THE ONLINE AND ONSITE HOLOCAUST MUSEUM EXHIBITION AS AN

INFORMATIONAL RESOURCE: A COMPARATIVE ANALYSIS

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Dissertation Prepared for the Degree of

DOCTOR OF PHILOSOPHY

UNIVERSITY OF NORTH TEXAS

December 2006

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Lincoln, Margaret L., <u>The online and the onsite Holocaust Museum exhibition as an informational resource</u>. Doctor of Philosophy (Information Science), December 2006, 166 pp., 23 tables, 10 figures, references, 145 titles.

Museums today provide learning-rich experiences and quality informational resources through both physical and virtual environments. This study examined a Holocaust Museum traveling exhibition, *Life in Shadows: Hidden Children and the Holocaust* that was on display at the Art Center of Battle Creek, Michigan in fall 2005. The purpose of this mixed methods study was to assess the informational value of a Holocaust Museum exhibition in its onsite vs. online format by converging quantitative and qualitative data.

Participants in the study included six eighth grade language arts classes who viewed various combinations or scenarios of the onsite and online *Life in Shadows*. Using student responses to questions in an online exhibition survey, an analysis of variance was performed to determine which scenario visit promotes the greatest content learning. Using student responses to additional questions on the same survey, data were analyzed qualitatively to discover the impact on students of each scenario visit. By means of an emotional empathy test, data were analyzed to determine differences among student response according to scenario visit.

A principal finding of the study (supporting Falk and Dierking's contextual model of learning) was that the use of the online exhibition provided a source of prior orientation and functioned as an advanced organizer for students who subsequently viewed the onsite exhibition. Students who viewed the online exhibition received higher topic assessment scores. Students in each scenario visit gave positive exhibition feedback and evidence of emotional empathy.

Further longitudinal studies in museum informatics and Holocaust education involving a more diverse population are needed. Of particular importance would be research focusing on

using museum exhibitions and Web-based technology in a compelling manner so that students can continue to hear the words of survivors who themselves bear witness and give voice to silenced victims. When perpetuity of access to informational resources is assured, future generations will continue to be connected to the primary documents of history and cultural heritage.

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CHAPTER I

INTRODUCTION

The museum, in recent years, has come to be regarded as an information utility and as a repository of knowledge rather than of objects. The long-established mission of collection and preservation of objects is being replaced by an emphasis on the importance of visitors and the visitor experience. America is undergoing a transformation from a goods-based to a knowledge-based economy. Knowledge and information are becoming the major economic products of society, and Americans are in search of learning-rich leisure experiences in the museum environment (Falk & Dierking, 2000).

Museums have also experienced unprecedented growth and a surge in popularity over the past decades as evidenced by an increase in annual visitations along with an increase in the number of museums. According to a study published by the American Association of Museums, there are an estimated 17,500 museums in the United States which average approximately 865 million visits per year or 2.3 million visits per day (American Association of Museums, 2006).

The technological revolution has been embraced by museums as they seek to emphasize the importance of the visitor experience and move beyond a mission of collection and preservation of objects. Visitors are experiencing a blended hybrid of the best offerings of cyberspace and the physical world of museums (Ferren, 1997; Sumption, 2006). Virtual museums are viewed as an archive to the world, giving visitors simultaneous access to the complete mammal collections of 17 museums (Gorman, 2003). Even more traditional museums have incorporated such technological innovations as Immersion Studios, motion simulators, 3-D

imaging and digital cinema (Steindorf, 2001). Many museums have constructed Websites to

provide visitors with learning-rich leisure opportunities (International Council of Museums,

2004). A museum visitor can now use a mobile handheld computer or PDA to provide added

content, or the visitor can extend the museum experience by accessing the Internet to deliver

personalized Web pages that relate directly to topics viewed during a museum visit (Hyde-

Moyer, 2006). As the promise of Web 2.0 is realized, museums are turning to blogs, podcasts,

RSS feeds, wikis, and open-source content management tools to promote greater interaction and

collaboration among visitors and staff (von Appen, Kennedy, & Spadaccini, 2006).

Paralleling the refocused vision, the growth and the technological innovations which have

impacted museums, there have been significant efforts on the part of institutions of cultural

heritage to better serve the K-12 education community. For example, the Girls at the Center

(GAC) program at the Franklin Institute Science Museum in Philadelphia represents a

collaborative project providing science enrichment activities in an economically disadvantaged

community (Dierking & Falk, 2003). Lishness and Hutchins (2006) report that at the Gulf of

Maine Research Institute's (GMRI) new onsite and online marine science education center, all

fifth and sixth graders in the state participate in museum/school program whereby students

conduct their own in-depth, simulated marine research investigations. The Institute of Museums

and Library Services (IMLS) undertook a study in 2002 titled *True Needs True Partners* and

reported that museums in the United States provided more than 18,337,800 instructional hours

for K-12 programs in 2000-01 and that the medium museum expenditure for such programs was

$22,500 (IMLS, 2002). In-service training for teachers, traveling exhibits (17%), print and

electronic educational materials (23%), Websites (72%), email (58%), and online tours (7%)

were supplemental resources offered by museums to schools and also reported in the study.

Statement of the Problem

As a result of this improved partnership between museums and the K-12 education community, teaching and learning have been positively affected. In particular, students have derived various benefits from having online access to museums. Visitors to an online museum exhibit may view supplemental digitized resources not normally seen by the public who frequent an onsite museum collection. An online visit can conveniently take place at any hour and is not bound by constraints of location, travel or monetary costs. Through appropriately designed learning activities, classroom teachers can use a museum Website to spark student interest and meet the needs of individual learners.

But although researchers have focused attention on models of museum learning theory and on the educational value of museum Websites, few studies have attempted to compare learning benefits associated with an online museum visit vs. an onsite museum visit. Could the use of a museum Website be considered as an alternative or supplement to an onsite museum visit?

Studies of the educational and informational value of museum Websites have been undertaken. Schaller and Allison-Bunnell (2003) examined how learning theory (primarily a constructivist approach) can guide the development of online educational activities. A Website is educational if it has clearly articulated learning goals, a focused subject domain, and scaffolding to help the users develop a skill or increase knowledge. An element of interactivity on a Website involves communication between people, or at least communication with the computer via narrative devices, giving users something to do rather than just something to see. Nickerson (2002), as project director for Voices of the Colorado Plateau online museum project, similarly reported that visitors desire compelling narrative stories of everyday people; stories enhanced by oral history recordings and historical images. Schaller et al. (2002) identified

preferences for different types of Web-based educational activities. Adults are more likely to select interactive reference or simulation whereas children prefer creative play and role-playing stories. The adult sites yield more straightforward cognitive information while the sites preferred by children allow more personal choice and interaction.

Research points to instances where museum Websites have been used effectively in the K-12 educational setting. Fry et al. (2001) evaluated user perceptions of the relative merits of Web-based library catalogs and museum exhibits and did employ an age-specific focus group of secondary school students. The students preferred using a museum Website for projects for the following reasons: the information was easy to find; the facts were readily available; the pictures told a story; and the site was more organized. Students were divided on the issue of how visiting a museum virtually would affect their actual visits. Reasons explaining why they would continue to visit the museum in-person included wanting to take longer to look at artifacts and a belief that seeing something on a computer was not the real thing. Reasons for reducing actual museum visits, given virtual access, included the trouble of getting to the museum, not being able to touch the artifact and the fact that the material was available on the computer. The Website of the University of Illinois' Spurlock Museum represents another online resource that students have used effectively in a problem-based learning approach designed by museum educators (Marty, Sheehan, & Lacy, 2003). Sixth grade students undertook an analysis of the authenticity of ancient Egyptian cartonnage fragments by examining artifacts, developing their own list of research questions and consulting books and online sources including a special Website developed by museum personnel.

Despite the scarcity of studies undertaken thus far to determine the comparable value of online vs. onsite museum exhibitions, several researchers have offered suggestions for further investigation. Kravchyna (2004) studied real and virtual information needs of museum visitors and recommended that additional research be undertaken regarding the educational component

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of virtual exhibits and that further studies should be done focusing on teachers' use of exhibits. Stinson (2001) studied the effect of a Web-based museum tour (that of the Bayou Bend Collection and Gardens) compared to an actual museum visit on the social studies achievement of fifth grade students. The author recommended that additional research be done focusing on students at a different grade level and in reference to different subject matter. Stinson (2001) also suggested that subsequent studies might look at how educators use a museum Website in conjunction with a field trip to enhance achievement.

Background of the Study

In response to this research need, an opportunity presented itself to study secondary school students' comparative use of an online museum exhibition vs. an onsite museum exhibition. The Art Center of Battle Creek, Michigan was chosen by the United States Holocaust Memorial Museum to receive a traveling museum exhibition *Life in Shadows: Hidden Children and the Holocaust* for a three-month period beginning in September 2005. The United States Holocaust Memorial Museum (USHMM) is America's national institution for the documentation, study, and interpretation of Holocaust history and provides both onsite and online exhibitions. The USHMM Traveling Exhibitions program allows institutions nationwide to bring the history and the lessons of the Holocaust into their community. Using the latest research methodology and innovative design and production, Museum exhibitions encourage diverse audiences to learn about the events of the Holocaust and to reflect on its meaning for people today.

The Battle Creek Art Center was selected as a suitable venue for *Life in Shadows* following a successful 2003 project whereby the city's local synagogue (Temple Beth El) hosted the USHMM traveling exhibition *Oskar Schindler* (Lincoln, 2003). *Life in Shadows* explored the

remarkable history of children who went underground to escape Nazi persecution and destruction. The exhibition was scheduled to travel to only two other locations in the United States: the Spertus Museum in Chicago and the Museum of Jewish Heritage in New York City. Funding for the Battle Creek exhibition was secured from the W. K. Kellogg Foundation, the Battle Creek Community Foundation, the Marshall Community Foundation, and the Battle Creek Rotary Club and from contributions given by individual donors and local businesses. The Art Center Ad Hoc Committee was in place for 18 months and oversaw all aspects of fundraising, publicity, organization of supporting events and educational outreach for *Life in Shadows.* For example, the Art Center Website was designed at

http://www.artcenterofbattlecreek.org/shadows/index.html

Figure 1. Battle Creek Art Center Website promoting exhibition.

The research component of the *Life in Shadows* project was made possible through my involvement in an interdisciplinary information science doctorate program of the University of North Texas (UNT) in Denton (http://web2.unt.edu/isdocs/IMLS.php). Supported by an Institute of Museum and Library Services (IMLS) grant, ten librarians drawn from the school and public library fields were chosen to begin their studies in June 2004. The IMLS grant of $350,000 covered two years tuition, travel to campus, and digital connectivity for students in this unique distance-independent education experience. The current research project thus came about through a fortuitous combination of circumstances which saw *Life in Shadows* on display in Battle Creek, Michigan and which permitted the formulation of this study guided by UNT's School of Library and Information Sciences.

Research Questions

The purpose of this study was to better understand the informational value of a Holocaust Museum exhibition in its onsite vs. online format

The study addressed the following research question:

How does a visit to an online Holocaust museum exhibition prepare students for a trip to an onsite Holocaust museum exhibition?

Three sub-questions were considered:

1. How do topic assessment responses differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite?

2. How does exhibition evaluation feedback differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite?

3. How do empathy test scores differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite?

Significance of the Research

This study of the online and the onsite Holocaust museum exhibition as an informational resource not only responded to the suggestions for further research put forth by Kravchyna (2004) and Stinson (2001), but the findings of the study could also have implications for teachers and museum educators. Gathering and interpreting data concerning visits to an onsite vs. online museum exhibition could contribute to a better understanding of how to effectively integrate technology in the classroom. Obtaining feedback on visitor response to the onsite and online versions of *Life in Shadows* could aid museum personnel in their own efforts at exhibit design and evaluation. Developing a sequence and model for use of lesson material to support visits to onsite and online museum exhibitions could assist teachers in the instructional planning process.

The occasion to engage students in Holocaust instruction is a worthy undertaking in itself. Studying the unfolding of the disastrous events of the 20th century can prove to be an intellectually stimulating experience for students and can have an enduring influence on their thinking. Teaching about the Holocaust does more than impart knowledge. It encourages the development of skills such as the ability to discern political propaganda or empathize with Holocaust victims. Students assess the consequences of indifference to the plight of others. They grapple with moral dilemmas posed by the Holocaust and reflect upon the sanctity of human life as a standard for guiding behavior. The specific content of the *Life in Shadows* exhibition moreover has been of inherent interest to students because it is about young people like themselves. While most writing about the Holocaust is of a historical or philosophical nature, the present study also represents an attempt to critically examine the effectiveness of efforts to educate about and memorialize the event (Bickman & Hamner, 1998).

Definition of Terms

The following definitions of terms are provided so as to create common understanding of concepts put forward in this study.

Holocaust -- "The Holocaust refers to a specific genocidal event in twentieth-century history: the state-sponsored, systematic persecution and annihilation of European Jewry by Nazi Germany and its collaborators between 1933 and 1945. Jews were the primary victims—6 million were murdered; Gypsies, the handicapped, and Poles were also targeted for destruction or decimation for racial, ethnic, or national reasons. Millions more, including homosexuals, Jehovah's Witnesses, Soviet prisoners of war, and political dissidents, also suffered grievous oppression and death under Nazi tyranny" (United States Holocaust Memorial Museum, 2001, p.3).

Museum Teacher Fellowship Program -- The Museum Teacher Fellowship Program (formerly known as the Mandel Teacher Fellowship Program) is developing a national corps of skilled secondary school educators to serve as leaders in Holocaust education in their schools, their communities, and their professional organizations. Up to 15 participants are chosen yearly for this program and create outreach projects to advance Holocaust education. These educators participate in a five-day, all-expense paid summer institute at the United States Holocaust Memorial Museum in Washington, D.C., designed to immerse participants in advanced historical and pedagogical issues.

Onsite exhibition -- The term onsite exhibition is used consistently to refer to an exhibition located on the physical premises of a museum building.

Online exhibition -- The term online exhibition is used consistently to denote an exhibition accessible through the World Wide Web.

Virtual Field Trip -- The term refers to a multimedia presentation that brings the sights and sounds of a distant place to the learner through a computer. It provides an alternative strategy for engaging students in study of the real world (Klemm & Tuthill, 2003).

Summary

The following study has been designed to research the online and the onsite Holocaust museum exhibition as an informational resource. This chapter has provided a statement of the problem, background of the study, research questions, and significance of the study and has defined several operational terms. Chapter II includes a review of literature relevant to the study and Chapter III sets forth the methodology used in the study. Chapter IV presents the results of quantitative and qualitative data analysis while Chapter V discusses the interpretations, implications for practice and recommendations for further research based upon these results.

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CHAPTER II

REVIEW OF THE LITERATURE

The review of literature pertaining to this study of the informational value of the online and onsite Holocaust museum exhibition addresses four areas of interest. In order to gain a better theoretical base and in order to appropriately frame the current study, this review first considers the field of museum informatics. Secondly, the review offers a broad perspective on museum learning research. The applicability of a particular museum learning theory (the contextual model) is the focus of the third section of the literature review. Developments and research in the field of Holocaust education and museum resources are examined in final section of the review.

Museum Informatics

Museum informatics has come to be regarded as an emerging discipline and a growing field in recent years. Marty, Rayward, and Twidale (2003) contributed the first *Annual Review of Information Science and Technology (ARIST)* chapter on the subject of museum informatics, which they define as "the study of how information science and technology affect the museum environment" (p.259). Museum informatics can be looked upon as a subfield of social informatics that has also been discussed in a recent *ARIST* chapter by Sawyer and Eschenfelder (2002). The term social informatics is used to represent the field of research focusing on the relationship between information and communication technologies (ICTs) within the larger social context. The design, implementation, and use of ICTs in a broad range of social and organizational settings are studied in social informatics. The specific realm of museum

informatics addresses the impact of new information technologies on both museum professionals and visitors. For example, a special issue of the *Journal of the American Society for Information Science* was devoted to museum informatics and the integration of Web technologies (Bearman & Trant, 2000).

To gain an historical perspective relative to the use of new technologies in museums, Marty et al. (2003) suggest going back in time to the 1960s when museum professionals started using computers for information management and the Museum Computer Network was established. Traditionally, museum information resources have been organized into card and ledger files, arranged by a tripartite numbering scheme of accession number, donor name, and object name. Such organization would allow a question to be answered about how many objects one particular benefactor had given to a museum. It would not be possible to provide an answer for a complex question such as how many specialized vases a museum possessed from late fourth century BCE. Another problem posed by the inherent uniqueness of museum artifacts meant that there could not be an organization equivalent to the library world's Ohio College Library Cooperative (now OCLC) to assist museums in developing a shared database of records. Unfortunately, during the early years, lack of cooperation and the expense involved in automating collections meant that progress could not be made until the late 1980s that saw the advent of personal computers and stand-alone databases. Digitization of artifacts, CD-ROM and multimedia technology along with the Internet revolution in the 1990s had a further bearing on the museum profession. Gradually, the problem of adopting common standards to facilitate data sharing is being addressed. Data structure standards, data value and data content standards permit the proper management of museum information through such tools as the Visual Resources Association's (VRA) Core Categories, the Union List of Artist Names (ULAN), the Getty

Thesaurus of Geographic Names (TGN) and Library of Congress Authorities (Coburn & Baca, 2004). Projects such as the Museums and the Online Archive of California (MOAC) are successfully utilizing encoded archival description (EAD) markup language to provide access to the archives and special collections libraries from across the nine University of California campuses (Gilliland-Swetland & White, 2004).

Museum informatics not only considers the various system problems that must be overcome as information technology is implemented, but it also examines the social effects of computerization on the museum environment. Drawing upon his experience at the Spurlock Museum of the University of Illinois in Urbana-Champaign, Marty (2000) discusses how information and communication technologies changed the social dynamics within a university museum. A new information system fostered dynamic communication among museum professionals, museum curators and exhibit designers as they exchanged information about artifacts in real time and actually collaborated more frequently and intensively. Other instances of the social impact of new museum technologies can be seen in the growth and development of collaborations and consortia (Marty et al., 2003). The Canadian Heritage Information Network (CHIN) has developed a centralized repository storing information about Canada's cultural heritage and features a searchable index. The Art Museum Image Consortium (AMICO) operated from 1997 to 2005 and documented information on over 100,000 works of art from many institutions, offering guides for dealing with digitization issues as well as questions of intellectual property, information access and economic matters.

Innovative examples of educational outreach and collaboration among museums and schools have occurred as new information technologies are implemented. At the University of Michigan, research has explored how museums and schools can work together to enhance greater

awareness of cultural differences through the Cultural Heritage Initiative for Community

Outreach (CHICO) project. Museum professionals, content specialists, K-12 teachers and

information specialists have come together to produce quality online educational materials,

including exhibits on mummies of Ancient Egypt and an instrument encyclopedia (Frost, 2001).

CHICO was honored on June 7, 2004 in Washington, DC with a citation as a Computerworld

Honors Foundation Laureate (University of Michigan, School of Information, 2004). Virtual

museums have even allowed students to engage in meaning making while publishing globally in

cyberspace. In the early years of the World Wide Web, McKenzie (1996) reported success with

students creating virtual museums online as an educationally productive method of Website

development. Students were initially entranced by vivid graphics and quality information sources

found on adult virtual museums. They were able to undertake such tasks as scanning

photographs, providing multimedia content, and gathering and interpreting artifacts and

information. The Internet also helps to bridge geographical distance and to provide important

learning opportunities for students. Global online museums in the international community are a

testament to the fact that different peoples want to share and enjoy world cultural creations while

striving to preserve their own identity and the symbols of their cultural differences (Vinson,

2001).

To conclude this overview of museum informatics, it is important to reaffirm how new

information technologies have redefined the role of the museum in the information age. Marty et

al. (2003) agree with the concept of a museum as an information utility and as a repository of

knowledge rather than of objects. While coming to grips with such issues as intellectual property

and copyright, the development of integrated information infrastructures, information storage

and retrieval and human computer interaction, museum professionals are witnessing changes in

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their workplace and in their job requirements. Marty (2004) points out that information science has had a long established importance for museums. For example, there has been a shift in emphasis from the technical skills required for a museum Web master to the ability to assess and meet the information needs of users of museum data. Museum Web masters have come a long way from the days when they had to actively seek out online projects. The expanded position of Web analyst is mentioned by Hamma (2004). The duties of Web analyst entail managing the evaluation of a museum's fast-growing communication system, understanding statistical analysis of how resources are used and addressing usability. As new hardware and software continue to be introduced into the museum environment, museum personnel with information expertise will be in demand.

<div align="center">Museum Learning Research</div>

It is generally accepted that learning occurs in museums but research must be undertaken to determine how people learn and what information they retain. Various theories and models of museum learning have been proposed. For example, Schauble, Leinhardt, and Martin (1997) introduced a theoretical framework for research on processes of learning in museums that also organized the common work of members of the Museum Learning Collaborative (MLC). The research agenda of the MLC at http://museumlearning.com/ was directed toward learning in informal contexts and was organized by the unifying theoretical framework of sociocultural theory. This theory emphasizes both variability and commonalities in visitors' learning; focuses on processes of learning, not simply on its outcomes; and foregrounds how people's thinking changes as they make meaning of their experiences. The work of MLC culminated in the publication of the book *Listening in on Museum Conversation* (Leinhardt & Knutson, 2004). The Website also offered an extensive annotated list of literature references.

Allard, Boucher, and Forest (1994) undertook research through the *Groupe de recherche sur l'éducation et les musées* (GREM) of the University of Quebec and studied educational programs for children ages 9 to 11 at the David M. Stewart Museum which specializes in Canadian colonial history. Formal and informal observation, discussions, and cognitive and affective questionnaires containing closed and open questions were employed. The researchers discovered that participating school groups made significant progress in the cognitive and affective domain (retention of facts and concepts; attitude toward museum visit). Active student involvement in the museum visit was seen to promote learning, and follow-up activities contributed to progress in cognitive skills and attitude toward museum visit. Allard et al. offered a schematic diagram summarizing their school museum process model of learning.

Table 1

A School Museum Process of Learning

Before	School	Preparation	Development of questions	Integration of object
During	Museum	Completion	Data gathering and analysis	Observation of object
After	School	Follow-up	Analysis and synthesis	Appropriation of object

Studies of museum learning have utilized audience research and evaluation projects. Kelly (2002) identified 12 key themes relative to museum learning which was found to be a social activity, a sensory experience, facilitated by "real stuff" and living exhibits, an active process, connecting with prior knowledge, new information immediate, changing your point of view, long-term, individual, entertaining and fun, and making a difference. In the realm of Web-based museum education, Sumption (2001) identified six learning typologies to help understand the complexities and challenges of active learning through online resources. Among the

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typologies geared for older students, education meta-centers allow for investigation of textual and pictorial information while video conferencing has the advantage of providing human facilitators and encouraging students to ask questions.

Museum learning research is recognized as clearly having moved beyond a stimulus/response behaviorist model with the work of Falk, Dierking and their colleagues at the Institute for Learning Innovation (Dierking, Ellenbogen, & Falk, 2004). The traditional transmission-absorption view holds that museum visitors learn the same types of things and in the same manner as do students at school, albeit less. If one presents a topic to the learner in the form of an exhibition, lecture, program, film, etc., learning can be determined by measuring the positive change in the amount of topic that the individual absorbs. This model fails to take into account whether the learner is intellectually, emotionally and motivationally predisposed to attend to a particular topic and whether a change in understanding can always be measured quantitatively (Falk & Dierking, 2000). In contrast to the behaviorist perspective, museum learning can be said to occur more holistically over time, as a series of related and overlapping processes. Learning is only very rarely of the "eureka" variety. It involves continuous piecing together of new pieces of information into existing ways of thinking (Falk, 2004).

The contextual model of learning has been proposed by Falk and Dierking (2000) as a framework within which to organize information about museum learning. A summary version is presented here.

Table 2

Contextual Model of Learning

Personal Context	Sociocultural Context	Physical Context
1. Motivation and expectations	4. Within-group sociolcultural mediation	6. Advanced organizers and orientation
2. Prior knowledge, interests, beliefs	5. Facilitated mediation by others	7. Design
3. Choice and control		8. Reinforcing events and experiences outside museum

Museum visitors have various motivations and expectations but intrinsically motivated learners tend to be most successful. People make sense of the museum experience based upon their prior knowledge, interests and needs. Learning is at its peak and most enjoyable when individuals can exercise choice. Within-group sociocultural mediation occurs as peers build social bonds through shared experiences and knowledge. Facilitated mediation by others occurs through interaction with museum guides and docents who can enhance or inhibit visitor learning. Expectations affect learning that benefits from the use of advanced organizers. Visitors are influenced by design elements such as layout and use of labels. Reinforcing events and follow-up experiences outside the museum are critical to learning. Thus the three overlapping contexts of the personal, the sociocultural and the physical interact in complex ways as museum learning occurs over time (Falk & Dierking, 2000).

Researchers at the Institute for Learning Innovation contributed to a peer-reviewed, supplemental issue of the journal *Science Education* in 2004 that focused on current research in museum learning supporting the contextual model of learning. For example, Griffin (2004) found that students equipped with tape recorders and lapel microphones in Australian museums moved about freely conducting learning-related conversations over 80% of the time. Interactions among students within the sociolcultural context allowed observations to be shared and learning about

exhibit content to take place. Pedretti (2004) reported on research conducted over a 10-year period at two Canadian science centers housing the exhibitions *Mine Games* and *A Question of Truth.* Pedretti observed that critical issues-based installations challenge visitors both intellectually and emotionally. Within the personal context, learning was evident as students engaged with more humanized subject matter, experienced affective elements, participated in stimulating discussion and debate, and reflected on controversial topics. Rennie and Johnston (2004) examined implications for further research relative to various principles of the contextual model of learning. For example, they drew attention to the vowel mnemonic method of looking for evidence of science communication as proposed by Burns, O'Connor, and Stocklmayer (2003). The mnemonic method argues that any relevant change in *awareness, enjoyment, interest, opinion, or understanding* represents a personal learning outcome.

This brief introduction to the work of Falk and Dierking is expanded upon in the next section of the Review of the Literature which uses the lens of the contextual model of learning to further examine the onsite and online museum experience.

Contextual Model of Learning

Personal Context

Most learning (including that which takes place in a museum) is a reflection of personal context (Falk & Dierking, 2000). A visitor's background, prior knowledge, motivation, interests, and abilities help to determine the nature of the museum experience (Rennie & Johnston, 2004). Individual needs and visitor agendas have been studied. For example, Booth (1998) undertook a case study at the Science Museum in London and drew conclusions that may be generalized to other museums and cultural attractions. Based on a survey-generated visitor profile that recognized 75% of museum visitors to be school children or families accompanied by children,

Booth summarized visitor information needs. Visitors require information at various locations throughout the museum (such as at the entrance, inside at an orientation point, before an exhibit display and within a study center) to guide their tour. Anthropologists Cameron and Gatewood (2003) documented a more affective need to explain visitors' involvement with historical sites and museums. The authors conducted a study in the historic downtown of Bethlehem, Pennsylvania and interviewed 255 informants as they left the National Museum of Industrial History. The survey included closed-ended and open-ended questions that assessed people's interest in historical sites. People were asked to describe what might enhance their experience at historical sites and what they seek to gain from such visits. Respondents indicated a quest for a deeper experience at heritage sites, a desire to make a personal connection with the people and spirit of earlier times and to feel the aura of the period. This impulse was termed numen-seeking.

Studies of user needs for visitors to virtual exhibits have been completed in more recent years with the growth of museum Websites. Kravchyna and Hastings (2002) reported that the majority (68%) of visitors are seeking information about recent exhibits; 63% value the ability to browse collection databases to find additional descriptive information. Visitors have need for contextual information, vivid descriptive narratives and theory drawn from narratives. The authors recommended that further research examine search strategies used by different categories of Website users along with the information needs and image needs of teachers and scholars. Paterno and Mancini (2000) have shown that adaptive systems can accommodate user needs in the online information environment. The authors developed user profiles that permitted such categories of visitors as tourist, student, and expert to more effectively access the Marble Museum Website in Cararra, Italy. Nickerson (2002) pointed out that visitors to virtual museums have needs that go beyond mere access to a database of disparate digital objects. Based

upon his work as project director for Voices of the Colorado Plateau IMLS funded online

museum project, Nickerson found that visitors sought compelling stories of real everyday people.

Such personal narratives convey historical content and result in less clicking and more viewing

(Falk & Dierking, 2000).

The power of personal context in museum learning can be addressed by the essayist as

well as by the researcher. Carr (2001) uses the metaphor of a museum as an open work, as a

composition that is freely interpreted by users. An individual brings his prior knowledge and

repertoire of memory to the museum. The museum allows the user to construct new meaning that

will be integrated into the previous experience. Carr speaks of museums as having an ability to

promote resonance. An exhibit may take us beyond the mere viewing of objects and inspire us to

seek further information. Through our own questions over time we gain new meaning and

understanding.

Sociocultural Context

The sociocultural context of museum learning considers the visitor's interaction with

other people as well as the social and cultural features associated with artifacts and exhibits

(Rennie & Johnston, 2004). Griffin and Symington (1997) investigated task-oriented learning

strategies (such as completion of worksheets) used by classroom teachers during excursions to

two Australian museums. The authors recommended the adoption of more learner-centered

strategies that fostered intermingling and free exchange of questions among students and adults.

Social interaction can take place in the online environment. Paolini et al. (2000)

developed the means to transform the lonely virtual museum visit into a more engaging

experience where several people are brought together. The Virtual Leonardo Project was tested

at the Milan's Museum of Science and Technology and used VRML (virtual reality modeling

language) and WebTalk to split a browser window into two parts. The upper half offered a 3D representation of the museum exhibit where the user could move and interact with objects while also seeing the presence of other visitors portrayed as human shape figurines or avatars. In the lower portion of the screen, visitors could write messages, and read incoming messages through a chat window. Milekic (2000) looked at digital environments as potentially useful for building collaborative pedagogical procedures for the digital medium among children. He described peer mentoring as a common, effective way of transferring information among children and as a good example of social collaborative activities. Klemm and Tuthill (2003) recommended that teachers incorporate cooperative learning strategies into the virtual field trip experience, allowing students to work with peers in exploring, making observations, experimenting, collaborating and gathering information.

Museum staff and docents assume an important function within the sociocultural context and facilitate learning. Marsh (1983), who served as Curator of Exhibitions at the National Archives in Washington, found that modeling and wait-time encouraged visitors to ask seven more times as many questions than had been asked on pre-experimental tours. His research indicated that if an authority figure asks questions and allows time for responses, visitors are inclined to ask questions. If the authority figure asks or models interpretive questions, students tend to ask similar interpretive questions. Students may hesitate to ask questions, fearing embarrassment and not wanting to challenge authority. Teachers or docents may discourage question asking to avoid revealing a lack of knowledge, weariness or a discomfort over painful subject. Dow (1993) recommends that docents use objects and exhibits in provocative ways to spark an interest in students to want to discover more information. Museum education need not be constrained by the requirements of textbooks and curriculum guides but can prompt students

to ask questions and to take responsibility for their own learning. Rayward and Twidale (1999) conducted a thorough study of docents who were described as being mature-age volunteers with an instinctive tacit knowledge, retentive memories, well-developed expository skills, ability to handle repetition of commentary and to provide quick, off-the-cuff answers, good appearance, and familiarity with pedagogical procedure and group dynamics. The physical docent makes the actual museum more than a mere collection of objects while the cyberdocent ensures that a virtual collection becomes a virtual museum. The cyberdocent takes on an educational and guidance function, offering individualized virtual tours meeting special needs of visitors, additional views of artifacts including 3-D and special detail, and access to restricted or supplemental exhibits.

Physical Context

Museum learning is also connected to the physical context; aspects of the environment that help organize and orient the visitor's experience (Rennie & Johnston, 2004). The milieu or setting of a museum field trip has been studied to determine impact on learning and behavior. Falk and Balling (1982) compared field trip experiences that differed by amount of environmental novelty. A field trip to the nature center resulted in increased content retention and a more positive attitude than did learning that occurred at an outdoor site on the premises of the school building. Although an optimum amount of novelty has been seen to enhance learning (Falk & Dierking, 2000), the role of prior preparation and advanced organizers in the physical context has also been recognized (Anderson & Lucas, 1997; Martin & Seevers, 2003; Milson, 1990). Bracey (1995) reported on research conducted at the Weizmann Institute of Science in Israel. Classes that had been prepared well for a field trip by means of a 10-hour package of preparatory lessons, along with psychological preparation about the length of the trip and the

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amount of time to be spent at various tasks, revealed high performance on an achievement test with negligible off-task behavior.

Visitors or students who know what to expect from the physical context both cognitively and spatially show significant learning (Falk & Dierking, 2000). This assumption is also applicable to the realm of virtual field trips. Taylor (2003) reported how graduate students at the University of Michigan in a seminar on cultural heritage resources created online field trip experiences for three area museums that could be utilized by K-12 students and teachers. The Websites, created by graduate students, used Internet technology and museum learning theory to help orient the K-12 students to the physical layout of the exhibits which they would later actually visit. Bellan and Scheurman (1998) similarly recommend that students approach a virtual field trip as a means of preparation for an actual visit. The authors point out that virtual field trips do not replace a visit to a real site. Computers cannot replicate the tactile, olfactory, visual and dialogical experience of an actual field trip. However, being able to access artifacts, images and text via the computer can provide students with prior knowledge and questions that will enhance their learning experience with the actual site.

The use of advanced organizers and efforts to provide students with some form of orientation contribute to successful learning outcomes in virtual field trips. For example, Lacina (2004) advises teachers to take certain preparatory steps: identify curriculum connections, state and national standards connected to the topic of the virtual field trip; provide students with a clear guide, background information, key concepts and vocabulary, and questions to follow so that they do not aimlessly surf a Website. Lacina further recommends that the teacher participate in the virtual field trip prior to planning the class trip. Klemm and Tuthill (2003) found purposeful planning to be among the best practices for ensuring the success of virtual field trips

while Schmidt (1997) showed how comprehensive teaching guides containing historical background material, lesson plans and document facsimiles were used effectively to prepare students for an electronic field trip to Colonial Williamsburg.

In addition to advanced organizers, the fundamental display tool of museum labels helps orient visitors to the physical context of the museum. Research has been conducted on how visitors read labels and interact with exhibit text. McManus (1989) studied 1,571 individuals in 641 visitor groups at five exhibits at the British Museum of Natural History (BMNH). Despite appearances that people do not seem to read labels or that they simply glance briefly at texts, McManus used observations and recorded conversations at museum exhibits to show otherwise. People tend to form themselves into small groups at exhibits with one person taking on the role of reader. This generates what McManus calls "text-echo" (p.175) whereby the reader repeats portions of the text labels for the benefit of others in the group. Conversation takes place with visitors talking back in an interactive way as they process museum labels. It is wise to avoid frequent shifts in topics. New material should be anchored in everyday experiences. It is not desirable for visitors to be required to engage in laborious, painstaking reading. The relative speed should not drop below 200 words per minute. There should be a balance between an under- interpretive exhibition (short on explanation and ambiguous) and an over-interpretative exhibition (boring and tedious). The text component of visual communication is an integral part of the communicative effort of an exhibit. Falk and Dierking (2000) offer a similar perspective on the use of museum labels, claiming that visitors are more likely to read three 50-word labels than a single 150-word label containing the same text. The size of the letters on the labels and their location relative to the objects influence label reading. The more visitors read labels, the more likely they are to stop and look at the objects associated with them.

People acquire knowledge and understanding over time and learning is not restricted by institutional boundaries. For this reason, Falk and Dierking (2000) are convinced that reinforcing events and experiences outside the museum are as critical to learning from museums as are the events inside the museum's physical context. Wolins, Jensen and Ulzheimer (1992) researched what children remember about their museum visits and why. An ethnographic study was conducted using open-ended questions and interviews of both students and teachers. Links with the curriculum and multiple or repeat visits to the same museum resulted in children remembering a museum trip. Students were asked to tell what made a particular trip stand out for them, rather than being asked to recount what specific content they remembered. This method is also advocated by Falk and Dierking (2000) who advise asking visitors what they thought, in their own words, was the main point of an exhibition. Falk and Dierking (1997) undertook an earlier study of 128 subjects who were interviewed about their recollections of school field trips taken during the early years of their school education. Even after many years, nearly 100% of the individuals interviewed could recall one or more things learned on the trip, the majority of which related to content/subject matter. The study also revealed a strong interrelationship between cognition, affect, and the various components of the contextual model. Many recollections were embedded within descriptions of the physical and social setting and included some statement of feeling.

Because memories are only partially laid down at the time of an event and knowledge is built up over time, Falk (2004) suggests that evaluation should be done by appreciating and accounting for the full complexities of the museum experience. Borun (1992) recommends that in assessing the impact of an exhibit, consideration be given to such factors as information transfer, excitement, stimulation, esthetic appeal, motivation, visual and sensory impressions.

Fialkowski (1994) is a proponent of using evaluation as a program development tool in assessing museum educational outreach initiatives. According to McNamara (1987), formative evaluation (conducted during the course of an exhibit) can result in exhibit modifications and improvements that will positively impact learning. Stone (1993) likens museum learning evaluation to research; it must be done systematically and goals and objectives must be set with care. Questionnaires can be used to gather general and specific data in short-term or more long-term longitudinal studies.

The contextual model of learning thus provides a framework with which to better comprehend and evaluate various components of the online and onsite museum experience. The model also has applicability to specific areas of museum learning. Online and onsite exhibitions within the realm of Holocaust education and museum resources are looked at in the concluding section of this review of the literature.

Holocaust Education and Museum Resources

A final but critically important section of this literature review focuses on developments and research in the field of Holocaust education and Holocaust museum resources. Historically, a general indifference to the Holocaust characterizes the post World War II period. Politically, the United States was trying to normalize relations with Germany while dealing with the Soviet Union as a Cold War opponent. Many Holocaust survivors were forced to deal privately with their brutal memories. American Jews maintained a low profile during the McCarthy era that saw the Rosenbergs put on trial. The 1960 capture and trial of Adolf Eichmann brought the Holocaust to the public's attention and promoted discussion and debate about the World War II atrocities. The June 1967 Six-Day War is considered the turning point in generating true American awareness of the Holocaust. This event was followed by the 1973 Yom Kippur War, the 1978 NBC miniseries on the Holocaust, and ultimately, the construction of the United States Holocaust Memorial Museum (USHMM) in 1993. As of 2000, at least 17 states had required,

recommended, or encouraged the inclusion of a study of the Holocaust in their school systems and had developed supporting curriculum guides (Shoemaker, 2003; Totten & Feinberg, 2001).

Teachers embarking on a Holocaust instructional unit can find resources and guidance through the education departments that have been established at many Holocaust museums and learning centers throughout the United States and the world. USHMM was founded as America's national institution for the documentation, study, and interpretation of Holocaust history (USHMM, 2003) and was built in a place of honor in Washington, among outstanding monuments memorializing the nation's experiences (Ben-Bassat, 2000). Gurian (1995) observes that USHMM has become an icon, a symbol for the contemplation of personal responsibility while Lennon and Foley (1999) hold that the Museum achieves the difficult task of interpreting the unimaginable. The educational mission of USHMM was clearly articulated in its strategic plan for the next decade (United States Holocaust Memorial Museum, 2003). Not only does the Museum remain committed to advancing and disseminating knowledge about the unprecedented tragedy of the Holocaust, but it also looks to creating an Institute for Holocaust Education and to developing a national initiative on Holocaust education and civic responsibility.

The goals of Holocaust education are both cognitive and affective. Totten (2002) identifies a list of at least 37 essential topics that should be addressed, but he also reminds educators to connect this content to the massive human rights violations of today's world. Gallant and Hartman (2001) see Holocaust education as bringing about positive attitudinal orientations in students and reducing popular tendencies toward indifference and silence. Ross and Gupta (1998) propose that human rights must be to the 21st century what democracy was to the 20th: a liberating force that demands freedom and justice for all. The connection with the Holocaust is that at the beginning of World War II, no international laws existed that might have prohibited the Nazi assault on the Jews. In fact, the Nazis passed a series of national acts to

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legalize their atrocities. Human rights education (HRE) is not a panacea, but it can help students learn to recognize and overcome the injustices they face or witness in the world around them. Similarly in Great Britain, where Holocaust study has been mandated as part of the National Curriculum, teachers are realizing not to use the Holocaust as a mere context for understanding World War II (Brown & Davies, 1998). It is equally important to alert students to present day instances of political extremism, racism and anti-Semitism and to the dangers of an apathetic response. Sebre and Gundare (2003) compared the level of ethnic intolerance among Latvian secondary school students before and after participation in a Complex Instruction (CI) Holocaust unit. The authors found a reduced level of prejudiced thinking and an increased level of civic responsibility among students who were taught by means of the CI approach.

Although human rights awareness is acknowledged to be a significant curricular goal in Holocaust education, the Holocaust is also taught so that students might show more caring attitudes and exhibit empathy (Alsip, 2002). Once again, in Great Britain as in the United States, there is agreement that if Holocaust education is to achieve its potential to influence students and their attitudes towards others, then teaching must go beyond knowledge of the historical facts of the Holocaust; students must be allowed to engage with their own feelings about what they have learned (Burtonwood, 2002). The British National Curriculum makes provision for empathetic goals by expecting students to care about other people's feelings and points of view. Powerful narratives, autobiographical literature, and poignant survivor accounts help students to appreciate the common human vulnerabilities and the sense of outrage at the misery and degradation of the Holocaust. Baum (1996) argues that pedagogical emotion (which has a certain cognitive force of its own) should not be discounted in Holocaust education. Empathy, or the ability to enter imaginatively into another's experience without giving up the boundaries between self and other,

impels students to not simply remember the history of the Holocaust but to be prompted to act in a socially responsible manner to prevent the reoccurrence of similar tragedies and genocides in our own day. Farkas (2003) found that using a multisensory instructional package in a Holocaust instructional unit yielded increased empathy towards people scores among middle school students. Farkas' study employed the Balanced Emotional Empathy Scale (BEES). This instrument is based on Mehrabian's research on emotional empathy that is defined as the vicarious experience of another's emotional experiences (Mehrabian & Epstein, 1972). Subsequent studies demonstrated that high-empathy, compared with low-empathy individuals engaged more in altruistic behaviors, were less aggressive, more affiliative, rated positive social traits as more important, scored higher on measures of moral judgments and volunteered more to help others (Mehrabian, Young, & Sato, 1988).

USHMM and other Holocaust museums offer valuable instructional materials for educators. Once again, the perspective of the contextual model helps us to understand what learning is taking place in the realm of the Holocaust museum experience. Museum visitors approach Holocaust exhibitions with a series of complex personal and educational needs. Students of the Holocaust also differ by their learning style preferences which, when accommodated, can result in higher scores on tests measuring content, empathy and attitude (Farkas, 2003). The Imperial War Museum (IWM) is among the growing number of institutions worldwide that has taken on the challenge of depicting one of the most horrific and controversial events of modern times. Bardgett (2000) describes how artifact selection in the new Holocaust exhibition required a balance between not overly sanitizing brutal details and not displaying images that are overly disturbing (e.g., a marble dissecting table found in the psychiatric hospital at Kaufbeuren-Irsee). The IWM has also employed powerful narratives, the stories of ordinary

people's lives to supply a personal context to the exhibition. Everyday common objects (a toy

owned by a hidden child or a sewing machine used in a ghetto) have given variety and texture to

the exhibition while serving to explain abstract concepts such as obsession with racial purity.

Although there are inherent difficulties in displaying the very disturbing imagery of a Holocaust

exhibition, the United States Holocaust Memorial Museum takes the precaution of protecting

younger children from especially graphic material by means of a privacy wall (Lennon & Foley,

1999).

The sociocultural context of the museum experience is thoroughly supported by the

Holocaust Museum Houston. Over 30,000 students tour the museum annually under the expert

guidance of trained docents who offer a balanced lesson about history and tolerance (Berger,

2003). Students are able to interact with peers and come to appreciate the special local historical

connections pointed out by the docents. It is a little known but documented fact that former

President Lyndon Johnson rescued several hundred Jews in the late 1930s by smuggling them

through Galveston, Houston's port city. At the IWM Holocaust exhibition, student groups are

similarly guided through their tour by qualified museum staff, participating in an orientation

session to help prepare them for what will be a very moving experience and in a feedback

session to allow space for reflection and discussion about what they have learned (Salmons,

2001).

As noted earlier, prior preparation and advanced organizers in the physical context play a

beneficial role in preparing students for onsite museum visits (Anderson & Lucas, 1997; Bracey,

1995; Martin & Seevers, 2003; Milson, 1990). A similar occurrence can be seen in the case of

Holocaust museums. For example, Short (2000) commends the Museum of Jewish Heritage in

New York for providing a guide containing historical background, bibliography, chronology,

preliminary and follow-up activities to help facilitate an onsite museum visit. The Holocaust

Museum Houston sends out its popular Curriculum Trunk outreach program, complete with age-

appropriate lesson plans and print and multimedia tools, at no cost to schools and teachers

(Elmore, 2002). The Imperial War Museum in London provides visiting schools with a specially

commissioned film that explores the vibrancy and diversity of Jewish life before the Holocaust

and that includes testimonies of survivors whom the students will hear again during the actual

exhibition (Salmons, 2001).

Just as an onsite visit to a Holocaust museum provides a learning experience for students,

the virtual space of an online Holocaust exhibition can accommodate individual information

needs. Miles (2001) contends that students can engage critically with historical material,

including oral testimony and supplemental exhibitions. For example, an online exhibition

activity at USHMM allows a student to use the material of historical records to determine the

destinies of four passengers who sailed on the ill-fated ship the *St. Louis*. Certain experiences,

however, are possible only through physical interaction with a display and cannot be recreated

even with 3-D special effects software. The ride up the elevator to the beginning of the

Permanent Exhibition at USHMM or the railcar installation allow the visitor to establish

identification with the victims who suffered terrible circumstances during the transports. It is

doubtful whether the Web can impart a sense of the sacred that exists in a physical space. The

impressive architecture and meaningful design of USHMM cannot be replicated online – nor will

it be possible to find a virtual equivalent for the actual soil from camp sites that is intermixed

with soil of the museum site. The educational value of a Holocaust Website could be weakened

by inclusions of inappropriate games, simulations, and other forms of edutainment (Bardgett,

2000). The Holocaust is a subject that cannot be trivialized. Nevertheless, the Internet, as a

flexible and innovative medium, has great potential for the representation and teaching of the Holocaust (Hauptman & Motin, 1998; Smith, 1999).

Throughout its first decade of assuming a leadership role in Holocaust education, USHMM has attempted to provide enhanced student learning experiences in the online environment. Students are encouraged to examine photographs, artifacts and other primary documents through online activities that support various USHMM Web-based exhibitions (such as the above mentioned *Voyage of the St. Louis*). Davis, Fernekes, and Hladky (1999) described an action research study about the use of Internet-based Holocaust resources that was undertaken between the social studies department at New Jersey's Hunterdon Central Regional High School and USHMM. The study found that students are especially drawn to artifacts and to biographies that allow for visualization of a person talking and that provide a more emotional account of the Holocaust with personal views and opinions. Klevan and Kramer (1999) have reported on further collaborative studies between USHMM and partnering schools to create an interactive student Website for learning about the Holocaust. The use of this USHMM site (which has evolved into The Holocaust: A Learning Site for Students) resulted in positive benefits to students. They acquired confidence in self-directed learning, in open inquiry, and in self and peer evaluation. Students showed gains in knowledge about the Holocaust, in-depth learning, and comfort with technology and group work. Improvements were noted in student research skills, on-line student-student communication, and use of primary sources and questioning strategies.

The United States Holocaust Memorial Museum thus demonstrates a proven commitment to support teachers in the difficult task of Holocaust instruction and to provide students with resources and guidance that will inspire critical thought and personal growth. Through onsite and online exhibitions, the Museum strives to bring the history and the lessons of the Holocaust into

communities and schools nationwide. How can these exhibition resources be used most effectively to encourage learning about the Holocaust and to promote reflection on the meaning of this unprecedented tragedy for people of today?

Summary

As the purpose of the current study has been to focus on the informational value of an online vs. an onsite Holocaust Museum exhibition, the review of the literature has provided a theoretical and current framework in which to place the research. The preceding discussions of museum informatics, museum learning theory, the contextual model of learning and of Holocaust education and museum resources contribute to a better understanding of the study's foundation.

CHAPTER III

METHODOLOGY

The purpose of this study was to better understand the informational value of a Holocaust museum exhibition in its onsite vs. online format by converging quantitative and qualitative data. Using student responses to questions on an online exhibition survey, an analysis of variance was performed to determine which scenario of a museum exhibition visit promoted the greatest content learning. Using student responses to closed-ended and open-ended questions on the same survey, data were analyzed to discover the impact on students of each scenario of a museum exhibition visit. By means of an empathy testing instrument, data were analyzed to determine any differences among student response according to the scenario of exhibition visit.

The study addressed the following research question:

How does a visit to an online Holocaust museum exhibition prepare students for a trip to an onsite Holocaust museum exhibition?

Three sub-questions were considered:

1. How do topic assessment responses differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite?

2. How does exhibition evaluation feedback differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite?

3. How do empathy test scores differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite?

This chapter describes the methodology that was used to address the above research question and sub-questions. The chapter is organized by the following sections: (1) research design; (2) identification of participants; (3) development and procurement of materials; (4) treatment; (5) data collection procedures; (6) data analysis procedures; and (7) limitations.

Research Design

A mixed-method design, using both qualitative and quantitative approaches to gathering, interpreting and reporting data, was selected for this study (McMillan 2004). This form of research design can provide a comprehensive picture of phenomena being studied, emphasizing both outcomes (quantitative) and process (qualitative). Creswell (1994) was initially cautious about adopting a combined quantitative and qualitative design approach for pragmatic reasons such as the extensive time needed to use both paradigms properly; the expertise required to undertake the research; and a preference for limiting the scope of a study. However, Creswell (2004) has more recently re-examined his earlier stance, claiming that mixed methods research has come of age and that to use only quantitative or qualitative methods falls short of the major approaches used today in the social and human sciences. Onwuegbuzie and Leech (2005) agree that the debate between quantitative and qualitative is divisive and counterproductive for advancing the social and behavioral science field.

Concurrent procedures in a mixed-methods study further allow the researcher to converge quantitative and qualitative data at the same time and then to integrate information in the interpretation of the overall results. The mixed-methods design applied to the use of a survey permits the collection of both closed-ended quantitative data and open-ended qualitative data, proving advantageous for better understanding a research problem. Finally, the mixed methods approach is well suited for the researcher who enjoys both the structure of quantitative research and the flexibility of qualitative inquiry.

This mixed-methods study employed a survey and empathy testing instrument to address the stated research questions. A survey is a system for collecting information from or about people to describe, compare, or explain knowledge, attitudes and behavior (Fink, 2003b). The

survey created for this particular study was based upon an experimental design characterized by the comparison of two or more groups whereby at least one of which is experimental and at least one of which is a control or comparison group. The experimental group was given a new or innovative program/intervention in the form of access to the online version of a museum exhibition prior to visiting the onsite exhibition. One control group was given an alternative program in the form of a single visit to a traditional or onsite museum exhibition while a second comparison group viewed only an online museum exhibition.

The study was planned to consider three groups or scenarios of classes that viewed various combinations of the onsite and online versions of *Life in Shadows: Hidden Children and the Holocaust* in fall 2005. Each group included two separate classes of approximately 23 students. In group one, teachers provided an introductory lesson on the Holocaust that focused on the topic of hidden children; students visited the onsite *Life in Shadows* exhibition; students were assessed by means of the online survey and the Balanced Emotional Empathy Scale (BEES); and as an optional event, students visited the online *Life in Shadows* exhibition but were not assessed again. In group two, teachers provided an introductory lesson on the Holocaust that focused on the topic of hidden children and that utilized the online *Life in Shadows* exhibition; students were assessed by means of the online survey and the BEES test; and as an optional event, students visited the onsite *Life in Shadows* exhibition but were not assessed again. In group three, teachers provided an introductory lesson on the Holocaust that focused on the topic of hidden children and that utilized the online *Life in Shadows* exhibition; students visited the onsite *Life in Shadows* exhibition; and students were assessed by means of the online survey and the BEES test. Figure 2 graphically summarizes the design of the study.

Group 1

- Holocaust lesson
- Onsite exhibition
- Assessment survey
- BEES test
- Optional online exhibition

Group 2

- Holocaust lesson and online exhibition
- Assessment survey
- BEES test
- Optional onsite exhibition

Group 3

- Holocaust lesson and online exhibition
- Onsite exhibition
- Assessment survey
- BEES test
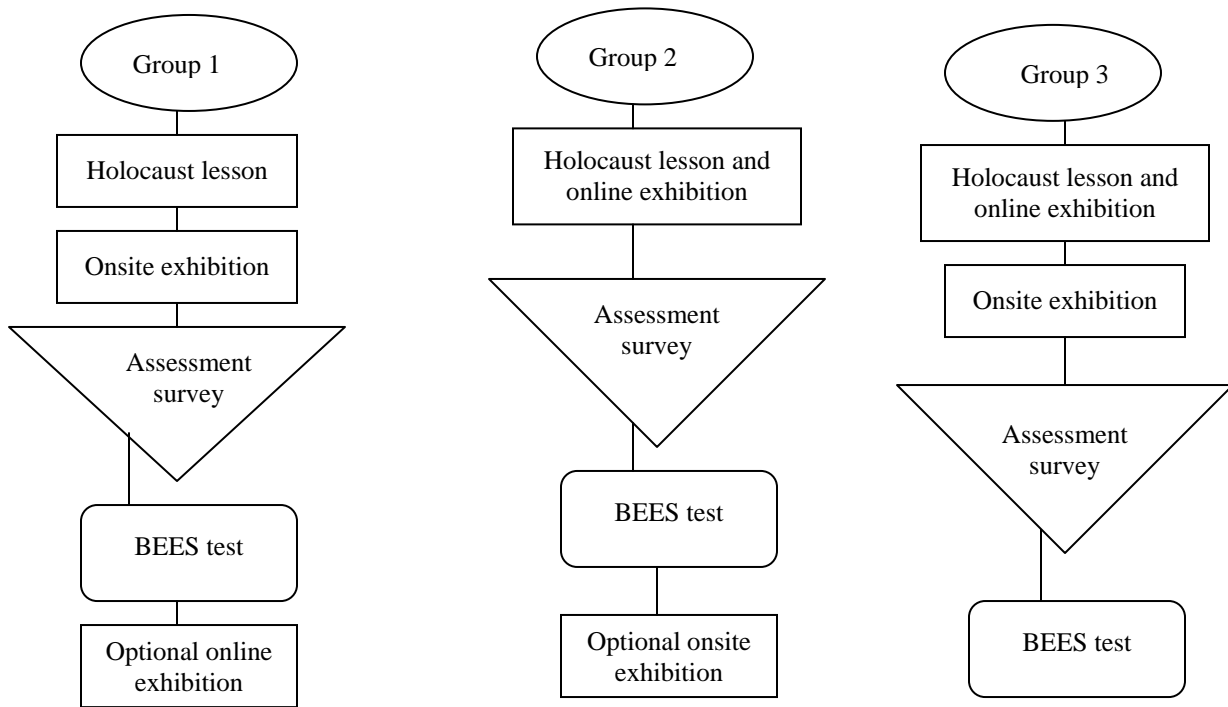
Figure 2. Scenarios of classroom visits to online and onsite Holocaust exhibitions.

Identification of Participants

An identification of participants in the proposed study took place in spring 2005 when a

Holocaust Educators' Workshop was held in Battle Creek, Michigan. Supported by funding

through the W. K. Kellogg Foundation, the Battle Creek Art Center had been chosen by the

United States Holocaust Memorial Museum (USHMM) to receive a traveling museum exhibition

Life in Shadows: Hidden Children and the Holocaust for display in fall 2005. Prior to this date,

teachers from around the state of Michigan were notified of the traveling exhibition and a

schedule of classroom field trip visits to the exhibition was developed. The traveling exhibition

and workshop were publicized through an announcement flyer (see Appendix A). This flyer was

posted on the Websites of the Michigan Association for Media in Education (MAME),

Michigan Teacher Network (MTN) and the Council of Holocaust Educators (CHE).

The Holocaust Educators' workshop was offered to secondary school teachers who had signed up to bring classes to the exhibition so that these teachers might better prepare their students for viewing *Life in Shadows*. The workshop took place at the local Willard Public Library on May 18, conducted by Stephen Feinberg, Director of National Outreach in the Museum's Education Division. The workshop was provided at no charge to attendees. These educators received professional development (PD) credit and stipends for purchases of instructional materials recommended by USHMM. Lesson plans focusing on the topic of hidden children were shared with workshop participants. These lessons had been developed by master teachers from USHMM teacher education programs to specifically support the *Life in Shadows* exhibition. Museum personnel had created an online version of *Life in Shadows* on the USHMM Website, thus affording the chance to study two varying formats of a museum exhibition.

During the course of the workshop, identification was made of a group of teachers to participate in the study from among all teachers attending the workshop. In turn, an identification of students in classes of these selected teachers was also made. Participants would include six eighth grade language arts classes that typically studied the Holocaust through reading *Anne Frank: The Diary of a Young Girl*. Students involved in the study were thus chosen by means of a nonprobability sampling method or convenience sample of a group of individuals who are readily available (Fink, 2003b).

School and class demographics were reviewed to determine the extent to which participating classes were comparable with regard to school enrollment, ethnicity, socio-economic level, school size, student teacher ratio, students with disabilities, and reading and writing proficiency scores on the MEAP (Michigan Education Assessment Program). Table 3 presents findings from https://oeaa.state.mi.us/ayp/, as provided by the Michigan Department of Education (2006).

Table 3

Demographic Characteristics of Participating Middle Schools

Variable	Madison	Springfield	Harper Creek
School Size (Enrollment)	334	435	469
White (%)	73.0	63.0	92.5
Black (%)	3.0	21.0	3.8
Hispanic (%)	22.0	8.0	2.2
Asian/Pacific Islander (%)	1.3	4.0	1.3
American Indian/Alaska Native (%)	.2	4.0	0.2
Multi Racial (%)	NA	NA	NA
Students receiving free or reduced lunch (%)	42	65	20.6
Students with disabilities (%)	21	14	13.6
Student/teacher ratio	15.2	14.2	18.1
Grade 7 Reading Proficiency 2005 MEAP (%)	84.7	62.5	79.6
Grade 7 Writing Proficiency 2005 MEAP (%)	47.3	39.3	54.1

Development and Procurement of Materials

The development and procurement of materials used in this study was accomplished with input and support from USHMM personnel, Holocaust educators and other researchers. The development/procurement process is described in the following section of the chapter on methodology with portions of the section devoted to the *Life in Shadows* exhibition, lesson plans, survey instrument and empathy testing scale.

Life in Shadows Exhibition

The procurement of *Life in Shadows: Hidden Children and the Holocaust* was made possible through USHMM's decision to send this traveling exhibition to the Battle Creek Art Center for a three-month period beginning in September 2005. The Art Center had been selected to host *Life in Shadows* following a successful 2003 project whereby the city's local synagogue (Temple Beth El) displayed the USHMM traveling exhibition *Oskar Schindler*. *Life in Shadows* focused on the children who went into hiding in order to escape the Nazi persecution and recounted stories of desperation, tragedy, courage, and survival. The traveling exhibition (considered the onsite exhibition in this study) included original artifacts, archival documents, photographs, video documentary, recorded audio, and objects from all over the world, donated or borrowed from hidden children themselves and their rescuers. This was the first USHMM traveling exhibition to include original artifacts and archival documents. The Web-based version of *Life in Shadows* (considered the online exhibition in this study) presented these same objects and used characteristics of Web media to support varied types of learning experiences (O'Dowd, 2004b).

Lesson Plans

Lesson plans related to the topic of hidden children during the Holocaust were collected and solicited from Holocaust educators so that this instructional material could be offered to teachers attending the spring 2005 workshop. As was mentioned in a description of the three scenarios of exhibition visits, teachers would employ these instructional resources in connection with the exhibition visits. Holocaust-related lesson plans had already been collected by the researcher as part of an advanced funding project for USHMM's Museum Teacher Fellowship Program and had been made available at http://mandelproject.us/index.htm (Lincoln, 2004). Additional lesson plans were sought with an incentive award through a posting on the CHE Web

site and through email communications with past USHMM Museum Teacher Fellows (see

Appendix B). The lesson plans were provided on CD to May workshop attendees and published

on the Museum Teacher Fellowship Resources site at http://mandelproject.us/index.htm. The

four hidden children lesson plans included:

- Children in Hiding During the Holocaust

- Hidden Children and the Holocaust: A Lesson and Pledge for Action

- In Hiding: A Choiceless Choice of the Holocaust

- "Let me sing a carefree song once more:" Poetry of Hidden Children

Survey Instrument

The online survey used in this study as a topic assessment tool (research sub-question 1)

and as a means to obtain student exhibition feedback (research sub-question 2) was designed by

the researcher through participation in a survey methods course. The School of Library and

Information Sciences at the University of North Texas offered this course in the spring 2005

semester with access to the University's Zope Web server and open-source QSurvey software.

Prior to constructing the survey, goals were established (research sub-questions 1 and 2)

to insure that the instrument would be properly designed and would yield useful data (Walonick,

2003). With this purpose in mind, the researcher contacted USHMM personnel who offered

advice as to what types of questions ought to be included in the survey. Lawrence Swiader,

Deputy Chief Information Officer at USHMM (personal communication, November 1, 2004),

pointed out that finding evaluation questions may take some work since the Museum's

exhibitions creation process doesn't begin with the writing of explicit learning objectives that can

be turned around into easy evaluation questions. Exhibit developers, for example, never say that

given one hour in the exhibit a person will be able to describe a hidden child as one who was

hidden physically or whose identity was changed. Swiader further recommended that attitudes

were worth evaluating. He would be curious about the attitudes of people towards learning more about hidden children or the Holocaust after having seen the onsite exhibition as opposed to the online exhibition. In the long term process, would one exhibition format create a greater or lesser tendency in students towards wanting to continue their education or maintaining their relationship with the Museum (real or virtual)? How empowered to continue their learning about the Holocaust does one or the other form of the exhibition make them? Swiader also expressed an interest in knowing more about the depth of feeling towards hidden children or the Holocaust subject matter in general after seeing one of the exhibitions. Which exhibition format allowed students to feel more deeply? Which format offered them the more engaging and memorable experience? Which format propelled them to associate with the Museum in a stronger way?

William Younglove, a colleague in the Museum Teacher Fellowship Program and organizer of the USHMM National Outreach Forums in Southern California, offered a rationale for the use of open-ended survey items as opposed to closed-ended items (personal communication, November 12, 2004). According to Dr. Younglove (a retired classroom teacher), closed-ended questions were less valuable, more tricky, and debatable at times. He often challenged students to pick the "best right answer." When they could mount a convincing argument, buttressed particularly with evidence, he gladly accepted alternate responses. Younglove shared some possible closed-ended items to include on the *Life in Shadows* survey but a quick perusal of these items made one realize that such questions would not be likely to elicit the type of affective responses described above by Swiader. An examination of such closed-ended items reinforced the belief that they should not be included in the survey.

1. The only hiding place NOT specifically mentioned in the *Life in Shadows* exhibit was
   a. the city sewers
   b. the nearby forests
   c. a wardrobe
   d. a haystack

2. A number of Jewish children hid successfully because they
    a. learned the prayers and rituals of their assumed religion
    b. wore the Star of David upside down and backwards
    c. managed to obtain forged papers
    d. appeared naturally "Aryan" in appearance

Having established goals and having made some preliminary decisions about survey design and format, USHMM curators were consulted so as to be certain of the commonality of exhibition content in the onsite/traveling version of *Life in Shadows* as compared to that of the online version of the exhibition. The survey instrument would need to be applicable for students who had viewed the onsite, online or both versions of *Life in Shadows*. To this end, Associate Curator Susan Goldstein Snyder provided the researcher with a list of artifacts contained in both exhibitions (personal communication, January 25, 2005). It should be mentioned, however, that there exists an underlying design variation in the exhibitions. In the traveling onsite exhibition, artifacts are not centered around the story of a particular individual but rather on circumstances, such as difficulties of hiding, circumcision, hiding with false papers, the role of rescuers, etc. In the online exhibition, a particularly effective portion of the Website ("Stories of the Hidden") allows viewers to sort through and examine the personal items and accounts of several individuals. The "sorting" activity is especially appropriate to this material since the survivors described within have had to build their own lives out of fragments (O'Dowd, 2004b).

Based upon input from Holocaust educators and USHMM personnel, a 36-item survey was initially constructed. Items 1-10 gathered student demographic information such as prior knowledge of the Holocaust history (item 4). Items 11-24 were designed as open-ended questions (research sub-question 1) whereby students responded to a visual image prompt provided by an artifact or photograph from the *Life in Shadows* exhibition. Items 25- 36 contained closed and open-ended items (research sub-question 2) designed to elicit student

feedback on such exhibition features as informational value, organizational layout, and ability to capture student interest (Borun, 1992; Marty & Twidale, 2004).

In order to obtain permission to conduct research involving human subjects, an online application and supporting documents were submitted to the Institutional Review Board (IRB) at the University of North Texas. A sample parental consent form and school administrative approval form can be found as supplemental attachments (Appendix C and Appendix D). Students gave their assent to participate in the project by completing the survey. Students were also informed that the survey was part of a research project being undertaken at the University of North Texas to determine the educational and informational value of a museum exhibition in the online vs. onsite or traveling version. The United States Holocaust Memorial Museum was interested in knowing how this exhibition impacted them and appreciated the students' willingness to respond to questions and to share their comments.

Following receipt of IRB approval (see Appendix E), the survey was piloted with students in the Language Arts classes taught by Mrs. Betty Faircloth and Mrs. Cindy Cable at Harper Creek Junior High School in Battle Creek, Michigan on March 22-23, 2005. The teachers had first used the lesson "Hidden Children and the Holocaust: A Lesson and Pledge for Action" at http://mandelproject.us/Durham.htm to provide an opportunity for their students to access the online version of *Life in Shadows* and to supplement their reading of *Anne Frank: the Diary of a Young Girl.* Students were guided by a group exploration activity sheet at http://mandelproject.us/LifeShadowsExplorationSheet.doc. The data collected from 52 Harper Creek Junior High School students thus represented group scenario 2 as outlined in Figure 1.

The pilot study allowed the researcher to observe students in the computer lab as they responded to the survey. Students appeared to be on task, focused, and did not try to rush through the survey. The survey was designed so that students would not feel that they were completing

an online quiz, testing their knowledge of the Holocaust. Rather there was an interest in learning how students were affected by the exhibit and in discovering how a historic topic was made real to them. Closed-ended items were used sparingly. The survey steered away from an overabundance of Likert-type questions so that students would not be bored or blow off the experience as just another survey.

Subsequent feedback from David Klevan, Education Manager for Technology and Distance Learning Initiatives in the Division of Outreach Technology at USHMM also led to a modification of original Survey Items 11-24 to elicit more evidence of cognitive learning (personal communication, June 15, 2005). The total number of survey items was reduced from 36 to 32 items so that the entire survey could be completed during a typical 40-minute class period. The review of survey items by qualified Museum educators and resulting revisions imparted a measure of face validity to the survey instrument. In other words, the survey appeared to ask needed questions and to use appropriate language (Fink, 2003b). The revised online survey is attached in a Word document format as Appendix F and represents the final version of the survey accessed by students participating in this study in the fall of 2005.

Empathy Testing Scale

Empathy testing materials (research sub-question 3) were obtained from the developer of the BEES (A. Mehrabian, personal communication, November 1, 2004). Purchase agreements with the developer preclude the reproduction of any items of the BEES in any medium for distribution to others (e.g., dissertation, written report, journal article or any Internet-based communication). Permission is only given to make hard-copy reproductions of the BEES for use with participants being tested. It is allowable per Mehrabian, however, to present the following two sample items from the BEES:

_____ Unhappy movie endings haunt me for hours afterward.

_____ I cannot feel much sorrow for those who are responsible for their own misery.

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Treatment

When the *Life in Shadows* exhibition officially opened at the Battle Creek Art Center on September 6, 2005, a full schedule of 72 separate classroom visits had been organized. Included among these visits were one student group from Madison Middle School in Adrian, Michigan; three student groups from Springfield Middle School in Battle Creek, Michigan; and two student groups from Harper Creek Middle School (previously known as Harper Creek Junior High School). Teachers from these three schools had attended the May 2005 Holocaust Educators' Workshop and their students had been selected as participants for the study.

In preparation for student visits to the onsite *Life in Shadows* exhibition, a group of 46 retired school teachers was identified to serve as volunteer docents. These retired teachers and an additional 24 Art Center volunteers received official training and a guided tour of the exhibition on September 1, 2005. The training/tour was conducted by *Life in Shadows* Associate Curator Susan Goldstein Snyder with the exhibition fully mounted. Ms. Snyder led the docents through the exhibition, provided background and unique historical details about various artifacts. Docents learned, for example, the story of five-year-old Frederik Steinkeller who hid by sitting on a small chair inside a wardrobe in an apartment in the Zawiercie ghetto. The wardrobe was a featured item in the exhibition. Docents also received various handouts including a teacher packet from USHMM, the official *Life in Shadows* exhibition pamphlet, a chronology of the Holocaust, an annotated listing of the films to be shown during the exhibition, and rack cards with information about supporting events for *Life in Shadows.*

Art Center staff (including the acting director, education coordinator and volunteer coordinator) worked with the researcher to plan the logistics of each school group visit. Student groups were met upon arrival by Art Center staff, with the Art Center Director typically greeting a busload of 55 students in the parking lot. Students were divided into two groups. One group

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assembled in a basement classroom to view the film *I'm Still Here, Real Diaries of Young People Who Lived During the Holocaust* based on Alexandra Zapruder's book *Salvaged Pages* while the other group toured the main exhibition. The film downstairs was approximately one hour in length and students spent an equal amount of time engaged with the exhibition upstairs. Groups then switched activities with the downstairs group coming up to experience the exhibition and the group that has just viewed the exhibition going downstairs to view the film.

Docents played an important role in facilitating the visits by school groups which did not exceed 55 students. Four docents were usually scheduled to guide one school group. Three docents attended to the students upstairs who viewed the exhibition while one docent and the Art Center Volunteer Coordinator supervised the showing of the film and guided students to respond in writing to reflection questions at the conclusion of *I'm Still Here.* Student responses (written on cards) were later posted on walls of the downstairs classroom and on surrounding stairways.

Students began their tour of *Life in Shadows* with a brief orientation to the exhibition by the Art Center Education Coordinator. Students gathered before the opening scrim photograph of a Catholic orphanage in Poland during the war and received some general background about the historical period. Students were then further sub-divided into three groups, introduced to a docent and given a gallery sheet of exhibition items such as the Frederik Steinkeller wardrobe mentioned above (see Appendix G). The docent guided his/her group of 6-9 students through one of the three main exhibition galleries, drawing students' attention to some of the artifacts noted on the gallery sheet. For example, students were most interested to see the actual green sweater worn by eight-year-old Krystyna Chiger who hid with her family and 16 others for 14 months in the sewer beneath the city streets of the Lvov ghetto. Each group spent approximately 15 minutes in a particular gallery and then rotated locations.

During the final 10-15 minutes of the *Life in Shadows* tour, the Education Coordinator brought all three sub-groups together in the central gallery so that students could discuss items highlighted on the gallery sheet and further share impressions of the exhibition. Students were especially moved by the gift of a 'life calendar' or prophecy drawing that one hidden child (Tsewie Herschel) received from his father who was later deported to the Sobibór killing center.

Additionally, students recorded on cards their responses to the following questions:

> What hardships of the experience of going into hiding would have been especially difficult for you?

> How does the knowledge gained from this exhibition influence the way you think about your choices today?

The comment cards (eventually numbering in the thousands after all school groups had visited *Life in Shadows*) were posted on walls of the downstairs classroom and on surrounding stairways of the Art Center. Students expressed a variety of emotions and offered comments such as the following:

> Going into hiding would be extremely difficult for me. It would be nearly impossible to keep quiet and barely move for several years. Those who survived, I idolize.

> I cannot see myself in the position of hiding and enduring the immense boredom and separation from my family and friends. I would be fearful of giving away my position and endangering the lives of others.

> Imagine existing on only 300 calories each day! I hope I can take this lesson into my normal everyday life.

> Seeing this exhibit and studying the Holocaust makes me want to not bully people anymore and never be against people who are different for me.

> This exhibit will affect the choices I make today because my brother and I fight all the time and hearing about how the girl lost her brother, I realize how much I love him.

> I felt very strongly about our visit to the Art Center. I knew a fair amount about the Holocaust but was able to still learn more. The actual artifacts made it more interesting and made the knowledge connect to us. To think that 1.6 million children died. This exhibit truly impacted my life.

The preceding description of the onsite exhibition tour is applicable to the experience had

by student groups from Madison, Springfield and Harper Creek Middle Schools. The researcher

met with teachers from these schools and planned the sequence of instructional activities and

participation in the *Life in Shadows* exhibition study as outlined in Table 4:

Table 4

Class Participation Schedule for Life in Shadows: Hidden Children and the Holocaust

School Teacher Visit Scenario	Activities	Time Frame
Madison Hogle Onsite	Holocaust unit in place at Madison + May workshop materials Visit to Art Center exhibition Completion of online survey and BEES	September 12-23, 2005 September 27, 2005 September 28, 2005
Springfield Johnson Onsite	Holocaust unit in place at Springfield + May workshop materials Visit to Art Center exhibition Completion of online survey and BEES	October 3-21, 2005 October 25, 2005 October 26, 2005
Springfield Gordon Online	*Life in Shadows* exhibit online via hidden children lesson online Completion of online survey and BEES Visit to Art Center exhibition	October 3-21, 2005 October 24, 2005 October 27, 2005
Springfield Gordon Online/Onsite	*Life in Shadows* exhibit online via hidden children lesson online Visit to Art Center exhibition Completion of online survey and BEES	October 3-21, 2005 October 28, 2005 October 31, 2005
Harper Creek Faircloth Online	*Life in Shadows* exhibit online via hidden children lesson online Completion of online survey and BEES Visit to Art Center exhibition	October 3-31, 2005 November 3, 2005 November 9, 2005
Harper Creek Kuipers Online/Onsite	*Life in Shadows* exhibit online via hidden children lesson online Visit to Art Center exhibition Completion of online survey and BEES	October 3-21, 2005 November 9, 2005 November 10, 2005

Data Collection Procedures

This study required the collection of data pertaining to Holocaust learning, exhibition

feedback and empathy responses. The following procedures were used to collect these data:

1. The Institutional Review Board (IRB) at the University of North Texas granted

   approval to conduct this research involving human subjects (Appendix E).

2. The researcher provided to schools involved in the study all necessary forms and

   materials including:

   a. Parental Consent Forms which were completed on behalf of each student
      participating in the study (Appendix C).

   b. Designated URL on University of North Texas server which was provided
      for each school in order to access online survey.

School Group	Survey URL
Madison Onsite	https://web2survey.unt.edu/users/mll0108/MadisonGroupASurvey/Favorites/
Springfield Onsite	https://web2survey.unt.edu/users/mll0108/BCPSGroup1Survey/Favorites/
Springfield Online	https://web2survey.unt.edu/users/mll0108/BCPSGroup3Survey/Favorites/
Springfield Online/Onsite	https://web2survey.unt.edu/users/mll0108/BCPSGroup5Survey/Favorites/
Harper Creek Online	https://web2survey.unt.edu/users/mll0108/HCMSGroupASurvey/Favorites/
Harper Creek Online/Onsite	https://web2survey.unt.edu/users/mll0108/HCMSGroupBSurvey/Favorites/

   c. Supplemental URLs were given to additional classes at Madison and
      Springfield so that students could access the survey without results
      included in data analysis.

   d. Paper copies of the survey instrument were provided in case of inability to
      connect to online survey (Appendix F).

   e. Student Assent form to participate in study was incorporated into survey.

   f. Paper copies of the Balanced Emotional Empathy Scale were provided.

3. The researcher collected student responses to reflection questions (written on

   cards) that were generated by the visits to the Art Center of the groups from

   Madison, Springfield and Harper Creek Middle Schools.

4. Evaluation feedback on the entire *Life in Shadows* exhibition project was obtained

   from teachers representing all 72 classrooms that visited the Art Center, including

   teachers in the three school districts participating in the research study (Appendix

   H).

Data Analysis Procedures

A data analysis plan, presented below as Table 5, was drafted to interpret results from

online survey and BEES test.

Table 5

Data Analysis Plan

Research Question	Survey Item(s) or Instrument	Variables		Analytic Method
		Independent	Dependent	
1	11-20	Nominal group (scenario of classroom visit)	Numerical: Topic assessment score on 10 survey items	Each student's responses to Survey Items 11-20 were converted to a numeric score using scoring rubric. An analysis of variance (ANOVA) was performed to determine a significant statistical difference among topic assessment responses among three groups.
1	4, 26	Nominal group (scenario of classroom visit)	Nominal: Incidence of an increased score for response to items about perceived knowledge level of Holocaust history (before vs. after class)	Determination was made if a student's response to Item 26 showed increase from response to Item 4. Chi-square test performed to measure discrepancies between observed and expected frequencies to determine a relationship between visit scenario and an increase in perceived knowledge level of Holocaust history.
2	21	Nominal group (scenario of classroom visit)	Numerical: Evaluation of media usefulness (survivor audio testimonies)	An ANOVA was performed to determine significant statistical difference among usefulness evaluation of survivor audio testimonies in three groups.
2	22, 23, 24			Performed similar ANOVA to determine significant statistical difference among usefulness evaluation of artifacts, video segments, or historic photographs among three groups of scenario visits.
2	25	Nominal group (scenario of classroom visit)	Open-ended text response: Artifact or photograph with greatest impact	Review of data and descriptive reporting of student comments to determine patterns of responses among three groups.

(table continues)

Table 5 *(continued).*

| Research Question | Survey Item(s) or Instrument | Variables | | Analytic Method |
		Independent	Dependent	
2	30	Nominal group (scenario of classroom visit)	Numerical: Interest level in further exploration of USHMM Website	An ANOVA was performed to determine significant statistical difference among interest levels in further exploration of USHMM Website among three groups.
2	31	Nominal group (scenario of classroom visit)	Numerical: Interest level in visiting USHMM	An ANOVA was performed to determine if there was significant statistical difference among interest levels in visiting USHMM among the three groups.
2	27	Nominal group (scenario of classroom visit)	Open-ended text response: Unanswered question or Holocaust topic to explore further	Review of data and descriptive reporting of student comments to determine patterns of responses among three groups.
2	28	Nominal group (scenario of classroom visit)	Open-ended text response: Interest in studying other genocides	Descriptive reporting of student comments to determine patterns of responses among three groups.
2	29	Nominal group (scenario of classroom visit)	Open-ended text response: Involvement in community service	Descriptive reporting of student comments to determine patterns of responses among three groups.
2	32	Nominal group (scenario of classroom visit)	Open-ended text response: Most important lesson learned from exhibit and Holocaust unit	Descriptive reporting of student comments to determine patterns of responses among three groups.
3	Balanced Emotional Empathy Scale	Nominal group (scenario of classroom visit)	Numerical: Score on BEES	An ANOVA was performed to determine significant statistical difference among empathy test scores among the three groups.

Data were first collected from the University of North Texas server so that text and single item survey responses could be combined into Microsoft Excel files. In order to convert each set of student responses to Survey Items 11-20 into a numeric score, a scoring rubric provided by the New York State Education Department was utilized (New York State Education Department 2005). To further assist in the scoring process, sample responses to items 11-20 were obtained from USHMM Teacher Fellows Dr. William Younglove, Dr. Joyce Witt and Mrs. Honey Kern (personal communications, July 30, 2005). BEES results were also inputted into Microsoft Excel files. Quantitative data were analyzed using SPSS® 13.0 for Windows® software[*] (Survey Items 4, 11-20, 21-24, 26, and 30-31). Close-ended items, yielding quantitative data, were analyzed using descriptive statistics (Vaughan, 2003). Qualitative data analysis was used in reference to Survey Items 25, 27, 28, 29 and 32. The responses to these open-ended items were organized by descriptive terms as part of a content analysis process (Colorado State University, Writing Center, 2004).

Limitations

There were several limitations that should be acknowledged in this study. One limitation pertained to the scope of the study which included eighth grade language arts classes in three Michigan locales. It is not possible to generalize results to other grade levels or to schools in other settings. The very powerful historical content of the traveling and virtual exhibitions that figured in this study also makes it difficult to extend generalizations about Holocaust learning to other areas of the social studies curriculum.

Additional limitations arose from smaller sample sizes. Due to the fact that not all students turned in a parental consent form, the average class size was reduced to 23 students.

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[*] SPSS Inc., www.spss.com; Microsoft Corp., www.microsoft.com

Differences among student populations with regard to academic achievement and demographics resulted in a variation on the original design plan that called for each middle school to represent a particular scenario of classroom visit. For example, the study originally intended for all Harper Creek students to follow the group 2 scenario of viewing the online exhibition and undergoing assessment. Springfield Middle School would follow the group 3 scenario and Madison Middle School would follow the group 1 scenario. The modified design resulted in students in three classes at Springfield being compared among themselves (according to the three scenarios of class visits to the exhibition) while three separate classes from Madison and Harper Creek were compared among themselves.

To address the problem of small sample size, an attempt was made to extend the research and thereby gain additional subject participants. The Director of Education at the Museum of Jewish Heritage: A Living Memorial to the Holocaust (which received *Life in Shadows* following the exhibition's display in Battle Creek) alerted teachers in the Metropolitan New York area about the opportunity to complete the online survey and to use the lesson plans focusing on hidden children (personal communication, January 22, 2006). A professional article written for *School Library Journal* (Lincoln, 2006b) and conference presentation at Museums and the Web 2006 (Lincoln, 2006a) also tried to involve more students and teachers in the study.

The survey instrument itself posed another limitation to this study. Items 11-20 found on the online survey were intended to be used as a topic assessment tool. At best, the survey assessed content knowledge associated with the *Life in Shadows* exhibition. Although the survey was developed with input from Holocaust Museum educators, other measures of knowledge about the Holocaust may not have been assessed by the survey.

This study purposefully did not employ a pretest/posttest design so as not to sensitize students to the test. Administering a pretest can be looked upon as a benefit or as a threat to the validity of a study (MacMillan, 2004). Additional problems can arise when attempts are made to measure noncognitive traits such as attitudes on a Likert scale as was done in this study. Two sources of error may occur: response set and faking. Response set is the tendency for subjects to respond in the same way while faking involves deliberately inaccurate responses by subjects.

Finally, a potential source of error can stem from the involvement of the investigator. If the researcher is personally connected to the topic under study, there is a risk of subjective bias. People are low-fidelity observational participants. Extraneous variance in data can be introduced when the human observer is the recording agent, with all his/her fallibilities and preconceived notions (Webb et al., 2000). It is possible, however, to compensate for error by converging corroboration. The use of multiple methods helps the deficiencies of one method to be overcome (Fidel, 1993). In an example of triangulation, this study employed an online survey, an emotional empathy scale, and a teacher exhibition feedback form, in addition to gathering comment cards from students. The study's mixed method approach was designed to contribute toward a better understanding of the informational value of the online vs. the onsite version of a Holocaust Museum exhibition.

CHAPTER IV

DATA ANALYSIS RESULTS

Data analysis results pertaining to this study of the informational value of the online and onsite Holocaust museum exhibition are presented in this chapter. The data analysis plan outlined previously in Table 5 provides a structure by which to group both quantitative and qualitative data obtained from the online survey instrument and from the Balanced Emotional Empathy Scale (BEES). These quantitative and qualitative data are used in response to the broadly stated research question: How does a visit to an online Holocaust museum exhibition prepare students for a trip to an onsite Holocaust museum exhibition?

An introductory chapter section contains general demographic data about the student population who participated in this study. Subsequent chapter sections on topic assessment and knowledge level set forth data results relevant to the first research sub-question which asked how topic assessment responses differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite. Chapter sections on media usefulness, artifact impact, further Holocaust study, genocide, community service, United States Holocaust Memorial Museum (USHMM) Website exploration, USHMM visits, and important lessons include data results that help answer the second research sub-question. This question considered how exhibition evaluation feedback differs among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite. Finally, a concluding chapter section on the BEES offers the data results applicable to the third research

sub-question which asked how empathy test scores differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite.

Demographic Data

This study considered three groups or scenarios of classes that viewed various combinations of the onsite and online versions of the USHMM exhibition *Life in Shadows: Hidden Children and the Holocaust* fall 2005. Demographic characteristics of the middle schools participating in the study have already been presented in Chapter III, Table 3. A review of several of these characteristics points out that the percentages of students receiving free and reduced lunch were the following: 65% for Springfield, 42% for Madison, and 20.6% for Harper Creek. Furthermore, the percentages of students achieving Reading Proficiency on the 2005 MEAP test were 62.5% for Springfield, 84.7% for Madison, and 79.6% for Harper Creek. The percentages of students achieving Writing Proficiency on the 2005 MEAP test were 39.3% for Springfield, 47.3% for Madison, and 54.1% for Harper Creek. There is evidence, therefore, of differing backgrounds for these school populations with respect to socio-economic factors and academic achievement. Responses to Survey Items 2, 5, 6, 7, 8, 9 and 10 contained in the online survey instrument provided additional data about the actual student population who participated in this study.

Six eighth grade language arts classes formed the three groups or scenarios of classes in the study, as outlined in Chapter III, Table 4. Each group included two separate classes and each class was made up of 23 students, resulting in a total of 138 student participants. Survey Item 10 asked students which version of *Life in Shadows* they had viewed (onsite, online or both). Data results for this survey item revealed an equal distribution of 46 students for each scenario version of the exhibition.

Responses to Survey Item 2 pointed to a balanced participation by gender. In both the onsite and online/onsite scenarios, the breakdown was 50% male, 50% female; in the online scenario, the breakdown was 54% male, 46% female. With regard to Survey Item 3, 54% of students, once again in both the onsite and online/onsite scenarios, reported having taken a prior class about the Holocaust while only 35 % of students in the online scenario stated that they had taken a prior Holocaust class. Responses to Survey Item 7 revealed that 7% of students in the onsite scenario had previously visited USHMM along with 2% in the online scenario and 30% in the onsite/online scenario. According to Survey Item 8, 37% of students in the onsite scenario had visited another Holocaust museum along with 17% in the online scenario and 54% in the onsite/online scenario. A substantial number of students reported on Survey Item 9 that they had visited a Holocaust Web site: 65% in the onsite scenario; 74% in the online scenario; and 76% in the onsite/online scenario. Table 6 summarizes the number of responses for the above mentioned survey items.

Table 6

Demographic Data for Three Scenarios of Classroom Visits

Scenario of visit	Male	Female	Prior class	1st class	Prior USHMM visit	No prior USHMM visit	Prior visit to another Holocaust museum	No prior visit to another Holocaust museum	Prior use of Holocaust Web sites	No prior use of Holocaust Web sites
Onsite	23	23	25	21	3	43	17	29	30	16
Online	25	21	16	30	1	45	8	38	34	12
Online/onsite	23	23	25	21	14	32	25	21	35	11
Total	71	67	66	72	18	120	50	88	99	39

Responses to Survey Items 5 and 6 provided further data about student participants in this study. *Anne Frank: The Diary of a Young Girl* was chosen as the most memorable Holocaust-related book ever read by 60% of respondents, and 10% of respondents selected *The Devil's*

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Arithmetic. While these two titles were read in connection with a class assignment, several

students indicated that they had individually chosen to read *Number the Stars*, *Twenty and Ten*,

Daniel's Story, *The Island on Bird Street*, and *Night*. Students also named *I Have Lived A*

Thousand Years, *Four Perfect Pebbles*, *The Assisi Underground*, *Auschwitz: A Doctor's Story*,

and *Trains* as books that had made a profound impressions on them. Thirty-nine percent of

respondents chose *Forget Me Not: The Anne Frank Story* as their most memorable film ever

seen; 24% selected the film version of *The Devil's Arithmetic*; and 12% named *Schindler's List.*

Table 7 summarizes the book choices among students and Table 8 presents the film selections.

Table 7

Most Memorable Holocaust-related Book

Title	Onsite	Online	Onsite/Online	Total
Anne Frank: The Diary of a Young Girl	23	17	43	83
Miscellaneous titles	5	17	1	23
The Devil's Arithmetic	12	1	1	14
Number the Stars	3	3	1	7
Twenty and Ten	1	3	0	4
Daniel's Story	0	2	0	2
The Island on Bird Street	1	1	0	2
Night	1	1	0	2
(No response)	0	1	0	1
Total	46	46	46	138

Table 8

Most Memorable Holocaust-related Film

Title	Onsite	Online	Onsite/Online	Total
Forget Me Not: The Anne Frank Story	22	17	15	54
The Devil's Arithmetic	15	0	18	33
Schindler's List	3	14	0	17
I'm Still Here	0	4	11	15
Jacob the Liar	5	0	1	6
(No response)	0	5	0	5
(Miscellaneous titles)	1	2	1	4
Documentaries	0	2	0	2
The Pianist	0	2	0	2
Total	46	46	46	138

Topic Assessment

To answer the first research sub-question which asked how topic assessment responses differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite, an analysis of variance (ANOVA) was performed. This statistical procedure was run using SPSS® 13.0 for Windows® software[*] to determine if there was a significant statistical difference among topic assessment responses from students in the

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[*] SPSS Inc., www.spss.com; Microsoft Corp., www.microsoft.com

three scenarios of classroom visits. Each student's responses to Survey Items 11-20 were converted to a numeric score using a scoring rubric. The Levene statistic for the homogeneity of variances showed a balanced design with the significance value of .260 > .05. There was a statistically significant effect of the scenario of classroom visit on the topic assessment scores, $F(2, 135) = 8.806$, $p < .05$. Eta-squared (the percent variance accounted for in the dependent variable) was computed to be .115. This is considered to be just under a medium effect size according to Cohen (Hinkle, 2003). The ANOVA summary table is presented below as Table 9.

Table 9

ANOVA for Content Score

Source	Sum of Squares	*df*	Mean Square	*F*	Sig	eta^2
Between	256.536	2	128.268	8.806	.000	.115
Within	1966.370	135	14.566			
Total	2222.906	137				

Post hoc tests revealed that the mean scores of students from the onsite classroom visit scenario were statistically different from students in the online and online/onsite classroom visit scenarios. The Tukey HSD procedure indicated that students who viewed the onsite exhibition had means that were statistically significantly lower ($p < .05$) than students in the other scenarios visits. The SPSS output also showed the 95% confidence interval for each mean difference. The confidence interval for the mean difference between the onsite and the online scenario visit was noted as -4.82 to -1.05. The confidence interval for the mean difference between the onsite and the online/onsite scenario visit was shown as -4.73 to -.96. In each instance, the confidence interval does not include zero, meaning that the mean difference in the population is not zero.

To summarize, the scenario of classroom visit had a statistically significant effect on topic assessment content scores; students who participated in the onsite visit scenario scored lower in terms of topic assessment. Figure 3 displays a visual representation of the distribution of content scores on the topic assessment portion of the survey instrument.

Content Score by Scenario
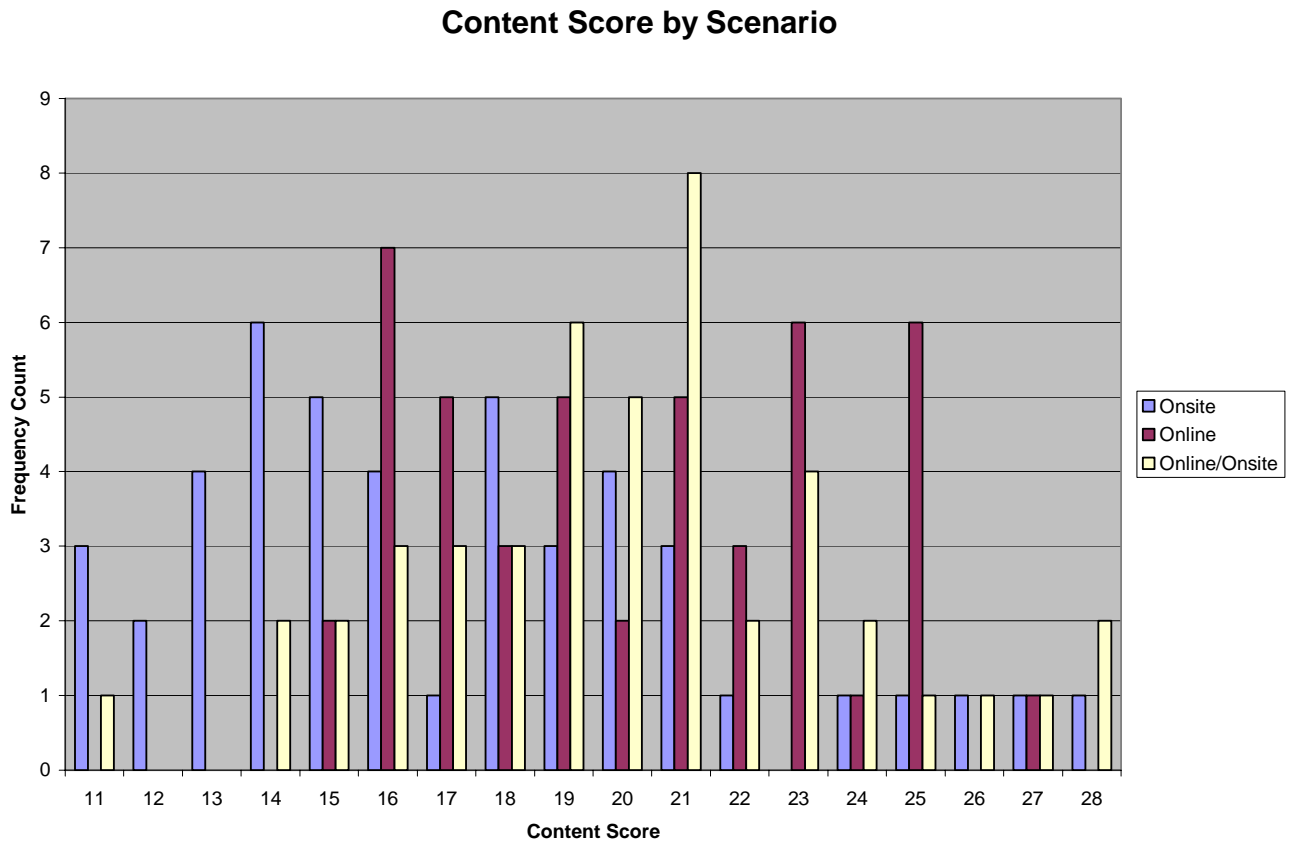
Figure 3. Content scores by scenario.

Knowledge Level

While data pertaining to Survey Items 11-20 were analyzed in the previous section to determine if there was a significant statistical difference among topic assessment responses from students in the three scenarios of classroom visits, student responses to Survey Items 4 and 26 also had a bearing on the first research sub-question. Survey Item 4 asked students how they would have rated their knowledge level of Holocaust history on a scale of 1 through 4 before

taking the present class. Survey Item 26 asked the same question of students after taking the class. Stated simply, the ANOVA revealed that students who participated in the onsite visit scenario received lower topic assessment scores. Were students in any one scenario group more likely to believe that their knowledge level had increased following involvement in the class and the Museum exhibition experience?

A chi-square test was run to determine if there was a significant statistical relationship between scenario of classroom visit and a perceived increase in knowledge level of Holocaust history. SPSS calculated the Pearson chi-square score as 3.499 and degrees of freedom as 2. The *p*-value for this chi-square score was .174. Because this value is not less than 0.05, the null hypothesis failed to be rejected and it was not possible to conclude that a perceived increase in knowledge level of Holocaust history was related to scenario of classroom visit. The contingency coefficient was found to be .157 for the .174 significance value.

Although a significant statistical relationship was not found in the relationship between scenario of classroom visit and a perceived increase in knowledge level of Holocaust history, descriptive statistics showed that 106 students (76.8%) reported an increase in their knowledge level of Holocaust history following their experience with the Museum exhibition experience. Thirty-two students (23.2%) reported no increase. In other words, over three-quarters of all students reported learning more about the Holocaust after having participated in a class that included a visit to the *Life in Shadows* exhibition. Figure 4 graphically displays the perceived increase in knowledge level of Holocaust history among students in all scenario groups.
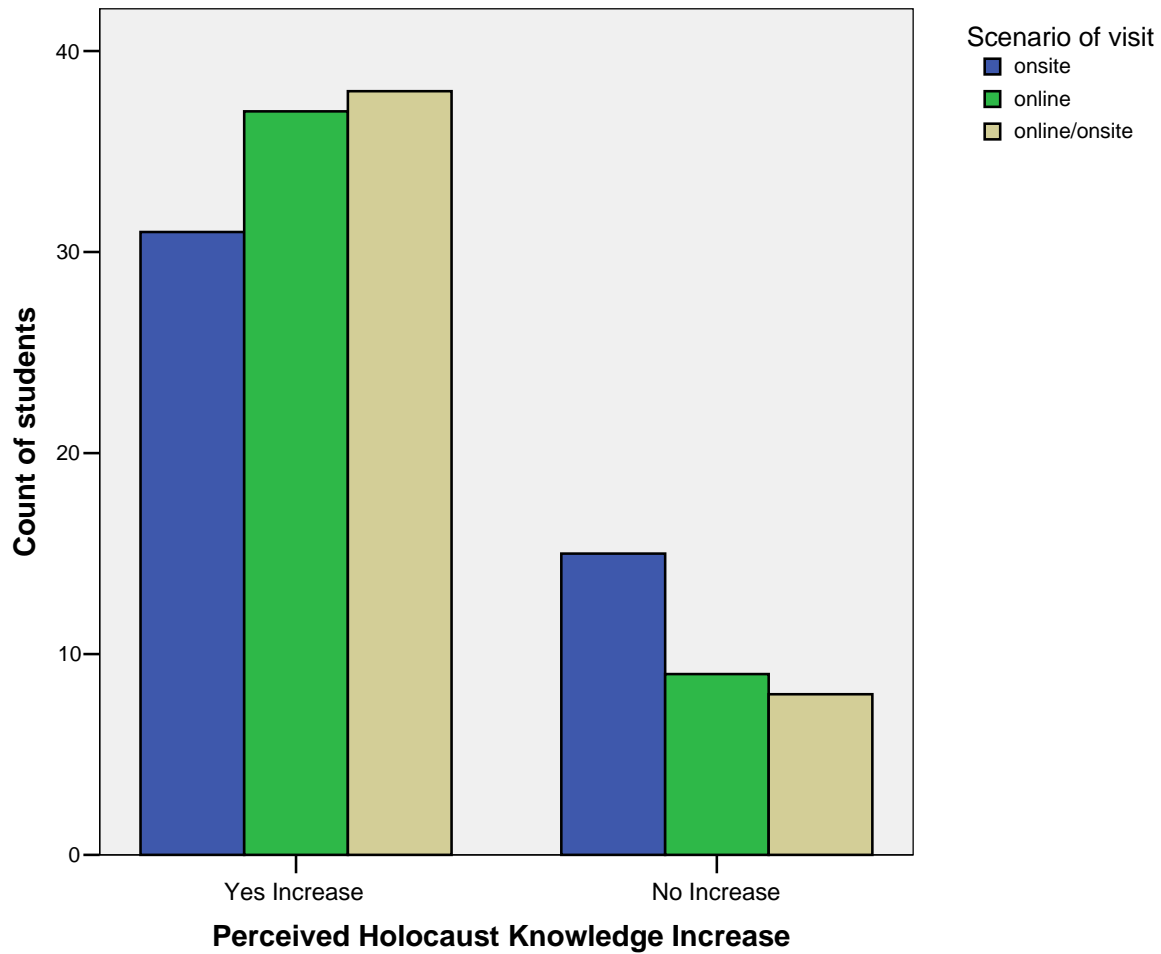
Figure 4. Perceived Holocaust knowledge increase.

Media Usefulness

The second research sub-question considered how exhibition evaluation feedback differs among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite. In an effort to gauge this evaluation feedback, Survey Items 21-24 asked students to indicate the usefulness of the following media in the context of the exhibition: recorded audio of survivor testimonies; video segments; artifacts; and historic photographs.

An ANOVA was performed to determine if there was significant statistical difference among usefulness evaluations for the above mentioned media formats. The Levene statistic for the homogeneity of variances showed a balanced design with the significance value of .699 > .05 for audio format, 051 > .05 for video format, .066 > .05 for artifact format, and .871 > .05 for photograph format. There was a statistically significant difference among usefulness evaluations for the artifact format, $F(2, 135) = 6.799$, $p < .05$. There was a statistically significant difference among usefulness evaluations for the video format, $F(2, 135) = 3.075$, $p < .05$. Eta-squared (the percent variance accounted for in the dependent variable) was computed to be .091 for the artifact format and .044 for the video format. These values for eta squared are considered to be in the small to medium effect size range according to Cohen (Hinkle, 2003). Table 10 presents the ANOVA summary table.

Table 10

ANOVA for Media Usefulness Evaluation

Format	Source	Sum of Squares	df	Mean Square	F	Sig.	eta^2
Audio	Between Groups	3.957	2	1.978	1.657	.195	.022
	Within Groups	161.152	135	1.194			
	Total	165.109	137				
Video	Between Groups	4.362	2	2.181	3.075	.049	.044
	Within Groups	95.761	135	.709			
	Total	100.123	137				
Artifact	Between Groups	8.536	2	4.268	6.779	.002	.091
	Within Groups	85.000	135	.630			
	Total	93.536	137				
Photo	Between Groups	2.087	2	1.043	1.165	.315	.017
	Within Groups	120.870	135	.895			
	Total	122.957	137				

Post hoc tests (Tukey HSD) revealed that the usefulness ratings of artifacts were statistically significantly lower among students who participated in the online classroom scenario

visit. The Tukey HSD procedure also revealed that usefulness ratings of video were statistically

significantly higher among students who participated in the online/onsite classroom scenario

visit. A crosstabulation was then run to further analyze the breakdown of usefulness of artifacts

ratings by scenario of classroom visit. A similar crosstabulation was run for the usefulness of

videos. Figure 5 illustrates the usefulness ratings of the artifact format by scenario of visit.
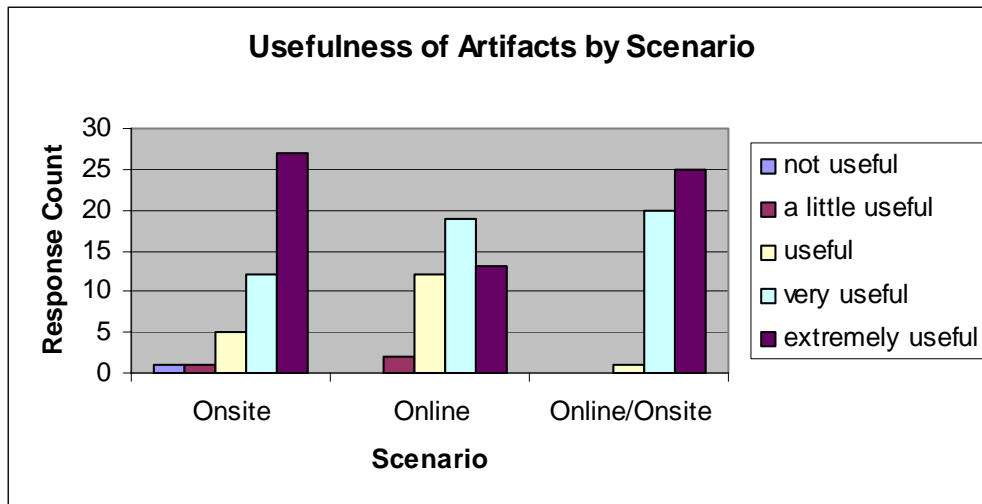
Figure 5. Usefulness of artifacts by scenario.

Artifact Impact

Although higher usefulness ratings of artifacts were reported by students who

participated in the onsite and online/onsite visits, through Survey Item 25, students in all three

visit scenarios offered feedback concerning the artifact or photograph from the exhibition that

had the greatest impact on them. The wardrobe in which Frederik Steinkeller hid was chosen by

25 or 18% of all 138 students in response to this survey item. There was a balance with respect to

response by visit scenario; 7 students in the onsite group, 10 students in the online group and 8

students in the online/onsite group selected the wardrobe as the artifact having the greatest

impact. A thematic summary of responses to Survey Item 25 is presented in Table 11 and actual

examples of responses to Survey Item 25 can be found in Table 12.

Table 11

Thematic Summary of Responses to Item 25 (artifact/photo with greatest impact)

Artifact/photo identified	onsite	online	online/onsite	total
Wardrobe	7	10	8	25
General photographs	5	8	4	17
Life calendar	5	3	7	15
Boy disguised as girl	4	2	6	12
Sweater of girl in sewer	6	0	3	9
Toy soldiers	3	4	2	9
Girl with dying child	3	0	3	6
Diaries	2	1	4	7
Lida Kleinman at Catholic orphanage	5	2	0	7
(No response)	2	4	1	7
Toddlers in orphanage	0	3	1	4
Shoes worn by two children	1	0	2	3
Survivor video testimonies	1	0	2	3
Blue dress	0	3	0	3
Mass graves	1	2	0	3
Autobus	1	0	1	2
3-year-old in fur coat	0	1	0	1
Rosary	0	1	0	1
Religious cross	0	1	0	1
Two suitcases for family of three	0	1	0	1
Picture drawn for mother in hospital	0	0	1	1
Watch given to little boy by older brother	0	0	1	1
Total	46	46	46	138

Table 12

Examples of Responses to Item 25 (artifact/photo with greatest impact)

Artifact/photo identified	Scenario	Response
Girl with dying child	onsite	The picture where the little girl had her brother in her arms and he was about to die It made me think what if that was me and my younger sister or me and my younger brother.
Lida Kleinman at Catholic orphanage	onsite	The picture of the girls face being scrathed out. Because she had to hide her identity any way she could really disturbe me.
Diaries	onsite	THE ACTULL WRITING THAT A CHILD HAD WROTE
Shoes worn by two children	onsite	The artifact that had the greatest impact on me was the shoes that were worn by two different people. It showed me that these people were real. Children actually walked in those shoes.
Life calendar	online	The calendar that the dad made of his sons life. It showed that he really loved his son and he only wanted the best for him.
Rosary	online	The rosary, imagine having to lie to the soldiers telling them that you are catholic when you are really Jewish and you don't want to be killed. This is what many people did.
Boy disguised as girl	online	The boy pretending to be a girl because he gave up his looks AND belifes.
3-year-old in fur coat	online	The little 3-year-old girl looked so sad wrapped in a fur coat.
Toy soldiers	online	The toy soldiers because it said the child who had played with them was later captured and sent to a concentration camp.
Toddlers in orphanage	online	The toddlers on the ground sitting in a half moon circle just looking around. They probably never saw their parents again.
Sweater of girl in sewer	online/onsite	The artifact that had the most impact on me was the sweater that the little girl actually wore in the sewer for 14 months.
Watch given to little boy	online/onsite	The watch that was givin to the little boy from his big brother.
Wardrobe	online/onsite	I would have to say that the wardrobe had the most effect on me because it was the actual thing. I know this sounds stupid, but i could see the little boy sitting in the wardrobe crying.
Picture drawn for mother in hospital	online/onsite	One of the items would be the picture that Hans Ament had drawn for his Mom while she was in the hospital.

In the above sample responses to Survey Item 25, students who participated in each of the three scenario visits recalled a particular artifact or photograph that truly impacted them. Responses have not been edited to correct spelling or grammar so as to capture the genuine impressions of students. The terms "actual" and "real" are used by several students in describing why an exhibition item was especially meaningful to them (as in the examples of the diaries, shoes, wardrobe, and sweater). A student in fact states that the shoes worn by two different children "showed me that these people were real." There is a sense of amazement as the student continues, "Children actually walked in those shoes."

Students made a connection to the tragic circumstances suffered by children portrayed in *Life in Shadows*. The photograph of the girl holding a dying child evoked an image of a student's own younger sister or brother. Another student felt almost able to see the little boy sitting in the wardrobe crying. Students recognized that various artifacts revealed special bonds between family members among Holocaust victims (as in the examples of the life calendar, the watch, and a picture drawn for a mother in a hospital). Students were troubled by the fact that certain artifacts or photographs represented the need to hide one's religion (as in the examples of the boy disguised as a girl and the rosary). The simplicity and power of an everyday object such a child's home-made toy soldiers made an impression on students. A little girl wrapped in an oversized fur coat was seen as a poignant and touching image. Students were both disturbed (Lida Kleinman) and deeply saddened (toddlers in orphanage) by exhibition photographs noted in Table 12.

Figure 6 (below) presents a compilation of the photographs and artifacts that were mentioned in this section and that students found to be especially moving. In short, evaluation feedback obtained through responses to Survey Item 25 offered evidence that students were affected by the *Life in Shadows* exhibition in the onsite, online and online/onsite versions.

Lida Kleinman in Catholic orphanage

Toddlers (Etterbeek, Belgium)

Rosary of Lida Kleinman

Girl with dying child

Watch given to Benno Ginsburg

Toy soldiers made by Jurek Orlowski

Sweater worn by Krystyna Chiger

Life calendar of Tsewie Herschel

Wardrobe hiding place of Jakob Steinkeller

Hans Ament's drawing for mother

Boots worn by two children

Peter Feigl's diary

Dawid Tennenbaum disguised as girl

Estera Horn wrapped in fur coat

Figure 6. Artifacts and photographs impacting students (courtesy of USHMM Photo Archives).

Further Holocaust Study

In addition to offering feedback concerning the impact of various exhibition artifacts and photographs, students were asked to identify an unanswered question or topic related to the Holocaust that they would like to further explore. The responses to this particular Survey Item 27 are summarized thematically in Table 13 while actual survey response examples are reported in Table 14 in an unedited format.

Table 13

Thematic Summary of Responses to Item 27 (Holocaust topic for further study)

Thematic topic identified	onsite	online	onsite/online	total
Role of Hitler	6	9	7	22
Horror, disbelief	9	4	3	16
Historical background, WWII	7	1	7	15
Circumstances of hiding	3	6	4	13
Survivors' stories	3	6	3	12
Death camps	5	1	4	10
No topic	1	5	4	10
Aftermath of war	2	1	4	7
Interest in Museum or specific artifact	4	1	2	7
Nazi Party	0	5	2	7
Children finding families	2	2	2	6
Diaries	1	0	3	4
Resistance	1	1	1	3
The Franks	2	1	0	3
Other victims, genocides	0	2	0	2
Fate of animals	0	1	0	1
Total	46	46	46	138

Table 14

Examples of Responses to Item 27 (Holocaust topic for further study)

Thematic topic	Scenario	Response
Role of Hitler	onsite	Why did Hitler want to do this to these innocent people?
Role of Hitler	online	What was Hitlers chidhood like and how did he kill himself?
Role of Hitler	online/onsite	How did Hitler reign terror without opposistion before America joined the war?
Horror, disbelief	onsite	I still haven't understood how something like that could have happened. How could someone have so much hate, they would attempt to kill so many innocent people?
Horror, disbelief	online	Did the Nazi officials ever feel shame in killing the Jews?
Horror, disbelief	online/onsite	I have no wish to know anything more than I already do about this horrific, sacrilegious abomination.
Survivors' stories	onsite	What kept hope in the survivors hearts?
Survivors' stories	online	I would like to talk to the survivors and see their perspective on it. How much of a grudge do survivors still hold?
Survivors' stories	online/onsite	I would still like to explore the video files of the children that survived because that's like up front and personal stories of what they went through.
Interest in Museum or specific artifact	onsite	How do museum curators know who used a particular artifact and if it was even really ever used?
Other victims, genocides	online	I would like to explore more about what the Gypsies had to go through.
Diaries	online/onsite	Why is Ann Frank's diary more known then some others diaries?

An initial examination of responses to Survey Item 27 shows 22 or 16% of all 138

students were interested in further learning about the role played by Adolf Hitler within the

context of the Holocaust. These particular responses reflect a balance with respect to response by

visit scenario; 6 students in the onsite group, 9 students in the online group and 7 students in the online/onsite group. A sense of horror or disbelief was simply expressed by 16 students (12%) from all visit scenarios when asked to identify a Holocaust-related topic that they would like to study. There were 12 students (9%) who spoke of a strong desire to probe more into the personal stories of survivors in an effort to learn this history directly from first-person accounts. More individualized or unique responses also came from students in each visit scenario. For example, one student who participated in an onsite visit was curious as to how museum curators know who used a particular artifact and if it was even really ever used. A student who viewed *Life in Shadows* online wanted to explore more about what the Gypsies had to go through. A student who experienced the exhibition both online and onsite asked why Anne Frank's diary is more known than some others diaries. Only 10 students (7%) gave no reply in response to the survey item. Evidently, most students were interested in gaining additional knowledge about the Holocaust after exposure to the Museum exhibition.

<center>Genocide</center>

A related question (Survey Item 28) asked students to identify other genocides in recent history that they might like to further study. Response pattern by visit scenario was not readily seen. Instead, it was noticed that fewer students across all three visit scenarios named specific historic topics in response to this survey item. While 24 or 18% of all 138 students gave no response, 22 students (16%) reiterated their preference for undertaking additional study about the Holocaust. Combined genocide topic choices related to the American Civil War, racism and the Ku Klux Klan accounted for 36 (26 %) of responses. Genocides that have occurred in Rwanda, Bosnia, North Korea, Afghanistan, Slovakia and Sudan were cited by several students. Table 15 presents a thematic summary of responses to Survey Item 28.

<center>75</center>

Table 15

Thematic Summary of Responses to Item 28 (further study of genocides)

Theme identified	onsite	online	onsite/online	total
None	7	9	8	24
Holocaust additional study	12	5	5	22
Civil War	4	4	8	16
Iraq	5	5	3	13
Racism	3	7	3	13
KKK	1	3	3	7
Rwanda	2	1	4	7
Religious persecution	2	1	1	4
Native Americans	1	2	1	4
Bosnia	0	2	2	4
North Korea	4	0	0	4
Misc. current events	2	1	0	3
9/11	2	1	0	3
Armenian genocide	0	0	3	3
Japanese treatment of Chinese WWII	0	1	2	3
Kurds	0	1	1	2
Afghanistan	0	2	0	2
Hate groups	0	0	1	1
Slovakia	1	0	0	1
Stalin	0	1	0	1
Sudan	0	0	1	1
Total	46	46	46	138

Community Service

Survey Item 29 asked students if there was a community service project (such as volunteering at the hospital, helping out at the food bank, etc.) in which they would like to become involved. As was seen in the discussion related to Survey Item 28, a response pattern by

visit scenario was not evident. A good number of students (42 or 30%) gave no response or

indicated that they had not considered such an option as community service. The lower response

rate could be explained by the fact that middle school students do not yet drive, depend on

parents for transportation and so have less flexibility with respect to being able to do after-school

volunteer work. A thematic summary of responses to Survey Item 29 is presented in Table 16.

Table 16

Thematic Summary of Responses to Item 29 (helping with community service project)

Theme identified	onsite	online	onsite/online	total
No response/Had not considered this	13	14	15	42
Hospital	7	11	13	31
Food Bank	6	3	4	13
Humane Society	8	1	2	11
Hurricane relief	3	2	2	7
Donate clothes, food	1	2	2	5
Environmental cleanup/Habitat	3	1	1	5
Volunteering in general	1	1	2	4
Museums and archeology	0	3	0	3
Church/Youth group	1	1	1	3
Elderly	3	0	0	3
Coaching kids	0	1	1	2
Orphanage	0	2	0	2
Homeless	0	2	0	2
Tutoring	0	0	1	1
Salvation Army	0	1	0	1
Helping special needs children	0	1	0	1
Reading to Holocaust survivors	0	0	1	1
Zoo	0	0	1	1
Total	46	46	46	138

USHMM Website Exploration and USHMM Visits

Survey Items 30 and 31 provided an additional means by which to address the second

research sub-question that focused on exhibition evaluation feedback. Students from among the

three visit scenario groups were questioned about their interest levels in exploring the Museum

Website further and in visiting USHMM. An ANOVA was performed to determine significant

statistical difference in these interest levels. The Levene statistic for the homogeneity of

variances showed a balanced design with the significance value of .992 > .05 for a Website visit

and .129 > .05 for a USHMM visit. Table 17 presents the ANOVA summary table.

Table 17

ANOVA for Museum Website Exploration and USHMM Visits

Activity	Source	Sum of Squares	df	Mean Square	F	Sig.	eta^2
Website	Between Groups	.188	2	.094	.101	.904	.001
	Within Groups	125.696	135	.931			
	Total	125.884	137				
USHMM	Between Groups	2.261	2	1.130	.969	.382	.014
	Within Groups	157.457	135	1.166			
	Total	159.717	137				

Because significance levels were not met or <.05, cross tabulations were run to provide

descriptive statistics. These descriptive statistic results are presented in Table 18 for Survey Item

30 (interest in exploring the Museum Website) and in Table 19 for Survey Item 31 (interest in

visiting USHMM). Additionally, Figure 7 provides a bar graph of the descriptive data found in

Table 18 while Figure 8 offers a similar visual display of the data found in Table 19.

Table 18

Interest in Website Exploration

			not interested	a little interested	interested	very interested	extremely interested	Total
Scenario	onsite	Count	2	6	18	15	5	46
		% of Total	1.4%	4.3%	13.0%	10.9%	3.6%	33.3%
	online	Count	1	8	15	18	4	46
		% of Total	.7%	5.8%	10.9%	13.0%	2.9%	33.3%
	online/onsite	Count	1	5	21	12	7	46
		% of Total	.7%	3.6%	15.2%	8.7%	5.1%	33.3%
Total		Count	4	19	54	45	16	138
		% of Total	2.9%	13.8%	39.1%	32.6%	11.6%	100.0%

Table 19

Interest in USHMM Visit

			not interested	a little interested	interested	very interested	extremely interested	Total
Scenario	onsite	Count	4	2	6	11	23	46
		% of Total	2.9%	1.4%	4.3%	8.0%	16.7%	33.3%
	online	Count	2	2	3	11	28	46
		% of Total	1.4%	1.4%	2.2%	8.0%	20.3%	33.3%
	online/onsite	Count	0	2	6	17	21	46
		% of Total	.0%	1.4%	4.3%	12.3%	15.2%	33.3%
Total		Count	6	6	15	39	72	138
		% of Total	4.3%	4.3%	10.9%	28.3%	52.5%	100.0%

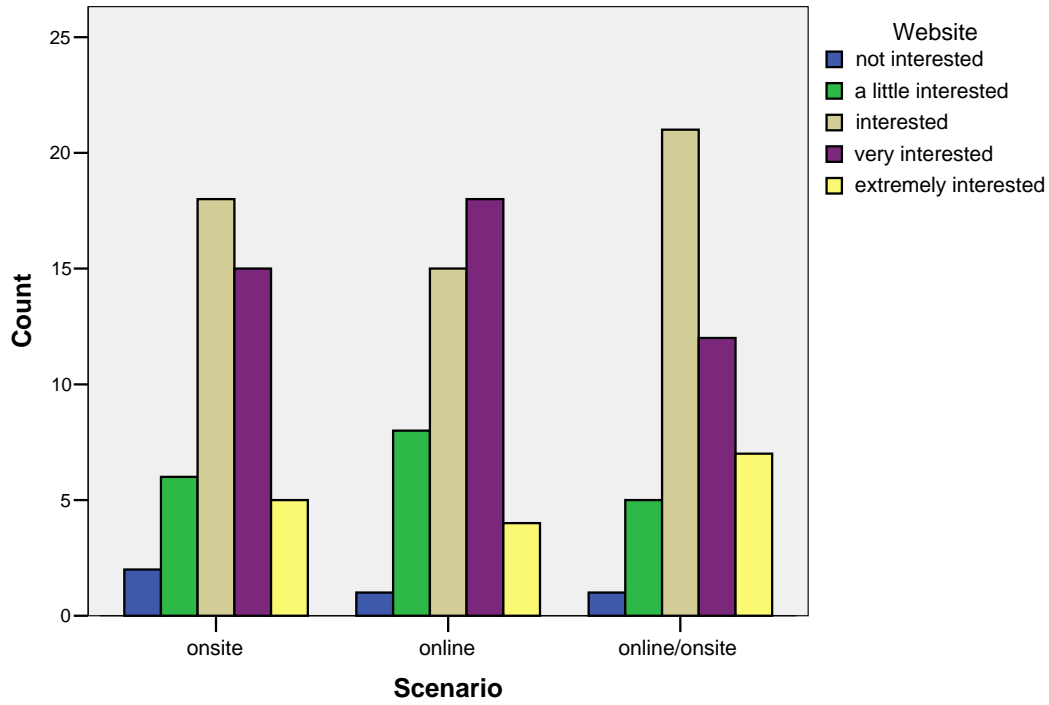**Interest in Exploring Museum Website**

Figure 7. Student interest in exploring Holocaust Museum Website.
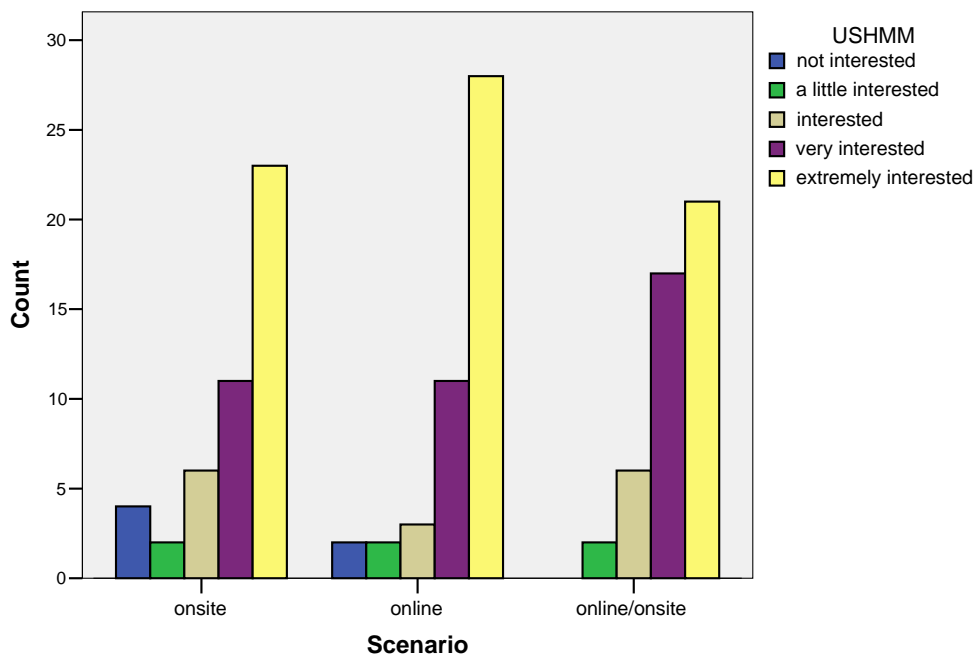
Interest in Visiting USHMM

Figure 8: Student interest in visiting USHMM.

When considering the data displayed in Table 18, it is encouraging to see that only 4 students (2.9%) were not interested in furthering exploring the Museum Website while 61 students (44.2%) were extremely interested or very interested in spending additional time on the Museum Website. Similarly, only 6 students (4.3%) claimed to be not interested in visiting USHMM but 72 students (52.2%) were extremely interested in a USHMM visit. Moreover, the largest group among these extremely interested students came from the online visit scenario.

Important Lessons

The final Survey Item 32 allowed students to both provide important exhibition feedback and to reflect on the overall significance of the *Life in Shadows* experience. Students identified a most important lesson that would remain with them following the exhibition and their study of the Holocaust. Table 20 presents a thematic summary of responses to Survey Item 32 and Table 21 offers actual examples of responses.

Table 20

Thematic Summary of Responses to Item 32 (enduring lesson)

Theme identified	onsite	online	onsite/online	total
Don't take life or family for granted	13	6	6	25
Anger at senseless killing	1	10	11	22
Memory of the children; sadness at their fate	10	6	3	19
Important to study Holocaust: Never again	4	8	6	18
Respect diversity; Oppose racism and hatred	2	7	5	14
Don't judge	4	2	3	9
Value freedom and equality	3	2	4	9
Beware abuse of power	4	0	4	8
Sense of hope and will to survive is strong	0	2	3	5
Golden rule	3	1	1	5
No response	2	2	0	4
Total	46	46	46	138

Table 21

Examples of Responses to Item 32 (enduring lesson)

Theme identified	Scenario	Response
Don't take life or family for granted	online	The most important lesson that will remain with me as a result of our experience with the *Life in Shadows* exhibition is that we should be thankful and happy that none of our lives are like any of the people that were in the Holocaust and be grateful for everything we have.
Anger at senseless killing	online/onsite	That millions of Jews died in this terrible tragedy for no reason and it will always remain in history and in our hearts and it will always be part of us. You just have to think back and realize how lucky you are and remember those who died and keep them with you.
Memory of the children; sadness at their fate	onsite	I will always remember the words of the little kids that went through the Holocaust. And I will never forget the look on their faces, confusion and disbelieve.
Important to study Holocaust: Never again	online	I will remember the hardships these people went through. I hope everyone can see that this was a major thing to learn about and this history should never be repeated. I hope everyone can enjoy the museum like I did.
Respect diversity; Oppose racism and hatred	onsite	Hatred never fair or right
Don't judge	online	Not to judge people by there religion but by what they act like
Value freedom and equality	onsite	I will help people to treat everyone equal and help them to not hold racism against others. Everyone is equal and they should be treated fairly no matter what they look like or what they believe.
Beware abuse of power	online/onsite	The most important lesson I learned is it only takes one man to change the world, in a very, very horrendous way.
Sense of hope and will to survive is strong	online/onsite	That Jews or any other race/person has the ability to survive in extreme conditions with a scarcity of friends and food
Golden rule	onsite	TREAT OTHERS LIKE U DO YOURSELF

The above examples of responses to Survey Item 32 were drawn from students who participated in each of the three visit scenarios. Students who viewed *Life in Shadows* in the onsite, online and online/onsite versions offered articulate and sensitive reflections on how this exhibition impacted their lives. The non-response rate (4 students or 3%) was the lowest among all other survey items. In other words, 135 or 97% of students shared their thoughts and feelings in identifying an important lesson learned from *Life in Shadows*. The ten summary themes (used to group student responses) even support established learning objectives and teaching rationale statements in the field of Holocaust education (United States Holocaust Memorial Museum, 2001).

Balanced Emotional Empathy Scale (BEES)

The third research sub-question in this study asked how empathy test scores differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite. All students had the opportunity to complete the Balanced Emotional Empathy Scale (BEES) according to the schedule previously outlined in Table 4. Emotional empathy is defined as an individual's vicarious experience of another's emotional experiences or feeling what the other person feels. As a personality characteristic, this trait helps distinguish persons who typically experience more of someone else's feelings from those who are generally less responsive to the emotional expressions and experiences of others (Mehrabian, 2000).

The BEES, developed by Dr. Albert Mehrabian, was available in a questionnaire paper format. Students spent approximately 10 minutes reporting the degree of their agreement or disagreement with each of its 30 items using a 9-point agreement-disagreement scale. The BEES has been designed to reduce acquiescence bias whereby some people tend to agree with most statements put to them while others generally disagree with any statement. One half (15) of the

BEES items are positively worded or positively scored such that agreement with these items shows higher emotional empathy. The remaining 15 items are negatively worded or negatively scored such that disagreement with these items shows higher emotional empathy. A total score is computed for each subject algebraically by summing responses to all 15 of the positively worded items and by subtracting from this quantity the algebraic sum of responses to all 15 of the negatively worded items. The alpha internal consistency (reliability) of the BEES is .87 and Mehrabian (1997) also reported evidence on the validity of the BEES.

BEES test results were obtained from 138 respondents. Raw scores ranging from a minimum of -22 to a maximum of 104 were recorded into SPSS. Mean scores and standard deviations (*SD*) on the BEES were found to be 30.24 (*SD*=22.82) for the onsite group, 31.63 (*SD*=24.99) for the online group and 35.87 (*SD*=21.57) for the online/onsite group. The total mean score for the three groups was calculated as 32.58 (*SD*=23.12). If BEES scores are compared with the rest of the population, norms for the Balanced Emotional Empathy Scale include a mean score of 45 with *SD* of 24. Scores ranging from 40 to 50 are attained by 50% of the population and indicate average emotional empathy while scores between 28 and 39 are interpreted at a level slightly below average emotional empathy (Mehrabian, 2000).

An ANOVA was performed to determine if there was significant statistical difference among BEES results from students in the three groups or scenarios of classroom visits. The Levene statistic for the homogeneity of variances showed a balanced design with the significance value of .842 > .05. However, a statistically significant effect of the scenario of classroom visit on BEES results was not found with $F(2, 135) = .737$, $p > .05$. Table 22 presents the ANOVA summary table.

Table 22

ANOVA for BEES Results

Source	Sum of Squares	df	Mean Square	F	Sig	eta^2
Between	791.319	2	395.659	.737	.480	.011
Within	72468.304	135	536.802			
Total	73259.623	137				

Although significant statistical difference was not found among BEES results as determined by the ANOVA, other trends or patterns in student responses were noted. As indicated above, the mean for all BEES results in the online/onsite scenario was 35.87 (greater than the onsite mean of 30.24 and greater than the online mean of 31.63). When the BEES results are further broken down by Springfield as compared to Madison and Harper Creek Schools, the mean for BEES results from online/onsite classroom in each school district grouping is greater than the mean from the onsite classroom and from the online classroom in each school district grouping. For example, the mean for the online/onsite scenario in Springfield is 27.391 which is greater than the online mean of 22.696 and greater than the onsite mean of 21.339. A similar pattern is evident among results from the Madison/Harper Creek school district grouping where the mean for the online/onsite scenario is 44.348 which is greater than the online mean of 40.565 and greater than the onsite mean of 39.087. Student scores on the BEES instrument are displayed graphically according to the scenario of classroom visit for the Springfield school district grouping in Figure 9 and for the Madison/Harper Creek school district grouping in Figure 10.
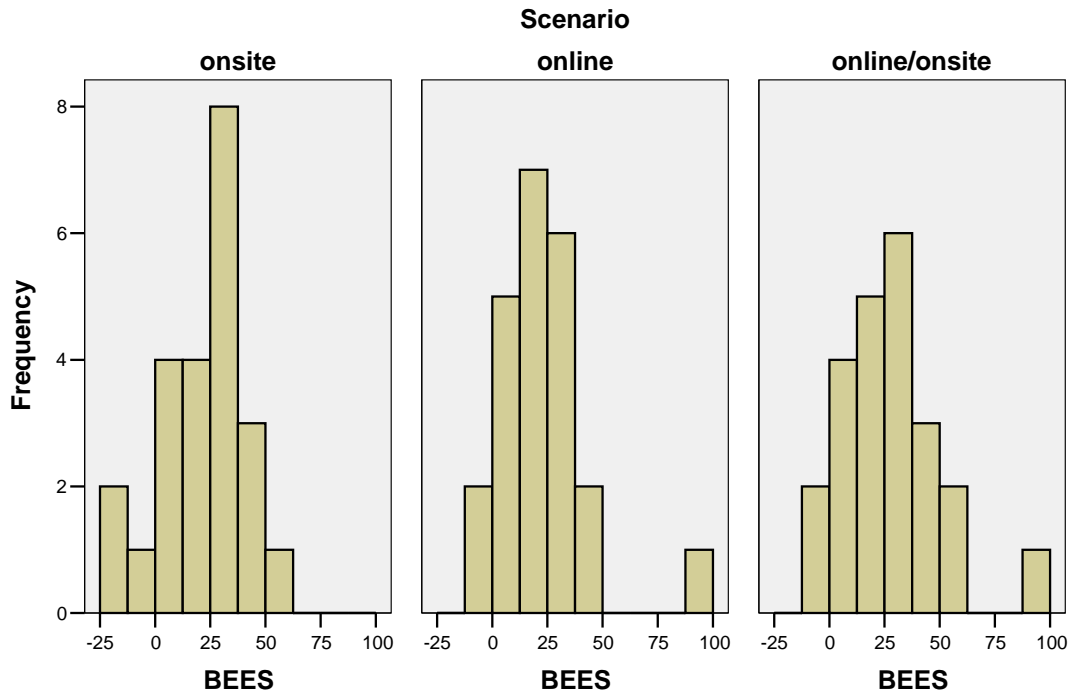
Springfield BEES results

Figure 9. Springfield BEES results.
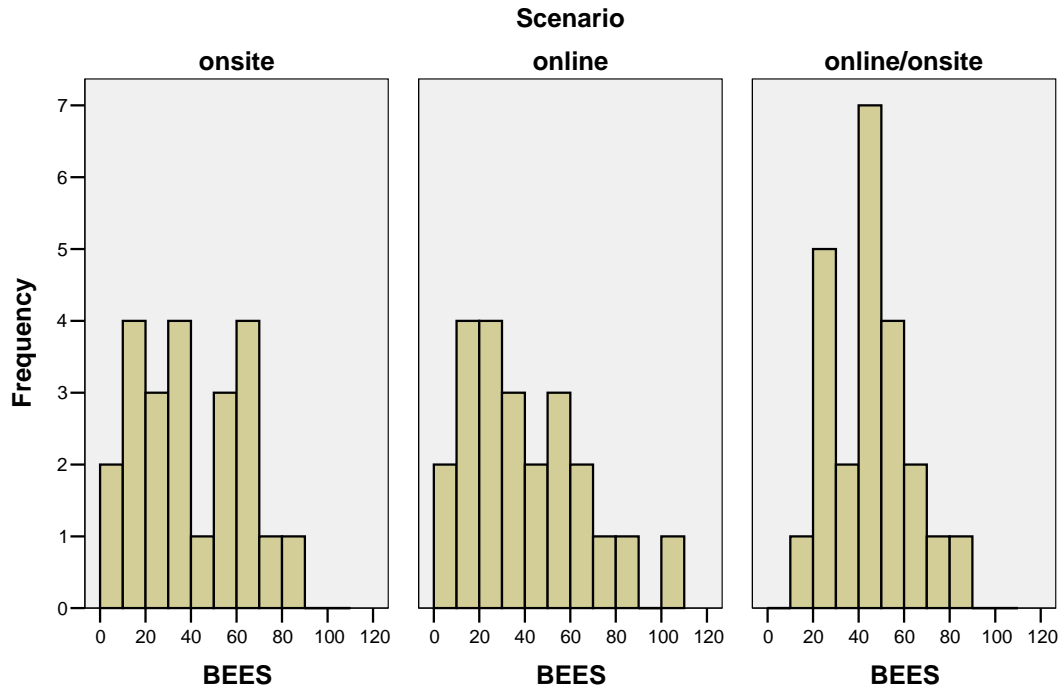
Madison and Harper Creek BEES results

Figure 10. Madison and Harper Creek BEES results.

Summary

This chapter has presented data results pertaining to a study of the informational value of the online and onsite Holocaust museum exhibition. An analysis plan using both quantitative and qualitative procedures was utilized. Six eighth grade language arts classes formed three groups or scenarios of classes in the study. Students responded to an online survey that functioned as a topic assessment tool and that provided exhibition feedback. Students also completed the Balanced Emotional Empathy Scale.

The study's first research sub-question asked how topic assessment responses differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite. The scenario of classroom visit was found to have a statistically significant effect on topic assessment scores; students who participated in the onsite visit scenario scored lower in terms of topic assessment. A significant statistical relationship was not evident, however, in the relationship between scenario of classroom visit and a perceived increase among students in their knowledge level of Holocaust history.

A second research sub-question considered how exhibition evaluation feedback differs among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite. While usefulness ratings of artifacts were statistically significantly lower among students who participated in the online classroom scenario visit, open-ended responses to an additional survey item offered evidence that students were strongly impacted by artifacts and photographs in the *Life in Shadows* exhibition in the onsite, online and online/onsite versions. Moreover, students involved in all three Museum scenario visits gave indication that they were interested in further studying Holocaust related topics, in learning about other genocides, in becoming involved in some type of community service, in exploring the Museum Website and in

actually visiting USHMM. Students from all three Museum scenario visits also identified a most important lesson learned from the *Life in Shadows* exhibition.

The third research sub-question did not find significant statistical difference among results on the Balanced Emotional Empathy Scale (BEES) results from students in the three scenarios of classroom visits. However, further examination of the data was conducted by school district groupings of Madison and Harper Creek compared to Springfield. The mean for BEES results from online/onsite classroom visit in each school district grouping was seen to be greater than the mean from the onsite classroom visit and from the online classroom visit in each school district grouping. The final chapter of this study discusses the interpretations, implications and recommendations for further research based upon these data results.

CHAPTER V

DISCUSSION

The museum in today's world has come to be regarded as an information utility, a repository of knowledge rather than of mere objects. Museums have also been impacted by the technological revolution and are able to offer learning-rich leisure experiences in both a physical setting and in cyberspace. The purpose of this study has been to better understand the informational value of a Holocaust museum exhibition in its onsite vs. online format by addressing the following research question: How does a visit to an online Holocaust museum exhibition prepare students for a trip to an onsite Holocaust museum exhibition? Three research sub-questions have looked at how topic assessment responses, exhibition feedback and empathy test scores differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite.

Chapter I provided an introduction and background to the subject and Chapter II reviewed relevant literature. Chapter III set forth the methodology used to achieve the purpose of the study while Chapter IV reported the results of quantitative and qualitative procedures used to analyze the data collected. Chapter V, therefore, presents an in-depth discussion of the results of the study. Answers to the three research sub-questions are first examined in an interpretations section. Subsequent sections of the chapter consider implications for practice and recommendations for further research. A concluding section completes the chapter and offers a summary of the study.

Interpretations

Quantitative and qualitative data were generated in this study as students responded to an online survey concerning the *Life in Shadows* exhibition and as they completed the Balanced Emotional Empathy Scale (BEES). Results from the online survey and the BEES are interpreted in greater detail in this chapter section with portions devoted to topic assessment, exhibition feedback and empathy scores.

Topic Assessment

The study's first research sub-question asked how topic assessment responses differ among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite. By means of an analysis of variance, it was determined that students who participated in the onsite visit scenario scored lower in terms of topic assessment. This finding supports research conducted by Stinson (2001) who described the educational effectiveness of a virtual vs. an actual tour of the Bayou Bend Collection and Gardens Website in Houston, Texas. The social studies achievement of fifth graders who took a virtual museum field trip was statistically significantly higher than the social studies achievement of fifth graders who took an actual museum tour during a field trip. Several explanations may account for higher scores being associated with the online or virtual visit.

Students who participated in only the onsite visit spent less time on task with respect to exposure to exhibition content. During the average visit to the Battle Creek Art Center, students viewed *Life in Shadows* for approximately 55 minutes. In contrast, students who engaged with the online exhibition devoted three class periods to a lesson focusing on artifacts, photographs and survivor testimony linked to hidden children of the Holocaust. Students who viewed both the online and the onsite exhibitions consequently spent the most time on task. For this reason,

students who participated in the onsite visit may have been less familiar with *Life in Shadows* compared to students who participated in the online or online/onsite visits.

Due to the constraints of scheduling 72 separate classroom visits to the traveling version of the *Life in Shadows* exhibition over a 10-week period, it was necessary to assign some schools to a less convenient date. Most schools were flexible and willing to make adjustments so as to not miss the opportunity to provide a valuable educational enrichment activity for students. However, the two classes who participated in the onsite visits in this study were scheduled to view *Life in Shadows* quite early in the fall semester. Eighth grade students from Madison Middle School had less time to prepare for their trip to the Art Center with their visit scheduled for September 25, 2005. Madison students referred back to their prior knowledge of the Holocaust acquired from studies in seventh grade language arts class. Students from Springfield Middle School who participated in the onsite visit scenario also had less time to prepare for their trip to the Art Center and saw instructional time interrupted by state MEAP testing.

In addition to benefiting from a more time intensive and conveniently scheduled experience with the exhibition, students involved in either the online or online/onsite visit had the advantage of up-to-date and fully functioning technology. The classrooms or computer labs from which students viewed *Life in Shadows* online were well-equipped. Teachers were also knowledgeable about using technology. Equipment and software underwent extensive troubleshooting measures before the online lesson was implemented. United States Holocaust Memorial Museum (USHMM) personnel in the Division of Outreach Technology gave assistance to Instructional Technology staff in the various schools. This help allowed RealMedia® and Flash® files[‡] in *Life in Shadows* online (often blocked by firewalls) to be

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[‡] RealNetworks, Inc., www.realnetworks.com; Adobe Systems, Inc., www.adobe.com

properly accessed. Students, characterized as the Net Generation or Millennials, appear to be better motivated and to thrive in the online learning environment (Carlson, 2005; March, 2005).

The format or structure of the instruction in the online vs. onsite museum visit should also be considered. Students who viewed *Life in Shadows* online followed a lesson plan sequence involving small cooperative group work of generally four students per group. For example, as these students completed the *Life in Shadows Exploration* assignment sheet at http://mandelproject.us/LifeShadowsExplorationSheet.doc, they analyzed primary documents, photographs and artifacts as presented by the online exhibition. In other words, they engaged in a thorough and careful study of museum objects so as to gain a more complete perspective on the historical past. Students were challenged to employ both higher and lower level thinking skills so as to understand the power of objects to carry memory and to convey meaning (Salmons, 2004). In contrast, students who viewed *Life in Shadows* onsite, were guided through the exhibition by a docent who was typically in charge of not four but six to nine students. The docent led students through each of the three main exhibition galleries, drawing students' attention to some of the artifacts noted on the gallery sheet. During the final 10-15 minutes of the *Life in Shadows* onsite tour at the Battle Creek Art Center, the Education Coordinator brought students together in the central gallery to discuss items highlighted on the gallery sheet and to further share impressions of the exhibition. Students who participated in the onsite visit thus had less experience in practicing the skills of how to 'read' objects and how to make deductions about the past from historical artifacts.

Although students who were involved in the onsite visit scenario received lower topic assessment scores, participation in any one of the three visit scenarios (onsite, online, or online/onsite) was viewed in a favorable manner. Out of a total of 138 students, 106 (76.8%)

reported an increase in their knowledge level of Holocaust history following their experience with the Museum exhibition experience. Thirty-two students (23.2%) reported no increase. In other words, over three-quarters of all students reported learning more about the Holocaust after having participated in a class that included a visit to the *Life in Shadows* exhibition. A similar finding was noted by Davies, Gregory, and Lund (2004) who describe how teaching and learning about the Holocaust was facilitated through a traveling Anne Frank exhibit. Seventy percent of pupils responding to a questionnaire said they agreed or strongly agreed with the statement that the Anne Frank exhibition helped them to understand better the work that they did at school.

Exhibition Feedback

A second research sub-question considered how exhibition evaluation feedback differs among middle school students who view a Holocaust museum exhibition only online, vs. only onsite, vs. both online and onsite. Although an analysis of variance showed usefulness ratings of artifacts to be statistically significantly lower among students who participated in the online classroom scenario visit, responses to open-ended items on the online survey were also carefully noted. These responses were reported in Chapter IV and offered evidence that students were strongly affected by the *Life in Shadows* exhibition in the onsite, online and online/onsite versions. For example, students who participated in each of the three scenario visits recalled a particular artifact or photograph that truly impacted them. How might the consistently positive feedback and favorable reactions on the part of students to both the online and onsite exhibitions be further explained?

To begin with, although many museums have created attractive and well-designed online interfaces, the overall usability characteristics of a museum Website should be examined (Marty & Twidale, 2004). The virtual version of *Life in Shadows* succeeds in providing large amounts of

rich content, of having an artistically designed graphical user interface, of encouraging

exploration, of being designed by museum professionals and of supplementing the physical

museum. In *Life in Shadows*, the United States Holocaust Memorial Museum exemplifies

"virtuality" as a fundamental exhibition practice and incorporates such features as space, time,

links, storytelling, interactivity, production values and accessibility (Muller, 2002).

      In the creation of the online *Life in Shadows*, USHMM Web designers and museum

educators followed the same concepts which guided the museum's architecture and exhibit

design teams. Through special access to artifacts, environments that resonate, storytelling and

testimonials featuring the teller and relationship building, both the onsite and online *Life in*

Shadows exhibitions were designed to convey a sense of memory, remembrance and memorial

(O'Dowd, 2004a). For example, the online "Stories of the Hidden" section at

http://www.ushmm.org/museum/exhibit/online/hiddenchildren/stories_of_the_hidden/ features

richly lit contemporary portraits of five survivors. These individuals are portrayed as they are in

today's world; vibrant, strong people who possess a special knowledge of humanity to share

through their testimony. Students who visited both the online and onsite exhibitions commented

often that they were especially moved by the personal accounts of survivors. An opportunity for

hearing survivor stories was also cited among the top five frequent responses to Survey Item 27

which asked students to name a Holocaust topic that they would like to further study.

      Positive exhibition feedback to both the onsite and online versions of *Life in Shadows*

was evident in the responses to Survey Items 30 and 31. There were 61 students (44.2%) who

were extremely interested or very interested in spending additional time exploring the Museum

Website. Additionally, 72 students (52.2%) were extremely interested in a USHMM visit. These

responses from students support evidence that there are links between online and in-person

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museum visits. Museums that put collections information and images on their Websites do not reduce visits to the physical museum, and will likely enhance interest in making in-person visits to the museum. A high number of visitors wish to see images of the collection after an in-person visit. Therefore, museums that put their images and collections information on-line do not discourage people from visiting a museum (Thomas & Carey, 2005).

An additional indication of favorable response to the exhibition can be seen through sample responses to Survey Item 28. This survey item questioned students about their desire to become involved in some form of community service project following their study of the Holocaust. While 30% of students replied that they were unable to be involved or had not yet considered the option of community service, 96 students replied that they were eager to volunteer in some capacity. For example, a student from the onsite scenario wrote, "Helping out at the food center because lots of people died from hunger and I don't want any more people to die from hunger." A student from the online scenario said, "I would like to work for the kids at a cancer hospital due to the fact that my dad and step grandma has cancer i'd love to help kids feel better." A student from the online/onsite scenario replied at length, "My friends and I are trying to arrange a car wash for the no-kill animal shelter in our county. Because this shelter doesn't euthanize its animals after 3-5 days, it isn't government funded, and has no donations this year. It may soon be closing its door if something is not done, despite newspaper ads pleading for help."

Such positive student response to even a hypothetical question about willingness to help others in the community suggests that important educational objectives were met through the Museum exhibition project. A study of the Holocaust should address one of the central tenets of education in the United States, which is to examine what it means to be a responsible citizen (USHMM, 2001). Similarly, the variety and depth of student responses to the survey item about

interest in studying other genocides indicates that another learning goal may have been realized. Through Holocaust education, students are encouraged to think about the use and abuse of power and the roles and responsibilities of individuals, organizations, and nations when confronted with civil rights violations and/or policies of genocide. It is hoped that such study generates greater understanding of what leads a person to become a perpetrator or bystander and of how acts of genocide or related crimes against humanity can be prevented (Wollaston, 2005).

Empathy Scores

The study's third research sub-question did not find significant statistical difference for results on the Balanced Emotional Empathy Scale (BEES) among students in the three scenarios of classroom visits. Mean BEES scores for all groups, furthermore, fell in the 31st percentile range (Mehrabian, 2000). Such scores of 30.24 (*SD*=22.82) for the onsite group, 31.63 (*SD*=24.99) for the online group and 35.87 (*SD*=21.57) for the online/onsite group are all interpreted to be slightly lower than average empathy scores.

All students had the opportunity to respond to the 30-item instrument that is designed to measure an individual's vicarious experience of another's emotional experiences or feeling what the other person feels. Instructions for completing the BEES were given verbally and in writing to students. Teachers from Springfield Middle School, however, remarked that there was some confusion on the part of students concerning the 9-point agreement-disagreement Likert scale and the incidence of positively and negatively worded statements (personal communication, November 14, 2005). Such a lack of familiarity with tests or with testing materials can influence response. Responses may be depressed because of lack or training with the materials. The novelty of a respondent being placed in a test-taking role or dealing with unusual subject matter may result in distorted responses (Webb et al., 2000).

Although significant statistical difference was not found for BEES results according to scenario of classroom visit, further examination of the data was conducted by school district groupings of Madison and Harper Creek compared to Springfield. The mean for BEES results from online/onsite classroom visit in each school district grouping was seen to be greater than the mean from the onsite classroom visit and from the online classroom visit in each school district grouping. This trend or pattern for higher empathy score in the online/onsite visit supports research conducted by Farkas (2002) who reported improved BEES scores among middle school students receiving Holocaust instruction through a multisensory learning styles approach.

Life in Shadows (online and onsite) was itself designed to encourage an empathetic response and to appeal to a variety audience learning styles (O'Dowd, 2004b). The "Quest for Family" section at http://www.ushmm.org/museum/exhibit/online/hiddenchildren/quest/, for example, focuses on difficulties that hidden children faced in the circumstances of their lives. The Quest film is particularly haunting through its use of voices from the past as well as from the present blended together with animated thematic text elements to illustrate particular hardships faced over the course of survivor's lives. In this final section of the online and the onsite *Life in Shadows*, the museum visitor is left with the beautiful and poignant Yiddish melody Dos elnte kind (The Lonely Child).

At this conclusion of the *Life in Shadows* exhibition, an alternative method to the BEES was in fact used to gauge empathetic response. As described in Chapter III, during the last 10-15 minutes of viewing the onsite exhibition, the Art Center Education Coordinator gathered students together in the central gallery to share their impressions of *Life in Shadows* and to record their reflections on comment cards. These cards were posted on walls of the downstairs classroom and on surrounding stairways of the Art Center. In addition to the representative comments that were

mentioned previously in Chapter III, students expressed a variety of empathetic emotions. Examples of such student comments (including a poetic response) are presented below. The responses are taken from students who participated in the onsite exhibition and are not associated necessarily with students from the six classes that took part in the research study. Nonetheless, the responses reveal a noticeable depth of feeling or empathy.

> I hope I would be courageous enough to protect and care for someone in danger – willing to put myself and family at risk. I cannot imagine letting my child go to be free and safe, but it would be even worse to have them taken by force, starved and killed. This exhibit should be shown to every school and city in the country!

> It makes me angry how evil people can be to each other and how passive people can be when confronted with that evil. SPEAK UP! Seeing this exhibit makes me more determined to try to help others and do something about bigotry, racism and hatred.

> I could not imagine the pain, anger, and fear. Seeing those children broke my heart. It makes you realize that we're lucky. I know now I will be a lot more appreciative of my life and family. Freedom has a whole new meaning.

> The look in the eyes of many of the children was one of deep depression. It is almost as if their eyes had run out of tears and their hopes had all been drained away. One man started this, only one, and yet millions died as a result.

> I can't believe how horrible those people must have felt! Being killed and tortured just because of their religion. Many of the kids had no idea why they were being taken from their moms and dads and brothers and sisters. I can't even begin to describe how I would feel if that happened to me! I don't know how someone could have so much hatred that they would kill an entire race of people.

> Shadows rise and shadows fall,
> But always we must carry on,
> To live and love and never don
> A mask of hate for those who fell like Saint.
> And though the years might weigh us down,
> Love will see us through,
> To white shores ad shining stars,
> That follow darkness through.

Implications for Practice

The preceding chapter section interpreted data results pertaining to the study's three research sub-questions that dealt with topic assessment, exhibition feedback and empathy scores. By means of reference to these interpretations and through consideration of supplemental teacher exhibition evaluation (Appendix H), the primary research question can now be addressed: How does a visit to an online Holocaust museum exhibition prepare students for a trip to an onsite Holocaust museum exhibition? The ensuing discussion also considers implications for practice.

The contextual model of learning, which was expanded upon in this study's review of the literature helps to explain how an online Holocaust museum exhibition prepares students for an onsite visit. Research has shown that people learn better when they feel secure in their surroundings and know what is expected of them. For many students who participated in a visit to the Battle Creek Art Center, this trip may have been a first-time occurrence in their lives. They could conceivably have felt disoriented in a strange and visually and aurally novel setting. When people feel disoriented, it directly affects their ability to focus on anything else. Conversely, when they feel oriented in museum spaces, the novelty enhances learning. Providing conceptual advanced organizers and prior orientation improves people's ability to construct meaning from experiences (Falk & Dierking, 2000). The use of the online *Life in Shadows* exhibition provided such a source of prior orientation and functioned as a form of advanced organizer.

In differentiating among the three scenarios of classroom visits to *Life in Shadows* as diagramed in Figure 2, the circumstances of the third group or online/onsite scenario proved to be advantageous. Students from the online/onsite scenario received significantly higher scores on topic assessment (the first research sub-question) than did students from the onsite scenario. In terms of exhibition feedback (the second research sub-question), students from the online/onsite

scenario were strongly impacted by artifacts, photographs and survivor testimonies and were

inclined to want to learn more about the Holocaust. Higher scores on the Balanced Emotional

Empathy Scale (although not statistically significant) were seen in students who participated in

the online/onsite scenario.

In examining feedback from 35 teachers who brought classes to *Life in Shadows*,

additional justification can be seen for using the online version of the exhibition to prepare

students for a visit to the onsite exhibition. Table 23 summarizes the comments of the 18 or 51%

of teachers who reported accessing the online version of *Life in Shadows*. Teacher 35 even

shared a scoring rubric used to evaluate student-created PowerPoint presentations and museum

memorials as part of students' preparatory work with the online exhibition (Appendix H).

Table 23

Exhibition Evaluation from Teachers Who Accessed Online Life in Shadows

Teacher	Comment
Teacher 3	My students did access this in several ways. My newspaper class used this site to create an article about the English class visiting the exhibit. My English classes who all toured *Life in the Shadows* also used the Website to create Power Points, papers, and collages about people who were in the Holocaust.
Teacher 5	I accessed the site, along with many others. Some of my students accessed these sites on their own at home and shared information found with other class members.
Teacher 6	Some of the students actually went to the Museum in Washington last spring and had accessed the website as part of their class.
Teacher 9	Some students used the Internet resource. It prepared them for the experience by describing how actual lives were changed. It is one thing to read in a textbook that millions of Jews died; it is quite another thing to read the actual stories of people who hid and went to such extreme measures to avoid persecution.
Teacher 10	The URL provided was very helpful.
Teacher 11	Yes, we previewed the exhibit online.

(table continues)

Table 23 *(continued).*

Teacher	Comment
Teacher 12	We accessed the online *Life in Shadows*. It was a tremendous benefit to have the electronic version so students knew what to expect when we visited the Art Center.
Teacher 13	We used the website as preparation for our class work and some students also accessed it individually.
Teacher 14	Yes we did and I am looking forward to accessing the online exhibit more next semester, since those students will not have the opportunity to visit the actual exhibit.
Teacher 15	Yes. The Washington Museum online is an excellent resource.
Teacher 17	The Website was a great resource for the students and gave them a preview of what to expect at the Art Museum.
Teacher 19	Yes, and I used several of the lesson plans during the *Night* unit. They used it as one of their sources for the Genocide Controlled Sources Paper.
Teacher 21	Yes, they did access the website. They felt that the website gave them some useful information about the exhibit as a whole, as well as, allowed them to learn about specific people's lives. The people became more real to them after they were able to learn their stories and see the things they cherished.
Teacher 25	Yes, we also did a photo archive project, created a newspaper for the Holocaust and a PowerPoint presentation was done in Eng. I
Teacher 27	The students did access this site and it was helpful. It provided a sort of preview to the exhibit, and in many cases, at the museum, they were able to see the actual artifact that they had analyzed online.
Teacher 32	My students did view the website. It enabled them to have actual case studies and actual artifacts to view. It made the unit more real for them, putting real names and real faces to this topic.
Teacher 33	Yes, we did access the *Life in Shadows* website before and after our visit. I really thought it helped prepare the students for what they were going to encounter at the exhibit. The website really helped build intentionality for why students were attending the exhibit and what they should expect to encounter. I believe the students got a lot more out of the exhibit because they were a bit familiar with what types of objects and subject matter they would be seeing.
Teacher 35	Yes. We used the online exhibition for making the PowerPoint presentations.

The success achieved by an online museum exhibition in helping to prepare students for an onsite exhibition is reflected in the work of other researchers. For example, West (1998) found that preparing students for experiences with works of art in the museum by incorporating an art museum's Website into lessons which covered all of the discipline of art education piqued students' interest to truly 'see' objects when they visited the museum. In addition, students who had the opportunity to learn about the art in the exhibition prior to visiting the museum had a starting point from which to continue to understand the significant forms and appreciate the objects at multiple levels. Although Lackey (1997) did not employ the prior use of a museum Website in her descriptive study of fifth-grade students' responses concerning a field trip to an art museum, a variant technology was used to supply pre-orientation. Students first viewed photographic slides of some of the paintings of Henry Ossawa Tanner and were later able to better understand and appreciate the artist's work during a field trip to the High Museum of Art in Atlanta.

If an online museum exhibition is seen to have value in preparing students for a visit to an onsite exhibition, what implications for practice should be considered? Within the context of public school education, could the use of a museum Website be seen as an alternative to an actual museum field trip? As school districts strive to improve teaching and learning through cost-effective measures, they look to Internet resources for providing content from real world experiences. Due to available technology, in the fall of 2003, nearly 100 percent of public schools in the United States had access to the Internet, compared with 35 percent in 1994, and 95 percent of public schools with Internet access used broadband connections (National Center for Education Statistics, 2005). A 2005 Pew Internet & American Life Study also reported that about 16 million students said they used the Internet at school. This represented a growth of roughly 45

percent over the past four years from approximately 11 million teens who used the Internet in schools in late 2000 (Rainie & Hitlin, 2005). The use of a Website could thus offer a financially beneficial means of exposing large numbers of students to museum content, especially when a field trip to a physical site is not possible.

In addition to easing geographical constraints and representing an efficient use of instructional time, a museum Website allows teachers to incorporate technology into the classroom and permits students to access primary source material online. Increasingly, state and national standards prescribe how technology should be integrated into the curriculum. For example, in March 2006, Michigan became the first state in the nation to require that students experience some form of online instruction before receiving a diploma when the state legislature approved a bill to bolster the state's graduation requirements (Ullman, 2006).

Despite the distinct advantages that a museum Website affords students and teachers in the school environment, the use of an online museum exhibition should be regarded as a supplement rather than as an alternative to the curriculum, particularly in the realm of Holocaust education. In examining teacher comments (Appendix H), again through the perspective of the contextual model of learning, important learning can be seen to have taken place within the sociocultural context of the onsite exhibition. According to Falk and Dierking (2000), peers build social bonds through shared experiences and knowledge. Social groups in museums utilize each other as vehicles for deciphering information and making meaning. Museums create unique milieus for collaborative learning. For example, Teacher 10 remarked that the visit to the onsite version of *Life in Shadows* functioned as a memorable bonding experience for her freshmen students that broke down some barriers between students who had previously been known as a certain stereotype and who did not usually interact with other students. The experience allowed

students to think of each other simply as human beings, as children, not unlike those portrayed in the exhibition.

Further evidence of the important learning that occurred within the sociocultural context of the onsite exhibition can be attributed to the efforts of the volunteer docents (retired classroom teachers) who facilitated the visits of school groups to the Battle Creek Art Center. Knowledge and flexibility on the part of the docents were appreciated along with the fact that students were given structure but also the freedom to browse at their leisure. Docents were also sensitive to special needs students and took extra time with those youngsters who had difficulty reading text labels. Perhaps the most telling comment came from the teacher who was grateful that someone was willing to sit down on the floor with kids and talk to them personally at the end of the exhibit about what they had viewed.

Yet another reference to the contextual model of learning is applicable to the present study. The preceding analysis has shown that an online Holocaust museum exhibition prepares students for a visit to an onsite exhibition but does not substitute for an actual physical visit. Similarly, Falk and Dierking (2000) hold that virtuality will never replace reality. Although people might be thrilled to visit a museum Website and view objects through the electronic medium, most visitors will readily choose the real experience. The future lies in the blending, not in the separation, of the virtual and the real world. This perspective is echoed in other current writings in the field of museum studies. Barry (2006) suggests creating a virtuous circle between a museum's online and physical spaces. In this way, visitors are motivated online to visit the museum while within the museum, access to a variety of media channels encourages visitors to extend their journey by book-marking and sending links of relevant information back to their home.

A final implication for practice should be mentioned with regard to the discussion of how an online Holocaust museum exhibition prepares students for a visit to an onsite exhibition. For the potential of the online learning environment to be realized and for an online exhibition to effectively support an onsite exhibition, museums need to work closely with schools (Arbach, 2006). Partnerships with schools are one way in which museums can seek to further develop their educational online resources. Teachers are eager to point out that they should be involved in the development of museum resources for students. They can bring a depth of knowledge relative to the school's curriculum that is far beyond that of any curator, and they can provide an excellent source of education end user savvy (Devine, Gibson, & Kane, 2004). Together with learning activities, lesson plans, online exhibits, guided tours, and lectures/demonstrations, museum educators should also encourage the development of social collaborative conversation tools to promote exchange of information and ideas among visitors and museum personnel (Varisco & Cates, 2005).

The United States Holocaust Memorial Museum is an example of an institution fully committed to helping teachers utilize its instructional resources and to working collaboratively with schools. The Museum commissioned SRI International to conduct a year-long study to assess the status of Holocaust education in secondary schools across the United States (SRI International, 2004). One principal finding of the study stressed the need for continued high-quality professional development opportunities in Holocaust education. While USHMM holds true to its mission to advance and disseminate knowledge about the unprecedented tragedy of the Holocaust, teachers must play a critical role in the education process. It is questionable whether the mere act of walking through a Holocaust museum exhibition (online or onsite) will automatically be morally therapeutic or that multiplying such encounters will make one a better

person (Novick, 1999). USHMM is not simply a giant vaccine, an inoculation against the evil contained within (Rosen, 1996). Nonetheless, through an organized, structured approach to learning, students can reflect upon the moral and spiritual questions raised by the events of the Holocaust as well as their own responsibilities as citizens of a democracy.

<div align="center">Recommendations for Research</div>

The results of this study of the informational value of a Holocaust Museum exhibition in its onsite vs. online format suggest topics for further research. When considering several limitations of the current study, it is possible to recommend modifications that could be implemented in future studies. For example, one limitation pertained to the scope of the study which included six eighth grade language arts classes in three Michigan locales. Studies of students from different geographic areas, in various grade levels and through other subject disciplines could be undertaken. A larger population sample could be used. It would also be interesting to replicate the study with students in foreign countries, thereby lending an international focus to the research. Given that the issue of the Holocaust and the prevention of other genocides is now a matter of grave concern to peoples everywhere, there is reason to place follow-up studies within the context of the global community.

Insofar as the online survey instrument itself posed a limitation to this study by only assessing content knowledge associated with the *Life in Shadows* exhibition, future research could employ a different methodological approach. A more valid and reliable instrument for measuring other indicators of knowledge about the Holocaust could be developed. Different options could be explored for evaluating emotional empathy, with possible consideration of gender as a factor. Ideally, a comprehensive and longitudinal study of the varying formats of a Holocaust Museum exhibition could be designed. Such a study would determine the long-term

effects of topic assessment, exhibition feedback and empathetic tendencies among students of various ages, academic levels and ethnic backgrounds. Of particular concern would be obtaining answers to such questions as the following:

> What enduring understandings about the Holocaust remained with students over a period of time?
>
> Was there a special artifact, a photograph, a film segment, a survivor testimony that students recalled months after having seen the museum exhibition?
>
> How inclined were students to engage in further Holocaust study or to learn more about other genocides?
>
> To what extent did students actually become involved in local service projects in their own community?
>
> Did students have the opportunity to visit the Holocaust Museum in Washington or to continue their exploration of the USHMM Website?

From this study of an online and onsite Holocaust Museum exhibition come additional suggested research topics in the field of museum informatics. Although the present project brought together a local Art Center and a nationally renowned museum, other collaborative partnerships linking cultural institutions and libraries could be studied (Morton, 2005). How might hosting a museum exhibition help a library to be identified as an integral part of a community's civic life? While the current study dealt with the topic of the Holocaust, subsequent research could examine ramifications of the display of controversial or difficult content in a museum exhibition and conversely consider the representation of non-emotional material.

The field of Holocaust education also points to the need for continuing research in areas linked to the present study. What professional development strategies could the Holocaust Museum deploy in order for teachers to make better use of exhibitions and other museum resources? In addition to understanding the role played by prior orientation and advanced organizers in connection with a museum visit, how might teachers create worthwhile follow-up

activities or alternate forms of authentic assessment after students view an exhibition? Prior research such as a dissertation by Lindquist (2002) has addressed the pedagogical methods of exemplary teachers of the Holocaust but additional studies could put forth best practices for effective instructional materials usage.

Finally, a critical issue facing Holocaust Museum personnel and educators today must be dealt with in a timely way. All but the child survivors of the Holocaust are now in their late seventies and eighties. Many of these individuals are less active than they once had been or in poor health. As the surviving generation grows smaller and there are fewer eyewitnesses, the challenge of ensuring the memory of the Holocaust intensifies. The United States Holocaust Memorial Museum recently made available a supplemental collection of survivor testimonies (some of whom are now deceased) through another powerful and sensitively designed online exhibition, *Life after the Holocaust: Stories of Holocaust Survivors after the War* at http://www.ushmm.org/museum/exhibit/online/life_after_holocaust/. The collection includes six narratives organized thematically and could be a valuable and engaging learning resource for the classroom. Additionally, USHMM supports a Memory Project at http://www.ushmm.org/remembrance/survivoraffairs/memory/ whereby survivors participate in writing workshops, sharing their memories and adding significantly to Holocaust remembrance. Finally, the Deutsches Historisches Museum, Berlin (German Historical Museum) has developed an online multimedia presentation at http://www.chotzen.de/ that incorporates audio, film image, still image and primary documents while recounting the moving stories of the survivors and victims of the Chotzen family (Steinbach & Pieken 2006).

The essential question for further museum exhibition research remains: How might Web-based technology be utilized in a compelling yet appropriate manner so that students can

continue to hear the words of survivors who themselves bear witness and give voice to the silenced victims? When perpetuity of access to informational resources is assured, future generations will continue to be connected to the primary documents of history and cultural heritage.

Conclusion

Museums of today provide learning-rich experiences and quality informational resources through both physical and virtual environments. The United States Holocaust Memorial Museum seeks to broaden public understanding of the history of the Holocaust through multifaceted programs and technology. The present study has attempted to understand how a visit to an online Holocaust museum exhibition might prepare students for a trip to an onsite Holocaust museum exhibition and has considered such factors as topic assessment, exhibition feedback and emotional empathy scores.

Student responses to an online survey and to the Balanced Emotional Empathy Scale were analyzed and interpreted in this chapter. It was suggested that students who participated in either the online or the online/onsite scenario of a classroom visit to the *Life in Shadows* exhibition may have received higher topic assessment scores for various reasons: They benefited from a more time intensive and conveniently scheduled experience with the exhibition; they had the advantage of up-to-date, fully functioning technology; and they engaged in small group work that included primary document analysis. In terms of exhibition feedback, students involved in all three Museum scenario visits indicated that they were strongly impacted by exhibition artifacts and photographs, interested in studying more about the Holocaust and other genocides, and might become involved in community service. Students also identified a most important lesson learned from the *Life in Shadows* exhibition and expressed a desire to further explore the

Museum Website and to visit USHMM. Positive exhibition feedback may have been attributed to exhibit design principles. Through special access to artifacts, environments that resonate, storytelling and testimonials and relationship building, both the onsite and online *Life in Shadows* exhibitions were designed to convey a sense of memory, remembrance and memorial. While BEES results were higher (although not statistically significant) among students who participated in the online/onsite scenario visit, comment cards collected at the Battle Creek Art Center revealed a noticeable depth of feeling or empathy on the part of many students.

As the above data results were interpreted and as consideration was given to teacher exhibition evaluation and to the contextual model of learning, a principal finding of the present study emerged: The use of the online *Life in Shadows* exhibition provided a source of prior orientation and functioned as a form of advanced organizer for a visit to the onsite exhibition. Further implications for practice pointed to the advantages of using a Website to expose large numbers of students to museum content when a field trip to a physical site was not possible due to constraints of time, money or geography. Although a museum Website was also cited for promoting technology integration according to state and national standards, its use was regarded as a supplement rather than as an alternative to the curriculum. Important learning benefits could still be derived from the sociocultural context of an onsite museum visit. The future is seen to lie in the blending, not in the separation, of the virtual and the real world. It is also vital that collaborative partnerships between schools and museums be strengthened to encourage the development of educational online resources.

Various recommendations for further research have become apparent. Taking into account methodological limitations, future studies could be conducted with a larger population of differing demographic characteristics. A longitudinal study could give a more complete

understanding of how students were impacted by the online and the onsite exhibitions. Additional research in the fields of museum informatics and Holocaust education could be generated. Of particular importance would be studies focusing on using museum exhibitions and Web-based technology to convey the testimony of Holocaust survivors to future generations.

Ultimately, the impact of an onsite or an online exhibition may be shaped by subsequent events that take place outside the realm of the museum. It may be weeks, months or even years later when visitors can appreciate the significance of a museum experience. As a teacher involved in the exhibition project commented, "You'll never know... for some people, this occasion to view *Life in Shadows* could have a profound influence on the way they see the world and their future choices" (Appendix G, p.140).

Yet learning of a cognitive and an affective nature did occur during the course of the exhibition and in its aftermath. Students connected the lessons of history with issues confronting today's global society. A one-day conference on genocide was organized in March 2006 by twelfth graders at Lakeview High School in Battle Creek. Several entries were submitted to the Holocaust Museum's Darfur Editorial Writing Contest held in the spring of 2006. A local English teacher joined with a colleague hundreds of miles away in a collaborative relationship. Together they launched a blog or online journal, designed for their students to share their reactions, feelings, and ideas about Elie Wiesel's Holocaust memoir, *Night*.

Supporting events, planned in conjunction with *Life in Shadows*, also made a lasting impression. The words below were written by an eleventh grade student considered troubled, at risk and struggling to remain in school. After viewing the *Life in Shadows* exhibition and attending a supplemental presentation by a survivor (a former hidden child, artist, and poet), the

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student was prompted to express her feelings in an email letter and was willing to share this
excerpt:

> I was especially moved by the fact that you were only 12 years old when you
> arrived in this country from Europe. When you spoke of going to high school,
> you said that it was almost like having two more years of the Holocaust. I
> understood this because sometimes it becomes hard for me to face getting up in
> the morning and just getting myself to school. You gave me a way to relate to
> you. Listening to you speak was a great honor because we can hear in your
> words and see in your art work what you have done with your life. Even though
> you are now retired, you continue to inspire students throughout the country
> and help to educate people about the tragic events of the Holocaust.

In the final analysis, residents of Battle Creek, Michigan were honored to be able to bring
this extraordinary traveling exhibition from the United States Holocaust Memorial Museum to
their community. The exhibition saw more than 8,160 visitors, with 3,800 junior and senior high
school students in attendance from all over the state of Michigan. Many more people accessed
the exhibition online. Over 100 individuals helped make *Life in Shadows* possible by
volunteering to serve as docents, guides, and greeters and by assisting with the physical
remodeling of the Art Center facility and with exhibit installation.

The experience of sharing the lessons of the Holocaust did more than impart knowledge.
It raised an awareness of our responsibility to protect and care for all those who are targeted by
hatred, discrimination and violence. Truly, this community heeded the remarks spoken by former
President Jimmy Carter on the occasion of the presentation of the Final Report of the *President's
Commission on the Holocaust, September 27, 1979* (Wiesel, 1979).

> Out of our memory...of the Holocaust we must forge an unshakeable oath with
> all civilized people that never again will the world stand silent, never again
> will the world...fail to act in time to prevent this terrible crime of
> genocide....we must harness the outrage of our own memories to stamp out
> oppression wherever it exists. We must understand that human rights and
> human dignity are indivisible.

APPENDIX A

EXHIBITION ANNOUNCEMENT

UNITED STATES HOLOCAUST MEMORIAL MUSEUM
presents
LIFE IN SHADOWS: HIDDEN CHILDREN AND THE HOLOCAUST

A traveling exhibition and teachers' workshop in
Battle Creek, Michigan
September - November 2005

Life in Shadows will be on display at the Art Center of Battle Creek, supported by a grant from the W.K. Kellogg Foundation and other donors. Michigan residents and visiting school groups will be able to view text and multimedia images from our country's premier national museum for the documentation, study and interpretation of Holocaust history. This exhibition will only travel to two other venues in the United States. Trained docents and retired teachers will serve as exhibition guides. Supporting events will include a film and lecture presentation by Pierre Sauvage, a concert by folksinger Theodore Bikel, and a panel discussion by Michigan residents who were Hidden Children. A Holocaust education workshop conducted by Museum personnel will be offered at no charge to interested teachers with professional development credit available. Attendees will also receive stipends to purchase recommended Holocaust teaching materials.

- -

Please detach and return to Margaret Lincoln by February 9, 2005 via US mail at 300 S. 28 Street, Battle Creek, MI 49015 or by fax to 269-565-3738. You may also email your response to mlincoln@bc-lakeview.k12.mi.us.

Name _____ District _____ School _____

Address _____ Telephone _____

email _____ Course(s) taught relevant to exhibit _____

I would consider bringing approximately _____ students to view *Life in Shadows* in fall 2005.

I am interested in attending the Holocaust education workshop in Battle Creek. _____ (yes) _____(no)

Additional comments _____

_____

Life in Shadows: Hidden Children and the Holocaust explores the remarkable history of children who went underground to escape Nazi persecution and destruction. It details stories of desperation, tragedy, courage, love, and survival in this darkest of times. With identities disguised, these youngsters faced constant fear, dilemmas, and danger. Theirs was a life in shadows, where a careless remark, a denunciation, or the murmurings of inquisitive neighbors could lead to discovery and death.

APPENDIX B

INCENTIVE AWARD FOR LESSONS

United States Holocaust Memorial Museum
presets
Life in Shadows: Hidden Children and the Holocaust

The United States Holocaust Memorial Museum (USHMM) traveling exhibition *Life in Shadows* comes to the Art Center of Battle Creek, Michigan in September 2005, funded in part by a grant from the W.K. Kellogg Foundation. A workshop on Holocaust education staffed by USHMM personnel will be held in Spring 2005.

We are seeking lesson plan material to be used during the workshop and to be available for teachers who bring classes to view *Life in Shadows* next fall. Lesson plans supporting the online version of *Life in Shadows* are especially needed. See http://www.ushmm.org/museum/exhibit/online/hiddenchildren/index/.

An incentive award of $250.00 will be paid to each of four teachers whose lessons are chosen for inclusion in the spring workshop for Holocaust educators.

You may choose to follow the template suggested for entries for the Belfer Exemplary Lessons Initiative at http://www.ushmm.org/education/foreducators/prodev/beli/2003/template.pdf. You may otherwise simply include the following components: Overview, objectives, grade level, curriculum fit, procedure/strategy, materials/resources and evaluation/assessment. It is recommended that your lesson be consistent with the USHMM "Methodological Considerations" set forth on p. 3 of the USHMM guide *Teaching about the Holocaust: A Resource Book for Educators* available at http://www.ushmm.org/education/foreducators/teachabo/part_2.pdf.

Lessons should be submitted in print or electronic format by **February 1, 2005**. Please email lessons to mlincoln@bc-lakeview.k12.mi.us or send materials via the US mail to Margaret Lincoln, Lakeview High School, 300 South 28th Street, Battle Creek, Michigan 49015. Questions may be directed to 269-565-3730.

APPENDIX C

PARENTAL CONSENT FORM

Parental Consent Form

Students from _____ (school name) in the classroom of _____ (teacher name) will be using the resources of the United States Holocaust Memorial Museum (USHMM) to supplement their study of the Holocaust. Students will access an online and/or onsite version of a traveling museum exhibit about children who went into hiding during the Holocaust. This exhibit, *Life in Shadows: Hidden Children and the Holocaust,* is on display at the Art Center of Battle Creek from September through November 2005. Holocaust survivors are visiting Battle Creek and lectures, concerts, and special film presentations are taking place in the community.

As part of this unit of Holocaust study, students will complete an online survey containing questions about the *Life in Shadows* exhibit. Questions will be of both an open-ended and closed-ended format. Responses will be stored on a web server of the University of North Texas in Denton, Texas.

Students are also being asked to participate in this survey to provide feedback about visitor response to *Life in Shadows*. USHMM is most interested in knowing how this exhibition impacts students and appreciates their willingness to respond to questions and to share their comments. The survey has been designed by Lakeview High School Librarian Margaret Lincoln as part of a research project being undertaken at the University of North Texas to determine the educational and informational value of a museum exhibition in the online vs. onsite or traveling version. The survey takes approximately 40 minutes to complete.

There are no foreseen risks associated with this project. Participants will benefit from exposure to the unique instructional resources provided by USHMM, our country's national museum for the documentation, study and interpretation of Holocaust history. Your child's participation may also help researchers better understand the educational effectiveness of online museum exhibits.

Participation in the project is voluntary. You may choose to not allow your child to participate or to withdraw your child at any time without penalty. Alternate activities will be offered in lieu of completion of the online survey.

The names and identities of students participating in the project will not be turned over to USHMM personnel or to any other organization. All reasonable measures will be taken to protect the confidentiality of your child's records. Your child's identity will not be revealed in any publication that may result from this study.

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). Contact the IRB at (940) 565-3940 or sbourns@unt.edu if there are any questions regarding your rights as a research subject.

If you have any questions regarding this study, please contact Margaret Lincoln at mlincoln@bc-lakeview.k12.mi.us or 269-565-3730. You may also contact Faculty Advisor, Dr. Brian O'Connor of the University of North Texas, School of Library and Information Science, at BOConnor@lis.admin.unt.edu or 940-565-2347.

Please detach and return to your child's teacher.

I have read this consent form and hereby consent to my child's participation in the project described above.

Student's Name _____

Signature of Parent or Guardian _____

Signature of Principal Investigator_____

Date _____

APPENDIX D

LETTER OF APPROVAL FROM COOPERATING INSTITUTIONS

University of North Texas

Institutional Review Board
Letter of Approval from Cooperating Institutions

Margaret Lincoln
Lakeview High School
300 S. 28 Street
Battle Creek, MI 49015

April 11, 2005

Mr. Gary Garland
Harper Creek Junior High School
7454 B Drive North
Battle Creek, MI 49014

Dear Mr. Garland,

Students from Harper Creek Junior High School are being given the opportunity to use the resources of the United States Holocaust Memorial Museum (USHMM) to supplement their study of the Holocaust. Students will access an online and/or onsite version of a traveling museum exhibition about children who went into hiding during the Holocaust. This exhibition, *Life in Shadows: Hidden Children and the Holocaust*, will be on display at the Art Center of Battle Creek from September through November 2005. Holocaust survivors will visit Battle Creek and lectures, concerts, and special film presentations will take place in the community.

As part of this unit of Holocaust study, students will complete an online survey containing questions about the *Life in Shadows* exhibition. Questions will be of both an open-ended and closed-ended format. Responses will be stored on a web server of the University of North Texas in Denton, Texas.

Students are also being asked to participate in this survey to provide feedback about visitor response to *Life in Shadows*. USHMM is most interested in knowing how this exhibition impacts students and appreciates their willingness to respond to questions and to share their comments. I have designed this survey as part of a research project being undertaken at the University of North Texas to determine the educational and informational value of a museum exhibition in the online vs. onsite or traveling version. The survey takes approximately 40 minutes to complete.

There are no foreseen risks associated with this project. Participants will benefit from exposure to the unique instructional resources provided by USHMM, our country's national museum for the documentation, study and interpretation of Holocaust history. A student's participation may also help researchers better understand the educational effectiveness of online museum exhibits.

Participation in the project is voluntary. Parents of students involved in the project will be asked to sign a consent form outlining the details of the project. Parents may choose to not allow their student to participate or to withdraw their student at any time without penalty. Alternate activities will be offered in lieu of completion of the online survey.

The names and identities of students participating in the project will not be turned over to USHMM personnel or to any other organization. All reasonable measures will be taken to protect the confidentiality of a student's records. A student's identity will not be revealed in any publication that may result from this study.

This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). You may contact the IRB at (940) 565-3940 or sbourns@unt.edu if there are any questions regarding the rights of students as research subjects.

If you have additional questions regarding this study, please contact me at mlincoln@bc-lakeview.k12.mi.us or 269-565-3730. You may also contact Faculty Advisor, Dr. Brian O'Connor of the University of North Texas, School of Library and Information Science, at BOConnor@lis.admin.unt.edu or 940-565-2347.

Please indicate your approval of Harper Creek Junior High School students participating in this study by signing the form below and returning the entire letter to me for forwarding on to the UNT Institutional Review Board. Please retain a copy of this letter for your records.

Thank you for your cooperation and support.

Yours truly,

Margaret Lincoln

Please add your signature below in the space provided for school administrator and return both pages of this document to Margaret Lincoln, Lakeview High School, 300 S. 28 Street, Battle Creek, MI 49015.

I have read the description of this research study and hereby give approval for the participation of Harper Creek Junior High School students in the project.

School administrator _____ Title_____

Address _____

Phone _____ Email _____

Signature _____ Date _____

APPENDIX E

UNT INSTITUTIONAL REVIEW BOARD APPROVAL

UNIVERSITY *of* NORTH TEXAS

Office of Research Services

May 2, 2005

Margaret Lincoln
School of Library and Information Sciences
University of North Texas

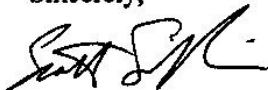Re: Human Subjects Application No. 05-085

Dear Ms. Lincoln:

As permitted by federal law and regulations governing the use of human subjects in research projects (45 CFR 46), the UNT Institutional Review Board has reviewed your proposed project titled "Holocaust Museum Survey." The risks inherent in this research are minimal, and the potential benefits to the subject outweigh those risks. The submitted protocol and informed consent form are hereby approved for the use of human subjects in this study. **Federal policy 45 CFR 46.109(e) stipulates that IRB approval is for one year only.**

It is your responsibility according to U.S. Department of Health and Human Services regulations to submit annual and terminal progress reports to the IRB for this project. Please mark your calendar accordingly. The IRB must also review this project prior to any modifications.

Please contact Shelia Bourns, Research Compliance Administrator, or Boyd Herndon, Director of Research Compliance, at extension 3940, if you wish to make changes or need additional information.

Sincerely,

Scott Simpkins, Ph.D.
Chair
Institutional Review Board

APPENDIX F

LIFE IN SHADOWS SURVEY AND INFORMED ASSENT NOTICE

Life in Shadows: Hidden Children and the Holocaust

Informed Assent Notice for Exhibition Survey

Thank you for participating in this survey to provide feedback about visitor response to *Life in Shadows: Hidden Children and the Holocaust.* The United States Holocaust Memorial Museum is interested in knowing how this exhibition impacted you and appreciates your willingness to respond to questions and to share your comments. This survey is part of a research project being undertaken at the University of North Texas to determine the educational and informational value of a museum exhibition in the online vs. onsite or traveling version.

You are being asked to complete a survey that will take about 40 minutes. Completion of the survey involves no foreseeable risks. Participation is voluntary and you may stop at any time. No individual responses will be reported to anyone because data will be reported collectively. Your responses to the questions are anonymous. You give assent by completing the survey.

If you have any questions regarding this study, please contact:

Margaret Lincoln, Lakeview High School
mlincoln@bc-lakeview.k12.mi.us
269-565-3730
Dr. Brian O'Connor, University of North Texas, School of Library and Information Science
BOConnor@lis.admin.unt.edu
940-565-2347

This project has been reviewed and approved by the University of North Texas Institutional Review Board 940-565-3940. You may print a copy of this Assent for your records.

I. Visitor background

1. What is your current grade in school?
   a. 8
   b. 9
   c. 10
   d. 11
   e. 12

2. Sex
   a. male
   b. female

3. Which statement best describes your knowledge about the Holocaust:
   a. This class represents the first time I have formally studied the Holocaust in school.
   b. I have already taken one or more classes that included some content about the Holocaust.

4. Before taking this class, how would you have rated your knowledge level of Holocaust history on a scale of 1 through 4, with 1 indicating low and 4 indicating high?

   1   2   3   4

5. Please give the title of the most memorable Holocaust-related book which you have read.

_____

6. Please give the title of the most memorable Holocaust-related film which you have seen.

_____

7. Have you ever visited the United States Holocaust Memorial Museum?
    a. yes
    b. no

8. Have you ever visited another Holocaust museum?
    a. yes
    b. no

9. Have you explored any Holocaust Websites before?
    a. yes
    b. no

10. Which version of *Life in Shadows: Hidden Children and the Holocaust* did you view:
    a. Traveling onsite version at the Battle Creek Art Center
    b. Online version at http://www.ushmm.org/museum/exhibit/online/hiddenchildren/
    c. Both onsite and online versions

II. Exhibition experience

For questions 11-32, please respond according to your experience of having recently viewed the onsite or online versions of the *Life in Shadows* exhibition.

11. Eight-year-old Augusta Feldhorn wore this patch in German-occupied Belgium. Why were children as young as six forced to wear the yellow star?

_____

_____

_____

12. Sisters Eva and Liane Münzer were placed in hiding with a strongly religious Catholic couple but were later reported to the police as a result of a fight between their rescuers. In February 1944, the young girls were deported to Auschwitz and murdered. Their brother Alfred was placed in a different home and survived. What risks were involved in keeping a family together?

_____

_____

_____

13. This photograph documents the December 1941 circumcision (brit milah) of Alfred Münzer in the German-occupied Netherlands. His mother carried this photograph with her when she was deported to Auschwitz. What other actions by Jews in German-occupied Europe illustrate their attempts to maintain some form of religious tradition?

_____

_____

_____

14. Five-year-old Frederik Steinkeller escaped a "children's action" planned for the Zawiercie ghetto by going into hiding. He survived the war living in the one bedroom apartment of the Nowaks, a Polish Catholic family. Frederik hid in several locations including under a table, in a bed, and even inside this wardrobe. What were some other difficult or dangerous hiding places where Jewish children found temporary shelter?

_____

_____

_____
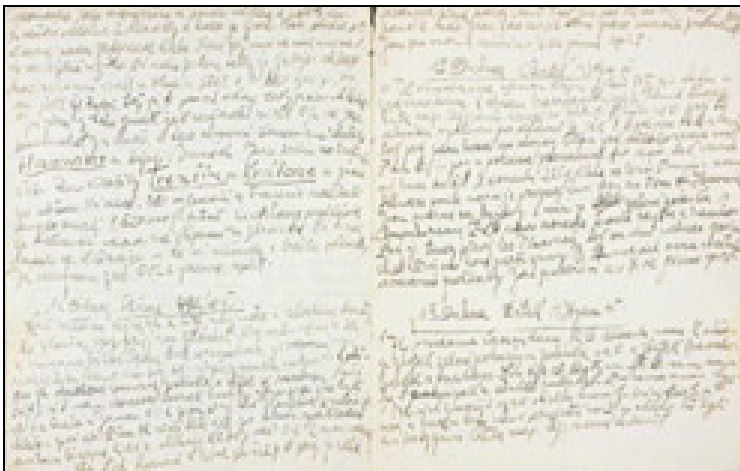
15. Teenager Otto Wolf kept a diary throughout his family's ordeal of fleeing to the forests outside their Czech hometown of Mohelnice in 1942 and moving from one hideout to another. Why did Otto (captured in April 1945) and other hidden children (such as Anne Frank) share their thoughts and experiences in writing?

_____

_____

_____

16. This photograph shows 11-year-old Dawid Tennenbaum disguised as a girl in hiding. In addition to a physical disguise, what other aspects of identity were children forced to change?

_____

_____

_____

17. Play remained an essential part of a child's life experience and mental development, even in the ghettos and concentration camps. Jurek Orlowski and his brother made these tiny "toy soldiers" out of wood scraps and played various games in the dark, flea-infested basement where they were hidden. Thinking back to the exhibition, how did a toy or personal belonging take on special meaning for a hidden child?

_____

_____

_____

18. This dress was worn by Sabina Kagan who was put in hiding as an infant when SS mobile killing squads rounded up Polish Jews in 1942. Children in hiding had to move quickly and without being noticed. They were forced to leave behind the few possessions they owned. Given the necessity of going into hiding upon very short notice, what three items would have been useful and valuable for a child to take and why?

_____

_____

_____

19. The toddlers in this children's home in Etterbeek, Belgium, survived in hiding, but their parents were deported to Auschwitz. When the war ended in 1945, what difficulties did children face as they began searching for family members?

_____

_____

_____

20. This photograph, taken in 1942-1943, shows an informal gathering of a group of children at a Catholic orphanage in eastern Poland. One girl, in the center background, scratched out her face. What do you remember about the story behind this photograph?

_____

_____

_____

For questions 21-24, please indicate how useful you found the following media in understanding the lives of hidden children during the Holocaust. Base your responses on a scale from 1-5 where 1=not useful and 5=extremely useful

21. Recorded audio of survivor testimonies   1   2   3   4   5

22. Video segments   1   2   3   4   5

23. Artifacts   1   2   3   4   5

24. Historic photographs   1   2   3   4   5

25. Which artifact or photograph from the exhibition had the greatest impact on you?

_____

_____

_____

26. Since taking this class, how would you rate your knowledge level of Holocaust history on a scale of 1 through 4, with 1 indicating low and 4 indicating high?

       1   2   3   4

27. Following our study of hidden children through the *Life in Shadows* exhibition, what unanswered question or topic related to the Holocaust would you like to explore?

_____

28. What other genocides that have occurred in recent history would you like to further study? (A genocide has been defined as the intentional and systematic destruction of a national, racial, ethnical or religious group.)

_____

29. Is there a community service project (such as volunteering at the hospital, helping out at the Food Bank, etc.) in which you would like to become involved? If so, which project?

_____

For questions 30-31, please indicate your interest in learning more about the Holocaust through the activities listed. Base your responses on a scale from 1-5 where 1=not interested and 5=extremely interested

30. Exploring the USHMM Website further   1   2   3   4   5

31. Visiting the United States Holocaust Memorial Museum   1   2   3   4   5

32. What is the most important lesson that will remain with you as a result of our experience with the *Life in Shadows* exhibition?

_____

_____

_____

_____

_____

APPENDIX G

GALLERY SHEET

Gallery Sheet

Life in the Shadows: Hidden Children and the Holocaust

1. Jews were required to identify themselves by wearing a certain yellow cloth shape. What is that shape?

2. One mother hid her son by dressing him as a girl. There is a photograph of Dawid (David). Where is it located?

3. One 8-year old girl lived in a city sewer for 14 months. One of the artifacts in the exhibition belonged to her. Which item is it?

4. Did you see the "life calendar?" What is the story behind it? What life events did the father consider important?

5. Clothing items were given from one child to another. What items were worn by two children in the exhibition?

6. One child lived in a piece of furniture. What was the piece of furniture called?

7. Where is *Anne Frank: the Diary of a Young Girl* located in this exhibition? Have you read this book already?

8. Can you name five countries named throughout this exhibition where there were hidden children?

9. There are identity papers that were buried by Jewish people and later dug up by the Nazis. Where are those papers in the exhibition?

10. Look for two artworks: one of a sister bathing a little boy and one of an "autobus" showing how travelers would navigate the globe in the year 2000.

11. Can you find the "toy soldiers?" What are they made out of?

Reflection questions in response to film *I'm Still Here: Real Diaries of Young People Who Lived during the Holocaust*:

- How does the knowledge gained from this exhibition influence the way you think about your choices today?
- What hardships of the experience of going into hiding would have been especially difficult for you?

Art Center of Battle Creek
265 E. Emmett Street, Battle Creek, Michigan 49017
Exhibition organized and circulated by the United States Holocaust Memorial Museum, Washington D. C.

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APPENDIX H

TEACHER EXHIBITION EVALUATION

Teacher Exhibition Evaluation

The following email message was sent out to 48 teachers who had brought classes to view the *Life in Shadows* exhibition at the Battle Creek Art Center. Teachers were asked to respond to the questions listed below and to return their responses by November 22, 2005.

1. Please describe your students' background knowledge and interest in Holocaust history before starting this unit of study.
2. What instructional activities were helpful in preparing your students for their visit to the *Life in Shadows* exhibition at the Art Center of Battle Creek?
3. Did your students access the online version of *Life in Shadows* at http://www.ushmm.org/museum/exhibit/online/hiddenchildren/?
4. Upon returning to your school building, what reactions or comments did students share with you after viewing *Life in Shadows*?
5. Which aspects of your school's visit to the Art Center were favorable? Do you have recommendations for improving the overall museum experience?

Email responses were received from 35 teachers. 5 teachers (from the initially email list of 48) did not respond directly because they had accompanied to the exhibition colleagues from the same school district who did submit feedback. Additionally, some teachers brought more than one class to the exhibition, accounting for the 72 classroom visits to *Life in Shadows*. Responses have been reproduced in their entirety, including the rubric for a final project based on students' viewing of the exhibition. Names and email addresses of teachers have been removed.

Teacher 1
1. Students did several book browses and a short inquiry into WWII and the Holocaust. We watched a WWII documentary on the Holocaust with footage from the concentration camps. We read a background piece to *The Diary of Anne Frank* and read the first Act of the play. Students were extremely interested in this time period.
2. The WWII documentary was very helpful in preparing students for the museum. Journaling activities where they had to place themselves into Anne's situation also helped. After book browsing, students wrote questions they still had about the Holocaust and looked for answers at the exhibit.
3. No, we did not.
4. Some felt the video was too long, but most were shocked by the information they saw. They questioned whether the wardrobe where the little boy hid behind was the real, actual wardrobe. They wanted to know why the Jewish boy pretended to be a girl and how did pretending to be mentally disabled protect him when Hitler wanted to build the perfect race.... weren't those people also selected for the camps? They said they didn't think they could survive in a sewer or staying quiet so long. They knew about the yellow stars, but were interested in the other patches used. Students were interested in the other diaries and asked if we were going to read some of them after Anne Frank's. They wondered at how Hitler could do this and others go along with it. I heard a lot of "Why didn't somebody kill him?"

5. The video was very well done, but may have been too long for middle school students to sit still. The treasure hunt sheet was a great idea...it lead students to interesting displays and gave them a purpose to their viewing. The timing was difficult, because some students wanted to read everything while others wanted to browse. So some students finished a section earlier than others. Overall it was very well organized. It was a powerful exhibit.

Teacher 2
1. We actually discuss the Holocaust with sophomores in World Cultures in the second semester. Because of the exhibit we introduced many of the articles from the *BC Enquirer* prior to our visit. Many of the students had some knowledge from movies, books. Etc.
2. We relied on discussion and the sharing of articles.
3. No they did not, sorry.
4. We had them write journal entries as if they were children of the Holocaust themselves. Through discussion many of them said how fortunate they were to have what they do today. It was excellent opportunity for our students and I am sure it made a lasting impression.
5. The volunteers were awesome. Dividing into smaller groups was a great idea. I would not have changed a thing. One word…Impressive!

Teacher 3
1. This quarter my students have been studying a Holocaust unit at Operation G.R.A.D. and have been reading *Night* by Elie Wiesel. We were in the middle of the book when we visited. We also made connections to the unit with present day hate crimes.
2. I looked at the Website and the suggested teacher lessons. I modified at least one of the lessons. I had students work in small team groups of 3-4 to plan what to pack in their backpacks/knapsacks as though they had little notice about having to leave. The teams worked using consensus to decide on items to take. I also used some of the information from the last Holocaust exhibit.
3. My students did access this in several ways. My newspaper class used this site to create an article about the English class visiting the exhibit. My English classes who all toured *Life in the Shadows* also used the Website to create Power Points, papers, and collages about people who were in the Holocaust.
4. My students are often reluctant writers, however, they wrote and wrote. Many commented on the boy who had to hide behind the wardrobe on the little chair. Many wanted more information about survivors. Some wanted to hear more about Anne Frank. A student commented, " I want to know how they got all the shoes and little dresses." (from the exhibit) Another student commented that she learned to, "Be grateful. Live life like it was your last day." She also wanted to know how long it took to put together the exhibit.
5. It was very well done. At first I was concerned as to how all the artifacts, film, informational boards, etc.. would fit in the small space, however it was well organized and did not feel cramped. I personally want more time with the exhibit without my class. That does not reflect on the museum, but my needs to absorb the information without being "in charge" of 30 students.

Teacher 4
1. Student's background: Most of these eighth grade students had read at least one or two historical fiction or biographical books on the Holocaust as seventh graders. They also spent about eight weeks covering the Holocaust during their 7th grade Language Arts classes. This study involved reading books, researching on the internet, listening to information given by teachers, and doing a project related to the book(s)/ Time Period.
2. Before we came to the Art Center this year we spent time doing some of the Hidden Children lessons that were given to us. In particular, we did Younglove's lesson which involved a writing prompt on choosing five items to take with you, the excerpt from Anne Frank, the excerpt from *Schindler's List*, and other writing prompts, discussions, and information that went along with these activities. We also did Aimee Young's lesson using identification cards, "The Darkest Days", and "A Letter to the Woman Who Will Find My Daughter" along with discussion of material and quotes and some writing on these activities.
3. We did not access the online version.
4. The reactions to the exhibit were very positive. Everyone seemed to want to talk about at least one thing that had stood out to them or made a big impression on them. The students feel that the Holocaust is more real to them now than it was after just reading and researching it. Photos and stories from the internet did not impact them as much as seeing some of the artifacts like the wardrobe and the dress from the girl who lived in the sewer.
5. Overall, the whole experience what very educational. Students were given good information from the guides, but were also allowed to wander and look at things at their own pace, spending time on artifacts that really interested them. I think the movie was also very good and made an impact on the students. Thanks for all your work and including us in this exhibit. Our students benefited greatly from this experience.

Teacher 5
1. Our middle school students have read aloud the play version of *The Diary of Anne Frank*. They have studied the Holocaust in general. They viewed the documentary *Genocide*, also.
2. The information, pamphlets, etc. that I received last spring during the educators' training was valuable. I used a lot of it in preparation of my unit. The website information was helpful for me.
3. I accessed the site, along with many others. Some of my students accessed these sites on their own at home and shared information found with other class members.
4. The students liked seeing other diaries. The wardrobe made an impression as did the Stars of David. They were taken with the hope these children possessed in spite of the horrors. The movie, while long for middle school kids, was also commented on by many as being powerful. The students appreciated being able to respond in writing to what they were seeing and feeling. This is what they are used to doing in class, so it was comfortable.
5. Keeping the groups small was important. Having knowledgeable docents was also important. I liked that someone got down on the floor with the kids and talked to them personally at the end about what they had viewed. This was a wonderful experience for these kids. My staff felt it was valuable, also. They enjoyed (not the right word, I know) the experience personally as well.

Teacher 6
1. Most of the students had taken a 12 week course on the holocaust at PHS. Some went on the class trip last spring to Washington to visit the Holocaust Museum. There were also some juniors who were taking honors history at the time of our visit.
2. Since most of the students had taken the class before the visit they had a natural interest in seeing the exhibit.
3. Some of the students actually went to the Museum in Washington last spring and had accessed the website as part of their class.
4. Those who took the class were glad to see some of the artifacts of topics studied. The others were more determined to take the class the next time it is offered.
5. I think everything was favorable. Walking into the exhibit gave me the same feeling as when I was in the holocaust museum in Washington. The students really liked the MTV film also.

Teacher 7
1. Before this unit, several of my students were not familiar with the Holocaust...Although a lot of them knew details about World War II.
2. We read *The Diary of Anne Frank* and I also allowed them to research the topic of the Holocaust. I used a variety of instructional strategies to engage my students in understanding the topic better....We played vocabulary games on a daily basis.....students participate in readers' theater, read independently with text sets on the topic, etc....The social studies teacher also focused on World War II as well ...so the students really made a huge connection.....
3. My students couldn't view the Holocaust site due to lack of computers in school.
4. Upon returning to school from the exhibit, many of my students wanted to see more information about Anne Frank at the exhibit.....During the movie, they were hoping to see Peter or Anne on the screen.....Some say they enjoyed seeing the movie and was really sad about what happened to so many people and some felt the movie was just too long.
5. Overall, the exhibit was nice and the kids really enjoyed reading the different facts. One student asked me today, if we would be going back there next year.... I like the idea of putting the students' reaction to the movie on the wall after their viewing.

Teacher 8
1. My students read *Night* by Elie Wiesel and completed research projects centered around issues of the Holocaust. Every year this is the unit my students are most engaged with. They are appalled. We also watch *Schindler's List* and reflect on what could have changed to make everything that happened less awful, etc.
2. Most of all Elie's story hits them. Elie himself was a child when his family was taken. The research multi-genre project is probably the most informative. We do a "showcase" day and display all our projects/papers/presentations and all the students grade each other and write down 5 things they didn't know before the showcase and share out.
3. We didn't see the on-line version
4. My students wrote some powerful responses to the experience and we hung them in the cafeteria for other students to read. My kids were also motivated to do something about what is going on in Sudan. We are writing Granholm.

5. Both times we had helpful guides. Kay and one other woman were specifically wonderful and informative. They made the experience much more powerful than to simply walk through it. The video in the basement felt as if the music was a little too much on the positive side. The video in the back room upstairs and other videos throughout the rooms were much more powerful. To have a speaker for the kids (a survivor) would have been remarkable. Thank you endlessly for all your efforts again in putting this together and involving so many kids. It is SOOO important and powerful for them to learn about this horrible part of our history in order to stop our judgmental habits now. Thank you!!!

Teacher 9
1. Few students had a real understanding of issues surrounding the Holocaust. While the interest level of the students was high, they had little real knowledge of the events.
2. Students read *Night* by Elie Wiesel and conducted researched on primary sources (journals, letters, court records, interviews, etc) that the Holocaust killed millions.
3. Some students used the Internet resource. It prepared them for the experience by describing how actual lives were changed. It is one thing to read in a textbook that millions of Jews died; it is quite another thing to read the actual stories of people who hid and went to such extreme measures to avoid persecution.
4. Students were extremely moved by the personal stories. They commented about the wardrobe where one little boy hid and how hard it would be to make a small boy remain quiet. They also commented that it was sad that such a little boy understood the need to be quiet.
5. Some commented they didn't understand how humans could be so cruel to one another. Several comments and a discussion on the LEVEL of hate it would take to inflict pain on and kill innocent children. Most didn't understand how anyone could justify it. Several compared those they saw in pictures to younger siblings and they were moved on a deeply personal level.

Teacher 10
1. The students who came from our school were freshmen. This was part of a bonding process and community awareness session for study hall. Only a few students were aware of the background of this exhibit before I provided them the URL given from you.
2. Only a couple students had already seen the movie on MTV. We also discussed in class before attending. This was very helpful for the students to see and understand what occurred. This allowed students to really think about a student/child perspective. Most knew about the war, and that Nazi fought. They didn't think about how the war affected the children.
3. The URL provided was very helpful.
4. Students were very subdued and thoughtful. They wanted to see world charts to identify the specific areas that they saw at the Art Center. They personalized and thought of what it would have been like if it were them. They were willing to share and let many of those "school stereotype" walls down and athletes and book-smart students were animatedly talking.
5. It was ALL memorable and wonderful--eerily so. The students will always have that experience in their minds, even after they have graduated. Although this wasn't a required

class event, and wasn't even a class, it was a great bonding experience for our freshmen class. It broke down some barriers between students who have been "known" as a certain stereotype and who do not usually interact with other students. The experience allowed students to think of each other simply as human beings, as children, not unlike those portrayed in the exhibition. It allowed them to realize how grateful they are to live in this time and age. They shared this, which I hadn't heard from them before. Thank you again for this opportunity.

Teacher 11
1. We had just completed *The Diary of Anne Frank* and had researched and talked a great deal about the Holocaust before, during and after reading the diary.
2. The students did many activities that were helpful. For example, they each were given a person to read about who was in the Holocaust and they had to write a summary of what they read and present that person to the class. We viewed some photos and discussed them. We did inquiry on ghettos, gypsies, Jehovah Witnesses (during the Holocaust) and others.
3. Yes, we previewed the exhibit online.
4. The students really enjoyed the tour and were able to discuss other things that they learned about the Holocaust once we arrived back to school.
5. The students had a lot to say about the actual tour and how much they liked it. They said all the tour guides were really nice. The only thing they complained about was that they had a hard time staying focused on the black and white film for 50 minutes.

Teacher 12
1. My classes have studied WWI: its causes and consequences. We then tied this information to its causal effects for WWII. We are studying Hitler and his tremendous influence over the German people. How did such a man gather such loyalty? Why did so many people seem to "blindly follow" Hitler? We are concluding with the Holocaust... its victims and their fate. Why are Holocaust survivors so insistent that their story be told forever? How was the creation of the modern country of Israel connected to the Holocaust?
2. Students who "qualified" to participate in today's field trip had to do some background research on the Holocaust. In doing so, they read a biographical sketch of a Jewish child and his/her experience during the Holocaust.
3. We accessed the online *Life in Shadows*. It was a tremendous benefit to have the electronic version so students knew what to expect when we visited the Art Center
4. Students were touched by the exhibit: Both the artifacts as well as the very well done MTV documentary. Is this movie available to schools for use in the future?
5. I feel the entire experience was positive... of course it was not a "fun" field trip but all who participated would certainly comment that it was a most worthwhile endeavor. THANK YOU for bringing this wonderful exhibit to Battle Creek. You'll never know... for some people, this occasion to view *Life in Shadows* could have a profound influence on the way they see the world and their future choices.

Teacher 13
1. Our students are currently getting an overview WW II and we always include a study of the Holocaust. The students who attended the exhibit actually went ahead of their classmates and did readings on 'Hitler's Final Solution' as well as narratives of survivors of the Holocaust and participated in an after school discussion prior to the field trip. Their classmates will be doing the same types of work in the coming week.
2. See above. We will actually be using more of the materials in our whole class instruction and the students who have been on the field trip will provide additional insights.
3. We used the website as preparation for our class work and some students also accessed it individually.
4. The students were most impressed with the artifacts...the shoes were mentioned over and over! The video left a lasting impression...the students identified with different children for different reasons.
5. So very well organized! The docents gave the students direction but were also flexible to the students needs...letting them move around independently but available for questions. Thanks for the small groups! I went to see the panel discussion of Holocaust child survivors as did some of my students. They were profoundly affected by their stories and shared with their classmates.

Teacher 14
1. I teach 10th grade students in American History. Most of my students have some familiarity with the Holocaust because they read *The Diary of Anne Frank* in 8th or 9th grade English. Some of them (those who were advanced placed in English and studied the Holocaust in 8th grade) had quite extensive knowledge and had done considerable research in 8th grade. We had spent about 10 days studying the Holocaust prior to visiting the exhibit. So most of my students had quite a bit of prior knowledge, before we went to the exhibit. I don't think they necessarily "learned" a lot of new information as a result of visiting the exhibit; but it did personalize the knowledge they already had for them.
2. We had studied the rise of Adolph Hitler and the reasons why he had gained power in Germany as well as why he targeted the Jews as a scapegoat in his rise to power. My students used a glossary and a timeline of events in the Holocaust to answer a number of questions about the course of the Holocaust and how the actions against the Jews evolved over time. We watched a clip from the ABC video series "The Century" about "Civilians at War" which detailed the evolution of the "Final Solution." We also watched the 1988 TV movie, "Escape from Sobibor."
3. Yes we did and I am looking forward to accessing the online exhibit more next semester, since those students will not have the opportunity to visit the actual exhibit.
4. The students were very moved by the exhibit. As I mentioned above, the thing the exhibit did for them the most, I believe, was to personalize the many stories of victims and survivors. They particularly liked the TV interviews with actual survivors that were interspersed throughout the exhibit. They knew all the details--6 million dead, etc. But seeing the shoes passed from one child to another gave those numbers much more meaning. I found the movie particularly effective. Using the actual diary words over the video footage was very powerful; and very personal.

5. Overall, I found the entire visit very favorable. I took my students on two separate occasions. With the second group, the students were given more time to explore the exhibit on their own with a bit less direction than was the first group. For students who already had prior knowledge, I found this more effective. Some of the students in my first group never had time to see what they wanted because the guides were reading to them, etc.

Teacher 15
1. Many students knew a little about the holocaust, having attended a school play or reading about Anne Frank. They had all heard about Hitler. They were very eager to learn more.
2. I have done a unit about the Holocaust for many years. I begin with some true stories that were told to me by my parents who were in the Netherlands during the war. We read a novel, *Tunes for Bears to Dance To*, by Robert Cormier. The young man in the story befriends an old man who survived the holocaust and immigrated to America. Prior to reading we discuss the feelings that a survivor of a tragedy might have. There are questions and essays that go along with the novel. Students go to the library and our librarian pulls her wonderful collection of books: stories told by witnesses, memoirs of survivors and novels based on the holocaust, and gives a book talk. Then students choose a book and present an oral report to the class. Everyone gets a chance to hear additional stories and it doesn't take long for them to realize the enormous impact of this event. Usually there are many books checked out on this topic during the remainder of the year. It's obvious that they are affected by what they've read and heard. After these reports we watch the movie "The Hiding Place", the true story of Corrie Ten Boom. I also have pictures of the actual house in Haarlem, NL where I visit frequently. There are discussions following the film.
3. Yes. The Washington Museum online is an excellent resource.
4. The students were very impressed with the exhibit. It's been brought up by them many times. Something in a discussion will remind them of something they saw.
5. The trip was fantastic. I did notice that some docents were better prepared than others. It was a wonderful exhibit and I appreciated being able to attend with my students.

Teacher 16
1. I teach Special Education students in grade 10-12. I took 15 of my students and 15 students from the German Language class. The students had varying levels of background knowledge; all were interested in learning about the Holocaust and the events that led up to it.
2. Learning the history of Hitler's rise to power. Class Discussions of how this could and did happen.
3. NO.
4. The most widely heard comment was that it was neat to see the real artifacts, that people had actually worn and used the clothes/shoes/toys that they saw in person. The pictures of the people also had a large impact on the students.
5. All aspects were wonderful. I only wish I had previewed the movie before I went to better tailor my lessons. The docents were AMAZING, I can't say enough about them. They took extra time with my students who have trouble reading, it was wonderful! Also, because we traveled so far we needed a place to eat lunch. Luckily it was a lovely day and we sat outside to eat our lunches.

Teacher 17
1. Most students had a surface level understanding of the Holocaust. I had a small number (five or less) who had never heard of it before.
2. I used two lesson plans from the CD I got at the May Conference; both involved reading information on the National Holocaust museum website and making inferences.
3. The Website was a great resource for the students and gave them a preview of what to expect at the Art Museum.
4. They were profoundly affected. We first wrote in response, then talked about it, then used the genocide links on the National Holocaust website to do further research. Many were moved to the extent that they have become somewhat political activists. It will be the foundation piece we use when we get to WWII in the early spring.
5. The film in the basement was good; some students said it was too long, but I think that the length was appropriate and helped to show the extent to which individuals' lives were affected. The artifacts upstairs were excellent and made it much more real, esp. the clothing articles and the chair/wardrobe. I also liked the way you broke up students into three groups upstairs. The entire visit was facilitated well.

Teacher 18
1. We talked about various aspects of the Holocaust (in general): camps, Hitler, ghettos, discrimination, and so forth.
2. I relied greatly on the book "Teaching the Holocaust," group pamphlets, and photos.
3. No
4. "I didn't know it was that bad." "They were our age." Overall, the students felt as if they connected with the children presented.
5. By viewing the movie first then the exhibit, the children really understood why art and diaries were so important.

Teacher 19
1. It was very minimal. A few students had read books like *The Diary of Anne Frank*. One student who came from another school had, at least according to him, a whole semester about the Holocaust.
2. The Blog was very helpful. Many more of my 2nd block students wanted to attend the exhibition which, I'm sure, was partly because of the Blog.
3. Yes, and I used several of the lesson plans during the *Night* unit. They used it as one of their sources for the Genocide Controlled Sources Paper.
4. They were generally very positive about the experience. The discussion at the end was excellent. The docents were very professional and helpful.
5. It was very well-organized and informative. It couldn't have been done better. It makes me want to see the museum in Washington D.C. even more than I did before. I went to the exhibit in Chicago, but I enjoyed this experience even a bit more because of the docents' information and guidance.

Teacher 20
1. Sorry that I couldn't get back to you sooner - busy life! My students learned a great deal at the exhibit. They had read SADAKO AND THE THOUSAND CRANES and THE DIARY OF ANNE FRANK.

2. They had a writing piece at the exhibit - what item affected them the most and why. They also had a triple entry journal for the movie.
3. We did not use the Website.
4. Students were touched in many different ways. Upon return, they wrote thank you letters to the staff at the Art Center.
5. Thank you for all of your hard work. What a meaningful experience!

Teacher 21
1. Our students had very little knowledge of the Holocaust before we began, but they were very interested in learning about that time in history.
2. We used many different activities that were helpful in preparing our students for their visit. They read 2 novels, *The Diary of Anne Frank* and *The Moon is Down* by John Steinbeck. They viewed several videos about the Holocaust and WWII. The two they most enjoyed were "Anne Frank Remembered" and "I'm Still Here." In addition, we utilized several of the lesson plans given to us by you (the students really responded to the poetry lesson). Finally, we viewed the exhibit online, and completed the work that went along with it, before our visit. The students expressed that the website really prepared them for their visit.
3. Yes, they did access the website. They felt that the website gave them some useful information about the exhibit as a whole, as well as, allowed them to learn about specific people's lives. The people became more real to them after they were able to learn their stories and see the things they cherished.
4. Many students thought the exhibit was very well done, and honored the memories of those who lost their lives. They found the video confessionals very moving and powerful, and enjoyed leaving their thoughts and feelings behind on the walls for others to read. They also enjoyed searching for the answers to the questions given to them at the beginning of the exhibit. They also liked that it was tastefully done; that the exhibit was able to convey its point and its purpose without having to shock.
5. The entire experience was wonderful. We liked that there was a video component as well. We also really liked that the students were asked to write down their thoughts to place on the wall for others to see. It was a wonderful idea to have them analyze and reflect on their feelings at that moment because it allowed them to stop and think about what they were viewing. If we had one complaint it was that we would have preferred to have more involved docents who were able to give more background information and share other interesting facts and stories.

Teacher 22
1. We altered our curriculum so that we could begin our Anne Frank unit right away in August so students had basic background about her life, the camps and Hitler's policies.
2. Spending time talking about the Nuremberg Laws and what they meant for Jews in Europe. Taking time to browse non-fiction sources about the war. Watching the A&E biography about Anne Frank
3. No
4. Most really started to understand the magnitude and scale of the Holocaust, and what it meant to go into hiding.

5. The scavenger hunt concept was a helpful focusing tool for the exhibition. The movie was quite long for the kids and very dark. Keeping some lights on, or shortening the movie a bit might help.

Teacher 23
1. My students that I took to the exhibit are dependent readers. Most of them knew something about the Holocaust when I introduced it to them, but their depth of knowledge was limited.
2. We did a web outline to see what they knew about the Holocaust and then we discussed what they had put. Students also had a word list of relevant words that related to the Holocaust. They researched these words and we discussed their meaning.
3. No, we did not go on the internet.
4. Each student wrote a page about what he or she had seen and his or her reactions. I was impressed by what they remembered, and the depth of feeling when they wrote about it.
5. I thought it was important for students to see that people outside of school were concerned with what happened during this period of history, and that people who experienced the Holocaust were still alive to tell their stories. The students were very impressed with the exhibit. The first group of readers I took looked at the exhibits on their own. The second group of readers had a narrator/guide who explained things to them. This group seemed to be a lot more engaged. They were able to absorb it better and get more out of. Thank you for giving my class and me a chance to share this experience.

Teacher 24
1. Since I teach reading, this field trip was geared towards our novel reading. We have read *The Devil's Arithmetic*, but the students had not received any formalized instruction in a history/social studies classroom. They were only knowledgeable through parent discussions and the information we had briefly talked about in class.
2. Since we weren't reading the novel until after Thanksgiving, the exhibit served as an introduction to a large unit that we'll be working on.
3. We have not due to the lack of Internet accessed computers. However we do plan to look at it while reading our novel.
4. The students were in shock. I don't think they had realized to what extend this tragedy occurred. Most of them were angry that this took place and upset by the brutality of the entire devastation. Many wanted to discuss what they had seen and voice their opinions. This created an open door to talk a lot about prejudice and the small roots that can lead to hatred and destruction.
5. Most students wanted to browse the exhibit as their leisure but weren't able to because of the tight schedule. They wanted to read the information to themselves and then share in with one another as they discovered new things, rather than the lecture format that some groups experienced. Overall, we LOVED our visit! The students learned so much, as their knowledge was so limited. This made their experience visual and REAL!

Teacher 25
1. Both English classes had spent several weeks studying and discussing the Holocaust. Eng I read *The Diary of Anne Frank* and Eng II read *Night*. The Visual Lit. class created a memorial for Sobibor and viewed A Survivor's Story.

2. The workshop we took last spring and also the US Holocaust Museum website was very helpful. We were able to go in and read about this exhibit.
3. Yes, we also did a photo archive project, created a newspaper for the Holocaust and a Powerpoint presentation was done in Eng. I
4. Students felt it was definitely a powerful exhibit. They commented on the clothing and also the toys. We had seen parts of the film that was presented downstairs, so that was somewhat redundant for them.
5. I liked the task of having the students respond in writing to the film at the end. The film maybe was too long...but also as I noted earlier, we had seen some clips before from the MTV film so it may have been just our kids that had difficulty attending to the film. Best exhibit yet!

Teacher 26
1. As 8th grade students, they read *The Diary of Anne Frank*. In the 9th grade we do a study of the Holocaust as part of U.S. History 9 and we read the novel *If I Should Die Before I Wake*. The students seem to have a genuine interest in understanding the Holocaust.
2. Before going to the museum I had my students come up with a plan for going into hiding, including who they thought they could trust, where they would go, difficulties they would face, etc.
3. We did not have an opportunity to access the website.
4. Many students were struck by particular images in the film or objects in the exhibit. Many expressed that there were certain images or objects that they would not forget. Also, many parents expressed to me that their child come home from the museum and discussed the exhibit with them, showing that they had been moved by the field trip.
5. I think the time given to write a reaction was important. In addition, the time to complete the search in the exhibit and then discuss it was beneficial.

Teacher 27
1. Many students did not have any prior exposure to the Holocaust. Their interest level was varied: some were eager to study this dark time in our world's history, some were indifferent. This, however, was only initially.
2. We spent a lot of class time discussing the historical context of the Holocaust, as well as the Holocaust itself. We also read *The Diary of Anne Frank* and that helped the students connect better to the staggering numbers of those killed. They were able to hear Anne's voice and step into her shoes to see what it would have been like at their age to go into hiding. We also spent time online with the *Life in Shadows* exhibit, as well as the suggested activities that the site provided.
3. The students did access this site and it was helpful. It provided a sort of preview to the exhibit, and in many cases, at the museum, they were able to see the actual artifact that they had analyzed online.
4. It was varied. I was very happy with my student's behavior while viewing the exhibit, but some of them misinterpreted the nature of our visit; some thought it might be more "entertaining." I was hearing some say that they were bored, and we discussed that the exhibit was not there for them to be entertained but to learn from so that this doesn't ever

happen again. Others, however, were very affected by it--wanting to discuss it more with me and their parents, and even wanting to bring their parents back to view it.

5. The entire visit was outstanding. Visually, the exhibit was excellent. My only (minor) disappointment was with the docents on our second visit. They differed from the docents on our first visit in that they gave the kids too much freedom to explore and very little explanation of what they were seeing. It was so helpful during our first visit when that was provided, and when it wasn't, I had to step in and fill in the blanks. The docents need to keep in mind the age level of those viewing any exhibit, because some students don't have the discipline to read the exhibit and they need to have their "interest sparked", so to speak. It was an incredible experience being a part of this. It is one I will never forget.

Teacher 28
1. The students read a couple of short stories and a play dealing with the Holocaust and dealing with racism.
2. The students read *The Diary of Anne Frank* and held class discussions and completed projects on the play.
3. No, they did not.
4. The students seemed fairly pleased with the visit. They didn't discuss the exhibit much amongst themselves, but they did discuss it as a class and they were amazed at the challenges faced by the Jews.
5. I believe that the students were able to feel more connected to the Holocaust by visiting the exhibit. They were able to see first hand the things that were talked about in class or they had read about in class.

Teacher 29
1. My students had an interest in WWII and some knowledge, although there were significant misconceptions beyond what I had expected. They had very little idea of the scope of the events and the loss of life. They had significant misunderstandings about Judaism & about the Holocaust that surprised me, many of which were results of mixing religious ideas or histories. While about half of the students were willingly interested upon the start of the unit, the others (nearly 1/2) felt that school should not force them to learn about emotionally difficult or depressing topics, even if they are realities.
2. Wow! Tons! We worked about 5 weeks. In addition to reading *Night*, writing in response to a real bio on a Holocaust victim, and sort of the usual activities, my students also were exposed to an introduction to some themes in Judeo-Christian literature such as the idea of sacrifice & atonement or the idea of judgment & mercy, Moses and his people's story, and other references that would help them know not just the vocabulary, but the motifs Wiesel assumes his readers will recognize. They did a wide range of activities w/ the text and additional texts. The capstone project was an especially interesting one. I can give you copies of the assignment if it'd be helpful to you.
3. No, but I hope it's still around so I can use w/ my students next semester :)
4. My students were impressed by the desperate & ingenious work of the parents. They were surprised to learn about the idea of "passing" oneself as a means of hiding, esp. the little boy who was hidden as a girl. The level of secrecy surrounding the family's experience's surprised my students. They were interested in the idea that parents did not want to tell their children what had happened to them, like Mr. Sauvage's experiences.

5. I liked the film, but I would have preferred to show it at the room b/c the meeting in the facility was so loud that I had trouble concentrating. I also think that I would have liked to have used that as a material for a more extended preparation & response. I really appreciated the introduction from the manager (?) before entering the exhibit & her work to keep the students calm and quiet. That really set a serious tone. I know that many people had good experiences with the guide, but ours was a real bummer. She talked about her ideas on the items and did not let the students stop and look at ANY of the artifacts. After weeks of thoughtful study, (and I'm a little shocked, but what I'm about to say was true) they were ready for a personal one-to-one interaction w/ the pieces. It was such a well-done exhibit that it really spoke for itself. All of our time--I mean ALL-- was used up w/ our well-meaning guide chattering about her feelings on the items. While my kids are no angels, I would have rather risked it to let them loose to look at their own pace after a quick once-around pointing out key items. I felt they were ready, especially in the small groups.

Teacher 30
1. My students didn't know very much. They learn a lot second semester in 8th grade.
2. I read some primary documents and passed out the handouts you gave us the May the handouts were really good
3. No they did not. However, second semester we do a lot of follow up work.
4. My students were really sad. We had some good decisions. In hindsight, the movie was too graphic for 8th graders. However, they loved the exhibit. Some wanted to learn more
5. The exhibit was great. The video was too much but the volunteers were awesome!

Teacher 31
1. It was limited to a few videos you recommended. We were just starting the unit when it was time for the fieldtrip.
2. We held class discussions before and after visiting the exhibit.
3. no
4. It allowed the history to be real to them--it wasn't words on a page.
5. We enjoyed the entire visit. Sorry I can't provide a lot of information- the time ran out on the semester and we could not do the unit justice. I hope I get to teach it first next time. Sorry it is late- I forgot with everything going on :)

Teacher 32
1. Prior to our study of the Holocaust, these students had little knowledge or background on this subject. I believe in seventh grade, their geography teachers read *Number the Stars* to them. However, an extensive study of the time period did not take place at that time.
2. The online explorations were helpful, also a research project concerning 28 different topics covered in this unit, the reading of *The Diary of Anne Frank*, as well
3. My students did view the website. It enabled them to have actual case studies and actual artifacts to view. It made the unit more real for them, putting real names and real faces to this topic.
4. They really appreciated the film! They thought that was very effective. I wish we had had more time in the museum part to just explore on our own. That was no fault of yours

or the committee. It was just our schedule. I hope the students will visit the Holocaust Museum in DC if ever they are in a position to do so. I believe they would.

5. The visit was useful. It put a final comment on our study. It gave closure to our unit in a visual, real way. Thank you so much for your hard work and for including our students in this experience. Thank you also for the video! We will use this in the years to come with our curriculum.

Teacher 33

1. The students knew little about the Holocaust before we began our unit. The students knew that the Nazis were involved and a great deal of Jewish people died. Not many of the students understood the extent of the persecution and why the people were persecuted.
2. I thought teaching the Pyramid of Hate and giving students some background on WWII really helped the students understand the time in history. It also helped the students understand the thoughts and feelings of a child their age going through this time in history by reading *The Diary of Anne Frank*.
3. Yes, we did access the *Life in Shadows* website before and after our visit. I really thought it helped prepare the students for what they were going to encounter at the exhibit. The website really helped build intentionality for why students were attending the exhibit and what they should expect to encounter. I believe the students got a lot more out of the exhibit because they were a bit familiar with what types of objects and subject matter they would be seeing.
4. A lot of my students were moved to tears by the exhibit. The students were very moved by what they encountered. I believe the reality of what the holocaust was actually became clearer to them after we visited the museum. The students really understood and saw what people and children went through.
5. I really enjoyed the guided tour. The guides were very knowledgeable of each item they were discussing with us. I also enjoyed watching the video about the other diaries that were written during the holocaust. I think it was good for the students to hear about different conditions children lived through. I will we could have spent a bit more time at the museum. I would have liked the students to have a bit more time to look at each exhibit.

Teacher 34

1. My students had very little background knowledge. A few had heard of Hitler, but they were not familiar with the term "Holocaust." We did read *Number the Stars* in preparation for visiting the museum.
2. Again, reading *Number the Stars* and having discussions about the Jewish people's experiences helped prepare them.
3. No
4. Some students were very insightful about their observations, and connections with the treatment of other groups for their differences in our history.
5. The video was very powerful, but for many of my students, I think it was too long. I might recommend this more for older, more mature students.

Teacher 35
I thought it best to have the students words reply to these questions. So, I have used some of
their responses to represent their range of answers. My teacher comments are in italics.

1. Please describe your students' background knowledge and interest in Holocaust history
    before starting this unit of study.

    "I had watched a lot of movies on the Holocaust."

    "I studied the holocaust in American history last year and learned a lot about it."

    "I knew that the Holocaust was when the Nazis killed Jews through concentration
    camps and they took the Jews from their homes. I never had a big interest in it
    before."

    "My background knowledge was not there much because I didn't know about a
    lot of things."

    "Extensive, I have been to the National Holocaust Museum in the past. Most of
    what I saw and learned I already knew."

    "I did not know much about it."

    "Well, I already had a pretty good knowledge of the Holocaust, but I learned a lot
    about how little kids had it during the Holocaust."

    "I knew an entire race was almost wiped out."

    "My knowledge was pretty extensive. I have been interested in WW II for a long
    time, so, I have read many books on the war and the Holocaust."

    "I knew the Holocaust was a time when Hitler became powerful and put all of the
    Jews in concentration camps."

    "I knew about the camps and that a lot of people died."

    "My background knowledge of the Holocaust was pretty good. I first started
    learning about the Holocaust in the 5th grade, and then in Jr. High and freshman
    year too. I always though the Holocaust was a crucial part of history that should
    not be forgotten.

    "Seeing movies in history."

    "I was always interested in it, but never got to see things up close."

    "I learned a lot in 7th grade history."

    "I was always curious, but did not know a lot."

    Their responses reveal a range of knowledge. All responses indicated a prior interest.

2. What instructional activities were helpful in preparing your students for their visit to the
    Life in Shadows exhibition at the Art Center of Battle Creek?

    "Making memorials for the survivors of the Holocaust helped. I also made a
    power point that was helpful. I think watching the stories was the most effective."

    "The pictures and writing about them helped a lot. Watching movies also brought
    great visuals to my head."

"Making the power point and looking up data on the internet."

"Definitely the power point because I got a chance to do some research on my own and when we got to the museum I recognized some pictures and also parts of the movie clip from the documentary we watched in the past."

"The movies, slide shows, power points and talks."

"All the movies that we had watched and talking about every thing really helped us."

"Watching documentaries and movies."

"Looking up memorials and watching movies."

"Watching the different stories."

"Watching some videos in class."

"I believe that watching the movie Escape from Sobibor was an effective movie and watching documentaries about the Holocaust. A also believe that looking up pictures and taking time to reflect on them was effective."

"We watched a lot of documentaries and studied many memorials."

"The research of our power points is what really went in all aspects of the Holocaust."

"Watching movies. Looking up memorials. Also looking up pictures of the Holocaust."

"I think it was when we made our own memorials."

"When I did a power point on the Holocaust and everything that happened."

"I think when we watched the movie and when we got to make our own memorial."

"Watching different films on the topic that brought the horror to life."

"The power point was helpful in filling me in on this tragedy. The power point was about ten different topics on the Holocaust."

You can see that the PowerPoints, films and creating their own memorials appeared to have the most impact on the students.

3. Did your students access the online version of *Life in Shadows* at http://www.ushmm.org/museum/exhibit/online/hiddenchildren/? If so, please describe how this Internet resource was helpful in either preparing students for their visit to the Art Center or in providing a useful follow-up activity after their visit.

Yes. We used the online exhibition for making the PowerPoint presentations. The rubric is below:

		Rubric: Artifact Power Point Choose ten photographs of the Holocaust to fill a new room in the Art Center of Battle Creek. The room is titled "The Holocaust Remembered." You are to select the image that best represents each of the following ten events. Write a paragraph for each picture stating what you see in the picture and why you chose it as the best representative.		
Scale/ Traits	Picture/Artifact	Written Rationale	Creativity and Original Thinking	Proper Conventions Grammar & Usage
Weights				
4	Effectively selects a picture to convey each of the following events: - Early stages of persecution of Jews - The first concentration camps - Ghettoes - Additional victims of Nazi persecution - Resistance - Death Marches - Rescue - Liberation - Postwar Trials - Displaced persons camps and emigration	Rationale is clearly stated for each required task - What do you see in the picture? - Why did you choose it? Ideas are presented coherently to move the reader through the selection. The voice of the writer is compelling and conveys the writer's meaning through effective sentence structure and precise word choices.	Very original (new, fresh, clever, outside the norm, expansive). Originality strongly fulfills clear/specific purpose. Originality has strong impact (evocative, insightful).	Uses proper capitalization. Uses correct punctuation at the end of sentences. No words are misspelled. Clear evidence that it has been reread for correctness.
3	Select pictures to convey each of the required events.	Rationale is reasonable clear, focused, and well supported; ideas and content are adequately developed and generally presented coherently. The voice of the writer contributes to the writer's meaning through appropriate and varied sentence structure and precise word choices.	Somewhat original. Originality has little impact.	Uses proper capitalization and punctuation most of the time. No words are misspelled. Clear evidence that it has been reread for correctness.
2	Gallery selection only slightly fulfills requirements.	Rationale has some focus and support; ideas and content may be developed but limited in-depth. Writing may be somewhat disorganized. Voice is generally absent. Basic sentence structure and limited vocabulary.	Mildly original. Originality has little or no impact.	Uses proper capitalization and punctuation most of the time. A few spelling errors but they do not interfere with meaning and it is apparent that writing has been reread.
1	Gallery selection fails to meet most of the requirements.	Rationale little focus and development; ideas and content poorly supported. Little discernible shape or direction. Tone is flat. Awkward sentence structure and inadequate vocabulary.	Not original.	Uses proper capitalization and punctuation most of the time. Numerous spelling errors and it is apparent that the writing has not been reread.

The other assignment that appeared to impact students was the creation of a memorial. The rubric is given below:

Scale/ Traits	Requirements of Project	Organization of Essay	Proper Conventions	Original Thinking
Rubric: Memorial Entry				
Weights	50%	20%	15%	15%
4	Effectively expresses the following: (Shows talent: high skill, excellent creativity, successful "rule-bending," etc. · Purpose · Names · Location · Quotation · Symbol/Color · Symbol/ Material or Texture	Introduction draws reader in and introduces the purpose. Body justifies choices very clearly, concretely, briefly. Conclusion brings closure and resolution.	Uses proper capitalization. Uses correct punctuation at the end of sentences. No words are misspelled. Clear evidence that it has been reread for correctness.	Very original (new, fresh, clever, outside the norm, expansive). Originality strongly fulfills clear/specific purpose. Originality has strong impact (evocative, motivating, pleasing).
3	Project quite expressive, somewhat fulfilling student's requirements. Completed neatly, with care and with good design and composition.	Has a clear introduction. Body clearly supports choices. Has a clear conclusion.	Uses proper capitalization and punctuation most of the time. No words are misspelled. Clear evidence that it has been reread for correctness.	Somewhat original. Originality has little impact.
2	Project not very expressive, only slightly fulfilling student's requirements.	Has an introduction. Has a body. Has a conclusion.	Uses proper capitalization and punctuation most of the time. A few spelling errors but they do not interfere with meaning and it is apparent that the essay has been reread.	Mildly original. Originality has little or no impact.
1	Project fails to meet most of the requirements.	Is missing an introduction, body and/or conclusion.	Uses proper capitalization and punctuation most of the time. Numerous spelling errors and it is apparent that the essay has not been polished.	Not original.

4. Upon returning to your school building, what reactions or comments did students share with you after viewing *Life in Shadows*?

> "I think it was really touching to see that exhibit. I made me sad to see all the children and leaning what they went through. Especially the story about the anonymous girl that was starving."

> "I couldn't imagine what it would be like to live the experience. I think it's really interesting that we got to see the exhibit."

> "Life in the Shadows was interesting and cool to see the actual diaries, clothing and the arm patches."

> "It was so much more than we ever touched upon in school."

> "It was amazingly overwhelming and impacted how I view people. Some of my friends make fun of the situation and it made me think how lucky I was that I got to attend. I will never forget."

> "The show was very powerful. It helped me see more about the era. I like how we got to look for the letters."

> "Just how amazing some of the people were and the acts they did to survive."

> "I was so surprised about all of the journals that the younger people wrote while in hiding and about how they would be split apart from their families or would be sent with another family to hide."

> "I thought the exhibit was great. The actual artifacts made it more interesting and made the knowledge connect to us."

> "I felt very highly and strongly about the Art Center. I know a lot about the Holocaust and was able to still learn more. 1.6 million children dead. I think it needs to be talked about more so more hear about it and come and visit. Truly impacted my life."

> "I thought it was pretty cool that we went and gave me a better grasp on what really happened."

> "I thought that it was a magnificent thing what they did."

> "It was very changing in a way I can't even explain. Because, I didn't understand what went on with the kids."

> "I think it was cool and that I could learn more."

It was apparent that for many students, it was a life changing event.

5. Which aspects of your school's visit to the Art Center were favorable? Do you have recommendations for improving the overall museum experience?

No, I have no recommendations. It was so carefully orchestrated; I have no idea of what could be improved. I found the retired teachers particularly effective and knowledgeable. Thank you.

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