

NOT EASILY DEFINED: A CONTINUUM OF DEFINITIONS OF THE 'MUSEUM
SCHOOL'

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A thesis Submitted to the Department of History in Partial Fulfillment of the
Requirements for the Master of Arts Degree in History with an Emphasis in Public
History

Middle Tennessee State University

May 2016

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ACKNOWLEDGEMENTS

I saved writing this portion of the thesis for the end, not because it is the easiest, but because it deserves its own time and consideration. Putting these words on paper in black and white does even begin to reach the level of gratitude that my advisors, friends, and family deserve.

To my advisors, Dr. Bren Martin and Dr. Andrew Polk, I say thank you for the introduction to a fascinating thesis topic and internship opportunity. I am grateful for your continued support and encouragement throughout the entire process. Thank you for valuable feedback and suggested areas of further research. Thank you for being just as interested in museum schools as I am. To my museum school advisors, Becky and Lyn, I am so thankful for the opportunities to intern and then volunteer with the museum school.

To my friends, thank you for always standing by my side, providing endless encouragement, and counting down the days until completion with me. Thank you for the times when you listened to me rant about the expanse of the research potential or about how much I hate IRB. Thank you for daily encouragement and fun distractions. Thank you for choosing to put up with me.

To my family, you are just stuck with me, but thank you anyway. Everything above applies to you a thousand times over. Thank you for being my biggest supporters in this and throughout everything.

ABSTRACT

The term ‘museum school’ suggests a seemingly straightforward concept; one in which a museum and school coexist and benefit together. While, this is true, it does not include the wider and varied definitions associated with the term. Previous research on the topic highlighted the formal educational aspects of the term, disregarding informal educational characteristics. This does a disservice to the term, relegating it to singular component of and reinforcing the formal/informal educational divide. Building on the history of and the increasingly educational roles of the museum, this thesis seeks to explore three specific types of museum schools: Historical Museum School, Informal Museum School, and Formal Museum School. Additionally, because Formal Museum Schools are currently at their highest number yet, this thesis develops a small inventory of those schools. Ultimately, this research reveals that museums, their programs, and schools are not entirely guided by strict educational boundaries.

TABLE OF CONTENTS

List of Figures.....	v
List of Tables.....	vi
List of Abbreviations.....	vii
Chapter One: Introduction.....	1
Methodology.....	5
Chapter Two: Museums—Not Just Collections.....	9
History of Museums and Museum Education.....	10
Chapter Three: Blurring the Lines of Education.....	39
Historical Museum Schools.....	44
Informal Museum Schools.....	47
Formal Museum Schools.....	49
Micro Museum Schools.....	68
Zoo Schools.....	69
The Informal as Formal.....	71
Chapter Four: Conclusion.....	73
Bibliography.....	79
Appendices.....	90
Appendix A: ‘Museum School’ Diagram.....	91
Appendix B: Formal Museum Schools.....	92
Appendix C: Formal Museum School Grades Distribution.....	97
Appendix D: Ortega Museum Magnet Elementary’s “Museum 101” Program.....	101
Appendix E: Formal Museum School Characteristics.....	103
Appendix F: Formal Museum School Images.....	105

LIST OF FIGURES

Figure 1: “A Field Trip to the Library of Congress”	29
Figure 2: “Washington, D.C. School Children on field trip-at the Smithsonian”	29
Figure 3: ‘Museum School’ Diagram.....	90
Figure 4: John Early Museum Magnet Middle, Facebook Post, October 22, 2015.....	105
Figure 5: The Museum School of Avondale Estates, Facebook Post, December 18, 2014.....	106
Figure 6: The Museum School of Avondale Estates, Facebook Post, May 10, 2015.....	107
Figure 7: John Early Museum Magnet Middle, Facebook Post, October 16, 2015.....	108
Figure 8: John Early Museum Magnet Middle, Twitter Post, August 13, 2015.....	109
Figure 9: Churchwell Museum Magnet Elementary, Twitter Post, March 6, 2016.....	110
Figure 10: John Early Museum Magnet Middle, Twitter Post, August 21, 2015.....	111

LIST OF TABLES

Table 1: Formal Museum Schools List.....92

Table 2: Formal Museum School Grades Distribution.....97

LIST OF ABBREVIATIONS

American Alliance of Museum.....	AAM
American Museum of Natural History.....	AMNH
Institute of Museum and Library Services.....	IMLS
John Early Museum Magnet Middle School.....	JEMMMP
Maplewood Richmond Heights Elementary School.....	MRH
National Association of Museum Schools.....	NAMS
New York City Museum School.....	NYCMS
Provincetown Art Association and Museum.....	PAAM

CHAPTER ONE: INTRODUCTION

“[Museums] are places that both children and adults can leisurely browse to discover the past, present, and future of humanity, the natural world, and the cosmos, where the public can seek and find meaning and connection.”
--Falk and Deirking

Night at the Museum, *Night at the Museum: Battle of the Smithsonian*, and *Night at the Museum: Secret of the Tomb* are fictitious cinematic renderings following the adventures of a night guard at the Museum of Natural History, the Smithsonian Museum, and the British Museum, respectively, as he interacts with various exhibits and artifacts in the museums that are anthropomorphized at night due to the curse of an ancient Egyptian tablet. While these films speak to sensationalized interactions in museums and present scenarios that obviously cannot exist, they do accentuate one distinct element—the idea that museums and their collections can come alive. Well, figuratively of course.

Subjects come alive in museums as artifacts are presented, interpreted, and given a narrative. That living energy felt in the museum is vital to the museum experience and the museum learning process, as well as serving to challenge the image of the museum as a guarded, stoic relic itself. Artifacts and artworks, as well as the exhibits they comprise, all work together to create that energy. These artifacts sometimes are meant “to be common evocations of an interesting or important group, time, or place. Objects are displayed in systems designed to encourage visitors to consider a particular take on a discipline and to encourage reactions such as amazement, mystification, realization, and

personal connection.”¹ The objects, themselves, embody that living energy that people connect with during their museum visits. Visitors actively engage with exhibits and artifacts, which leads to the creation of meaningful experiences.

As museums increasingly work to move away from the reputation of being a humdrum experience, they strive to be sites of unique engagement through adaptation and evolution. Each year, numerous people experience and interact with that energy as they venture into museums on field trips, family outings, and individual journeys, similar to John H. Falk and Lynn D. Dierking’s Contextual Learning Model as discussed in *Learning from Museums: Visitor Experiences and the Making of Meaning* (2000), in which they suggest that visitors approach museums based on their own personal experiences, sociocultural experiences, and their physical contexts.² This interaction is particularly evident in relation to schools and classrooms that must address particular curriculum topics. Field trips are the most popular of these school and museum experiences. However, “as school budgets are increasingly constrained and field trip policies become more restrictive, a growing school audience will not have the experience of visiting the museum,” thus school outreach opportunities have become an imperative museum practice, as Mary D. Houts points out in “School Outreach Programs and

¹ Gaea Leinhardt and Kevin Crowley, “Objects of Learning, Objects of Talk: Changing Minds in Museums,” in *Perspectives on Object-Centered Learning in Museums*, ed. Scott G. Paris (Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers, 2002): 302.

² John H. Falk and Lynn D. Dierking, *Learning from Museums: Visitor Experiences and the Making of Meaning*, (New York: AltaMira Press, 2000).

Materials.”³ As the interested parties place greater emphasis on achieving standards and receiving high scores on standardized examinations in general education, the museum must make itself marketable to schools and teachers through adaptation of standards into their programs.

This intersection of the museum and education is a primary focus of this research project. Each day, numerous students across the nation experience the power of objects and exhibits, sometimes even in their own classrooms, in a museum school. What is a museum school? The term ‘museum school’ has evolved increasingly throughout the decades, yet there is not a single definition. Museum School has been used to apply to both formal and informal learning environments, or “free-choice” learning sites as described by Falk and Dierking.⁴ This thesis seeks to provide a better understanding of the term and how it is applied to multiple situations spanning the learning continuum. In June 2015, the National Association of Museum Schools, a professional organization established in 2014 by Museum School of Avondale Estates (Atlanta, Georgia) principal Katherine Kelbaugh, held its inaugural meeting “to provide a national platform for educators to discuss the museum school movement, share their curricular approaches and

³ Mary D. Houts, “School Outreach Programs and Materials,” in Beverly Sheppard, ed. *Building Museum & School Partnerships*, (Washington, D.C.: American Association of Museums, 1993): 61.

⁴ John H. Falk and Lynn D. Dierking, *Learning from Museums: Visitor Experiences and the Making of Meaning*, (New York: AltaMira Press, 2000): xii.

ideals, and cultivate an environment of support.”⁵ The member museum schools of NAMS are considered on the formal end of the education continuum. This conference revealed that not a single example of a museum school existed but rather a multitude within the formal learning environment. One of the primary purposes of this thesis is to create a hierarchy of the categories of museum schools with titles and captions created as deemed necessary by the author. The expected outcome of this hierarchy of museum schools is to provide greater clarity in the discussion of this complex subject.

This thesis seeks to look in-depth at the museum schools, the formal museum school practice in particular, and then tie it back to the larger relationship between the school and the museum. It will provide a better understanding on how museum schools and such partnerships affect the museum and how the museum must adapt to remain an active participant in these interactions. Within the formal aspects of education, this research project explores why museums and schools partner to create museum schools. Additionally, it considers how these schools develop curriculum that incorporate and reflect museum practices and techniques.

Overall, this thesis seeks to create a definition of the museum school, which will demonstrate a spectrum or diverse approaches from informal to formal learning environments.⁶ Furthermore, through the exploration of the development and diversity of

⁵ Lane Tillner, "Trending Now: 'Museum Schools'" *Center for the Future of Museums Blog* (blog), September 8, 2015. Accessed January 3, 2016. <http://futureofmuseums.blogspot.com/2015/09/trending-now-museum-schools.html>.

⁶ Kelly O. Finnerty, "Introduction to a Museum School: The Museum Process as Pedagogy," *Journal of Museum Education* 21, no. 1 (1996): 6-10. Accessed May 26, 2015. JSTOR. <http://www.jstor.org/stable/40479046>. Finnerty uses the phrase "spectrum

museum schools, this thesis will examine the fundamental characteristics of these schools, as well as how museums can better influence such schools, and how the museum profession in general can advocate for the needs of these schools.

Methodology

This project developed not out of talks about museum education, or education in general, but rather a discussion about an internship. As part of the Public History Master's program, I am required to participate in a summer-long internship, resulting in work products and a portfolio. I spoke with my advisor, Dr. Bren Martin, about an internship announcement for a position at John Early Museum Magnet Middle School.⁷ This discussion of the internship spurred the question, "What is a museum school?" We spoke about this relatively new phenomenon (and my jealousy about not being able to attend one) and how this could make an excellent thesis topic. Prior to this, I had had no knowledge of museum schools.

A basic Google search began this process and resulted in numerous avenues of study, more than ever expected. Not only did this simple search reveal that there are in fact many museum schools operating in the United States, and even internationally, but also that there are numerous types of museum schools. The initial Google search expanded to include such search terms as "museum school," "museum magnet school,"

of possibilities" to refer to the diversity of formal museum schools, however the term is also applicable to the multiple definitions of museum school as well.

⁷ Since the completion of my internship, the full name has changed to John Early Museum Magnet Middle Prep School, as an initiative of the Metropolitan Nashville Public Schools district to rebrand the middle schools.

and “school museum.” The latter is clearly different; however, that difference is important to understanding more about museum schools and will be addressed more at a later point. All of the related results were compiled into a spreadsheet and from there these results were then divided into distinct categories based on differing characteristics.

Following these initial searches, I then turned to numerous library databases to find additional sources about museum schools. From these sources, I discovered numerous theses and articles that proved useful. I began strictly looking for sources directly related to the term “museum school.” Branching out, I searched for materials related to museum-school partnerships, history of education, education theory, object-based learning, and theories and practices of museum education. Because this thesis seeks to satisfy the requirements for a public history degree and not an education degree, I decided to limit the amount of education theory and practice that is included in order to provide a greater view of the “museum” side of this material.⁸

⁸ Briefly, public history is a field of history, which works to create a bridge between ‘academic’ history and the public that experiences it. It is also how history is used in real-life occurrences. An aspect of public history is to preserve the history that is presented through archives, museums, historic preservation, and cultural resources management, among other concentrations. The public historian works to assist the audience/visitor in creating memorable experiences, making memories, and connecting their own personal history to a larger narrative. For more information, refer to: “What is Public History?” National Council on Public History, Accessed January 2, 2015. <http://ncph.org/cms/what-is-public-history/>. See also Ian Tyrell, *Historians in Public: The Practice of American History, 1890-1970* (Chicago: University of Chicago Press, 2005) and Denise Meringolo, *Museums, Monuments, and National Parks: Toward a New Genealogy of Public History* (Boston: University of Massachusetts, 2012) for perspectives on the progression of the field of public history.

As part of my study, I also had to consider the definitions of “museum” and how it related to museum schools. Museums are unique and come in all shapes and sizes. As the American Alliance of Museums suggests, museums can be any combination of nonprofit, run by universities, run by local historical associations, run by governments, for-profit, corporate, and have staff of varying sizes.⁹ Aside from these characteristics, museums encompass a variety of subjects and interests and can be any of the following: “aquarium, anthropology, arboretum/botanic garden, art, children’s, culturally specific, hall of fame, historic house, historic site, history, historical society, military/battlefield, nature center, natural history, planetarium, presidential library, science/technology, specialized, transportation, visitor center, and zoo.”¹⁰ Thus, if all of these categories are taken as museums, then numerous examples of museum schools are possible. For the purposes of this thesis, schools that directly used the phrase “museum school,” “museum magnet school,” “school museum,” or directly states a connection to museums on their homepage. That being said, through my research, I found some “zoo schools,” which I have included in my spreadsheet and will very briefly discuss herein, but will not incorporate them beyond that.¹¹

⁹ “About Museums,” *American Alliance of Museums*, accessed January 5, 2013. <http://www.aam-us.org/about-museums>.

¹⁰ Ibid.

¹¹ Because this is a thesis, it cannot be completely comprehensive, but rather acts as a window into a much larger phenomenon. The incorporation of zoo schools and other types that might also be considered within the museum school spectrum will be addressed to a minor degree but might best be incorporated into a later dissertation or other publication.

This thesis is divided into a history of museums and museum education, a discussion of museum schools, including a look at the historical development of museum schools, and the various definitions thereof, and concluding notes. Originally, I intended to include cases studies of museum schools as a fourth chapter within this thesis. I planned for these case studies to include excerpts from emails or interviews conducted about the particular museum school. However, this did not occur.¹² Nevertheless, this thesis seeks to gain a better understanding on the museum school concept.

The next chapter explores the history of museums, the history of museum education, and how the museum has become a site of education. Chapter three considers the partnerships that have developed between museums and schools, most particularly the museum school. This chapter breaks down the term museum school into three major categories: Historic Museum School, Informal Museum School, and Formal Museum School. Specific examples of each museum school type are provided. Only through the intersection of the museum and education can one have a greater appreciation for the practices and varieties of museum schools.

¹² This would have required the full review and approval by the Institutional Review Board (IRB), rather than an expedited or exempt review. However, because the requirements of the full IRB review were unreasonable for such a small aspect of humanities research, after consultation with my thesis advisor, I decided not to include case studies in the final thesis. Though IRB is designed to protect human subjects and promote research, in this case, it did the opposite by posing major obstacles to humanities research. Nevertheless, perhaps those case studies may serve as a basis for future research once IRB recognizes the need to consult and inform those in the humanities about research restrictions and not just assume that they are understood. Likewise, those in the humanities should seek advice from the IRB as well.

CHAPTER TWO: MUSEUMS—NOT JUST COLLECTIONS

“If collections are the heart of museums, what we have come to call education—the commitment to presenting objects and ideas in an informative and stimulating way—is the spirit.

--Museum for a New Century¹

Museums made possible the development of the museum school, both formal and informal incarnations of the term. The popularity and success of the museum school reflects the trajectory of museum evolution and the increased emphasis on museum education. Currently, there are upwards of fifty museum schools, which are free-choice, formal learning sites. However, before any discussion of museum schools can occur, understanding the history of the museum and the rise of modern American museums is critical. How have the museum and the emphasis on education within the museum changed? This chapter develops a foundational knowledge about museums and the progression of museum education on which to consider the creation of museum schools. Additionally, this chapter considers how the historical evolution of museums and museum education show increased significance placed on learning and education. Beginning with museum history, this chapter then moves into the transformation of museum architecture, its evolution, and impact on museum visitation. It then moves into a discussion of museum education history, interpretation, museum education theory and practices, and John Dewey and the impact of experience on museum education and the development of museum schools. Over time, the museum transforms from a storehouse

¹ *Museums for a New Century: A Report of the Commission on Museums for a New Century*, (Washington, D.C.: American Association of Museums, 1984): 55.

of artifacts to a site of engagement, thus paving the way for the creation of fortified partnerships between the museum and the school. The development of the museum school illustrates a growing push to continue to designate the museum as a legitimate site of learning and education. The museum schools in existence today inherited the educational nature of museums as well as a pattern of collaborative efforts between the museum and the school to create an enhanced and meaningful learning environment.

History of Museums and Museum Education

On June 13, 2014, an article appeared in the *Washington Post* about museums in the United States. In it, Christopher Ingraham states that the United States has more museums, roughly 35,000, than Starbucks and McDonald's combined, sitting at roughly 25,000.² According to the Institute of Museum and Library Services' most recent collection of "Museum Universe Data File," the number of documented museums sits at 35,364 in the United States, yet this is not a comprehensive number of all museums in the country.³ As stated previously, the term "museum" encompasses many other ventures

² Christopher Ingraham, "There are More Museums in the U.S. than There are Starbucks and McDonald's—Combined," *The Washington Post*, June 13, 2014. Accessed June 15, 2014.

<http://www.washingtonpost.com/blogs/wonkblog/wp/2014/06/13/there-are-more-museums-in-the-us-than-there-are-starbucks-and-mcdonalds-combined>.

³ "Museum Universe Data File," *Institute of Museum and Library Services*. Accessed June 2, 2015, http://www.ims.gov/research/museum_universe_data_file.aspx. The number mentioned above is taken from the most recent file, FY 2015, 1st Quarter. The Excel spreadsheet, XLS ZIP file, 5.4 MB, was downloaded and the numbers gathered from that.

that might not traditionally be thought of as museums. That being said, where did museums come from? How have they evolved?

Narrowing down the start of museums to one specific year is difficult and does a disservice to informal collections and practices before the onset of the formalized museum. Like numerous other aspects of society and culture, museums can be traced back to early Greek and Roman sites, which acted as “a university or philosophical academy—a kind of institute of advanced study with many prominent scholars in residence and supported by the state.”⁴ These early institutions primarily functioned as sites of research, an element that continued through modern museums.

Museums, as they are known now, emerged in the seventeenth century out of previously private collections in the form of ‘cabinets of curiosity’ and galleries, primarily owned by those with the financial means to collect vast and exotic treasures. With the influx of Enlightenment and humanistic ideals, the desire to gain an understanding of the past through scientific means emerged. The Ashmolean Museum (Oxford, UK), the British Museum (London, UK), and the Louvre (Paris, France) were among the earliest museums established, as well as among the first to take on a more public role.⁵ In the case of the British Museum, the establishing collection began as a private collection by Sir Hans Sloane of nearly 71,000 items that he donated to King

⁴ N. Elizabeth Schlatter, *Museum Careers: A Practical Guide for Students and Novices* (Walnut Creek, CA: Left Coast Press, 2008): 3-4.

⁵ Ibid. 5-6.

George II, and on June 7, 1953, Parliament established the British Museum, which publicly opened on January 15, 1759.⁶ The progression from private to public was a trend seen throughout museums established in the Enlightenment period.

American museums developed in much the same manner. Established in 1748, by a group of intellectuals, the Charleston Library Society sought to create a collection of various artifacts comprised primarily of natural history objects, which later formed the Charleston Museum, founded in 1773 as the first museum in the British North American colonies and later as the first in the United States.⁷ However, a museum established only a few year later provided the basis for the creation and study of museums.

Charles Willson Peale, an American artist, converted parts of his home in order to display portraits and natural history artifacts that he thought best represented the national narrative at time, opening an “American cabinet of curiosities.”⁸ Thus is seen the transition from private collections to public audience exposure arising out of a common need to save artifacts of the past for the common good of the nation and future audiences.

⁶ “History of the British Museum,” *The British Museum*, Accessed August 13, 2014, http://www.britishmuseum.org/about_us/the_museums_story/general_history.aspx.

⁷ “Mission and History,” *Charleston Library Society*, Accessed August 13, 2014, <http://www.charlestonlibrarysociety.org/mission-and-history/>.; also Marjorie Schwarzer, *Riches, Rivals, & Radicals: 100 Years of Museums in America*, (Washington, D.C.: American Association of Museums, 2006): 8. It is important to know that this museum formed during the colonial period in the North American territories and continued to persist after the founding of the United States. Thus, it can be argued that this museum was not the first to be founded in the United States, but the first to continue to persist from its establishment in the revolutionary period through the country’s founding.

⁸ Marjorie Schwarzer, *Riches, Rivals, & Radicals: 100 Years of Museums in America*, (Washington, D.C.: American Association of Museums, 2006): 8.

Peale's museum served as an example of not only museum practice and the incorporation of scientific classification in museums, but also the ease with which a museum can transform from a site of validity to a site of spectacle, a fine line for any museum. For instance, P. T. Barnum (of what became Barnum & Bailey) purchased a segment of the collection, to exhibit alongside items of awe, like a mermaid skeleton.⁹ Nevertheless, Peale's American Museum served as the forebearer of American museums.

Nearly sixties years passed between Peale's museum and the opening of one of the United States' most well-known museum complexes, the Smithsonian Institution. Opened in 1846, following a ten-year debate about how to utilize the bequest by James Smithson, a British scientist, the Smithsonian Museum continues to serve as one of the most prominent American museums.¹⁰ Following not far behind the creation of the Smithsonian, Henry Ford and Henry Mercer developed museums with the purposes of creating a sense of nostalgia and artifacts exhibiting the 'good ole' days,' in response to the over-industrialization of the nation. Reflecting the nature of history itself through the establishment of such collections, these early museums illustrated that the past cannot be separated from the present, but is a central aspect of it, respectfully.¹¹

⁹ Ibid., 8.

¹⁰ "From Smithson to Smithsonian: The Birth of an Institution," Smithsonian Libraries, Last Modified January 1998, Accessed January 15, 2015.
<http://www.sil.si.edu/Exhibitions/Smithson-to-Smithsonian/index.html>.

¹¹ Steven Conn, *Museums and American Intellectual Life, 1876-1926*, (Chicago: The University of Chicago Press, 2000): 152-165.

As with anything, the history of museums, and museums in the United States in particular, is a history of transformation and evolution, and not simply a linear pattern of growth and success. Local and grassroots efforts to gather and protect artifacts are just as significant to the evolution of the museum as those done on a national scale. Museum creation in America was, and continues to be, a developing, evolutionary process.

Museums have previously encountered transition from initial elitist, patronizing practices to educate the masses to a more progressive approach, which entailed opening the museum to wider audiences, as seen in the works of Louise Connolly, Anna Billings Gallup, Laura Mary Bragg, Albert Barnes, John Cotton Dana, and John Dewey, A discussion of Dewey will follow later in this chapter. In 1920 John Cotton Dana devised a plan detailing what he thought a museum should be and how it should benefit its surrounding community. At the time, Dana suggested that the museum function more as a “storehouse for ‘collections’” rather than an actual museum, which served as a site for reflection and use by the community.¹² The museum should be active rather than passive. Dana’s assertions acted as an early predecessor to Duncan Cameron’s assertion that museums have transformed from temples, creating a figurative religion of objects, to a forum, creating an environment of engagement.¹³ Throughout *A Plan for A Useful Museum*, Dana argued that museums whose sole aim is to collect artifacts, particularly those of ‘high’ culture and equally high expense, do a disservice to the people it benefits

¹² John Cotton Dana, *A Plan for a New Museum: The Kind of Museum it will Profit a City to Maintain* (Woodstock, VT: The Elm Tree Press, 1920): 9.

¹³ Schlatter, *Museum Careers*, 11.

and fail to fulfill a component of their essential mission, to educate. He stated that museums “should be studied and not worshipped. They should be preserved that they may help us, not that they may amaze and confound us. And, above all, we, the museum community, should study them with the purpose of learning from them, and in the hope that we may learn from them, not the secret of their making but the factors that united to bring them forth.”¹⁴ Dana’s plan called for an active museum-community interaction, which would eventually develop over time, mirroring the trajectory of museum evolution, or perhaps more correctly predicting it.

From roughly the 1930s to the 1950s, the museum returned to a traditional practice of focusing on a national narrative, particularly as the United States faced two significant wars, and provided an excellent space to produce narratives. Depicting images of American heroism and values. Mirroring the shift in the ‘traditional’ history field and the rise of social history, which highlighted minority and cultural groups previously ignored or viewed in a patronizing manner, there was a drive to create the socially responsible museum of the 1960s and 1970s. Museums of the 1980s and 1990s faced ‘culture wars,’ most notably a proposed exhibit at the National Air and Space Museum, “The Last Act: The Atomic Bomb and the End of World War II.” This exhibit centered on one of the original bombers, the Enola Gay, and designed to allow the visitor to consider different perspectives of the dropping of the atomic bomb, amidst museum reform in general, placing an emphasis on education, community involvement, and museum functions and

¹⁴ Dana, *A Plan for a New Museum*, 36.

practices in general.¹⁵ In “Visiting the Past: History Museums in the United States,” Michael Wallace discusses the development of the museum, particularly the history museum. He argues the evolution of the history museum resulted from a dominant segment of the American population consistently asserting their power over the past.¹⁶ In light of recent events in American society, critique and reconsideration of monuments and memorials named after controversial historical figures, perhaps museums will once again act in a socially responsible manner through education and advocacy. As a reflection of American society, museums continued to progress as society progressed and meet needs not met elsewhere.

In “Fifty Years of Change in America’s History Museums,” Martin E. Sullivan discusses the changes museum practice, particularly that of a history focus, faced over the last fifty years (this article was published in 2007). He cites changing educational standards, decreased visitation rates, and competition from destination entertainment sites as areas of concern for history museums. Despite these challenges, Sullivan suggests three factors have held a role in the development of museums of the span he studies: “the

¹⁵ Rebecca Conard and Bren Martin, “History of Public History—Museums” (lecture note, Middle Tennessee State University, Murfreesboro, TN, October 2, 2013); also Marjorie Schwarzer, *Riches, Rivals & Radicals: 100 Years of Museums in America* (Washington, D.C.: American Association of Museums, 2006): 8-25. The shifts discussed in both the lecture and selected readings focus primarily on the evolution of history museums.

¹⁶ Michael Wallace, “Visiting the Past: History Museums in the United States,” in *Presenting the Past: Essays on History and the Public*, ed. Susan Porter Benson (Philadelphia: Temple University Press, 1986): 158.

emergence of many forms of federal support and oversight, an increasingly inclusive approach to the American past that has characterized both academic and popular history, and technological change affecting both institutions and audiences.”¹⁷ Sullivan highlights the practical changes occurring in the museum field in order to show their greater impact on the general museum institution over time.

Similarly, the museum building, itself, has an evolutionary story. The building and façade, especially those early museums, follow this dichotomy of temple and forum, more on the side of the former. The museum building that adheres to this temple-esque building style creates an imposing elitist atmosphere that might intimidate the average passerby from entering the building. Douglas Davis explored this concept in his work *The Museum Transformed: Design and Culture in the Post-Pompidou Age*, in which he looks at the functions of museums through their architecture in order to show the impact it has on the museum experience, particularly after the remodeling of the architecturally unique Pompidou Center in Paris. “It is the undeclared presumption that the exterior of a great museum should match its contents in terms of visual significance, and equally critical, in ‘significance,’” as a result, Davis classified these types of museums as “treasure houses.”¹⁸

¹⁷ Martin E. Sullivan, “Fifty Years of Change in America’s History Museums,” *Curator* 50, no. 1 (January 2007): 152.

¹⁸ Douglas Davis, *The Museum Transformed: Design and Culture in the Post-Pompidou Age* (New York: Abbeville Press Publishers, 1990): 16, 30.

Combatting this sentiment created by these museum buildings is a key component of creating an open environment for a diverse audience to experience the museum and its holdings, recognizing the potential of the museum as a site of social and political exchange. Davis stated that the “evolving museum must see itself as a medium of information and pleasure as well as a repository providing first-hand access to the sacred object—in brief, for a somewhat wider role, which might be termed ‘post-object’ in the programmatic sense.”¹⁹ Therefore, the architecture of the museum works to both alter and reflect the function of the museum, away from a place of storing ‘high’ culture to interaction and engagement, beyond the objects themselves.

Throughout *The Museum Transformed*, Davis followed the progression of the museum away from the temple-like museum to a museum setting of multiple functions and practices for the community, much like John Cotton Dana proposed. Yet, Davis uniquely explored this evolution of the museum through the development of transformed architectural styles. Thus, as the architecture and façade of the museum evolve, reflecting the changing functions of the museum, the audience may expand as the older more classical styles fade.

Museums and education have always been linked. Learning in the museum setting provides a unique experience for the visitor to create significance for herself. “At its best, museum learning encourages independent thought. Museums have the capacity to stimulate meaningful learning for their visitors. Meaningful learning is about making

¹⁹ Ibid., 35.

connections, and it occurs when new information is linked with existing concepts in the visitor's system of understanding. Meaningful learning results in visitors creating a variety of messages and meanings."²⁰

There are those who claim that the museum profession went through a paradigmatic shift away from a significant focus on collections and exhibiting to a focus on education.²¹ However, a paradigmatic shift, one away from collections to one of education, does not adequately account for the systems of education that existed in museums. Perhaps because early educational efforts did not resemble current interpretive structures, outreach programs, or specialized educational programs, some might believe that education was not a function of museums.

However, educational practices in museums have existed in a sort of continuum, moving from basic practices to more open and varied experiences currently seen in the museum. Early museums, and their elite patrons, envisioned the museum as a source of civic education for members of the lower classes to learn about 'high' culture and

²⁰ Mary Ellen Munley, "Is There a Method in Our Madness? Improvisation in the Practice of Museum Education," in *Reinventing the Museum: Historical and Contemporary Perspectives on the Paradigm Shift*, ed. Gail Anderson (New York: AltaMira Press, 2004): 244.

²¹ George E. Hein, *Progressive Museum Practice: John Dewey and Democracy* (Walnut Creek, CA: Left Coast Press, 2012): 178-179. Hein discusses how some authors (he does not name the authors) contend that there was a paradigm shift in museum practice that the "emphasis on education and public services as a 'paradigm shift' for museums, arguing that past museums were musty, inward-looking collections of objects, while today they are recognized as educational institutions committed to serving a divergent public (178)." However, Hein disagrees stating that one of the main functions of the museum has always been education. I am inclined to agree with Hein's view of this 'paradigm shift,' and will continue to discuss it further.

develop a sense of national pride through the process of cultural uplift. Those creating exhibits in early museums did so in a precise and calculated manner in order to create specific messages. Oftentimes, the resulting exhibits lacked interpretation, labels, or panels and instead, the museum visitor was expected to simply gain understanding ‘naturally’ through the notion that “to look was to learn.”²²

Until recent decades, the stories being told in most museums were often those of the dominant group in society, and were nationalistic in tone. Museums often favored Western, Anglo, and male points of view, and did not incorporate the stories and artifacts of other groups, individuals, and perspectives that have a role in the American past. Or, if other groups’ artifacts were included, they were often viewed as archaeological, ethnographic, or exotic, and not part of the shared culture of the United States. This lack of representation for marginalized groups has changed in many museums over the past several decades, and in many ways parallels the multicultural movement in education.²³

Though this form of cultural paternalism is highly classist, at the time, those leading museums viewed it as the appropriate form of education. “Education in the modernist museum thus included the laying out of objects in disciplinary taxonomies and also the shaping of disciplined (or civilized) attitudes, values and behaviors...the

²² Gaea Leinhardt and Kevin Crowley, “Objects of Learning, Objects of Talk: Changing Minds in Museums,” in *Perspectives on Object-Centered Learning in Museums*, ed. Scott G. Paris (Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers, 2002): 302.; Eilean Hooper-Greenhill, “Education, Postmodernity and the Museum,” in *Museum Revolutions: How Museums Change and Are Changed*, eds., Simon J. Knell, Suzanne MacLeod, and Shelia Watson, (New York: Routledge, 2007): 370.

²³ Alan S. Marcus, Jeremy D. Stoddard, and Walter W. Woodward, *Teaching History with Museums: Strategies for K-12 Social Studies*, (New York: Routledge, 2012): 20-21.

educational purposes of museums could only be conceived in an abstract way for a general public...”²⁴ In addition to educating the masses, these early museums, as Stephen Weil suggested, also sought to create a moral education for these same people. Early museums sought to provide “a wholesome alternative to the seamier forms of diversion that might otherwise tempt the working-class inhabitants of those burgeoning nineteenth-century cities.”²⁵ George Hein agrees that these early museums were educational in the manner that they produced specific societal outcomes. He states, “Museums have always been educational institutions, and education is inevitably political. Education is *for* something. Societies and their members educate to achieve social goals.”²⁶ Perhaps because this form of education does not resemble current educational trends and theories, many considered museum education nonexistent in early museums. Where educational practices today are more or less standardized and concrete in the form of specific curriculum topics that museums must appeal to, education of these early museums existed in a more abstract manner in order to create specific messages in order to better benefit a larger majority of people. Education in early museums existed but did so in a limited manner and represented only the perspectives of those who supported and created these museums.

²⁴ Hooper-Greenhill, “Education, Postmodernity and the Museum,” 370.

²⁵ Stephen E. Weil, *Making Museums Matter*, (Washington, D.C.: Smithsonian Institution Press, 2002): 197.

²⁶ Hein, George. *Progressive Museum Practice: John Dewey and Democracy*, (Walnut Creek, CA: Left Coast Press, Inc., 2012): 19.

However, this image of the museum as a site of paternalistic, patronizing education for the lower classes evolved into a method of providing supplementary educational support for wider audiences. Many began to recognize the museum as a reputable site of education. In fact, museums have been recognized formally as educational resources by the United States' federal government. Title VIII, Section 803, entitled "Policy of the United States with Respect to Museums as Educational Institutions," of the "Education Amendments of 1974," states:

The Congress, recognizing—

- (1) That museums serve as sources for schools in providing education for children,
- (2) That museums provide educational services of various kinds for educational agencies and institutions and institutions of higher education, and
- (3) That the expense of the educational services provided by museums is seldom borne by the educational agencies and institutions taking advantage of the museums' resources, declares that it is the sense of the Congress that museums be considered educational institutions and that the cost of their educational services be more frequently borne by educational agencies and institutions benefitting from those services.²⁷

Thus, education has played a role in museums from some of the earliest manifestations.

Increasingly, museums have moved away from the cultural paternalism narrative in efforts to create experiences that are more significant and inclusive for the visitor. Since then, interpretation efforts and professional museum educational practices have evolved to provide for increased visitor participation, in which the visitor becomes an

²⁷ Elementary and Secondary Education Act Amendments of 1974, H. Res. 69, 93rd Cong., govtrack.us, August 21, 1974, Accessed November 15, 2014. <https://www.govtrack.us/congress/bills/93/hr69>.

active participant and director of their own learning experiences. Freeman Tilden spoke of such interpretive theories. In *Interpreting Our Heritage*, Tilden, an early advocate of interpretation, provides guidelines on how to create effective interpretation opportunities for the museum/site visitor. He defines interpretation as “an educational activity which aims to reveal meanings and relationships through the use of original objects, by firsthand experience, and by illustrative media, rather than simply to communicate factual information.”²⁸ He devised a program of six core principles for effective interpretation, which relate to education. The second principle states that “information, as such, is not interpretation. Interpretation is revelation based upon information...However, all interpretation includes information.”²⁹ The fourth principle dictates that “the chief aim of interpretation is not instruction, but provocation.”³⁰ Finally, with the sixth principle, he argues that interpretation aimed at children should not be a diluted form of the adult interpretative program but rather should be different altogether.³¹ Through these principles, Tilden shows that interpretation and education are intimately tied together. Leaving the experience open for the visitor to create their own meaning and develop active participation, Nina Simon argued similar theories in *The Participatory Museum*.³²

²⁸ Freeman Tilden, *Interpreting Our Heritage*, (Chapel Hill, The University of North Carolina Press, 2007): 33.

²⁹ Ibid., 34.

³⁰ Ibid., 35.

³¹ Ibid., 35.

³² Nina Simon, *The Participatory Museum*, (Santa Cruz, CA: Museum 2.0, 2010).

Likewise, museums have incorporated various learning theories and trends in order to develop better educational programs. “Much of education philosophy in schools and museums today is based upon the theory of constructivism, that is, learners construct knowledge for themselves individually and/or socially as they learn.”³³ This theory of constructivism follows the theoretical dictates of John Dewey, a progressive educational psychologist. Dewey advocated that experience was a component of effective learning that not only led to better educational opportunities, but also a more informed citizenry. He saw experience as composed of both an active and passive component, which he called trying and undergoing, respectively. Thus, trying is the act of performing a task, while undergoing is the how that performance acts upon the person and how they interpret it.³⁴ He further stated, that learning from experience results when “doing becomes trying; an experiment with the world to find out what it is like; the undergoing becomes instruction—discovery of the connection of things.”³⁵ Therefore, experience directly relates to education because one’s experience informs how she interprets and

³³ Beth A. Twiss Houting, Mary Jane Taylor, and Susy Watts, “Learning Theory in the Museum Setting,” in *An Alliance of Spirit: Museum and School Partnerships*, eds. Kim Fortney and Beverly Sheppard (Washington, D.C.: American Association of Museums, 2010): 24.

³⁴ John Dewey, *Democracy and Education: An Introduction to the Philosophy of Education*, eBook (Waiheke Island, The Floating Press, 2009): 240-241. Also refer to George E. Hein, *Progressive Museum Practice: John Dewey and Democracy* (Walnut Creek, CA: Left Coast Press, 2012). Hein discusses in greater depth Dewey’s theories and how they have been and can be applied to museum education.

³⁵ *Ibid.*, 241-242.

interacts with the world around her, an important concept that has been used in museum education practices. Further discussion of Dewey and his principals of experiential learning will occur later in this chapter.

Building on constructivism and Dewey's theories of experience as learning, John H. Falk and Lynn D. Dierking developed the Contextual Learning Model in *Learning from Museums: Visitor Experiences and the Making of Meaning*. They argued that "all learning is situated within a series of contexts... Learning is not some abstract experience that can be isolated in a test tube or laboratory but an organic, integrated experience that happens in the real world," and is composed of the personal context, the sociocultural context, and the physical context.³⁶ Museum education has also been influenced by other educational learning theories including Maslow's "Hierarchy of Needs" and Howard Gardner's Multiple Intelligences theory.³⁷ Not all museums incorporate the same learning theories in exactly the same manner, yet the presence of these school-based theories in the museum practice further cements the connections between the museum and education.

The Belmont Report, of 1969, urged government support to alleviate some of the financial needs of museums and acknowledged museums as sites of both education and

³⁶ John H. Falk and Lynn D. Dierking, *Learning from Museums: Visitor Experiences and the Making of Meaning*, (New York: AltaMira Press, 2000): 10.

³⁷ Howard Gardner, *The Unschooled Mind: How Children Think and How Schools Should Teach*, (New York: BasicBooks, 1991): 11-15.

pleasure.³⁸ “They addressed issues of bringing the institutions to the community, using education to give people skills to participate in public discourse, and addressing the typical hierarchical structure of institutions in order to make them more democratic.”³⁹ Echoing similar issues and continued struggles, the museum community experienced reform in 1980s and 1990s. One such reform movement focused on increasing the museum field’s relationship with its public audience. In 1992, the American Association of Museums published a pamphlet, *Excellence and Equity: Education and the Dimension of Museums*, which details ten areas of focus for those in the museum field to attempt to implement in their practice in order to create a better public relationship, in the hopes of gaining increased funding. The first of the ten principles relates directly to museum education. The first principle states that professionals are to “assert that museums place education—in the broadest sense of the word—at the center of their public service role” and that museum missions “should state unequivocally that an educational purpose is embedded in every museum activity.”⁴⁰ This first principle of *Excellence and Equity* established education as a primary and crucial element of the museum’s institutional mission. The third principle presented in *Excellence and Equity* states that the museum

³⁸ George Hein, *Progressive Museum Practice: Dewey and Democracy*, (Walnut Creek, CA, 2012): 162.

³⁹ *Ibid.*, 175.

⁴⁰ *Excellence and Equity: Education and the Public Dimension of Museums*, (Washington, D.C.: American Association of Museums, 1992): 14.; The American Association of Museums has since been rebranded as the American Alliance of Museums.

must understand, develop, and promote the museum as a site of learning, often informal and reflection, for various audiences.⁴¹ Here, the AAM recognized that museums serve as a place for informal learning and the opportunity to create meaningful experiences for the visitor. Finally, the tenth principle discussed financial and leadership resources and opportunities museums should adhere to or provide. This principle further details that because education is a primary function the leadership of the museum must promote the resources to enable continued learning at the museum. “Museum leaders must actively advocate education for a diverse audience as a museum-wide function with a high priority, and they must revise their financial plans to reflect this priority.”⁴² Thus, with the publication of *Excellence and Equity*, the AAM definitively asserted that education was a primary function of museums.

Nevertheless, Anna Johnson in *The Museum Educator’s Manual: Educators Share Successful Techniques* refers to Alison L. Grinder and E. Sue McCoy’s 1985 work, *The Good Guide: A Sourcebook for Interpreters, Docents and Tour Guides* which suggested that museum education is an emerging or “new” field because many museums specifically hired for educator positions.⁴³ Johnson further discussed that ‘education’ in the museum field is subjective, based on different learning theories, and each institution

⁴¹ Ibid., 16.

⁴² Ibid., 24.

⁴³ Anna Johnson, “Museum Education and Museum Educators,” in *The Museum Educator’s Manual: Educators Share Successful Techniques*, eds. Anna Johnson, Kimberly A. Huber, Nancy Cutler, Melissa Bingmann, and Tim Grove (New York: AltaMira Press): 2009, 7.

determines their own educational practices. Thus, the contributors to this manual created a working definition stating “museum education is understood in the broadest sense as any museum activity pursued with a view of facilitating knowledge or experiences for the public audiences. The vision of education is in fact a vision of the museum’s mission and purpose as a whole. Education and exhibitions are related and should be mutually inclusive.”⁴⁴ Just as there is a multitude of museums of varying categories, there is an equal multitude of educational programs. Education within the museum has progressed from simply artifacts compiled together with little interpretation to a focus on interpretation and programming which allow the visitor to engage with the museum artifacts.

As has been suggested, over time, education has moved away from simple interpretation and a single narrative to a plethora of activities and opportunities meant to provide the visitor with a lasting experience. One of the most notable and enduring educational programs produced by the museum is the field trip. Figure 1 and Figure 2 below, dated from the turn of the nineteenth/twentieth century, depict the long-lasting tradition of field excursions to a museum or historic site for educational purposes. Figure 2 even shows students actively journaling about their selected subject matter.

⁴⁴ Ibid., 8.



Figure 1: "A Field Trip to the Library of Congress,"
 Frances Benjamin Johnston, *Library of Congress*, 1899,
<http://www.loc.gov/item/2001702328/>



Figure 2: "Washington, D.C. school children on field trip- at
 the Smithsonian," Frances Benjamin Johnston, *Library of
 Congress*, 1899, <http://www.loc.gov/item/2001697368/>

The tradition of school field trips to museums continued to thrive, even in pop culture. In *The Catcher in the Rye*, fictional narrator Holden Caulfield describes his memory of the field trips he took to the Museum of Natural History in New York. He recounts walking through the various exhibit spaces and how they were expected to behave, “It was a long, long room and you were only supposed to whisper. The teacher would go first, then the class. You’d be two rows of kids, and you’d have a partner...Boy, that museum was full of glass cases.”⁴⁵ Field trips often vary in structure,

⁴⁵ J.D. Salinger, *The Catcher in the Rye* (New York: Little Brown Books, 1991): 120-121. Here, it is important to note that Holden Caulfield describes the field trips he experienced as a child not specifically for the experience itself but because of the immutable nature of such field trips and the museum. For him, there is too much change occurring in his life and his discussion of the field trips and the museum provide him with an element of stability that he looks for in his life. However, this consistency in museums described by Caulfield is a difficult issue for museums in general. Stephen E. Weil, in his Foreword to Robert R. Janes, *Museums and the Paradox of Change: A Case Study in Urgent Adaptation*, (Calgary, Alberta, Canada: University of Calgary Press, 1995) details thoughts he and his mentor, Joseph Veach Noble, shared about change within the museum setting. “Faced with changing environments, he [Noble] said, their choices were limited to three: they could adapt, flee, or die. The implication was clear. Given the environmental flux is a constant, given that most museums are too ponderous and/or too deeply rooted to flee, and given that those responsible for museums and generally reluctant to let them die, museums in reality have only one choice. The museum that seeks to survive – no less the one that hopes to prosper – must develop and maintain the capacity to adapt itself to changing conditions. Moreover, it must be able to do so not only as a sometimes reaction to an occasional crisis but on a built-in everyday basis. Solely in that way will it have the essential means by which to respond to inevitable and ongoing change (ix).” Similarly, in Simon J. Knell, Suzanne MacLeod, and Sheila Watson, eds., *Museum Revolutions: How Museums Change and Are Changed* (New York: Routledge, 2007), the various contributions to this work highlight how museums evolve overtime from their early European predecessors to institutions that are pointed toward the future. In the Introduction to *Museum Revolutions*, the contributors suggest that museums are “human products of different times, places, values, media, cultures, and so on, [thus] museums themselves are more variable in time and space than we sometimes credit” and therefore, change is a central aspect of museum culture (xix). Therefore, contrary to the hopes of fictional Holden Caulfield for the museum to remain ever-constant, the museum must adapt and evolve in order to provide the visitor with

as is seen in the contrast of the images with the picture Holden Caulfield presents, yet they remain a constant act of educational engagement for museums. A vast majority of people can recount a memorable experience from a field trip taken during their formative school years. Increasingly, to better appeal to schools and education coordinators, many museums create “focused field trips,” which provide the visiting students with experiences focused on a particular theme, exhibit, or lesson.⁴⁶ Just as museum educational practices have evolved from merely the exhibits themselves, the field trip has evolved to provide greater meaning for those experiencing it.

However, as educators face more pressure to adhere to standardization of the curriculum, most recently the adoption of Common Core curriculum and “teach to the test,” the museum educators face similar pressure as field trips are often cut due to such circumstances.⁴⁷ Fewer students might be unable to make multiple field trips to the

better and more meaningful experiences, through updated narratives and exhibits, as well as increased educational processes.

⁴⁶ Beverly Sheppard, “Aspects of a Successful Field Trip,” in *Building Museum & School Partnerships*, ed. Beverly Sheppard (Washington, D.C.: American Association of Museums, 1993): 44-45.

⁴⁷ Two ‘Letters to the Editor’ which appeared in the *New York Times* appearing on November 28, 2013, in response to “Art Makes You Smart” by Brian Kisida, Jay P. Greene, and Daniel H. Bowen, three individuals discussed the process of field trips, particularly in terms of the art museums. In the first letter, Kim Kanatani and Sharon Vatsky discuss their interest and support for field trips to art museums, which they believe to help foster critical thinking and other 21st Century Skills. Conversely, in the companion ‘Letter to the Editor,’ Daniel Bronheim maintains that such study does not benefit the student by fostering critical thinking skills. He states that “just as doing crossword puzzles or watching baseball makes one better at answering questions about crossword puzzles or baseball, going to art museums would likely improve one’s critical thinking about art but not necessarily about anything else.” While Bronheim does promote a traditional image of the museum—that the topical or thematic museum can

museum and thus museums are creating outreach programs to provide students with a similar museum experience.⁴⁸ Outreach and public programming are methods museums use in order to better serve their audiences, the community at large as well as students. These programs vary in nature and format. Kim Fortney highlights some of these, which include field trips, in-class presentations and exhibits by museum staff, after-school programs, traveling trunks, distance learning programs, and model programs, such as the National History Day program.⁴⁹ The outreach opportunities for the museum are almost endless. For example, the American Museum of Natural History, the Carnegie Science Center, the Franklin Museum, the Natural History Museum of Los Angeles County, the Field Museum, and the Cincinnati Museum Center all offer sleepover opportunities within the museums, many of which offer unique learning opportunities that incorporate STEM (Science, Technology, Engineering, and Mathematics) principles.⁵⁰

only be incorporated into its corresponding topic in the school curriculum—this idea is losing footing, particularly in light of the move toward the development of 21st Century Skills. Claudia Ocello discusses the need for museums to develop interdisciplinary programs for students that not only address an array of curriculum topics but also fosters the advancement of 21st Century Skills in her article “Getting Out of the Subject Box.” Claudia Ocello, “Getting Out of the Subject Box,” in *An Alliance of Spirit: Museum and School Partnerships*, Kim Fortney and Beverly Sheppard, eds., (Washington, D.C.: American Association of Museums, 2010):45-50.

⁴⁸ Kim Fortney, “Museum Programs for School Audiences: The Basics,” in *An Alliance of Spirit: Museum and School Partnerships*, eds. Kim Fortney and Beverly Sheppard (Washington, D.C.: American Association of Museums, 2010):31-39.

⁴⁹ Kim Fortney, “Museum Programs for School Audiences: The Basics,” in *An Alliance of Spirit: Museum and School Partnerships*, eds. Kim Fortney and Beverly Sheppard (Washington, D.C.: American Association of Museums, 2010):31-36.

⁵⁰ Andrea Sachs, “Bring your own pillow: More museums are offering slumber parties for their visitors,” *The Washington Post*, January 27, 2016. Accessed January 29,

Similarly, Alan S. Marcus, Jeremy D. Stoddard, and Walter W. Woodward, in *Teaching History with Museums: Strategies for K-12 Social Studies*, provide various methods through which educators are able to incorporate museums into the classroom curriculum, particularly for history and social studies teachers. However, many of the strategies presented can be incorporated into other disciplines.

Museums must continue to market themselves to schools and prove their adaptability to the curriculum taught in the classroom. Museums, whether in a formal or informal relationship with schools, should, particularly as a result of the recent adoption of the Common Core curriculum standards, highlight the specific standards that are met by each of their programs or outreach materials. Furthermore, these museums can work in conjunction with local teachers in order to create or redesign their programs to better sync with state and national standards.⁵¹ By connecting their programs to curriculum standards, museums instantly become more appropriate learning site, particularly in the eyes of the teachers and school administrators. The adaptation of curriculum standards to

2016. https://www.washingtonpost.com/lifestyle/travel/bring-your-own-pillow-more-museums-are-offering-slumber-parties-for-their-visitors/2016/01/26/30a0c418-aaac-11e5-9b92-dea7cd4b1a4d_story.html; Also Andrea Sachs, “For an offbeat museum experience, have a slumber party with penguins in San Francisco,” *The Washington Post*, January 27, 2016. Accessed January 29, 2016. https://www.washingtonpost.com/lifestyle/travel/race-to-sleep-by-penguins-at-the-california-academy-of-sciences-slumber-party/2016/01/26/5d72742a-a442-11e5-9c4e-be37f66848bb_story.html.

⁵¹ Katherine Walker Schlageck, “Schools in the 21st Century,” in *An Alliance of Spirit: Museum and School Partnerships*, eds. Kim Fortney and Beverly Sheppard (Washington, D.C.: American Association of Museums, 2010): 16.

museum programs also re-emphasizes the educational nature of the museum and the field trip, as opposed to common views of the field trip as simply entertainment.

The collaboration between museums and teachers to create programs, exhibits, and field trips, relevant to the curriculum currently taught, leads to another form of partnership. Increased interactions with teachers are an important step for the museum and museum educators in terms of creating effective programming. Increasingly over the last few decades, many museums have realized that not only do teachers provide untapped resources, but that teachers are important allies. Professional development programs for teachers, to display exhibits, objects, and learning materials available at the museum, are the next and most logical step in the development of museum education. James Boyer, Kim Fortney, and Susy Watts discuss museum-provided professional development for teachers. They argued that, “this training includes teachers in the planning, implementation, and evaluation of their own learning,” which reflects a general trend in museums to integrate audience opinion into their exhibits and programming, thus showing that museums are willing to share their authority with the very people they hope to serve.”⁵² This idea of shared authority provides the audience with the opportunity to invest in the museum and see a return on that investment, perhaps resulting in increased interaction with the museum and its educational programs.

⁵² James Boyer, Kim Fortney, and Susy Watts, “The Changing Landscape of Museum-Provided Professional Development for Teachers,” in *An Alliance of Spirit: Museum and School Partnerships*, eds. Kim Fortney and Beverly Sheppard (Washington, D.C.: American Association of Museums, 2010): 57.

A crucial component of museum education, and one that is oftentimes not discussed, is understanding the exhibit development process and examining the perspectives presented in exhibits. Moving toward a critical perspective of the museum, Marcus, Stoddard, and Woodward highlight an important aspect of the museum world that many do not consider; however, it is discussed in terms of the teacher and student, but is relevant for all museum visitors not just those from formal educational settings. The visitor endows the museum with a significant level of trustworthiness, without considering that museums are fabricated, a fact well known by those in the museum profession.

Museums select the narratives they desire to tell, often limit the perspectives revealed within a narrative, and can reflect the society within which they exist, sometimes more than the time period within which a narrative exists. The demystification of museums does not make them less accurate or less useful to visit, but instead bestows a wonderful opportunity for students to explore how museums present a subjective and selective past and how history is ‘made’.⁵³

Visitors embed artifacts with a significant degree of authenticity, which they believe translates into credibility in the narrative presented in the exhibits themselves. As stated previously, museums and exhibits have been designed in order to present particular perspectives, particularly those early museums that sought to educate the lower classes. Thus, it is important that the visitor understands that all narratives displayed in exhibits are crafted and provide a specific message. This practice of examining the technical

⁵³ Marcus, Stoddard, and Woodward, *Teaching History with Museums*, 9.

aspects of museum exhibits and the narratives they present is a common aspect of the formalized museum schools to be discussed later.

So how do we get museum schools out of this discussion of museums and museum education? We must once again return to the progressive educational theories of John Dewey. His theories about experience and learning have been instrumental in the field of museum education and have been incorporated as a founding principle in many of the practices mentioned above. A progressive approach to education, based on Dewey's theories, includes one in which "education must be active; it must give the learner something to think about, to interpret and to study; it should provide experiences...it should provide the means and time to engage in such reflection, that is, to connect immediate and past experiences, and to apply these to future experience."⁵⁴ Thus, an institution must provide an environment in which a visitor or student is actively engaged in an experience and is able to reflect upon that experience. This type of active learning is a common practice of museum schools. In 1899, Dewey gave a lecture series entitled, *The School and Society*, in which he discussed the development of the ideal school. For Dewey the ideal school included subject-specific areas as well as a library and museum in which students were able to actively develop and interpret their experiences.⁵⁵ His concept was incorporated into the School of Education building in Chicago, in which "the space on the third floor immediately over the library has been assigned to the

⁵⁴ Hein, *Progressive Museum Practice*, 37.

⁵⁵ Ibid., 41-45.

museum...The museum shall be used largely for practical work in connection with all the departments of the school...”⁵⁶ Thus, Dewey saw the museum as a necessary site of learning in which students explored their experiences. However, Dewey also recognized that the museum alone could not account for the entirety of an individual’s life experiences but rather acts as a significant means of pursuing and engaging said experiences.⁵⁷

Dewey’s practices have been more successfully incorporated in museums as opposed to schools. Why is this so? Perhaps it results from the current structure of the American education system. As George Hein states, “unfortunately, the current emphasis in schools on academic ‘outcomes’ separated from the wide range of activities that might lead to increased learning has reduced much of school activity to traditional drill and practice divorced from life situations.”⁵⁸ Thus, the rise of museum schools, which promote active and authentic learning from project-based and experience-based opportunities. These schools provide their students with more than just the ability to bubble in answer sheet. Rather, these schools create learning opportunities that mirror the free-choice learning atmosphere on the museum.

⁵⁶ John Dewey, “The School of Education, the Building.” *The Collected Works of John Dewey, 1882-1953, Electronic Edition. Middle Works, 1899-1924, Volume 3*, edited by Larry A. Hickman, (Charlottesville, VA, 1997): 343 cited in George Hein, *Progressive Museum Practice: John Dewey and Democracy*, (Walnut Creek, CA, 2012): 45.

⁵⁷ Hein, *Progressive Museum Practice*, 45.

⁵⁸ Ibid., 37.

Just as there is not one distinct date for the creation of the museum, there is not one distinct date for the creation of active museum education. Rather, museums and museum education follow an evolutionary path in which focus does not rest solely on the collections or exhibits but also on the visitor. The principles of experience as espoused by Dewey not only represented a shift in museum practice, but also in traditional education in which the museum school serves to bridge the gap between the two entities providing it with its name. Following this discussion of the history of museums and the development of museum education principles, the next step is to establish and analyze the spectrum of museum school definitions and the role of the museum in each type.

CHAPTER THREE: BLURRING THE LINES OF EDUCATION

“No one flunks museum.”
–Frank Oppenheimer¹

Increasingly, adults and children alike walk into the museum and are transported to a figurative classroom holding some of the best learning tools. Museums, artifacts, and historic sites serve as visual and physical supplements to the lessons people are taught in other, more traditional educational environments. Following the progressive trajectory of the museum approach to education, partnerships and collaborations between museums and schools have increased in numbers over time, in the form of museum schools. These new school conception creates a bridge between the museum and the school, blurring the lines between informal and formal education.

One of these bridges between the museum and the school is the museum school. The museum school is a relatively recent transformative approach to education. However, the term “museum school” is not solely limited to formalized schools within the education system, but also exists in various other representations outside of it.² Nor is the

¹ Frank Oppenheimer, “Everyone Is You...Or Me,” *Technology Review* 78, no. 7 (1976): 31-35 cited in Howard Gardner, *The Unschooled Mind: How Children Think and How Schools Should Teach*, New York: BasicBooks, 1991: 201.

² Many have tried to provide a definition of museum school, but only in the formal sense of the tone. Some of these include: Kira S. King, “Alternative Educational Systems: A Multi-Case Study in Museum Schools” (PhD diss., Indiana University, 1998); Jennifer L. Lapp, “Museum Schools” (MA Thesis, State University of New York College at Oneonta, 1998); Andrew R. Heughins, “The Grand Experiment, A Historical Account of a Museum/School Partnership: The Alexander Science Center School of Los Angeles” (EdD Diss., University of Southern California, 2006); Cari Barragree, “Museum and Public School Partnerships: A Step-by-Step Guide for Creating Standards-Based Curriculum Materials in High School Social Studies, 2007); and Kaleen E. Povis,

term easily defined. It is a stop on the ever-expanding path of museum and school cooperation. Museum schools inherit the belief that the museum space and learning can positively affect a learner's experience. As David Carr in *The Promise of Cultural Institutions* states: "...learners do not *visit* museums—they *use* them."³ The idea of the use of the museum is a constant one throughout museum schools, both informal and formal representations. The museum school uses the museum as a tool, an environment, a narrative, or a process, among many other possible manifestations. This chapter primarily argues that three major categories of museum schools exist and provides a context for each: the Historical Museum School, the Informal Museum School, and the Formal Museum School. Because of the significant number of corresponding sites, the majority of this chapter focuses on the Formal Museum School. It attempts to determine how the museum and museum process are incorporated into the curriculum, to discuss the relationships between the school and partner museums, and to speculate about how this school trend might grow. As a result of my research and analysis, I created a spreadsheet illustrating the different types of museum schools and provided examples of each. For ease and understanding, I will use the terms I created for the spreadsheet in order to

"A Unifying Curriculum for Museum-Schools" (MA Project, University of Washington, 2011). While these authors attempted to create a working definition of a museum school, they mostly limit this definition to the tradition meaning of a school, serving specifically K-12. By doing so, however, these writers disregard (whether intentional or not) numerous other definitions of a 'museum school'. It must further be noted that of these cited dissertations and theses, most, but not all, developed in a department of education as opposed to history, public history, or museum studies.

³ David Carr, *The Promise of Cultural Institutions*, (New York: AltaMira Press, 2003): 18.

create a sense of continuity and fluidity among the different types, which correspond to the types aforementioned.

Many people who have written on museums schools previously focus primarily on those formalized school structures that have emerged over time. As stated earlier, it is the intention of this thesis, and of this section in particular, to provide an understanding that other types of museum schools exist and they are just as credible as the formalized schools. Several varieties of museum schools exist. These varieties can be broken down into two general categories, formal and informal learning environments, despite the fact that breaking experiences down into formal and informal education seems unnecessary if successful learning is occurring. This leads one to question the distinctions between learning and education, but that is a consideration for another place and time. However, in *Learning from Museums: Visitor Experiences and the Making of Meaning*, educational theorists John H. Falk and Lynn D. Dierking argue that “*free-choice* captures the underlying motivational and structural nature of the learning that occurs in and from such [museum] settings better than does the other frequently used term, *informal*.”⁴ Accordingly, best attempts were made to determine a term that best defines museum school environments, however that is a difficult task. The dichotomy of ‘traditional/nontraditional educational sites’ suggests that there is not an inherent educational function of museums, which is not accurate. A better distinction has not been developed as of yet.

⁴ John H. Falk and Lynn D. Dierking, *Learning from Museums: Visitor Experiences and the Making of Meaning*. (New York: AltaMira Press, 2000), xi.

At this moment in the discourse, it is important to distinguish between several terms. Though using the same words, the terms “museum school” and “museum-school” are not the same. Museum school, non-hyphenated, refers to a program, institution, or related entity. Museum-school, hyphenated, refers to a type of partnership. More simply put, museum school is a noun, while museum-school is an adjective. A museum school is a type of museum-school partnership. However, a partnership between a museum and school does not necessarily mean it is a museum school.

The museum-school partnership exists in various manifestations. These include field trips, traveling trunks or kits, distance learning programs, afterschool programs, and model programs, such as National History Day, which do not simply replicate a traditional classroom experience but also provides supplementation.⁵ Museum-school partnerships are not limited to those previously mentioned. For example, the Science Museum of Minnesota in St. Paul holds regular sleepovers for school children. This sleepover is often the first time a student is exposed to the museum and is able to interact with the collections. The Science Museum of Minnesota’s sleepover program has reached nearly 15,000 students across the state.⁶

Furthermore, a distinction must be drawn between museum school and school museum. Though seemingly just a switch of words, the terms hold different meanings.

⁵ Kim Fortney, “Museum Programs for School Audiences: The Basics,” in *An Alliance of Spirit: Museum and School Partnerships*, eds. Kim Fortney and Beverly Sheppard (Washington, D.C.: American Association of Museums, 2010): 31-39.

⁶ Heron Marquez Estrada, “‘Night at the Museum’ Meets ‘Indiana Jones,’” *Star Tribune*, March 28, 2014. Accessed August 29, 2014. LexisNexisAcademic.

The term school museum has two meanings. Historic School Museum refers to a museum developed to discuss the history of a school relevant to a community or a museum created to highlight the history of education through a historic school setting. A second definition is associated with school museum. Academic School Museum refers to an in-school project-based learning experience. Linda D'Acquisto in her work, *Learning on Display: Student-Created Museums that Build Understanding*, details how teachers and students can develop in-school exhibits or museums to display a more hands-on and experiential learning process through emulation of the exhibit development and design process practiced throughout the museum community. D'Acquisto asserts that “as creators of a school museum, students have a specific mission to develop an interesting and informative exhibition...using a strategy common in problem-based learning: giving students a loosely defined, real-world problem or challenge that serves as the context for the upcoming instruction.”⁷ She argues that the problem-based learning aspects of research and exhibit development creates authentic learning for students. Similarly, in an article entitled “Schools as Museums,” appearing in *Principal Special Supplement*, Karla Taylor and Eric Zebley discuss that “when students are empowered as museum researchers, exhibit designers, and curators, they engage in deeper learning,” as they witnessed in three elementary schools.⁸ D'Acquisto's theories will reappear in the

⁷ Linda D'Acquisto, *Learning on Display: Student-Created Museums that Building Understanding*. (Alexandria, VA: Association for Supervision and Curriculum Development, 2006), 70.

⁸ Karla Taylor and Eric Zebley, “Schools as Museums,” *Principal Special Supplement* (September/October 2013): 17. Accessed September 8, 2015. National

discussion of Formal Museum Schools, a distinction to be made shortly. The Academic School Museum shares elements with the overall idea of Formal Museum Schools, yet it does not meet other conditions of the Formal Museum Schools in order to be included therein.

Historical Museum Schools

Museums and learning exist in a symbiotic manner. Education has always functioned as a practice and role of museums, thus it only seems natural that stronger ties between museums and schools should occur. The earliest museum schools upheld this close tie between the museum and education. Existing not in the traditional sense of educating children and young adults, these early schools served to create a sense of professionalism as well as a creation and appreciation of culture. “Study focused on copying the museum component’s typical collection of classical European paintings hung in tightly-packed multiple rows alongside antique statuary casts. This new hybrid institution provided a structured alternative to the apprentice system, and it became a significant presence in the nation’s growing urban centers well before college art departments developed as primary suppliers of post-secondary art training.”⁹

Association of Elementary School Principals.
https://www.naesp.org/sites/default/files/Museums_CRSO13.pdf.

⁹ Joyce Woelfle Lehmann, “Art Museum Schools: The Rise and Decline of a New Institution in Nineteenth-Century America,” *Proceedings of the American Antiquarian Society* 105, no. 1 (April 1995): 231. Accessed August 13, 2015.
<http://www.americanantiquarian.org/proceedings/44574420.pdf>.

Though established for differing reasons than the museum schools of today, these early art museum schools nevertheless shared some similarities in terms of how the museum is used for education. Despite the fact that the phrases may have changed, the overall ideas have remained relatively constant. Citing examples such as the Albright Art School in New York and the Herron School of Art in Indiana, among numerous others, Joyce Woelfle Lehmann analyzes the rise and decline of these types of museum schools in the nineteenth century, while also highlighting, perhaps unintentionally, the importance and use of museum collections in learning and education. “Object-based learning” was not a phrase used until much later, but it appears to have been a critical aspect of these early learning systems. The students analyzed and imitated the pieces of the museum’s collection in order to better emulate and understand various stylistic renderings, indicating the importance of the museum collection to the student’s learning process. “Probably the most important was the need for student access to original art at a time when travel even for short distances generally was difficult, reproductions were scarce and usually of poor quality, and copying the art of the past was a necessary part of art training.”¹⁰ Thus, the need for students to have access to the original was and has always been a factor of museum learning, particularly seen in museum schools. Though Lehmann asserts that many of these early art museum schools declined as the importance of formalized degrees provided a sense of legitimacy, many still remain active today.¹¹

¹⁰ Ibid., 235.

¹¹ Ibid., 240.

The need for standardization and legitimacy of degrees played a vital role in the life cycle of these early museum schools. However, some of these schools evolved in order to match the needs of society's call for professionalism. Two of these schools include the School of the Museum of Fine Arts in Boston and the Pennsylvania Museum School of Industrial Arts in Philadelphia, both of which Lehmann cites in her discussion of these nineteenth century museum schools. Though these programs evolved over time, they do retain elements of their initial missions in training students. Founded in 1876, the School of the Museum of Fine Arts opened its doors to its first class the following year and the first student graduation took place in 1885. In 1945, the School of the Museum of Fine Arts created a partnership with nearby Tufts College in the form of the creation of a training program for teachers as well as other degree programs.¹² The collaboration between Tufts (now university instead of college) and the museum school has continued to develop. Beginning June 30, 2016, Tufts University will take full control of the Museum School of the Museum of Fine Arts, which will provide the museum school with accreditation opportunities and Tufts with strong ties to a major museum.¹³

These schools and programs serve as an illustration of the first educational collaboratives in which the museum is used as a site of analysis and learning for a

¹² "History of SMFA," SMFA Boston, Accessed January 15, 2015, <http://www.smfa.edu/history>.

¹³ Ruth McCambridge, "Museum of Fine Arts and Tufts University Strike an Extraordinary Deal," *Nonprofit Quarterly*, December 23, 2015. Accessed January 3, 2016. Google Alert. <https://nonprofitquarterly.org/2015/12/23/museum-of-fine-arts-and-tufts-university-strike-an-extraordinary-deal/>.

particular group of students. Though not as prominent as they once were, these museum schools offer the first step into the exploration of the term ‘museum school’.

Informal Museum Schools

The second type of museum school, Informal Museum School, is currently more prominent than the first, yet, it serves to cause confusion when people search for examples of Formal Museum Schools, which will be discussed later. This type of museum school is typically a public programming effort created by museums to provide enrichment or enhancement classes for the surrounding community. Some of these programs are free to the public, while others require ‘tuition’ or a one-time payment to help the museum defray the costs of supplies and similar materials. For example, the Museum Art School at the Vero Beach Museum of Art in Vero Beach, FL charges tuition for their courses, however, it is considered a tax-deductible gift to the museum as well as discounted rates for museum members.¹⁴ Other examples of this particular type of museum school includes: the Museum School at the Cameron Art Museum in Wilmington, N.C., the E.L. Cord Museum School at the Nevada Museum of Art in Reno, NV, the Museum School at the Mississippi Museum of Art in Jackson, MS, the Museum School at the Alden B. Dow Museum of Science & Art in Midland, MI, the Museum School at the Arkansas Arts Center in Little Rock, AR, the Museum School at Attleboro

¹⁴ “Museum Art School,” Vero Beach Museum of Art, accessed May 14, 2015, http://www.verobeachmuseum.org/index.cfm?method=ArtSchool_main&.

Arts Museum in Attleboro, MA, and the Museum School at the Albuquerque Museum in Albuquerque, NM among others.

These particular museum schools create programs focused for students, young children through adults. As noted from the list above, these educational programs are focused primarily at art-based museums. Thus far art-based museums appear to be only category of museums that conduct these museum schools. Is this trend solely because museum schools at art-based museums are more easily replicated than at other types of museums? This fact is yet unknown, however, it is an area of further research. For the time, these museum schools present opportunities in which students actively engage with museums, museum professionals and artists, and the collections. The Museum School at the Albuquerque Museum “seeks to enhance children’s artistic and cultural development” through innovative courses.¹⁵ On occasion, there are programs within the museum school program at museums. For instance, the E.L. Cord Museum School at the Nevada Museum of Art developed several programs including Art High, Kids’ Corner, and Arte en Español, which sought not only to increase the number of participants in each course but also to expand the variety and availability of courses.¹⁶

¹⁵ “The Museum School,” Albuquerque Museum, accessed May 14, 2015. <http://cabq.gov/culturalservices/albuquerque-museum/education-programming/the-museum-school>.

¹⁶ Amanda Horn, “Munoz brings community classes to Nevada Museum of Art,” *Reno Gazette-Journal*. December 30, 2015. Accessed January 3, 2016. Google Alert. <http://www.rgj.com/story/life/arts/2015/12/30/munoz-brings-community-classes-nevada-museum-art/78096514/>.

However, despite the fact this particular type of museum school is situated primarily in museums, that does not necessarily mean that these museum schools cannot participate in museum-school partnerships. For instance, the Museum School at the Provincetown Art Association and Museum (PAAM), originally founded in 1982 as an educational program enhancement, hosts an experiential learning opportunity for local students—the Lenore Ross Student and Educator Curating Program. Through this learning experience, elementary school students “make contemporary connections with the past” in which students engage with the museum’s collection and “interpret it through creative writing and art-making,” which is then developed into a collaborative exhibit for the museum.¹⁷ The Museum School at the PAAM creates a unique opportunities for free-choice learning environments and the development of museum-school partnerships. This partnership with traditional schools leads into the discussion of formalized museum schools.

Formal Museum Schools

Museums and schools create significant partnerships. In the words of Beverly Sheppard, they “are natural partners.”¹⁸ Museum and school partnerships are nothing

¹⁷ “Museum School History,” Provincetown Art Association and Museum, accessed January 3, 2016. <https://www.paam.org/education/workshops/taking-a-workshop-2/museum-school-history/>. ; “Harvesting the Land and Sea,” Provincetown Art Association and Museum, accessed January 3, 2016. <https://www.paam.org/exhibitions/harvesting-the-land-and-sea/>.

¹⁸ Beverly Sheppard, “The Perfect Mix: Museums and Schools,” in *Building Museum and School Partnerships*, ed. Beverly Sheppard (Washington, D.C.: American Association of Museums, 1993), 2.

new. They have existed for some time. Multiple instances of school and museum partnerships are seen in the early decades of the twentieth century. These early museum-school partnerships highlight the understanding that books are not the only nor the best form of education and learning. As early as 1904, I.B. Meyers and Elsie A. Wygant questioned the legitimacy of education solely from books and advocated for study of artifacts as well.¹⁹ Similarly in “Connections between the Museum and the School,” an excerpt from a paper presented at the American Association of Museums conference in 1911, Anna D. Slocum stated, “in this new epoch, is our opportunity; and this is our material; thousands and thousands of young minds to reach—children of the unlettered—with the museum, a new institution in our educational world, which makes, through the eye and the emotions, a more vivid appeal than books alone can do.”²⁰ Likewise, in 1956, Andrew H. Whiteford acknowledged the importance of museum collections and promoted their use in everyday academic study.²¹ The connection between museums and schools has been long established and have encouraged the development of greater partnerships.

¹⁹ I.B. Meyers and Elsie A. Wygant, “The Development of the School Museum. II,” *The Elementary School Teacher* 4, no. 5 (January 1904): 319-325. Accessed November 30, 2014. JSTOR. <http://www.jstor.org/stable/992504>.

²⁰ Anna D. Slocum, “Possible Connections between the Museum and the School,” *The Metropolitan Museum of Art Bulletin* 7, no. 9 (September 1912), 164. Accessed November 30, 2014. JSTOR. <http://www.jstor.org/stable/3252541>.

²¹ Andrew H. Whiteford, “The Museum in the School,” *American Anthropologist*, New Series 58, no. 2 (April 1956): 352-356. Accessed November 30, 2014. JSTOR. <http://www.jstor.org/stable/665494>.

The October 9, 1991 edition of *Education Week* included an excerpt, from *The Unschooled Mind: How Children Think and How Schools Should Teach*, by noted educational theorist Howard Gardner entitled “Making Schools More Like Museums,” in which he builds on the strength of museum-school partnerships and on museums practices that he argued should be replicated in schools. Gardner begins his essay by requesting the reader imagine a scene in which children learn in children’s museums, gain professional training via apprenticeships at the museums, and genuinely appreciate the learning process. Gardner argues that “if we are to configure education for understanding, suited for the students of today, and for the world of tomorrow, we need to take the lessons of the museum and the relationship of the apprenticeship extremely seriously. Not, perhaps, to convert each school into a museum, nor each teacher into a master, but rather to think of the ways in which the strengths of a museum atmosphere, of apprenticeship learning, and of engaging projects can pervade all educational environments from home to school to workplace.”²² Schools began incorporating museum-style learning into their overall structure in the form of museum schools almost simultaneously to the publication of Gardner’s work.

With the increasing number of museum schools in the 1990s, a group of nearly one hundred-and-twenty concerned stakeholders met in Washington, D.C. in order to create an understanding of museum schools. In the opening remarks made by Mark St. John, who at the time was the President of Inverness Research Associates, stated “today

²² Howard Gardner, “Making Schools More Like Museums,” *Education Week* 11, no. 6 (October 1991): 40. Microfilm.

is about helping you make a case for museum schools. You have to get the language right, the argument right. You need a case that's real and powerful."²³ It is reasonable to suggest that in the twenty years since that initial meeting, which did not set off an annual meeting on the topic as was suggested, little has been done in the way of making the case for museum schools. The field of museum schools remained relatively unchecked in the period and the variety of these schools flourished as a result, creating an even greater degree of uncertainty about the defining characteristics of a museum school. Thus, this particular aspect of the museum school spectrum remained in flux as a standardization of the institution did not occur. At the time of the symposium, representatives from six museum schools participated: the New York City Museum School, the Museum Magnet School, the Dr. Charles Drew Science Magnet School, the Elementary Professional Development School (now the MOSI Partnership School), and the Smithsonian Institution, District of Columbia, Museum Magnet Schools—Brent Elementary School and Stuart Hobson Middle School.

Incorporating the same ideals of practical experience and engaged learning that Gardner espoused, the Museum Magnet School, in partnership with the Science Museum of Minnesota and the University of Minnesota, opened as a Kindergarten through Sixth grade school in 1991 and expanded to include middle school grades in 1995.²⁴ Another

²³ "Museum Schools Symposium 1995: Beginning the Conversation," Science Museum of Minnesota, 1996. 4.

²⁴ "Museum Schools Symposium 1995: Beginning the Conversation," Science Museum of Minnesota, 1996: 27.

museum school, the New York City Museum School opened in 1994 with eighty-five sixth and seventh graders, adding a new grade successively each year until the school incorporated twelfth grade.²⁵ Similarly the Dr. Charles Drew Science Magnet opened in 1990, the MOSI Partnership School in 1997, Brent Elementary School and Stuart Hobson Middle School in 1996 and 1997, respectively. These few museum schools paved the way for future museum schools.

Why did this particular type of school trend happen at this time? One reason develops from the increased emphasis on education in the museum field. As stated earlier in 1992, the American Association of Museums published *Excellence and Equity: Education and the Public Dimension of Museums* that urged museums to incorporate educational principles into their missions. One manner in which museums strengthened their educational missions is through significant and direct partnerships with formal school environments. The education structure of the United States is another cause for education reform resulting in the creation of museum schools. Gardner further argues,

Much if not most of what happens in schools happens because that is the way it was done in earlier generations, not because we have a convincing rationale for maintaining it today. The often-heard statement that school is basically custodial rather than educational harbors more than a grain of truth... Yet as institutions, schools have become increasingly anachronistic, while museums have retained the potential to engage students, to teach them, to stimulate their understanding and, most important, to help them assume responsibility for their own future learning.²⁶

²⁵ Ibid., 20.

²⁶ Gardner, "Making Schools More Like Museums," 40.

Gardner found that schools lacked creativity in terms of pedagogy and learning opportunities for students, and instead they opted for the same linear structure because that was how it occurred in the past. He asserts that museums fill gaps that the traditional school structure fails to fill. At the Museum School Symposium of 1995, Diane Frankel, then the director of the Institute of Museum Services (now Institute of Museum and Libraries Services, or IMLS) provided a viewpoint built on the same ideals. She suggested that schools have realized that they can no longer provide solutions to all of the problems inherent in the educational system, and that through partnerships with museums, “learning communities” develop and provide what is lacking from school-only educational structures.²⁷ The renewed emphasis on museum education and the stagnation of the American education system allowed for the rise of museum schools.

Attempts to create a unified understanding of museum schools occurred most recently at the National Association of Museum Schools (NAMS) Inaugural Conference on Monday, June 22, 2015 in Atlanta, Georgia. As with the conference nearly twenty years previously, this conference revealed the difficulty of defining the museum school concept. This conference featured nineteen presentations ranging from the museum school concept to museum partnerships to significant project-based learning opportunities. Among other purposes, the National Association of Museum Schools conference served to reveal the diversity that exists among current museum schools.

²⁷ “Museum Schools Symposium 1995: Beginning the Conversation,” Science Museum of Minnesota, 1996: 81.

Kira King, in her 1998 dissertation, conducted case studies of four of the original museum schools discussed at the *Museum Schools Symposium*, including the New York City Museum School, Museum Magnet School, Brent Elementary School, and Stuart-Hobson Middle School. King's dissertation provided one of the earliest and most-cited working definitions of museum schools. She determines that schools fall within a continuum that included three commonalities, "museum learning, organizational partnership structure, and systemic change," in which strengthened partnerships led to greater overall systemic change within the school environment.²⁸ King found that of the museum schools studied, several museum characteristics existed including, "creating museums, exhibits, objects; object-oriented products, experience-oriented products; pursuing museum learning; and learning within the museum setting."²⁹ Building on King's theories, Kaleen E. Pavis continued to study museum schools in her Master's project, "A Unifying Curriculum for Museum-Schools." Pavis argues that museum schools can be categorized into four types based on museum interaction: teaching approach, which mimics museum education practices similar to object-based learning; thought process, which uses the exhibit design process as a model; topical, which uses the museum as a content resource; and thematic, which studies the museum structure itself.³⁰ Based on Pavis' descriptions, the current study finds that museum schools fit into the

²⁸ Kira King, "Alternative Educational Systems: A Multi-case Study in Museum Schools," (Indiana University, Ph.D. Dissertation): 1998, 165.

²⁹ Ibid., 165.

³⁰ Kaleen E. Pavis, "A Unifying Curriculum for Museum-Schools," (University of Washington, M.A. Project): 2011, 24.

above categories, yet one does not fit all. A single museum school can fall into multiple categories.

Similarly, Jennifer Lapp in her thesis, primarily focused on the same original six schools of the 1995 *Museum Schools Symposium*, likewise concluded that museum schools are formalized partnerships that exist between schools and museums. She postulated that museums and schools enter into these partnerships based on self-preservation for museums rather than altruism, as a result of the increased need to renew an educational mission after the publication of *Excellence and Equity*, in order to procure greater levels of funding.³¹ While Lapp's theory is accurate, one wonders how accurate this theory is in relation to recently developed museum schools. Lapp also stated that "all museum schools stress their ability to provide students with an atmosphere for learning that cannot be matched elsewhere," but again as the result of specific needs from both the school and museum in the partnership.³²

It is at this point that we come to a unique revelation. These original six museum schools were not the first. The Hudson River Museum Magnet School Program, known today as P.S. 25 in the Yonkers School System, resulted from a court ordered desegregation mandate in 1986. This school, like the ones that followed, created opportunities in which "the museum experience provides a framework for acquiring, organizing, and processing information in a way that differs from the traditional

³¹ Jennifer L. Lapp, "Museum Schools," (State University of New York College at Oneonta, M.A. Thesis): 1998, 8.

³² Ibid., 14.

classroom approach.”³³ Why this museum school was not one of the original museum schools studied during the 1995 *Symposium* is unknown.

Nevertheless, as is evidenced by these previous studies on museum schools, the New York City Museum School, the Museum Magnet School, the MOSI Partnership School, Brent Elementary School, and Stuart-Hobson Middle School, or “the original six” as they can easily be dubbed, have been the foci of the museum school movement. The original six served as models of museum school structure, yet cannot be exactly replicated. Lack of funds, geographic location and proximity to museums, size of supporting school districts, and buy-in from museums, parents, students, and teachers all account for why these models cannot be emulated as is. However, an analysis of the characteristics of the original six is necessary in order to understand the development of resultant museum schools.

The Museum Magnet School of St. Paul, Minnesota, opened in 1991, began as an initiative on the part of the Science Museum of Minnesota. The school teachers and the museum educators developed a set of specific learning goals that sought to “link skills, process, and museum concepts using museum resources is goal one, using objects and collections as research tools is goal two, developing exhibit projects is goal three, interpreting exhibit projects is goal four, and ultimately what [they] tried to do was create a museum by kids for kids.”³⁴ These goals clearly highlighted a noteworthy connection

³³ Kathryn Adamchick, “Museum Magnet Schools,” *Museum News* 72, no. 1 (January/February 1993): 43.

³⁴ “Museum Schools Symposium 1995: Beginning the Conversation,” Science Museum of Minnesota, 1996: 35.

and partnership between the school teachers and the museum educators. Unfortunately the Museum Magnet School closed in 2012.³⁵ However, the Museum Magnet School developed the Museum Process Wheel that they implemented in order to promote student learning and engagement. The Museum Process Wheel included five specific steps: *engage*; *explore* through careful observation, research, and willingness to see things in new ways; *experiment* by posing questions of why and what if and by taking risks to test possible answers; *explain* the results of the discoveries by working collaboratively to identify patterns and make new connections; and *exhibit* their new understandings in a variety of formats, using multiple communication media and tools.”³⁶ Newer museum schools have adapted variations of the Museum Process Wheel.

The New York City Museum School (NYCMS) likewise is one of the original six museum schools studied at the *Museum School Symposium*. The New York City Museum School, similar to the Hudson River Museum Magnet School Program, resulted from a call for desegregation and the development of the museum magnet program meant to attract students and integrate students into the school.³⁷ While the Museum Magnet

³⁵ I was unable to find out the exact reason for the school closure because my research was restricted by Institutional Review Board (IRB) specifications. In order to simply call or email to discover the reason behind the closure, I would be required to submit an entire IRB application.

³⁶ Kelly O. Finnerty, “Introduction to a Museum-School: The Museum Process as Pedagogy,” *The Journal of Museum Education* 21, no. 1, Getting to Goals 25 Accessed May 26, 2015. JSTOR. <http://www.jstor.org/stable/i40021035>. (Winter 1996): 7.

³⁷ “Museum Schools Symposium 1995: Beginning the Conversation,” Science Museum of Minnesota, 1996: 16-17.

School partnered with a single museum, the NYCMS partnered with multiple museums. In fact, it was the only one of the original six to partner with more than one museum. The NYCMS' original partner museums included the Brooklyn Museum, the American Museum of Natural History, the Children's Museum of Manhattan, and the Jewish Museum, with dedicated spaces for NYCMS students at each of the partner museums.³⁸ Sonnet Takahisa, a founding partner of NYCMS, discussed how the New York City Museum School was designed as a laboratory for museum learning. She stated that the learning curriculum developed for NYCMS was not perfect, but rather evolutionary and consisted of six elements including: sustained looking, articulating observations, making connections, generating questions, undertaking research, preparing presentations, and promoting reflection and criticism.³⁹ Furthermore, "NYCMS models the pattern of learning practiced by museum professionals—learning that is intellectually rigorous, uses authentic and primary resources, and requires scholarly training, an innate sense of curiosity, and the ability to synthesize and evaluate information from a variety of sources."⁴⁰ The New York City Museum School, like the Museum Magnet School, developed pedagogical programs based on museum learning in which the process of

³⁸ Ibid., 20.

³⁹ Sonnet Takahisa, "A Laboratory for Museum Learning: New York City Museum School," *The Journal of Museum Education* 23, no. 2, The Classroom Connection: Museums as Catalysts for School Reform (1998): 7. Accessed May 26, 2015. JSTOR. <http://www.jstor.org/stable/40479121>.

⁴⁰ Ibid., 7.

learning is ever-evolving and is of more significance than the product of filling in bubbles on test card.

Since the *Museum School Symposium*, numerous other museum schools have developed. In her study of museum schools, Kaleen Povis found thirty-museum schools.⁴¹ Since the inaugural conference of the National Association of Museum Schools on June 22, 2015, the NAMS website features a “Find a Museum School” in which forty-one museum schools are listed.⁴² Of those listed on the NAMS website, five of those schools no longer function as museum schools. In research since then, I have found a total of fifty-nine museum schools, which span from Pre-Kindergarten to Twelfth Grade.⁴³ There are three additional museum schools under consideration two in Beavercreek, Ohio, The Museum School and Museums, Zoos, and the Arts School, the possible result of “Straight A Fund” grants provided by the Ohio Department of Education.⁴⁴ The third potential museum school is the Old Sturbridge Academy Public Charter School, to be housed at Old Sturbridge Village and open for grades Kindergarten

⁴¹ Kaleen E. Povis, “A Unifying Curriculum for Museum-Schools,” 38.

⁴² “Find a Museum School,” National Association of Museum Schools, accessed January 3, 2016. <http://www.museumschools.org/find-a-museum-school/>.

⁴³ Refer to Appendix B and Appendix C for a complete list of current museum schools and their grade distribution. See Appendix E and Appendix F for common characteristics of museum schools and images of museum schools.

⁴⁴ “Straight A Fund,” Ohio Department of Education, accessed January 3, 2016. <http://education.ohio.gov/Topics/Straight-A-Fund>. More information about the schools is available through the spreadsheet on the website titled, “Applicants” under the Fiscal Year 2016 Straight A Grant sections.

through 8th.⁴⁵ Thus, the increasing numbers and varieties of museum schools throughout the United States suggest that the museum school concept creates significant and meaningful learning opportunities for students. A short discussion of selected museum schools follows.

Maplewood Richmond Heights Elementary School is one of four schools in the Maplewood Richmond Heights School District outside of St. Louis, Missouri. Each of the schools within the district follows a specific theme: the Early Childhood Center follows the School as Studio, MRH Elementary follows School as Museum, MRH Middle focuses on School as Expedition, and the theme of MRH High is School as Apprenticeship.⁴⁶ Maplewood Richmond Heights Elementary School is specifically a museum school, however, the thematic aspects of the school district in general harken back to Gardner's call for schools to be more like museums and apprenticeships within the museum. Within the School as Museum metaphor taught at MRH Elementary School, "students become curators and docents as they put their learning on display with two museum exhibits for peer, families and the public. These museum exhibits provide for extensive use of reading and writing across the curriculum and encourage the use of technology. Field trips reinforce and extend learning and are often focused on museums."⁴⁷ "School as Museum," an exhibit at the Museum of Westward Expansion at

⁴⁵ "Our Vision," Old Sturbridge Academy Public Charter School, Accessed January 5, 2016, <http://www.osacps.org/about.html>.

⁴⁶ "School Directory," Maplewood Richmond Heights School District. Accessed May 27, 2015. <http://www.mrhschools.net/schools/school-directory>.

the Gateway Arch in 2013, sponsored by a \$12,000 grant from the National Park Foundation, served as a significant example of Maplewood Richmond Heights Elementary School's museum education model.⁴⁸ Within this exhibit, students displayed artifacts they considered significant, recorded accompanying video presentations about the artifacts, and developed narratives about the artifacts and the people who interacted with them.⁴⁹ The School as Museum thematic program at Maplewood Richmond Heights Elementary School thoroughly illustrates how museum schools incorporate exhibit development and production as efficient and productive pedagogical strategy as well as how museum schools connect students to deeper levels of thinking.

At the National Association of Museum Schools inaugural conference, Ortega Museum Magnet School was featured as a "Spotlight School," a distinction resulting from a national search on school characteristics including museum model incorporation, program length, and student success ratios.⁵⁰ Like the Museum Magnet School and the New York City Museum School, Ortega Museum Magnet developed a museum processing learning pedagogy, called Museum 101, see Appendix D. During a panel at

⁴⁷ "School as Museum," Maplewood Richmond Heights School District, Accessed May 27, 2015. <http://www.mrhschools.net/elementary-school/school-as-museum>.

⁴⁸ Stephen Deere, "'School as Museum' Brings History Alive," *St. Louis Post-Dispatch*, January 6, 2013. Accessed August 29, 2015. *LexisNexisAcademic*.

⁴⁹ Ibid.

⁵⁰ Lane Tillner, "Trending Now: 'Museum Schools,'" *Center for the Future of Museums Blog* (blog), September 8, 2015. Accessed January 3, 2016. <http://futureofmuseums.blogspot.com/2015/09/trending-now-museum-schools.html>.

the NAMS conference, entitled “Museum 101,” principal Stephanie Brannan discussed Ortega’s learning curriculum. The Museum 101 strategy incorporates a base of museology in order to allow students to develop understanding of museum practice, which highlight specific themes of museum practice including: collections, display and conservation, design and production, content, interpretation and communication, and audience awareness.⁵¹

Ortega Museum Magnet’s Museum 101 provides an exemplary pedagogical model highlights the importance and emulation of museum exhibit development practices. Not only do the students develop projects and then exhibit the results, the students at Ortega Museum Magnet gain a fundamental understanding of the museum design process alongside normal curriculum.

The Museum School at Avondale Estates, in Decatur, GA, acted as host for the inaugural conference of the National Association of Museum Schools. The Museum School opened to students in August 2009 and serves as a successful model of museum learning. The Museum School incorporates partner institutions through use of content, models to emulate, and destinations for learning expeditions.⁵² The school further divides partners into three specific sets: Curricular Partners, Resource Partners, and Community

⁵¹ “Ortega Museum Magnet” Handout, “Museum 101” Presentation, *National Association of Museum Schools Conference*, Atlanta, GA, June 22, 2015.

⁵² “Curriculum-The Museum School Model,” The Museum School, Accessed August 28, 2015. http://themuseumschool.org/Curriculum/museum_school-model.php.

Partners, based on how the skills and activities of each meet the needs of the school.⁵³

The Museum School likewise incorporates project-based and experience-based learning into curricular practices which culminate in a thematic exhibit for Exhibit Night, occurring four times throughout the school year.⁵⁴ What is most unique about The Museum School is that they share curriculum and experience-based learning activities with elementary schools in the surrounding area. Following the receipt of a Race-to-the-Top Grant in 2012, The Museum School, alongside their curricular partners, developed the “Museum in a Box” program to share and incorporate experience-based, project-based, and hands-on learning into traditional school settings, expanding the reach of the museum model beyond just the school itself.⁵⁵

Similarly, John Early Museum Magnet Middle Prep (JEMMMP), in Nashville, Tennessee, presents yet another example of the variety of museum schools. Like other museum schools, JEMMMP students fulfill museum curriculum standards, alongside the mandated curriculum.⁵⁶ Students at John Early participate in project-based and experience-based learning activities. For instance, in the 2014 school year, 7th grade

⁵³ “Partners-About Our Partners,” The Museum School, Accessed August 28, 2015. http://themuseumschool.org/Partners/about_our_partners.php.

⁵⁴ “Curriculum-The Museum School Model,” The Museum School, Accessed August 28, 2015. http://themuseumschool.org/Curriculum/museum_school-model.php.

⁵⁵ “Curriculum-Museum in a Box Program,” The Museum School, Accessed August 28, 2015. <http://themuseumschool.org/Curriculum/museum-in-a-box.php>.

⁵⁶ “Museum Curriculum Standards,” Academics-Thematic Program-Museum Theme, accessed August 28, 2015. http://johnearlyms.mnps.org/pages/JohnEarlyMiddle/Academics/Thematic_Program_-_Museum_Them/Museum_Curriculum_Standards.

students partnered with the Nashville Zoo, specifically the Croft House, on a project about a slave cemetery discovered on the property of the zoo. In this learning experience, students “conducted primary source research, looked at cultural burial customs from around the world, conducted DNA analysis and explored the probability of genetic dissemination from generation to generation” for various written narratives about the “Unknown 20” and a special exhibit during Exhibit Night.⁵⁷ John Early Museum Magnet is unique from other museum schools. October 22, 2015 marked the grand opening of the John Early Museum. The John Early Museum was opened as a building addition to the school in which students actively create exhibits from the museum’s collection of nearly 5,000 cultural artifacts.⁵⁸ The students at John Early “act as Junior Curators handling artifacts, maintain artifact records, helping to install exhibit cases, and developing online and on-site exhibits.”⁵⁹ Despite the fact that the John Early Museum is active and involves significant student input, that does not mean that partnerships with other

⁵⁷ MetroSchools, “Incredible student projects that perfectly explain what a ‘museum magnet school’ is really all about,” *Children First* (blog), April 14, 2015, Accessed August 28, 2015. <https://mnpschildrenfirst.com/2015/04/14/incredible-student-projects-that-perfectly-explain-what-a-museum-magnet-school-is-really-all-about/>.

⁵⁸ Lane Tillner, “Trending Now: ‘Museum Schools: Part II,’” *Center for the Future of Museums Blog* (blog), September 15, 2015. Accessed January 3, 2016. <http://futureofmuseums.blogspot.com/2015/09/trending-now-museum-schools-part-ii.html>.

⁵⁹ MetroSchools, “PHOTOS: John Early Museum Magnet Middle Prep Opens New Museum,” *Children First* (blog), October 29, 2015, Accessed November 15, 2015. <https://mnpschildrenfirst.com/2015/10/29/photos-john-early-museum-magnet-middle-prep-opens-new-museum/>.

museums have ceased. On the contrary, JEMMMP maintains partnerships with nearly fifty cultural institutions.⁶⁰ JEMMMP is not the only museum school in the Metropolitan Nashville Schools District. Robert Churchwell Museum Magnet Elementary School is a feeder school for John Early, thus children can potentially experience museum learning for nine years. Students at John Early interact with students at Robert Churchwell and study the museum theme through the Big Buddy/Lil' Buddy Museum Mentoring Program, which allows students from each school to practice museum and communication skills.⁶¹ John Early Museum Magnet adheres to the commonalities found in museum schools, yet it also steps beyond those in order to create a unique museum learning experience for its students.

While the museum schools for pre-kindergarten through twelfth grades are growing throughout the nation, another type of museum school is happening. The American Museum of Natural History (AMNH) in New York offers degrees to graduate students, using the museum as a content resource for research. The AMNH began conferring Master of Arts degrees in science education teaching, in 2013, as part of a program with the New York State Board of Regents to create new teachers for high-need

⁶⁰ "How our museum partners collaborate with us," Academics-Thematic Program-Museum Theme, accessed August 28, 2015.
http://johnearlyms.mnps.org/pages/JohnEarlyMiddle/Academics/Thematic_Program_-_Museum_Them/How_our_Museum_Partners_collab.

⁶¹ MetroSchools, "John Early Museum Magnet Middle Prep junior curators present at "The People's Guide to Nashville" book launch," *Children First* (blog), December 15, 2015. Accessed January 4, 2016.
<http://mnpschildrenfirst.com/2015/12/15/john-early-museum-magnet-middle-prep-junior-curators-present-at-the-peoples-guide-to-nashville-book-launch/>.

public schools trained in teaching inquiry-based learning.⁶² Likewise, in 2015, the American Museum of Natural History would offer a doctoral degree in comparative biology, again with the museum as a content resource, at no cost to the students.⁶³ Thus, museums as sources of instruction are credible even at the graduate level. Museum training programs can be argued as a similar type of museum school, yet that is not a discussion to be had herein.

Formal museum schools exist as various manifestations. Nevertheless, they involve some form of museum partnership, some degree of museum curriculum, focused and in-depth Learning Expeditions instead of field trips, Exhibit Nights, and museums as classrooms featuring increased interaction between students and artifacts and exhibits. Formal museum schools lack a significant degree of systematic uniformity. However, the variability across museum schools is a benefit to the field, providing multiple and unique examples of successful museum pedagogical practices into the traditional school setting.

⁶² Douglas, Quenqua, “Back to School, Not on a Campus but in a Beloved Museum,” *New York Times*, January 15, 2012. Accessed August 29, 2015. http://www.nytimes.com/2012/01/16/nyregion/american-museum-of-natural-history-will-groom-school-teachers.html?_r=0

⁶³ Robin Pogrebin, “Museums, Always Educational, Now Confer Degrees,” *New York Times*, October 28, 2015. Accessed November 5, 2015. <http://www.nytimes.com/2015/11/01/arts/design/museums-always-educational-now-confer-degrees.html?smid=tw-share>

Micro Museum Schools

Yet still, some partnerships between museums and schools that call themselves ‘museum schools’ but do not fully integrate the museum pedagogy. Therefore, I have termed them Micro Museum Schools. The first of these is the Grout Museum District Museum School. To begin, the museum school is the work of multiple museums in conjunction with local schools in Waterloo, Iowa. The museums comprising the Grout Museum District include: Sullivan Brothers Iowa Veterans Museum, the Grout Museum of History and Science, the Carl A. & Peggy J. Bluedorn Science Imaginarium, the Rensselaer Russell House Museum, and the Snowden House.⁶⁴ The partnership between these museums is significant in itself, but the partnership with local schools is even more impressive. In this museum school, aligned with the third grade curriculum taught in Iowa, students attend school for a week at the partner museums with a Family Night on Thursday when the students highlight their work throughout the week.⁶⁵ Another such program is the immersive museum school created between the State Historical Museum of Iowa with a fourth grade class at Monroe Elementary School and a social sciences course at Scavo Alternative High School.⁶⁶ In this museum school program, the high

⁶⁴ “Sites & Exhibits,” Grout Museum District, Accessed January 4, 2016.
<https://www.groutmuseumdistrict.org/sites-exhibits/>.

⁶⁵ “Museum School,” Grout Museum District, Accessed January 4, 2016.
<https://www.groutmuseumdistrict.org/education/museum-school.aspx>. See also:
 “Preparing for Museum School” PDF, Museum School, Accessed January 4, 2016.
<https://www.groutmuseumdistrict.org/webres/File/Preparing%20for%20Museum%20School.pdf>.

schoolers act as mentors for the fourth graders as well as attend class at the museum and refer to the museum collection as their textbook rather than use an actual textbook.⁶⁷

Incorporating the museum partnerships and learning occur in to a minimized degree in the Micro Museum Schools, as opposed to those described as Formal Museum Schools, yet important museum and school partnerships are being forged.

Zoo Schools

Just as museums merge into sites of instructive, formal learning, zoos are doing likewise. As stated above, it is not the intention of this thesis to look in-depth at zoo schools, but a precursory glance, because zoos are considered a museum under the American Alliance of Museums as mentioned in chapter one, only serves as further evidence of the shift from strictly formal and informal learning sites to environments in which aspects of both sites appear. Zoo schools follow the same patterns as the museum schools above. There are informal zoo schools and formal zoo schools. Informal zoo

⁶⁶ “Community Based Learning Program,” American Association for State and Local History Awards, Accessed January 11, 2016, <http://awards.aaslh.org/award/community-based-learning-program/>.

⁶⁷ Daniel P. Finney, “Scavo students handle history,” *The Des Moines Register*, December 10, 2015. Accessed December 15, 2015. <http://www.desmoinesregister.com/story/news/local/daniel-finney/2015/12/09/finney-scavo-high-school-students-handle-history/77024492/>.; Also “Community Based Learning Program,” American Association for State and Local History Awards, Accessed December 15 2015, <http://awards.aaslh.org/award/community-based-learning-program/>.; Also Hannah Hethmon, “State Historical Museum of Iowa’s Award Winning Education Program Recognized in Media,” *Member Announcements* (blog), American Association for State and Local History, December 10, 2015. Accessed December 15, 2015, <http://blogs.aaslh.org/state-historical-museum-of-iowas-award-winning-education-program-recognized-in-media/>.

schools are programs offered outside of the traditional school setting and do not typically adhere to state curriculum content standards. The Museum School at Binghamton Zoo in Binghamton, NY serves as an example of an informal museum school. This zoo school is a program attended during the summer months to educate about animal habitats, environmentalism, and zoology for students in Kindergarten through Eighth grades.⁶⁸ Formal museum schools, like formal museum schools incorporate the zoo theme into the school curriculum. For instance, the Zoo School in Grand Rapids, MI developed the Environmental Studies Program in partnership with the John Ball Zoo. At the Zoo School, designed for sixth grade only, the students participate in experience-based and project-based learning as well as zoological-based curriculum, in addition to the required state content standards.⁶⁹ There are also Micro Zoo Schools as well. The Zoo School at the Birmingham Zoo in Birmingham, AL and the Zoo School at the Brevard Zoo in Melbourne, FL consist of multi-week programs for seventh and fifth graders, respectively, in which the students use the zoo as a classroom and participate in standards-based, experiential learning.⁷⁰ This brief insight into zoo schools mirrors the

⁶⁸ “Zoo School,” Binghamton Zoo at Ross Park, Accessed February 16, 2016, <http://www.rossparkzoo.com/education/zoo-school/>.

⁶⁹ “Zoo School,” Grand Rapids Public Schools, Accessed February 16, 2016, <http://www.grpublicschools.org/zoo/>.

⁷⁰ “Zoo School,” Birmingham Zoo, Accessed February 16, 2016, <https://www.birminghamzoo.com/education/schools-groups/zoo-school/>. And “Zoo School,” Brevard Zoo-Education, Accessed February 16, 2016, <https://brevardzoo.org/education/partner-programs/zoo-school/>.

museum school movement, in which zoos are appreciated not only as informal sites of education, but rather as sites of formal education and instruction.

The Informal as Formal

This chapter explores the complex and multiple definitions of the term ‘museum school,’ as they exist on a continuum, through a breakdown of each category into Historical Museum School, Informal Museum School, and Formal Museum School. Focusing most specifically on the Formal Museum School, this chapter reveals that while there is not a standard, adopted museum curriculum (think state content standards or Common Core standards) across the multitude of schools, they do share a several commonalities. These include an active and engaging learning environment, as influenced by Dewey’s theories on experience and later constructivism; multiple and focused Learning Expeditions as opposed to field trips; project-based learning and the development of exhibits; incorporation and study of museum practices; and expanded, meaningful partnerships with museums and cultural institutions.

Furthermore, this chapter builds on the history of museums and museum education presented in chapter two in order to demonstrate that the boundary that exists between formal and informal learning and education is blurring. The increasing number of museum schools suggests that museums are not simply viewed as treasure troves of dusty artifacts or as a field trip destination. Rather, museums are increasingly gaining appreciation from the school sector as sites that provide supplemental content to classroom instruction and that allow students to develop and interpret their own experiences. Additionally, museums are increasingly valued for their practices and

exhibit development techniques. This model of museum procedure is repeatedly replicated in museum school settings because it involves authentic learning, research, understanding, and interpretation, much more so than simply ‘teaching to the test’ will ever create. For museum schools, the museum is a destination, teaching tool, encyclopedia, and a role model to emulate.

This chapter, additionally, studies the diversity of Formal Museum Schools. As stated above, there is not a singular model but many. Museum schools are “charter schools...others are magnet schools. Some are traditional schools that have adopted a museum theme. Some museum schools are housed on museum campuses...while others operate at an independent location. Some were developed by museum educators and others developed by school and district professionals. So far, the one thing all...[museum schools] have in common is that they are *public* schools (emphasis by source).”⁷¹ Thus, the museum schools that exist now reflect and promote the public aspect of the museums they emulate.

⁷¹ Lane Tillner, “Trending Now: ‘Museum Schools,’” *Center for the Future of Museums Blog* (blog), September 8, 2015. Accessed January 3, 2016. <http://futureofmuseums.blogspot.com/2015/09/trending-now-museum-schools.html>.

CHAPTER FOUR: CONCLUSION

“The American museum does not simply exhibit; it teaches as well.”
--Museums for a New Century¹

As is clear, the term ‘museum school’ spans a continuum of definitions. It can refer to a Historical Museum School, an Informal Museum School, or a Formal Museum School. To only consider one of the above, such as Formal Museum School, as the only type of museum school does a disservice to and ignores successful programs developed by museums that also happen to share the ‘museum school’ name. This inclusive approach to the study of the museum school further the ever-increasing blurring of the distinctions between formal and informal educational practices and greater emphasis on the role of the museum and its effects on education. Building on the rich history of museums and museum education, the museum school flourishes.

Yet, where the Informal Museum School reaches a wide audience ranging from toddlers to retirees, the Formal Museum School typically only research individuals between six and eighteen years old, with the exception of the museum school program at the American Museum of Natural History, as discussed in chapter three. In “Museums, Lifelong Learning, and Civil Society,” Gail Dexter Lord argued that “lifelong learning is thus for everyone—and museums, because they are open to all, no matter what their level of academic or economic achievement, can be places of lifelong learning for everyone.”² Should the characteristics of the Formal Museum School be incorporated into upper

¹ *Museums for a New Century: A Report of the Commission on Museums for a New Century*, (Washington, D.C.: American Association of Museums, 1984): 55.

² Gail Dexter Lord, “Museums, Lifelong Learning, and Civil Society,” in *The Manual of Museum Learning*, ed. Barry Lord (New York: AltaMira Press, 2007): 8.

levels of education in order to supplement academic study? That is more a matter of personal opinion rather than anything that can be answered definitively. Nevertheless, schools are moving beyond the boundaries of the ‘school house’ to incorporate methods of practices that provide greater learning experiences and expansion of skill sets for students.

Before the first museum school and before Howard Gardner ever compared the school environment to that of the museum, the Commission on Museums for a New Century, an entity of the AAM, set out “to study and clarify the role of museums in American society, their obligations to preserve and interpret our cultural and natural heritage, and their responsibility to an ever-broadening audience.”³ This report provided sixteen recommendations about then current practices in order for the museum to better perform its functions as well as serving its audience. The Commission found that “*museums have not realized their full potential as educational institutions* (emphasis by source)” in what they found to be “a troublesome gap” between the educational goals and ideals of American museums and the actuality.⁴ Three of the sixteen recommendations directly applied to museum education, museum partnerships with schools, and museum learning:

Recommendation 5: Education is a primary purpose of American museums. To assure that the educational function is integrated into all museum activities, museums, need to look carefully at their internal operational structures. Collaborative approaches to public programs that

³ *Museums for a New Century: A Report of the Commission on Museums for a New Century*, (Washington, D.C.: American Association of Museums, 1984): 17.

⁴ *Museums for a New Century*, 28.

include educational as well as scholarly and exhibition components facilitate achieving the full educational mission of museums.

Recommendation 7: We recommend that the AAM and other professional education and museum organizations convene a national colloquium to begin an effective dialogue about the mutually enriching relationship museums and schools should have. We urge that the new consideration of the museum-school partnership involve leaders at all levels, with participation from government, business, the academic community, education and museums. This colloquium should consider the value of collaboration between museums and schools, the issues that need fresh approaches for the future and the practical means by which mutual goals can be realized at the state and local levels.

Recommendation 8: We urge that museums continue to build on their successes as centers of learning by providing high-quality educational experiences for people of all ages, but, in recognition of the increasing median age of our population, that they pay new attention to their programs for adults. Museum professionals must consider ways to introduce their institutions to the adult public as sources of intellectual enrichment, as places where learning can be spontaneous and personal and as opportunities for growth and thinking as well as seeing.⁵

Looking at these recommendations, it is no wonder that *Excellence and Equity* appeared only a few years later. Nevertheless, all of the informal and formal definitions of museum school adhere in some manner to these recommendations. Museums, themselves, create an educational structure in which multiple learning strategies and techniques are developed for the benefit of the audience. Museum schools recognize and incorporate the strength and diversity of museum education into their own programs. The Formal Museum Schools offer clear, visible evidence of the museum-school partnership called for in Recommendation 7. It is unknown if the colloquium between the stated entities in this recommendation ever occurred. Nonetheless, Informal Museum Schools develop educational programs and learning experiences for learners spanning an age range who

⁵ *Museums for a New Century*, 31-32.

look to the museum for extended and supplemental learning opportunities, as discussed in Recommendation 8. Museum schools are a manifestation of the museum working towards its educational potential. This, however, is not to suggest that museum schools, the Formal at least, directly resulted from the issuance of this report or *Excellence and Equity*. Rather, these schools, again Formal Museum Schools, spawn from a variety of push and pull factors from both the museum and education fields. *Museums for a New Century* and its recommendations were simply one of many factors influencing the development of museum schools.

Yet, museums and museum schools do fall short in realization of that educational potential. The Commission found that

Most programs are aimed at elementary school audiences. When the curriculum gets ‘serious’ in high school, museum visits are hard to coordinate with class schedules, and most high school students have little organized exposure to museums. Programs in which the museum experience is a consistent, fully integrated part of the formal school curriculum are few and far between. When museum programs are used to enrich the curriculum, they are shaped by the needs of the schools, not the strengths of the museum. The museum experience seems auxiliary, and museum educators feel constricted by the limits they feel the schools establish.⁶

This is where Formal Museum Schools, and the museums they partner with, fall short. Of the fifty-eight Formal Museum Schools that I found through research, only six schools involve the standard high school grades (9th-12th), as seen in Table 2 in Appendix C. The principles of the museum school model could easily be replicated with high school-aged students. Furthermore, of those fifty-eight schools, twenty-two reach into the standard middle school grades (6th-8th). This suggests that there is opportunity and ability to adapt

⁶ *Museums for a New Century*, 67.

these schools into older grades, but it is perhaps easiest to do so with younger students.

Yet, the Formal Museum School is a learning process developed by both the museum and the school. As this learning process continues and is expanded, it will likely move into areas of need, such as the high school level.

Despite this flaw of the Formal Museum School, the museum school continuum continues to grow. The development and success of museum schools is seen the longevity of the Historical Museum School and the Informal Museum School. However, what remains unseen is the sustainability of the Formal Museum School, which at this time cannot be answered. The Formal Museum School is built on a multitude of factors and influences from both the museum and education fields. Thus, it needs those factors to remain constant or improve in order to remain viable (as well as achieve required scores in national standardized testing). The future of Formal Museum Schools, in particular, remains unknown. However, if the current Formal Museum Schools continue to succeed then it stands to reason that future museum schools will also succeed.

Where does this research stand? This thesis incorporates new definitions of the term ‘museum school’ that are not discussed elsewhere. It attempts to provide clarity in distinguishing between the different types of museums schools. As mentioned previously, initially this thesis intended to contain cases studies on three Formal Museum Schools. However, because of research restrictions, that did not occur. Perhaps that hurts this research, perhaps not. Nevertheless, much of the museum school spectrum remains a mystery. Further, in-depth analysis of all three types of museum schools is warranted. In the instance of Formal Museum Schools, case studies or profiles of the existing schools is an area for future research in order to better and truly understand the unique nature of

each school and the movement in general. A global approach to this subject is also an area of further research. During the course of my research, I discovered one museum school in England, Langley Academy, which incorporates the museum process into academic study.⁷ Are there similar school structures in other countries? How might the language barrier and translation between English and non-English speaking countries influence the meaning and results of that study? Future studies can conduct research into how professional organizations representative of both fields, museums and education, might advocate and support museum schools, and specifically Formal Museum Schools. Which field has the responsibility in that instance—the museum or the school or both? This leads into a final area of future study. The Formal Museum Schools have been discussed and studied significantly from an education perspective. Research into the specific benefits and drawbacks of this relationship from the museum perspective is needed.

After completing an internship and volunteering with a Formal Museum School, nothing is better than watching students make connections between classroom lessons and artifacts or reading the exhibits they designed. The museum school continuum is a unique expression of the capabilities of a museum alone or in partnership with a school and is worthy of support and advocacy on its behalf.

⁷ “Museum Learning,” *The Langley Academy*, Accessed January 16, 2016. <http://www.langleyacademy.org/pages/museumlearning.html>.

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APPENDICES

APPENDIX A: 'MUSEUM SCHOOL' DIAGRAM

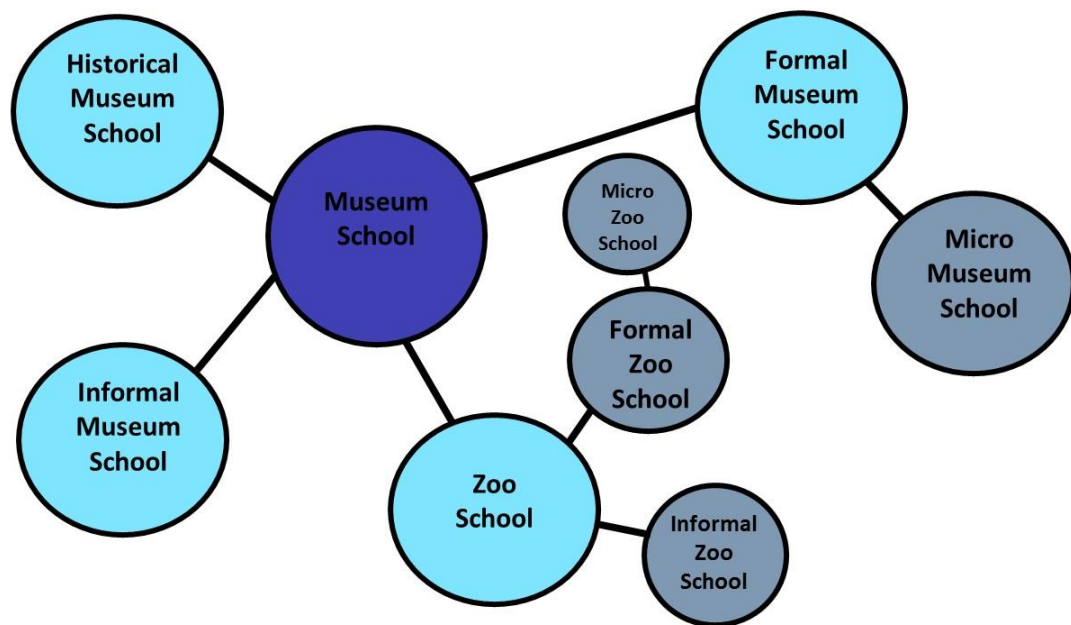


Figure 3: 'Museum School' Diagram

APPENDIX B: FORMAL MUSEUM SCHOOLS

Table 1: Formal Museum Schools List

KEY: Standard Museum School (Black) Micro Museum School (Green) Potential Museum School (Purple) Graduate Level Museum School (Red)				
Name	Location	Website	Date of Inception	Grades
Altantic West Elementary School	Margate, FL	http://atlantic.browardschools.com/	2013	K-5 th
Arroyo Seco Museum Science Magnet School	Los Angeles, CA	https://arroyoseco-laUSD-ca.schoolloop.com		K-8 th
Bailey's Elementary School for the Arts and Sciences	Falls Church, VA	http://www.fcps.edu/BaileysES/ceta.html		PreK-5 th
Beaumont Magnet Academy	Knoxville, TN	http://knoxschools.org/beaumont		K-5 th
Brent Elementary School	Washington, DC	http://brentelementary.org/about/	1996	K-5 th
Brooks Museum Magnet Elementary School	Raleigh, NC	http://www.wcpss.net/brooks		K-5 th
Broward Estates Elementary School	Lauderhill, FL	http://browardestates.browardschools.com/	2013	K-5 th
California Science Center School	Los Angeles, CA	https://alexanderes-laUSD-ca.schoolloop.com	2004	K-5 th
Carrillo K-5 Museum Magnet School	Tucson, AZ	http://www.carrillo-tusd1.org		K-5 th
Chrysalis Charter School	Palo Cedro, CA	http://www.chrysalischarterchool.com/schooloverview	1996	K-8 th
Colbert Museum Magnet Elementary School	Hollywood, FL	http://colbert.browardschools.com	2013	K-5 th
CREC Museum Academy	Bloomfield, CT/ Windsor, CT	http://www.crecschools.org/our-schools/crec-museum-academy		K-5 th

Table 1: Formal Museum Schools List (cont.)

KEY: Standard Museum School (Black) Micro Museum School (Green) Potential Museum School (Purple) Graduate Level Museum School (Red)				
Name	Location	Website	Date of Inception	Grades
Dr. Charles Drew Science Magnet Museum Site (P.S. 59)	Buffalo, NY	http://www.buffaloschools.org/DrewScienceMagnet.cfm	1991	PreK-8 th
Elias Brookings EL Museum Magnet Middle School	Springfield, MA	http://www.springfieldpublicschools.com/schools/brookings/about		PreK-5 th
Fred D. Wish Museum School	Hartford, CT	http://www.hartfordschools.org/component/joomd/school/items/view/fred-d-wish-museum-school		PreK-8 th
Genesee Community Charter School at the Rochester Museum	Rochester, NY	http://www.gccschool.org/about	2001	K-6 th
Grand Rapids Public Museum Magnet School	Grand Rapids, MI	http://publicmuseumschool.org	2015	6 th
Grout Museum District Museum School (G)	Waterloo, IA	https://groutmuseumdistrict.org/education/museum-school.aspx		3 rd
Henry Ford Academy	Dearborn, MI	http://dbn.hfli.org	1997	9 th -12 th
Hunters Woods Elementary for the Arts and Sciences	Reston, VA	http://www.fcps.edu/HuntersWoodsES/magnet_program.html		K-6 th
IMA Preschool	Indianapolis, IN	http://www.imamuseum.org/events-programs/ima-preschool	2015	PreK
Interdistrict Discovery Magnet School	Bridgeport, CT	http://bridgeport.ct.schoolwebpages.com/education/school/schoolhistory.php?sectiondetailid=1451&	2004	PreK-8 th
John Early Museum Magnet Middle School	Nashville, TN	http://johnearlyms.mnps.org/pages/JohnEarlyMiddle	2011	5 th -8 th
L.W. Beecher Museum School of Arts and Sciences Interdistrict Magnet	New Haven, CT	https://sites.google.com/site/beechermuseummagnet/		PreK-8 th

Table 1: Formal Museum Schools List (cont.)

KEY: Standard Museum School (Black) Micro Museum School (Green) Potential Museum School (Purple) Graduate Level Museum School (Red)				
Name	Location	Website	Date of Inception	Grades
Liberty Elementary School	Plantation, FL	http://liberty.browardschools.com/	2013	K-5 th
Maplewood Richmond Heights Elementary School	Maplewood, MO	http://www.mrhschools.net/schools/school-directory		2 nd -6 th
Miami Children's Museum Charter School	Miami, FL	http://www.mcmcharter.com/?page_id=68		K-5 th
Moore Square GT/AIG Basics Museum Magnet Middle School	Raleigh, NC	http://www.wcpss.net/mooresquarems	2002	6 th -8 th
MOSI Partnership School	Tampa, FL	http://mosi.mysdhc.org/Home%20Page	1997	K-5 th
Museum School	San Diego, CA	http://museumschool.org	2010	K-8 th
Museum School 25	Yonkers, NY	http://ps25ypschool.org	1986	PreK-6 th
Museum School of Avondale Estates	Decatur, GA	http://themuseumschool.org	2010	K-8 th
Museum School, Fort Worth Museum of Science and History	Fort Worth, TX	http://fortworthmuseum.org/museumschool	1949	PreK-K
Museums, Zoos, and the Arts (P)	Beavercreek, OH	http://education.ohio.gov/Topics/Straight-A-Fund		
New Visions School of Discovery and Exploration	Freeport, NY	http://www.freeportschools.org/schools/New_visions		K-4 th
Normal Park Museum Magnet School	Chattanooga, TN	http://www.normalpark.com	2002	K-8 th
North Miami Middle School	Miami, FL	http://nmiamid.dadeschools.net		6 th -8 th
NYC Museum School	New York, NY	http://www.nycmuseumschool.org/#!/about/cjg9	1994	9 th -12 th

Table 1: Formal Museum Schools List (cont.)

KEY: Standard Museum School (Black) Micro Museum School (Green) Potential Museum School (Purple) Graduate Level Museum School (Red)				
Name	Location	Website	Date of Inception	Grades
Opal Beginning School	Portland, OR	http://www.portlandcm.org/teaching-and-learning/opal-school-opal-beginning-school		PreK
Opal Charter School	Portland, OR	http://www.portlandcm.org/teaching-and-learning/opal-school/opal-charter-school		K-5 th
Ortega Museum Magnet Elementary	Jacksonville, FL	http://dcps.duvalschools.org/ortega		K-5 th
P.S. 333 The Museum School	Bronx, NY	http://schools.nyc.gov/SchoolPortals/08/X333/default.htm		PreK-5 th
Palm Beach Maritime Academy and High School	Lantana, FL	http://www.palmbeachmaritimacademy.org	1999	K-12 th
Plantation Elementary School	Plantation, FL	http://www.broward.k12.fl.us/plantationelem/index.htm	2013	PreK-5 th
Potential Charter School at Old Sturbridge Village (P)	Worcester, MA	http://www.osacps.org/about.html		
Raisbeck Aviation School	Tukwila, WA	http://highline.schoolwires.net/domain/618	2004	9 th -12 th
Richard Gilder Graduate School (R)	New York, NY	http://amnh.org/learn-teach/master-of-arts-in-teaching		Post-Grad
Robert Churchwell Museum Magnet Elementary School	Nashville, TN	http://roberchurchwelles.mnps.org/pages/RobertChurchwellES	2011	PreK-4 th
RPE STEM Museum Magnet School	Lauderhill, FL	http://www.repmuseummagnet.org	2013	K-5 th
Science Leadership Academy	Philadelphia, PA	https://scienceleadership.org	2006	9 th -12 th
Shenandoah Middle Museums Magnet School	Miami, FL	http://shenandoahmiddle.com/museumms-magnet	2005	6 th -8 th
Silverton Paideia Academy	Cincinnati, OH	http://silverton.cps-k12.org		PreK-6 th

Table 1: Formal Museum Schools List (cont.)

KEY: Standard Museum School (Black) Micro Museum School (Green) Potential Museum School (Purple) Graduate Level Museum School (Red)				
Name	Location	Website	Date of Inception	Grades
Smithsonian Early Enrichment Center	Washington, DC	http://www.si.edu/seec/about	1988	PreK-K
Southside Elementary Museums Magnet School	Miami, FL	http://southside.dadeschools.net		K-5 th
Stuart Hobson Museum Magnet Middle School	Washington, DC	http://www.capitolhillcluster.org/our-schools/stuart-hobson-middle-school	1997	6 th -8 th
Sugar Hill Museum Preschool	New York, NY	http://www.sugarhillmuseum.org/schools/		PreK
The Museum Magnet School for Inquiry, Innovation, and Imagination (P.S. 191)	New York, NY	http://www.museummagnet.com/home		PreK-8 th
The Museum School (P)	Beavercreek, OH	http://education.ohio.gov/Topics/Straight-A-Fund		
Uplift Luna Preparatory Museum School	Dallas, TX	http://upliftluna.org/domain/798	2011	K-12 th
W.J. Bryan Elementary School	North Miami, FL	http://wjbryantmagnet.net		PreK-5 th
Woodbury School at the Strong	Rochester, NY	http://www.museumofplay.org/education/woodbury-scchool	2006	PreK-K
Y.E. Smith Elementary Museum School	Durham, NC	http://smith.dpsnc.net/pages/YE_SMITH/About_Us		K-5 th

**The selected colors do not have any significance other than to provide ease in viewing.

[illegible]

Table 2: Formal Museum School Grades Distribution (cont.)

****The selected colors do not have any significance other than to provide ease in viewing.**

[illegible]

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Table 2: Formal Museum School Grades Distribution (cont.)

**The selected colors do not have any significance other than to provide ease in viewing.

Name	PreK	K	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th
Stuart Hobson Museum Magnet Middle School														
Sugar Hill Museum Preschool														
The Museum Magnet School for Inquiry, Innovation, and Imagination (P.S. 191)														
Uplift Luna Preparatory Museum School														
W.J. Bryan Elementary School														
Woodbury School at the Strong														
Y.E. Smith Elementary Museum School														

APPENDIX D: ORTEGA MUSEUM MAGNET ELEMENTARY'S "MUSEUM 101" PROGRAM

*Adapted from "Ortega Museum Magnet" Handout and Notes by Lane Tillner during "Museum 101" Presentation, *National Association of Museum Schools Conference*, June 22, 2015.

Kindergarten: Focus on Collections:

Kindergarten Standard One: "The student will work with a collection of objects focusing on observation, collecting data, sorting, and classifying."

Kindergarten Standard Two: "By the end of Kindergarten, the student will understand that there are many different types of collecting."

1st Grade: Focus on Display and Conservation:

1st Grade Standard One: "By the end of first grade, the student will demonstrate appropriate mounting methods in exhibition scenarios."

1st Grade Standard Two: "By the end of first grade, the student will understand the requirements of good conservation in a museum setting."

1st Grade Standard Three: "By the end of first grade, the student will understand that in a museum, curators select objects from a collection to create a narrative or to communicate information."

2nd Grade: Focus on Design and Production:

2nd Grade Standard One: "By the end of second grade, the student will write informative/explanatory texts and or museum labels in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section."

2nd Grade Standard Two: "By the end of second grade, the student will understand spatial planning, design, and physical presentation appropriate to the exhibition's theme, subject matter, collection, and audiences."

3rd Grade: Content:

3rd Grade Standard One: "By the end of third grade, the student will convey the information/message of the exhibition clearly and coherently by including: (1) an exhibition title that communicates the subject and sounds appealing; (2) communicating a clear set of ideas, presenting information in a discernable pattern, providing coherent, easy-to-follow, and consistent formats for presenting information and eliciting responses, including interpretive media that is appropriate to the exhibition goals and using attractive presentation to make the subject matter come alive."

4th Grade: Focus on Interpretation and Communication:

4th Grade Standard One: "By the end of fourth grade, the student will understand the integrity of exhibition content by: (1) presenting a sufficient number of objects

to present the subject of the exhibition; (2) using an appropriate format with its use of objects, environments, and other means of physical presentation of content; (3) clearly expressing significant ideas through reference to objects in the exhibitions; and (4) creating visitor interest.”

5th Grade: Focus on Audience Awareness:

5th Grade Standard One: “By the end of fifth grade, the student will demonstrate an awareness of audience consistent with exhibition goals by basing decisions of content, means of expressions, and design on the intended audience.”

5th Grade Standard Two: “By the end of fifth grade, the student will design an exhibition to accommodate the needs of those who wish to skim as well as those who wish to take more time.”

5th Grade Standard Three: “The student will provide information in a variety of formats to accommodate various needs and preferences in an exhibition.

APPENDIX E: FORMAL MUSEUM SCHOOL CHARACTERISTICS

*Adapted from notes by Olivia Lane Tillner taken February 26, 2015 during “School Partnerships II” class presentation by Becky Verner and Lyn Edmondson, John Early Museum Magnet Middle Prep, HIST 6620: Public Programming for Historical Organizations and Archives, Spring 2015, Instructed by Dr. Bren Martin

What do museum magnet schools do differently from other schools?

1. Object-based Learning (OBL)
Students analyze objects (artifacts, works of art, primary source documents, etc.) to determine their relationships to other objects, people, eras, events, and ideas. Students then interpret the objects to communicate their stories making abstract principles more concrete. Objects are also used to initiate discussion during seminar and to help students make connections to their own experiences.
2. Learning Expeditions
Teachers, in partnership with staff from area museums, plan learning expeditions that take place as part of daily instruction (NOT at the end of a unit after all instruction has taken place.) Learning expeditions provide interactive experiences with museums, artifacts, speakers, etc. which engage students in learning outside the four walls of the classroom. Students are held accountable for this learning that takes place during the expedition by having to complete a graphic organizer activity, writing a reflection of the expeditionary experience, and/or incorporating newly gained concepts into assignments.
3. Paideia Seminars
Paideia seminars allow for the discussion of ideas, concepts, and values in a non-threatening classroom setting. Through the use of seminar, students learn how to respectfully communicate with each other while developing their skills of articulation, listening, and conceptual understanding.
4. Inquiry-based Learning
Teachers incorporate time for student application of skills learned in the classroom. Students also learn how to develop quality research questions that lead to thorough and quality investigations using skills and concepts. Students then share the inquiry / research process through public presentations of their findings on museum exhibit night.
5. Project-based Learning (PBL)
Students learn Common Core and subject area standards through extended, meaningful (meaty) projects. These are NOT last minute activities (crafts) done at the last minute. PBL units are purposefully planned and implemented over the course of each quarter. The projects serve as a means to assess student mastery of

standards, concepts, and skills. In addition, museum teachers plan with and incorporate museums into their projects. Each project or unit relates to an overall museum exhibit theme and encompasses essential questions as well as enduring understandings.

6. Cooperative Learning

Students work in small groups with classmates who have different learning skills, cultural backgrounds, attitudes, and personalities in order to learn to see different points of view other than their own. Students may take on different museum roles including curator (researcher), designer, or docent (tour guide/interpreter).

7. Museum Exhibit Nights

Museum exhibit nights occur quarterly at the end of each nine weeks. These serve as showcases of student learning and allow students to share and interpret their learning with families and guests. Students act as docents during exhibit night interpreting their museum theme and projects to all visitors. In addition, students hosts special presentations and activities on exhibit nights, i.e. Health & Wellness Night, museum activity tables, genealogy workshops, and band/chorus performances.

APPENDIX F: FORMAL MUSEUM SCHOOL IMAGES



Figure 4: John Early Museum Magnet Middle, Facebook Post, October 22, 2015, “[Nashville] Mayor Barry & Junior Curator in Community area of exhibit,” Accessed 13 March 2016.

<https://www.facebook.com/JohnEarlyMiddle/photos/pcb.549176448583348/549176085250051/?type=3&theater>

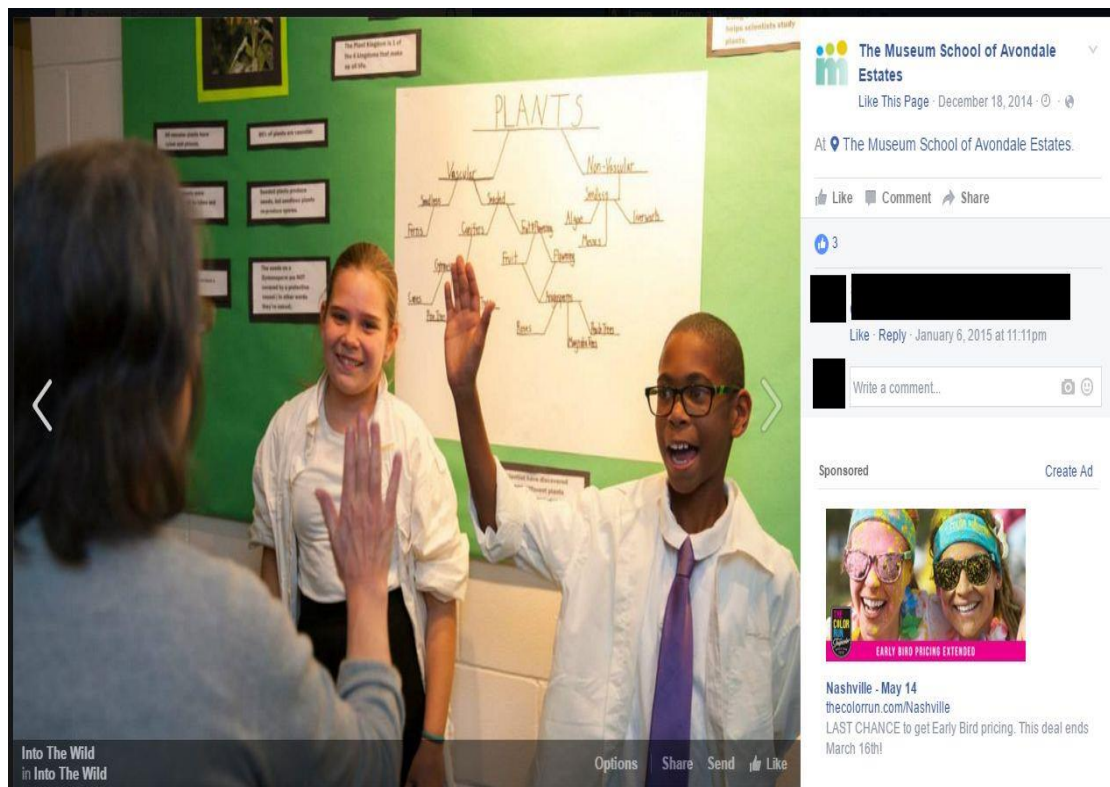


Figure 5: The Museum School of Avondale Estates, Facebook Post, December 18, 2014, Image of Exhibit Docents on Exhibit Night, Accessed 13 March 2016.
<https://www.facebook.com/themuseumschool/photos/ms.c.eJxIj8sNxEAMQjuKYMbf~;hvL7i2Cm~;UEBgjmTUxgMZu1Dz9knYQQtpJz1XWOaV11QdWE~;Yk2Yp3TXGkrKjWrRklb57btY53HspZGZDsBGHHNKKGk~;45rpP6uFztLYho~-b.p.s.a.10153508409024569.1073741828.160624739568/10153508409684569/?type=3&theater>



Figure 6: The Museum School of Avondale Estates, Facebook Post, May 10, 2015, Image of Students during Interactive Learning Expedition to the Gwinnett Environmental & Heritage Center, Accessed 13 March 2016.

<https://www.facebook.com/themuseumschool/photos/ms.c.eJxlzckNACAMA8GOUBzI4f4bQ~;yQ812NZRh0w27wxnJhb8cLVCToSY5DNVUjTJWnWo43qmGhlcuVewrhA~~~.bps.a.10153920138414569.1073741829.160624739568/10153920138864569/?type=3&theater>



Figure 7: John Early Museum Magnet Middle, Facebook Post, October 16, 2015, Image of Students during Interactive Learning Expedition to the Tennessee State Museum, Accessed 13 March 2016.

<https://www.facebook.com/JohnEarlyMiddle/photos/pcb.547126928788300/547126175455042/?type=3&theater>



Figure 8: John Early Museum Magnet Middle, Twitter Post, August 13, 2015 (10:54am) “#PBL in action—designing floor plan for museum storage area. Applying math skills like mad!! @MetroSchools,” Accessed 13 March 2016. <https://twitter.com/JohnEarlyMiddle/status/631856391494496257>



Churchwell School
@ChurchwellMNPS



 Follow

#churchwellmuseum Jr Docents helped State Museum install "Slaves & Slaveholders of Wessington Plantation"



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2

7:50 PM - 9 Mar 2016

Figure 9: Churchwell Museum Magnet Elementary Twitter Post, March 6, 2016 (7:50pm) “#churchwellmuseum Jr Docents helped [Tennessee] State Museum install ‘Slaves & Slaveholders of Wessington Plantation,’” Accessed 13 March 2016.

<https://twitter.com/ChurchwellMNPS/status/707745403010211840>



Figure 10: John Early Museum Magnet Middle, Twitter Post, August 21, 2015 (12:35pm) “Junior Curators working with artifact collection in JE’s new museum—hands-on experiences Rock! @MetroSchools,” Accessed 13 March 2016.
<https://twitter.com/JohnEarlyMiddle/status/634780905052221440>