Appendix B – Data Collection Instruments

We are currently converting the online versions into word documents so temporarily you can view the instruments online. We apologize for any inconvenience.

Teacher Survey

<http://faculty.education.uconn.edu/edci/alm03008/museumsurvey/nteachers/>

Museum Staff Survey

<http://faculty.education.uconn.edu/edci/alm03008/museumsurvey/nprofessionals/>

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Interview Protocols

Teacher Interview Protocol

Date and Time of Interview:

Location of Interview:

Name of participant:

Educational/Teaching background

1. Most background information is available from the survey. Follow-up with any background questions about specific courses taught or educational background.
2. What are your primary goals or objectives for student learning in your U.S. history courses?
3. What types of activities do you do to meet your goals?

Museum visit activities

4. Which museums have you regularly taken students to over the past 4-5 years? Why these sites? (if they do not take visits now ask about previous years and why they do not take visits).
 - 4a. What limits the types of field trips you take?
5. What changes have you made in where you take students during your teaching career and why?
6. What are your general goals for your students when visiting museums? What about specific goals for specific museums? Ask follow-up from survey here.
7. When you take students on field trips, what kinds of preparation do you do on your own? With your students?
8. Do you do anything as follow-up to museum visits? What specific activities do you do for various sites?
9. For the sites named above (question #4) describe what students are asked to do (by you and/or museum staff) and any specific activities during the visit. If there are many sites, focus on a few – use survey for guidance.
10. Describe one of your most successful field trips to a museum and what made it successful.
11. Describe one of your least successful field trips to a museum and what made it unsuccessful.
12. Have you changed the types of activities you have students do? How? Why?
13. How do you get information about a museum prior to visiting with students?
14. Do you ever use lessons provided by museums with your students? If not, why not? If yes which ones?
15. If logistics and money were not an issue, where would you take students for history field trips? Why these sites? What would be your goals?

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16. What influences your decision to take one type of field trip over another?

17. Walk me through how you would plan for a new field trip – choose a site you might like to take students to – how would you go about planning? Ask about in-class and out-of-class tasks/activities for teacher and student.

Attitudes and beliefs about history and museums

15. What types of museums do you believe best promote student learning of history?

16. What would you like to know or do in order to feel even better prepared to take students on field trips? (How well prepared do you feel to plan and run effective field trips to museums?)

17. How, if at all do you collaborate with museum staff, if so who, when, how, why (e.g. coordinate logistics, plan activities, etc.)?

18. Describe any professional development training you have attended at museums or with museum staff.

Closure

19. Is there anything you wanted me to ask about in relation to field trips to history museums or history museums in general?

20. Any other thoughts about the purpose/value of museums and field trips?

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Museum Professional Interview Protocol

Date and Time of Interview:

Location of Interview:

Name of participant:

Educational/Teaching background

1. Most background information is available from the survey. Follow-up with any background questions about professional experience or educational background.
2. What are your primary responsibilities at the museum? In what ways do you have contact with teachers and students?
3. What types of activities does your museum staff do with students to meet your goals?

Museum visit activities

4. Who are the school groups that are coming to visit your museum (districts, age, subject areas, numbers, etc.)?
5. What changes have you seen in the past five years in regards to who is visiting, why they visit and when they visit?
6. What are your general goals for students when visiting your museum?
7. What do you do to prepare students for museum visits or do as follow-up to a visit? Museum staff?
8. For the school groups named above (question #4) what are students asked to do (by you and/or their teachers) what specific activities?
 - 8a. What limits the activities you do with students?
9. Describe one of your most successful student visits to your museum and what made it successful.
10. Describe one of your least successful student visits to your museum and what made it unsuccessful.
11. What influences your decision to do one type of activity over another?
12. Have you changed the types of activities you have students do over the past five years? How? Why?
13. How do you get information about a school/students prior to a visit?
14. Do you ever use activities provided/created by teachers with the students? If not why not, if yes which ones?
15. Do you have seasonality to your museum that is an impediment to your school visit programming?

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16. Walk me through how you would plan for a new visit by a school group – what information would you need to find out about a visiting group, – how would you go about planning activities? Who else from the museum would be involved? Ask about role the teacher might play, how things might change during the actual visit, follow-up to visit, etc.

Attitudes and beliefs about history and museums

17. What types of museums do you believe best promote student learning of history?

18. What would you like to know or do in order to feel even better prepared to work with students on field trips. How well prepared do you feel to plan and run effective field trips at your museum?

19. How, if at all do you collaborate with teachers, if so who, when, how, why (e.g. coordinate logistics, plan activities, etc.)?

20. Describe any professional development training you have attended at museums or with museum staff related to supporting student learning.

What role(s) do you perceive that museums play in student learning?

Closure

21. Is there anything you wanted me to ask about in relation to field trips to history museums or history museums in general?

22. Any other thoughts about the purpose/value of museums and field trips?

Appendix C – Raw Quantitative Data from Survey Responses

Teacher Responses – Teacher Practices

n = 94

1 = Never to 5 = Always

Question	Mean
Museum staff visit your classroom prior to a field trip?	1.20
Museum staff visit your classroom without a field trip?	1.23
Students complete reading assignments as preparation for a field trip.	3.60
Students view a film as preparation for a field trip?	2.88
You hold a class discussion as preparation for a field trip?	3.90
Students review primary source documents as preparation for a field trip?	3.42
Students visit a museum's website as preparation for a field trip?	2.68
You prepare for a field trip using lessons developed by that museum?	2.26
Students conduct research in preparation for a field trip?	2.83
Museum staff visit your classroom as follow-up to a field trip?	1.10
Students complete reading assignments as follow-up to a field trip?	2.80
Students view a film as follow-up to a field trip?	2.07
You hold a class discussion as follow-up to a field trip?	3.95
Students review primary source documents as follow-up to a field trip?	2.76
Students visit a museum's website as follow-up to a field trip?	1.99
You use lessons developed by a museum as follow-up to a field trip to that museum?	2.05
Students conduct research as follow-up to a field trip?	2.42
Students complete specific activities or tasks during a museum visit?	3.64
You participate in activities with your students?	3.89
You serve as a guide during your students' museum visit.	3.16
Museum staff provide a guided tour during a museum field trip?	3.24
Students explore a museum without a guided tour	2.80
Students watch a film or video during a field trip to a museum?	2.65
You consult a museum's website to learn about the content at a museum?	3.76
You consult a museum's website to learn about programs offered at a museum?	3.83
You email or call museum staff to plan logistics for a field trip?	4.00
You collaborate with museum staff to plan specific activities for a field trip?	3.67
Students evaluate or analyze the way a museum presents the past (e.g. ideology of the museum, potential political influences on the museum, perspectives included and/or left out, etc.)?	2.56
You visit a museum prior to taking students on a field trip?	3.50
Students visit a museum's website without a field trip to the museum?	2.56
Students visit a museum on their own for extra credit?	1.86
You collaborate with other teachers to plan/discuss/evaluate field trips to museums.	3.43

Teacher Responses – Attitudes and Beliefs**n = 94****1= Strongly Disagree to 6 = Strongly Agree**

Question	Mean
Museums' presentation of content is historically accurate	5.32
Museums visits should be part of the history curriculum in middle/high school.	5.29
I find students to be more motivated when I take them to museums than they are in class.	4.72
Students tend to view field trips to museums as entertainment or a day off more than as a way to learn content.	4.23
Museums are more of an accessory than a core part of my curriculum.	4.41
It is difficult to take field trips to museums due to logistical issues.	5.02
There is not enough time to take field trips to museums	4.03
Museums should be used to increase students' understanding of the past.	5.49
I am more likely to take a field trip to a museum with an honors class than a lower-track class.	3.31
Students learn about history when we go on field trips to museums.	5.24
Students understand history better from museums than from traditional texts.	4.94
Museums help connect content to the lives of students.	4.95
Museum staff are helpful when planning a field trip.	4.90
Museum staff understand the learning needs of my students.	4.23
I take my students to museums to help bring the past alive for them.	5.33
I take my students to museums so they can interpret evidence about the past.	5.13
I take my students to museums to learn specific content.	4.67
I take my students to museums to help them connect the past and the present.	5.14
I take my students to museums to develop their historical empathy.	5.18
I take my students to museums to expose them to multiple perspectives about the past.	4.90
My school administrators (department chair and principal) are supportive of my field trips to historical museums.	4.52
I learned strategies for effective field trips in my teacher preparation program.	3.08
The number of field trips I take with students each year is adequate for meeting my learning goals with students.	2.90
I am satisfied with my ability to plan effective activities for field trips to museums.	4.17
I am satisfied with museum staffs' ability to plan effective activities for my students.	4.35
I would attend professional development for teachers offered by museums where I take my students on field trips if offered for a few days in the summer.	4.95
I would attend professional development for teachers offered by museums where I take my students on field trips if offered for a few evenings during the year.	4.47
Museum websites are helpful when planning the logistics for a field	5.00

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trip.	
Museum websites are helpful in preparing students for learning on a field trip.	4.60
Museum lesson plans (online or from a visit) support my goals for field trips.	4.34
Museum lesson plans (online or from a visit) are appropriate for my students' learning needs.	4.20

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Museum Responses - Staff Practices

n = 51

1 = Never to 5 = Always

Question	Mean
Communicate with teachers after booking a field trip (via email or phone) to plan specific activities for students?	3.79
Offer pre-visit materials for an upcoming visit?	3.84
Consult a school's website to learn about the school, teacher, and/or students who will visit?	2.92
Visit a classroom prior to the students coming to the museum?	2.61
Visit a classroom without the students coming to the museum?	2.72
Visit a classroom as follow-up to the students coming to the museum?	2.09
Design activities specific to a group of students based on their curriculum, backgrounds, or some other factor?	3.61
Ask students to use your website prior to visiting your the museum?	2.55
Have students watch a film or video prior to their visit to your museum?	1.90
Have students watch a film or video during a visit to your museum?	2.18
Ask teachers to participate in activities with their students?	3.67
Have a classroom teacher serve as a guide during their students' museum visit?	2.00
Have students do a specific activity that does not include a guided tour?	3.33
Provide a guided tour during a museum field trip?	4.22
Encourage unstructured exploration by students?	2.92
Collaborate with teachers to plan specific activities for a field trip?	3.46
Ask students to evaluate or analyze how your museum presents the past (e.g. ideology of the museum, potential political influences on the museum, perspectives included and/or left out, etc.)	2.33
Collaborate with staff from other museums to plan/discuss/evaluate your work with students?	2.80
Ask teachers to evaluate their satisfaction with a visit.	4.12
Ask teachers to evaluate how well the visit met their content goals.	3.92

Museum Responses – Staff Attitudes and Beliefs
n = 51
1= Strongly Disagree to 6 = Strongly Agree

Question	Mean
Students learn about history when they go on field trips to museums.	5.26
It is difficult for teachers to take field trips to museums due to logistical issues.	4.63
K-12 students tend to view field trips to museums as entertainment or a day off more than as a way to learn content.	3.63
Students understand history better from museums than from traditional texts.	5.12
Museums help connect content to the lives of students.	5.42
Museum staff understands the learning needs of students.	4.74
Museum websites are helpful when planning the logistics for a field trip.	4.91
Museum websites are helpful in preparing students for learning on a field trip.	4.50
Museum lesson plans (online or from a visit) are appropriate for students' learning needs.	4.88
Museums help to bring the past alive for students.	5.53
Museums help students to interpret evidence about the past.	5.36
Museums teach students specific content.	5.10
Museums help student to connect the past and the present.	5.38
Museums help students to develop their historical empathy.	5.25
Museums expose student to multiple perspectives about the past.	5.08
I learned strategies for effective field trips in my previous educational experiences.	4.85
I am satisfied with my ability to plan effective activities for students visiting my museum.	4.88
I would attend professional development for museum staff offered by other museums or organizations that focuses on student learning in museums	5.67
It is easy to contact and correspond with teachers to plan and discuss field trips.	3.45
Schools give my museum all relevant information about their students before their visit (special needs, language needs, behavioral problems, etc)	3.61
During museum visits, teachers/chaperones are helpful in keeping groups focused and well behaved.	4.17
Teachers and students have used pre-visit materials before visiting your museum?	4.48