THE LEAST RESTRICTIVE MUSEUM: EDUCATIONAL PROGRAMMING FOR COGNITIVELY DISABLED VISITORS AT HISTORY MUSEUMS AND HISTORIC SITES IN NORTH CAROLINA

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ABSTRACT

This thesis examines the current state of museum educational programming in North Carolina. The basis of this study is to understand what history museums are doing to meet the needs of a specific and under-represented population. Museum visitors who suffer from learning disabilities are the focus of this study. It is the goal of this thesis to see how history museums have or have not been able to adapt their resources to meet the needs of this specific population. In completing this study, it was necessary to survey history museums, historic sites, as well as children’s museums and learning centers throughout the state of North Carolina. This survey has shown that the history museums and historic sites are less equipped to meet the growing demand of educational programming for visitors with cognitive disabilities than science museums and other institutions with similar missions. At the end of this thesis, there will be recommendations for history museums and historic sites that will benefit those institutions and educate them in steps that can be taken to make their programs available and beneficial to all visitors, regardless of their ability.
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INTRODUCTION

Imagine you are a young visitor to a history museum in your state’s bustling capital city. Smiling volunteers and a knowledgeable museum staff greet you. You look around your immediate surroundings and you see glass cases holding odd objects and many words on the walls around you. There are dozens of other visitors throughout the museum as well. Many of the other visitors are children, chaperoned by their parents. The other children are excited about their visit; they move around quickly looking at different objects and yelling to their friends to come have a look.

This sounds like a very welcoming and exciting museum to visit, right? Imagine you are that same child, only now a child who is diagnosed with a disability. The emotions you see on the faces of the other children confuse you. The quick movements and the many people in your immediate surroundings are as foreign as the objects in the glass cases. The tremendous influx of stimuli into your system from the vibrant museum disrupts your usual controlled routines. Your reactions to the new sights and sounds look like a child having a temper tantrum to the other guests. This is what many individuals who suffer from Autism Spectrum Disorders experience in large social settings. Individuals who exhibit one of the many levels of disorders on the Spectrum, or many other developmental and learning disabilities, are often forced to stay away from environments and activities which might cause them a level of discomfort unfamiliar to the rest of society.

Autism is one condition that falls under the umbrella of cognitive disabilities. Individuals who suffer from cognitive disabilities and their encounters with history museums and historic sites are the focus of this thesis. Individuals with cognitive
disabilities and their families suffer from a lack of available programming at their local museums and interpretative sites. This is by no means an intentional neglect of a minority by the administrative heads of history museums. It is the result of a serious oversight in visitor studies by these museums and sites. Museums should conduct studies to understand the scope of their audience. Public history scholars should also share responsibility for the oversight of visitor studies. Individuals with cognitive disabilities should never remain invisible to museum administrators, educators, and other staff members who serve the needs of the public. The purpose of this thesis is to identify the problem of oversight and offer some direction for museum curators, educators, and administrators in their efforts to respond to the needs of children with cognitive disabilities.

History museums and historic sites are common field trip destinations for school groups. These sites and their staff members have to be prepared to work with school-aged children. Primary and secondary classes are very diverse groups of individuals all with different needs and abilities. In North Carolina, in the 2009-2010 school year, 179,983 students were served by Exceptional Children’s Services in North Carolina Public Schools.1 Exceptional Children’s Services provide additional resources and care for disabled students in North Carolina’s public schools. Of the 179,893 students who received Exceptional Children’s Services for the 2009-2010 school year, 176,103 could fall under the category of cognitively disabled. Rather, they do not receive services because of a physical impairment.2 Federal law mandates individualized Education Programs for each student for each student who falls under the category of being

2 Ibid.
disabled. Some students are assigned to special needs classrooms, are given extra time
on tests, or are given help in other ways so that they are afforded the best education
possible. Those students who received Exceptional Children’s Services make up almost
12.5 percent of the 1,446,650 students in North Carolina schools in the same year.
Students who qualified for EC services but did not have a physical impairment make up
12.17 percent of the total school population in 2009-2010. However, it is a large group
of individuals for whom museums need to make additional plans. It is also entirely
possible that a significant number of students have an undiagnosed disability. Because of
the number of public school students along with the many museums and historic sites in
the state, North Carolina is a perfect sample by which to complete this study.

Cognitive disabilities have been an area of interest for physicians and academics
for over a century. During the nineteenth century, European physicians worked to find a
connection between brain injury and increased problems with learning. They found that
in some cases, significant injury to the brain could cause individuals to have trouble
reading, speaking, and retaining information even if they were able to do so before their
injury. American educators and health professionals built on the foundations that their
European counterparts had created for them. In the United States, noticeable interest in
students with problems reading and writing increased after 1918 when all states passed
legislation forcing all children into public education.\(^3\) Progress in the field of what would
become cognitive disabilities was slow to mature. In fact, cognitive disabilities were not
part of a national discussion until the civil rights era of the 1960s and 1970s. It would
still take many years for the United States government to pass federal legislation

\(^3\) H. Lee Swanson, Karen R. Harris, and Steve Graham, *Handbook of Learning Disabilities*, (New York,
pertaining to individuals with cognitive disabilities. Before that time, individuals, who today would be diagnosed with cognitive disabilities, were thought to be mentally retarded.4

Nineteenth century health professionals like Joseph Gall, P. Paul Broca, Sir Henry Head, and Sir William Broadbent publishing accounts of what would later become known as cognitive disabilities. These individuals reported the findings of case studies from across Europe that would help draw the connection between brain injury and learning problems. Later, during the 1930s, in the United States, Samuel Orton would consult these findings to support his own publications on dyslexia in Reading, Writing, and Spelling Problems in Children.5

American interest in cognitive disabilities began to climb after 1937 when Samuel Orton noticed a difference in students who struggled with reading. Orton’s discovery, which he termed “strephosymbolia”, now known as dyslexia, piqued the interest in other individuals concerned with learning problems in America’s schoolchildren. Orton and other leading educators and psychologists, including Anna Gillingham, worked tirelessly after Orton’s discovery to develop new teaching methods for students who could not learn to read in a traditional classroom setting. It would take twenty-six more years for the first advocacy organization to form in the United States for children with learning disabilities.6

In 1963, a group of parents in Chicago, Illinois met to discuss ways in which they could help their children who had trouble reading. These parents were concerned that their children were labeled as “minimally brain damaged.” The group of parents agreed to represent their children under the title of the Association of Children with Learning Disabilities. This organization worked closely with educators to create special education classes for cognitively disabled students across the country. The trend of responding to the needs of the learning disabled spread through the end of the 1960s and into the 1970s.

The first law on the books in the United States acknowledging learning disabilities was 1969’s Children with Specific Learning Disabilities Act. The passage of the Education of All Handicapped Children Act in 1975 began an era of legislative equality for the learning disabled in the United States. EAHCA was the first federal law that made it a requirement for all schools to provide all students, including those with learning disabilities, an education in the “least restrictive environment.” All students would be placed in a regular education class setting as long as their disability was not severe enough to warrant placement in a special education setting. This law started a trend of policy that addressed the needs the learning disabled and their families. However, the Education of All Handicapped Children Act pertained only to education in formal public education school systems and did not reach private or government controlled museums.

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7 Ibid.
Over the thirty-six years after the passage of the Education of All Handicapped Children Act several other laws passed to assist the cognitively disabled community in the United States. Nearly all of those laws dealt directly with the public education system in the country. Fifteen years after the signing of the EAHCA, the United States federal government passed a new law designed specifically to benefit learning disabled students in the United States. The passing of 1990’s Individuals with Disabilities Education Act or, IDEA, defined what the government would consider a specific learning disability and the services that would be available to those that met the approved criteria. The United States continued its support for the learning disabled with the reauthorization of IDEA in 1997 and again in 2004.¹¹ Unfortunately much of the work done in the 1980’s and 1990’s focused on defining learning disabilities.

The history of learning disabilities legislation coincided with a movement pushing for equal rights for those with physical disabilities. In 1990, the United States government passed the Americans with Disabilities Act. This bill required all public spaces, including schools, government buildings, museums, historic sites, along with restaurants and other establishments to make their facilities accessible to the physically handicapped. The Americans with Disabilities Act forever changed the architectural landscape of the United States. Businesses and governmental agencies both had to adjust to the new federal mandate and work to meet the needs of all people. That is all people, except not specifically the learning disabled community. While the ADA was a much needed and welcome piece of legislation, its definition of disability narrowed the publics’ view of disability to only those with physical disabilities. The ADA could have been much more inclusive and forced institutions to make their services more accessible to all

In 2008, Congress passed the Americans with Disabilities Amendments Act of 2008. This act broadened the previous laws definition of disability from just a physical or mental disability to, among many other things, “an impairment that substantially limits one or more major life activities of such individual as . . . learning, reading, concentrating, thinking, communicating, and working.”

While recent changes to the law have taken place, educational programming geared towards serving the cognitively-disabled community at history museums is still catching up. Museum literature has been forthright in working to educate the professionals of its field in meeting the requirements of the Americans with Disabilities Act.

The first literature about learning disabilities appeared in the eighteenth century when differences were first being researched. Today, the literature on specific learning disabilities is extensive. The field of learning disabilities is now as varied as that of public history. There are experts in Autism Spectrum Disorders, dyslexia, reading comprehension, hearing and visual impairments, child and adolescent psychology, and many other areas.

There is also a significant collection of literature on the causes, characteristics and treatments available for specific learning disabilities. These monographs will be very helpful for museum educators and other staff members who need to acquire a better understanding of how learning disabilities affect an individual and how they might be able to help them. Works like Improving Educational Outcomes for Children with Disabilities: Principles for Assessment, Program Planning, and Evaluation by Martin A. Kozloff, Learning Disabilities Sourcebook by Joyce Brennfleck Shannon, and The Six

13a “ADA Amendments Act as Amended 2008,” U. S. Code, Title 42. Section 12101, part 1-part2.
Success Factors for Children with Learning Disabilities compiled by The Marianne Frostig Center of Educational Therapy will give a more complete look at how individuals with learning disabilities cope and succeed in and out of the classroom. These books are essential to identify learning disabilities and how best to enable those who are suffering from them. The Learning Disabilities Sourcebook gives specific information about diagnosing and treating specific learning disabilities. This kind of book is more helpful to practicing professionals in education, psychology, and medicine. On the other hand, The Six Factors for Success and Improving Educational Outcomes for Children with Learning Disabilities help the reader understand what strategies are best for helping disabled students learn inside and outside of the classroom.

Books like Supporting Individuals with Autism Spectrum Disorder in Recreation by Phyllis Coyne and Ann Fullerton and Helping Children with Autism Learn: Treatment Approaches for Parents and Professionals by Bryna Siegel give specific advice that can be adapted to the history museum. Similar books that focus on an array of learning disabilities are also available. Coyne, Fullerton, and Siegel’s works are specific to autism and do not lend guidance on other types of disabilities. They offer concrete examples of how to treat autistic children in educational settings as well as everyday environments.

With the passage of the Americans with Disabilities Act, professionals in many fields found a new topic around which to form an interdisciplinary body of literature. Museum professionals and academics alike welcomed the opportunity to inform their colleagues of the new legislative requirements and best practices. In 1980, Alice P. Kenney published her work Access to the Past: Museum Visitors and Handicapped Visitors. This was one of the first monographs written for museum professionals,
addressing their concerns with meeting the new requirements of Section 504 of the Rehabilitation Act of 1973. Much of her work pertained to making institutions accessible to the handicapped and maintaining the standards set forth by the Historic Preservation Act of 1966. She writes that museums and historic sites should work to maintain the integrity of historical buildings but also make them accessible to physically disabled individuals when necessary and appropriate.

In a similar fashion to Access to the Past, the American Association of Museums released The Accessible Museum: Model Programs of Accessibility for Disabled and Older People in 1992. The Accessible Museum is a compilation of museum programs designed to meet the needs of people with disabilities and to help educate the museum field and about the requirements of Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Along with The Accessible Museum, John Salmen’s Everyone’s Welcome: the Americans with Disabilities Act and Museums is a “how to” guide for public historians. These works do not actually note a deficiency in programming for the learning disabled. Instead, they include learning disabilities into the discussion only nominally while they focus on disabilities that are more visible.

Museum professionals have not been the only group to produce guides of best practices. Scholars have completed many works on visitor studies, education, design, and the many aspects that are public history. Many of these books can be described as “how to” guides for historians. Contributions like The Museum Educator’s Manual: Educators

Share Successful Techniques by Anna Johnson, Kimberly A. Huber, Nancy Cutler, Melissa Bingmann, and Tim Grove along with Curating Oral History by Nancy MacKay and The Practical Evaluation Guide by Judy Diamond, Jessica J. Luke, and David H. Uttal help public historians become better acquainted with segments of the field. There is no how-to guide for public historians on creating a more hospitable environment for visitors with learning disabilities. In fact, the topic is rarely mentioned in any of the major monographs regarding history museums, museum education, and visitor studies. Museum educators easily overlook visitors with cognitive disabilities because their disabilities are largely invisible.

In Learning from Museums: Visitor Experiences and the Making of Meaning John Falk and Lynn Dierking examined how visitors make personal connections in museums and turn those connections into learning experiences. Their work along with D. Lynn McRainey and John Russick’s Connecting Kids to History with Museum Exhibitions and Roy Rosenzweig and David Thelen’s The Presence of the Past provide insight into how learning takes place in a museum setting. These books discuss how learning takes place; however, they do not consider the differences that visitors have in learning except in the most basic of manners; suggesting merely that some visitors are not on the same level as others.

One new and essential work in museum literature is “Learning Disabilities in Museum Visitors” by Paul Gabriel. Gabriel is one of the few specialists who have written on this emerging topic. His article focuses on explaining the differences in brain development for individuals with and without learning disabilities. He posits that even
though an individual learns differently than others, they can still have meaningful museum visits that result in learning when information is provided in multiple formats.17

The American body of literature on history museums and the learning-disabled community is very limited, but that there has been research on the topic. Researchers and museum professionals along with the government in the United Kingdom have written about the need to accommodate the learning disabled in their museums. Hannah Shepherd’s 2009 article, “Inclusion and museums: developing inclusive practice,” was published in the British Journal of Special Education. Shepherd discusses the need for museums in Great Britain to be welcoming and inclusive environments for all types of learners. She draws on the Disability Discrimination Act of 2005 for legal reasoning. However, her main focus is museums’ attention to the formal learning methods in public schools and how they can be adapted to fit the needs of a museum.18 Valuable examples of museum programming from Great Britain will be discussed further during an examination of recommendations for North Carolina museums. The lack of a solid grounding in museum education literature for learning disabilities and the exponential climb in numbers of learning disability diagnoses reveals a unique opportunity for research.

This thesis looks at a number of research questions to better understand what the field of public history has done to meet the needs of the cognitively disabled community. What does the literature of the public history field say about museum education and the area of cognitive disabilities? What have museums in North Carolina done to better meet the needs of the cognitively disabled? This includes not only history museums and

historic sites but also science museums, natural history museums, learning centers, art museums, and children’s museums. One of the main questions is, why have history museums ignored the cognitively disabled community for so long? Finally, what can history museums do to improve the quality of their programs and exhibits while making their institutions more accessible to those who struggle with cognitive disabilities?

Just as with any other subject, it is necessary to have an understanding of the terminology, verbiage, and general course of discussion when it comes to the definitions of learning disabilities, both in general and the specific disorders that will be discussed. The terminology of many of these disabilities only dates back two or three decades, some are far more recent introductions to this field of study. The lack of sophisticated terminology and definitions of these disabilities in the beginning of the twentieth century represents how little was actually understood about the human brain and its developmental capabilities before the 1970s.

The terms used to discuss cognitive disabilities have evolved as rapidly as the study of the conditions. The need in recent decades to appear politically correct in every facet of American life has had an effect on what words are used to appropriately describe people, conditions, and symptoms of different disabilities. The words Americans use to describe people and their conditions in life reveal, in many ways, how society as a whole views that population. The common terms used to describe learning disabilities and those who have them have changed over time just as the words used to describe other minorities have changed. This has happened as American society has grown more accepting and understanding of all individuals, even though there is still plenty of room for growth in many areas.
This thesis employs a set list of definitions to discuss the topic of cognitive disabilities. In every instance, the most current name and definition provided by professional health organizations and the United States federal government were considered and checked against each other. In most cases, definitions and criteria for certain disabilities were taken from the North Carolina Department of Public Instruction. Information from public school systems was used. Local schools deal with these students on a daily basis and have insight into helping them become successful.

The third edition of the *Learning Disabilities Sourcebook* defines learning disabilities as “problems that affect the brain’s ability to receive, process, or store information.” Learning disabilities affect all aspects of an individual’s life. They make it difficult for people to learn in school, make strong and lasting social relationships, and interact with their environment. The federal law ensuring equal education for those with learning disabilities provides a much more direct and specific definition of the term. The Individuals with Disabilities Education Improvement Act of 2004 defines learning disabilities as:

(A) “General-The term means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations.

(B) Disorders included-This term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

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(C) Disorders not included—This term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbances, or of any environmental, cultural, or economic disadvantage.”

Even with a legal definition of learning disabilities like that from IDEA, it is still necessary to be more specific of what conditions are considered learning disabilities. The following disabilities are those provided by the state of North Carolina through the Exceptional Children’s Division of the Department of Public Instruction, to identify which individuals receive Special Education and Exceptional Children’s Services as detailed by the Department of Public Instruction’s Policies Governing Services for Children with Disabilities and the federal legislation of IDEA. Not all of these disabilities meet the conditions set by IDEA as a specific learning disability but all of the disabilities affect learning in one way or another. Children with physical disabilities still do receive Exceptional Children’s Services in North Carolina Public Schools. The disabilities categories included are: Autism (or Autism Spectrum Disorders), Deaf-Blindness, Deafness, Developmental Delay, Serious Emotional Disability, Hearing Impairment, Intellectual Disability, Multiple Disabilities, Orthopedic Impairment, Other Health Impairment, Specific Learning Disability, Traumatic Brain Injury, Visual Impairment including Blindness.

A complete list of North Carolina Department of Public Instruction definitions for these disabilities can be found in Appendix A at the end of this thesis.

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Museum educators and other staff members likely will understand what disabilities like Deaf-Blindness, Visual Impairment, and Hearing Impairment implicate. However, cognitive disabilities like Autism Spectrum Disorders, Developmental Delays, Specific Learning Disabilities, and Traumatic Brain Injury can venture outside of museum professionals’ range of knowledge. Museum educators, unlike special education teachers, are not typically educated about those disabilities. For purposes of this research, Autism, and or, Autism Spectrum Disorders are defined as a “developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three that adversely affects a child’s educational performance.”

Specific Learning Disabilities are conditions such as dyslexia, dysgraphia, and auditory processing disorder. These conditions are more common than once perceived. With more and more students in North Carolina diagnosed with cognitive disabilities every year, it is certain that more and more of these individuals are frequenting the many historical treasures that North Carolina has to offer. A major goal of this research is to uncover what the state’s museum field is doing to accommodate these visitors.

The research method for this thesis included a review of the available and relevant literature in the fields of public history, museum education, special education, and specific learning disabilities. Unfortunately, the literature on history museums and their services to the cognitively disabled community is extremely limited. However, this does provide a useful niche for this thesis and will hopefully create interest in further research on this topic. The literature on cognitive disabilities and best practices in helping those suffering from them is very thorough. A significant portion of the research for this thesis

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Shannon, *Learning Disabilities Sourcebook*,
will come from actual museum practices. A survey of North Carolina museums and sites will provide valuable information on what the museum world is actually accomplishing in regards to this topic. This topic is still very new and museum practices are changing rapidly every day. The quick pace of evolution requires gleaning research material from press releases and newspaper publications as well as advertisements.

My research method also included a survey of museums in North Carolina. The author conducted a random sample of history museums, historic sites, science museums, learning centers, art museums, and children’s museums in order to capture a representative sample of the current museum field across the state of North Carolina. The purpose of the survey was to gain an understanding of the current museum educational programs being offered to North Carolinians and the visitors to this state. The survey tool questioned museum participants on their ability to produce and present programming to the cognitively disabled community. Survey participants had the option of responding through email or by telephone. When few responses were received by email, I made personal phone calls to ask participants questions directly from the survey tool and recorded their answers for use in the research. Survey responses and corresponding cases studies will be the basis of Chapter Two of The Least Restrictive Museum.

Chapter One focuses on the rapidly increasing frequency of cognitive disability diagnoses in the United States and specifically those in North Carolina. It shows that there is a current need for history museum programming for individuals with learning disabilities. This chapter helps the reader have a better understanding of cognitive disabilities and how formal education has adapted to meet the needs of this population.
Chapter One outlines how museums have evolved over the years and become more, or in some cases, less, inclusive. This chapter compares the needs of individuals with physical disabilities and those with cognitive disabilities in a museum setting. It also looks at how museums have expanded their staff to include educators in the recent years. However, it also reveals that these educators have a need for more education in the field of special education. The population of individuals diagnosed with cognitive disabilities has been steadily increasing along with the rise in the general American population. Museum educators need to rise and meet the needs of that growing minority.

Chapter Two of this thesis looks primarily at the state of museums in North Carolina and their limited responses to the need for more museum programming addressing the needs of visitors with cognitive disabilities. This chapter explores what has and has not been done in North Carolinian museums to reach out to the cognitively disabled population. This chapter also reports the results of a survey sent out to museums across North Carolina. The survey results are aggregated to show what types of museums best meet the needs of individuals with cognitive disabilities. It also shows what factors prohibit and inhibit the creation of programs for the cognitively disabled. Following the data there will be a case study of one museum that provides programming for visitors with special needs.

Chapter Three provides recommendations drawn from the survey in Chapter Two for history museums to make their institutions more inclusive to the cognitively disabled community. Recommendations generated from the survey discussed in the previous chapter. Other recommendations are taken from experts on cognitive disabilities. Insight is taken from institutions like the Hill Center in Durham, North Carolina who work with
cognitively disabled students on a daily basis. Various museums in Great Britain which have previously adapted their programs and exhibits to accommodate the cognitively disabled will also be highlighted in this chapter. Another focus of Chapter Three is on the availability of continuing education opportunities for museum educators. Current and future educators will need to become more skilled at creating programs for the cognitively disabled community. In order to do so they must first have some knowledge of the topic. There are currently many private groups who offer courses for educators on special education. Many recommendations and best practices in this chapter will be the result of current and past work done by other museum professionals in the field of science and child development. Their work will be essential to the progress history museums can make.

The Conclusion of this thesis shows that museums have not fully matured in their ability to provide services to the cognitively disabled community. There have been gaps in the inclusion process at many museums. While history museums have focused on bringing a more complete history to their audience, they have forgotten who broadly represents their audience. The least restrictive museum will meet the needs of all visitors including those with cognitive disabilities.
CHAPTER ONE: THE EVOLUTION OF PUBLIC HISTORY AND THE EMERGENCE OF COGNITIVE DISABILITIES

History museums and sites offer visitors the opportunity to step back in time and experience the past in a variety of ways. Today museums offer educational programs that can supplement existing curriculum in public education as well as offer continuing education for visitors to those institutions. This chapter looks the evolution of the field of public history and the development and role of the museum educator. Museum educators hold an important role in the diffusion of historical information to the public. It is their responsibility to guide visitors through the deluge of information available at these sites and help them make the most of their visit. But how did the role of the museum educator emerge and why is that role relevant in the discussion of educational programming for visitors with cognitive disabilities? This chapter also reviews the current state of public history site visitation and cognitive disabilities in North Carolina and the previous work done in public schools to accommodate those individuals.

Museums in the United States have not always been welcoming institutions for all Americans, nor were their exhibits always representative of the entire American population. The inclusivity of American museums has only recently been a goal of public historians. America’s early museum field and what would become American public history, started out as an elite professional field of rich and affluent Americans of European ancestry.

The American museum came into being from the vast collections of relics and natural wonders held by wealthy citizens of the eighteenth century. The new American museums were places “for the elite and privileged to teach the nation’s working men and
women what it meant to be cultured, civic-minded Americans.”23 They helped individuals and groups identify themselves and remember the progress of earlier generations. The early American museums were comparable to exotic showrooms where curators would put the most appealing objects on display for their visitors. When the American museum field first came into being in places like Charleston, South Carolina, individuals visited museums and were brought face to face with the “cabinets of curiosity” which held rarely seen species of exotic environments. The public greatly enjoyed the halls of wonder and for many years curators continued to meet the publics’ desires. As the country grew and matured, museums and historic sites in the United States changed with the times and offered more complex versions of America’s past.24

The second half of the nineteenth century brought a new era for museums and public history. The approaching Civil War and the resulting era of Reconstruction brought the public shrine phase in American public history. This phase was directed by private organizations raising money and awareness to preserve the historic homes and battlefields across the United States. The historic homes and battlefields concentrated the attention of the public on a grandiose narrative of the history of the United States. Most of the new attractions were not staffed and were open to the public to view at their own discretion. The sites and private organizations were in the business of bolstering the American spirit through hard times rather than educating the public broadly about its

past. Patricia West documented the phenomenon of the rise of historic homes in her book, *Domesticating History: America’s House Museums*.25

Eighteenth century historic house museums defined what type of history museums would exhibit over the next one hundred years. Historic homes and private, as well as public museums, in the United States focused their attention on the grandness of American history. The public’s attention focused on the founders and heroes of American history. That said, attention was mainly focused on the elite-white ruling class of the colonial and early national era. Mount Vernon and Monticello are two examples of historic homes from the early republic that depict the founding fathers as benevolent and revered. The same can be seen in small local communities as well. The preservation of local, planter-class homes depict the antebellum period where landowners were paternal caretakers over not only the land but their neighbors, too.26

The attention paid to the white upper class in historic homes also translated into the museums across the country. Museum curators believed that Americans needed to be reminded of their superior past in order to affirm their current place in the world. The consequence of that affirmation was the exclusion or marginalizing of minorities from the American historical narrative. This was true at Mount Vernon, Monticello, Colonial Williamsburg, and dozens of other historical sites around the United States.

Colonial Williamsburg is a perfect example of exclusionary practices at major public history sites. While not created during the nineteenth century like many of America’s elitist historic homes, Colonial Williamsburg still exhorts a similar history as told by the same houses of history. The historic site, reproduced in the twentieth century

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to resemble colonial life in Virginia, had a reputation for excluding the role played by African slaves in the colony, therefore, providing a slaveless history to visitors.\textsuperscript{27}

Today, while there is still much work for public historians to complete, museums and historic sites are far more inclusive than they ever were in the past, including Colonial Williamsburg. The emergence and gradual acceptance of social history after the 1960’s helped to focus museums’ attention on the pasts of all Americans. This new representation of American history and the expectations of an ever-more educated public increased the range of expertise among museum professionals, which now could consist of even the most amateur of historians and collectors. Public history has expanded to become a more complete field. The social movements of the 1970s really helped to propel public historians to be more inclusive in their presentations of the past. The increased visibility of women, African Americans, and Native Americans in the public realm enforced the idea that historians, too, needed to be more inclusive in their work. The dominance of the white elite is no longer the sole version of American history professed at the country’s museums and historic sites. African American, Native American, womens, rural, and urban dwellers, and so many other groups of Americans have their stories told by exhibitions, galleries, documentaries, and other media across the country.

Social history has led to innovations in public history. Public historians are now working more closely with the public than ever before. Public historians want a more inclusive American narrative and strive to include the public in the decision making

process. Museum exhibitions, documentaries, oral histories, and even the physical spaces of built environment are now working to better represent the pasts of all Americans. Even with these innovations, museums still can fail to represent portions of the population. Museums have an ugly past when working with individuals with disabilities and it will take work to overcome that history. Museums in the United States exploited individuals with disabilities for decades. Individuals like P. T. Barnum were trailblazers in that exploitation.

P. T. Barnum was the quintessential museum developer of mid-nineteenth century America. The progenitor of Barnum’s American Museum which was open to the public in New York City from 1841 to 1865. Barnum was famous for employing a certain shock factor to bring paying visitors to his museum. Barnum’s American Museum is especially important in understanding how the public viewed individuals with disabilities during the nineteenth century. His museum displayed countless paintings, fossils, and artifacts from around the world. However, Barnum’s signature attractions were individuals with physical disabilities and deformities. Barnum’s American Museum, along with his subsequent traveling circus, and imitation museums continued to exploit the disabled to generate a profit for their endeavors.

Barnum and his contemporaries like the Cole brothers frequently portrayed individuals with disabilities as freaks in their sideshows. Museum and circus attractions juxtaposed disabilities on a grand scale from pairing together extraordinarily large and small individuals together. Rosemarie Garland Thomson notes in her book Extraordinary Bodies: Figuring Physical Disability in American Culture and Literature

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29 “Barnum’s American Museum,” chnm.gmu.edu/lostmuseum/lm/163/.
that this was done in many instances to make the Euro-American audience perceive themselves as normal and “banal.” These attractions were developed to generate a profit but they also served to reinforcing gender, racial, and overall social roles in the United States. This type of exploitation for entertainment was not contained solely within the nineteenth century. For example, images of “The Ugliest Woman in the World” were exhibited for nearly a century after her death in 1860.

Individuals with mental disabilities were also exploited for the amusement of audiences. Robert Bogdan describes three exhibitions of individuals who would today be diagnosed as mentally retarded. These three examples were Hiram and Barney Davis known otherwise as “The Wild Men of Borneo,” Maximo and Bartola exhibited as “The Aztec Children,” and William Henry Johnson or “What Is It?” Bogdan also discusses a group described as “The Wild Australian Children.” Individuals with mental disabilities were often exhibited as exotic savages. Audiences were treated to shows featuring these disabled individuals and had every thought that they were less than human. These exhibited people were often lured away from families when showmen offered generous sums of money to parents or caregivers. The showmen would in turn, generate significant profits from their exhibits. However, by the 1930s this practice began to wane as mental retardation became recognized by the medical community and the public alike as a disease.

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31 Ibid.
33 Bogdan, Freak Show, 147.
The depiction and interpretation of disability for better understanding is much needed today. However, access to and involvement in programming is still an area that is limited in museums for those with cognitive disabilities. Reasons for the lack of programming for these individuals can range from low funding for special programs to a staff that is not fully trained to develop programming for people with cognitive disabilities. Given these circumstances, a more interdisciplinary approach to educational programming would benefit public history. This type of cooperative production has led to beneficial results in other areas such as oral history and exhibition design. In fact, public historians now tout cooperative and interdisciplinary projects as the best way to develop a complete picture of the exhibited topic. The resources on cognitive disabilities for public history sites in North Carolina are ripe for the picking. Many advocacy organizations within the state represent the interests of individuals with autism, ADHD, and specific learning disabilities.

A portion of the problem in creating appropriate and focused educational programming stems from a lack of understanding of a public history sites’ audience. Museum educators and other personnel do not have cognitive disabilities on their mind as frequently as special education teachers operating in more formal learning environments. Even if museum educators do realize some of their visitors have a disability, they do not always fully understand what it means and how it affects their experience at the museum.

Museum education has grown to become one of the most important components of the museum experience for visitors. That professional attention was not always a priority or concern. In fact, in the early decades of American museums, education was not necessarily the goal of museums. Rather, museums were institutions that held on to
objects of wonder and brought the exotic home to the public. To be sure, learning did take place in museums of the past, but today’s museums have a more deliberately educational role in American society opposed to their predecessors. It was not until *Museums for a New Century* was published in 1984 that museums became epicenters of education in the United States. It reported that museums had yet to realize their full potential as educational institutions and that the need for more advanced educational programs was rapidly increasing. The next year, museum education was identified as “a relatively new field of study” in *The Good Guide*. It was during this time that museums began to hire trained educators to their staffs in order to transform the educational role of their institutions. Museums’ dual role as educator and entertainer has been an evolving relationship which continues to shape trends in the field.

Museums in the United States have to meet many functions today to serve a public demanding quality educational and leisure activities. Museums and historic sites have many different types of visitors. Museum professionals commonly say that there is no “average visitor.” Museums regularly see visitors of every walk of life. One of the most common visitor groups to frequent museums and historic sites are school groups. Schools want their students to be both educated and entertained while on field trips. This demand from schools has helped create the position of education specialists at many museums. Museums have the tools to meet both of these needs. They are places of enjoyment and wonder where visitors can explore the past and imagine themselves in it. They are also venues where trained educators can help broaden the visitors’ knowledge.

35 Ibid.
Museum educators have to be ready to adapt their teaching techniques and extend the capabilities of their programs and lessons. Educators at museums and historic sites share the same responsibilities as teachers in more formal education settings. They have goals and anticipated outcomes for each lesson. The difference is that school teachers have to meet a set curriculum and continuously assess their students. On the other hand, museum educators are able to deliver whatever curriculum they consider relevant to their visitors. They do not have to worry about formal assessments. However, museums typically design programs that meet the curriculum requirements of local education agencies. Many people believe that school field trips to museums and historic sites are opportunities for children to see something interesting outside of the classroom or a chance for students to pick up interesting facts, but museum education can be so much more. Educational programs at museums and historic sites have the unique ability to open up the world of history to visitors through dynamic exhibitions and hands-on participation in the past.

Rebekah Brockway, an exhibit designer at the National Air and Space Museum, defines the role of the museum educator succinctly by stating, “. . . the educator strives to present the material in appropriate ways so that everyone can come away with a higher level of understanding.”37 The educator is a unique position to work together with other museum staffers like designers and curators. The challenge for the educator is to develop techniques to present information in an understandable format by incorporating pedagogical methods from formal education into an informal learning environment.

There are an incalculable number of programs and teaching techniques being used in museums across the country. Educators have done an impressive job connecting

visitors to the past in history museums. How well have they been able to do this and how
does it translate into developing programming for visitors with cognitive disabilities? If
programming had been developed specifically for or adapted to fit the needs of those with
cognitive disabilities then it would have been uncovered in the literature.

Eilean Hooper-Greenhill wrote in *The Educational Role of the Museum* that
education in the museum has evolved into much more than just the education room. It
encompasses the entire museum and all of the visitors.\(^{38}\) School field trips are only one
part of the machine of museum education. Museum education relates to almost every
area of museums and historic sites. Docents’ training, school programs, consultations in
exhibition design, and professional development are other facets of museum education
that are not always at the forefront of the museum picture. The educator has to have a
hand in every aspect of the museum serving the public. The educator is usually the
individual most concerned with how the public will interact and experience the
information presented in exhibitions and programs.

Museum educators are drawn into the museum field for different reasons.
However, a successful museum educator must be invested in the product that you are
presenting to the public. An educator should also be equally invested in the public, if not
more so because they have to continuously think about outcomes of visitors’ experiences
in the museum. Educators are guides in the most basic of terms. They guide visitors
through information and allow them to interpret as they see fit. However, it is necessary
as an educator to understand how individuals learn and learn differently so that they can
be guided through their interpretations in order to gain the most out of their visit to a
museum or historic site. Understanding the range of ways that individuals learn can be a

challenge for museum educators. Not all museum educators set out to be teachers. However, The Museum Educator’s Manual notes that museum educators need a background in education or a closely related field of study.\(^3^9\)

Interest in visitor experiences had risen along with the increased role of education in museums. According to George E. Hein in *Learning in the Museum*, prior to the twentieth century, literature on visitors to museums was almost non-existent. However, as research in formal education and psychology grew during the first half of the twentieth century the literature on visitor studies began to evolve. After 1950, scholarly research on visitor studies and evaluating museum experienced unprecedented growth. According to Hein, prior to 1950 only 103 papers were written on visitor studies while the next forty years saw that increase to 1,014 papers.\(^4^0\)

Museum educators have always challenged to make information more accessible to all people. With the position of museum educator only catching on and gaining momentum in the middle of the 1980s, the field did not have time to mature before the Americans with Disabilities Act passed in 1990.\(^4^1\) The Americans with Disabilities Act made it necessary to make educational programs as well as the entire museum or site accessible to those with physical disabilities. Since 1990, educators have had to develop programming that meets the different needs and abilities of different age groups as well as serves the needs of those with physical disabilities. However, as noted earlier, the requirements of The Americans with Disabilities Act neglects visitors to museums that have cognitive disabilities.

The histories of museum education, federal legislation regarding equal education, and the development of research on cognitive disabilities interweave and reinforce one another throughout the twentieth century. Early research into cognitive disabilities took place during the first half of the twentieth century. This research continues to present time. After 1950, the introduction of legislation on cognitive disabilities, and disabilities in general, paralleled the cultural and political reform movements of the 1960s and 1970s. This legislation in turn focused the attention of educators on providing a valuable education to all students. Soon after, during the 1980s, museums and historic sites began to hire educators in order to boost the educational role played by those institutions. Unfortunately, during the last twenty years, museums and historic sites have become stagnant in the educational programming. Federal legislation has continued to promote the needs of disabled individuals and students and research continued to flourish as more disabilities became more fully understood. Museums and historic sites need to catch up with formal education and the available research in order to be more inclusive of all visitors.

One way to understand how museum educators can help visitors with cognitive disabilities is to look at what has been done in formal education settings since the recognition of such disabilities by the federal government in the 1960s. Formal education institutions like local education agencies and public school districts have been able to provide students with cognitive disabilities uninhibited classroom instruction thanks to new technologies and inventive pedagogical methods. Universities trained teachers to be experts in educating students with cognitive disabilities, experts in education developed...
the theory and practice of Universal Design, and educators drew from the work of psychologists like Howard Gardner and Jean Piaget.

Jean Piaget and Howard Gardner were instrumental in shaping the current principles of education in the United States. Piaget’s work on understanding cognitive development helped educators view where their students were on a longitudinal track of development. By knowing students’ stage of development, teachers were more prepared to structure their lessons and the information so that students could best grasp the material being taught. This information is also useful to museum educators.

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Educators at museums and historic sites cannot create “one size fits all” programming for their visitors.

Not only are visitors to museums and historic sites at different levels of cognitive development, they do not all learn in the same fashion. Some visitors may function at the same level of cognitive development according to Piaget, however, they most certainly may not process the information in identical ways. Howard Gardner’s theory of multiple intelligences also comes into play for both school teachers and museum educators. Gardner realized that individuals could possess intelligence that manifested in many different ways. It was clear that not everyone could simply read a text book or listen to an hour long lecture and then completely comprehend the information. It was far more likely that individuals processed information at different rates and best absorbed it through different methods.
Gardner’s theory of multiple intelligences is very important to museum educators as it has been to school teachers for years. Gardner’s multiple intelligences illustrates how individuals learn differently. This is important for museum educators to remember while planning programming. Traditional museum exhibitions and educational programs which rely on visitors reading label text and examining objects from a distance relate to only two of the types of intelligences that Gardner describes. Verbal/Linguistic and Visual/Spatial intelligences are the types of intelligences commonly associated with learning in museums. However, the other seven types of intelligences are completely suitable for learning in a museum or historic site. The museum educator just has to be aware of whom the audience is and the different ways in which learning takes place in a

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44 Howard Gardner’s Theory of Multiple Intelligences.
museum. Museum educators must be aware of the different types of intelligences held by their visitors. The more ways that educators connect this information to their audience will influence the success of the educator in meeting the needs of all visitors including those with cognitive disabilities. This can be done in educational programs by having visitors use their different skills.\textsuperscript{45} Hein uses examples from Thomas Armstrong’s*

*Multiple Intelligences in the Classroom* like creating 3-D objects and developing songs. These examples could be just as useful in a museum education program as they are in a formal classroom.\textsuperscript{46}

Americans put a lot of trust in museums and historic sites. Museums and historic sites are seen as purveyors and trustees of the nation’s collective past. When it comes to history, Americans place more faith in museums than they tend to in their own family’s memories of the past. Museums also hold more credibility with the public than public schools and documentaries or television programs.\textsuperscript{47} With that trust, museum educators have a responsibility to provide the best programs to their audiences. That challenge includes reaching the visitors with cognitive disabilities. The best ways of reaching all visitors is to offer a diverse set of programs.

All museum-goers bring along personal baggage on their visit. They also will, in some way, try to relate what they see on their visit to their own life. This is critical to understanding how learning takes place in museums. Personal interests, social conflicts, the physical environment, and individual abilities all determine how and what is learned

\textsuperscript{45} Hein, *Learning in the Museum*, 165.


in museums. These factors affect visitors with cognitive disabilities just as much as they do to visitors who are developmentally normal.

John Falk and Lynn Dierking discuss how important the social context is to increase learning during school field trips to history museums. They admit that there is little research on the topic of the learning that takes place within school field trips. However, the relationships between students on field trips can enhance the drive of some students to learn more while others will simply enjoy the time away from school. For an example, during the evaluation of an educational program at the U.S.S. North Carolina Battleship Memorial in Wilmington, North Carolina, some students participating in the program worked together and challenged each other to find more answers to their assignment. Other groups of students were more inclined to explore the battleship for the entertainment factor. That is not to say that learning did not take place in both segments of the sample, but rather that in terms of the programs’ effectiveness, students working together in social groups were more effective in completing the assignment.48

The effectiveness of learning in social groups can enhance the learning experience for visitors with cognitive disabilities. The stigma that surrounds cognitive disabilities can be even more pronounced when looking at elementary and secondary education aged children. Students with cognitive disabilities are often left as outsiders while in school so social groups could be seen as a distraction to those visitors rather than a learning tool. However, researchers note that inclusive learning environments can greatly benefit students with disabilities not only in formal learning but also in social gains.49

educators cannot always expect social interaction to enhance learning in museums; they must be aware of other processes by which to help each visitor gain the most out of their experience.

Museum educators can incorporate formal education techniques into their plans in order to reach every visitor. Universal design has been used in museums for nearly twenty years after the passage of the Americans with Disabilities Act. However, universal design in relation to museums has largely been a tool for making museums physically accessible to all visitors.\textsuperscript{50} Universal design extends to far more than just the physical environment of a museum. Educators can use the basic principles of universal design to make the curriculum in programs accessible to all learners. The Center for Universal Design at North Carolina State University defines Universal Design as, “The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.”\textsuperscript{51} Universal Design makes it possible for visitors with cognitive disabilities to participate on a more equal playing field with their peers who do not have a disability. Universal design also does not mean that educators have to reduce the curriculum or information that they would normally prepare for adults or other visitors without cognitive disabilities. Freeman Tilden’s last principle of interpretation can extend to visitors with cognitive disabilities. In Tilden’s observations of interpretation at museums he notes that, “Interpretation addressed to children . . . should not be a dilution of the presentation to adults, but should

\textsuperscript{50} D. Lynn McRainey and John Russick, eds., \textit{Connecting Kids to History with Museum Exhibitions}, (Walnut Creek, California: Left Coast Press, 2010), 203.
\textsuperscript{51} \url{http://www.ncsu.edu/project/design-projects/udi/center-for-universal-design/the-principles-of-universal-design/}
follow a fundamentally different approach.” Tilden’s approach to interpretation for children closely resembles the process in education of differentiated instruction.

Universal design was adapted by the Center for Applied Special Technology from its original purpose of making buildings and the physical environment accessible to all people including those with disabilities to making education accessible to all people. The Center for Applied Special Technology is an organization that focuses on educational research and development that works to enhance educational opportunities for all people through the Universal Design for Learning. Universal Design for Learning calls for universally design curriculum for individuals with cognitive impairments. The three principles of Universal Design for Learning complement what museum educators strive for in their programming. Those three principles are: “1. To support recognition learning, provide multiple, flexible methods of presentation; 2. To support strategic learning, provide multiple, flexible methods of expression and apprenticeship and; 3. To support affective learning, provide multiple, flexible options for engagement.” What is important for museum educators to take away from the Universal Design for Learning is that there are multiple ways of reaching the audience and that it is important to keep visitors as highly involved as possible. This is especially important for visitors with cognitive disabilities.

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54 http://cast.org/.
It is extremely important to keep school groups engaged during educational programs at museums and historic sites. Younger visitors who are interrupting their normal routine to visit a museum or historic site are easily distracted by the influx of new and exciting stimuli that they encounter. Participation on the behalf of visitors is one key to a successful program. If visiting school groups attend a museum program where they are only being talked to, it is likely that they will mutiny. The program will turn into another classroom session for the students and they will begin to disengage from the program. If the visitors are effectively engaged in the program then there is a greater chance of success and enjoyment for everyone that is involved. The American Association of Museums found through a study published in the Journal of Education that, “. . . there is no particular activity that guarantees academic success. . . but more active participation by the student leads to better results in learning.”

Participation for student-visitors with cognitive disabilities needs to be focused for those individuals. A student-visitor who is on the Autism Spectrum should not be thrown into a situation where they are confronted by exciting stimuli, but, rather, introduced to the curriculum through specific, step-by-step instructions. Focusing in on how best to meet the needs of visitors with cognitive disabilities will help them feel more comfortable in this new environment and can result in a greater degree of participation.

Participation by visitors with cognitive disabilities can take place in a multitude of ways. Not only can these individuals become active participants in educational activities, they can help museum educators plan for future programs. Their input should not be overlooked as museums plan for future exhibitions, programs, and discussions. Just as

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Michael Frisch advocated for greater involvement by the public in oral and public history, museum educators should encourage visitors with disabilities to lend a hand in the development process at museums.\footnote{Michael Frisch, \textit{A Shared Authority: Essays on the Craft and Meaning of Oral and Public History}, (Albany, New York: State University of New York Press, 1990), xx.} They deserve just as much input as the rest of the population when it comes to planning services in which they will take part.

In order to help facilitate participation, museum educators can use other methods perfected by teachers and experts in child development. One of those methods is differentiated instruction. Differentiated instruction is now commonly used in formal education to make lessons and their content easily accessible to all students regardless of learning level. This development in pedagogy focuses on individual student abilities with given tasks in an educational setting. Teachers adapt their lessons to help students at all levels reach the goals set at the beginning of the lesson.\footnote{Tracy A. Huebner, “Differentiated Instruction,” \textit{Educational Leadership} 67, 5 (February 2010), 79.} In accordance with keeping students in the least restrictive environment in public schools, teachers developed ways to adapt their lessons so that students at lower levels of cognitive development or those with cognitive disabilities could participate in the classroom as equals with their non-disabled peers.

Differentiated instruction is highly compatible to Howard Gardner’s theory of Multiple Intelligences. Using Gardner’s different types of intelligences which include Verbal/Linguistic, Logical/ Mathematical, Visual/Spatial, Bodily/Kinesthetic, Musical/ Rhythmic, Interpersonal, Intrapersonal, and Naturalistic, educators can create different activities that correspond to the different learning styles and levels of students and visitors.\footnote{Jennifer L. Nolen, “Multiple Intelligences in the Classroom,” \textit{Education} 85, 3 (Fall 2003), 115-119.} Museum educators also can adapt their lessons and programs in order to
differentiate for these different learning styles. By differentiating they are not “diluting” the curriculum as put by Tilden but rather they are modifying their techniques so that everyone benefits. Even the museum educator with minimal educational training can learn to easily differentiate their programming. To make sure that they are prepared to offer a differentiated lesson to visiting school groups, museum educators should be in contact with local schools and teachers so that they know what type of learners they should be ready for. Forward planning is the key to any successful program or learning activity.

North Carolina offers an ideal opportunity to study museum visitors with cognitive disabilities and the strategies museum educators use to meet their needs. First of all, North Carolina boasts a great quantity of leisure activities for residents and tourists alike. The state relies heavily on its tourism industry for income. A large part of the tourism industry in North Carolina rests on the shoulders of the state parks, historic sites, and museums of all backgrounds. In 2003, eighty-one percent of tourists in North Carolina visited a museum or other cultural resource destination in the state.\textsuperscript{60} By 2006, the cultural resources tourism in North Carolina generated $3.9 billion dollars for the local economies.\textsuperscript{61} In 2003 there were 6,669 full time employees in the cultural resources and non-profit arts sectors in North Carolina.\textsuperscript{62} These numbers are representative of how important the state’s cultural resources are to the prosperity of North Carolinians.

The North Carolina Department of Cultural Resources boasts twenty-seven state historic sites and seven history museums that run the length of the state from Fort Fisher on the Cape Fear coast all the way to the Zebulon Vance Birthplace in the Great Smokey

\textsuperscript{60}http://www.ncdcr.gov/research/ArtfulTraveler.pdf
\textsuperscript{61}http://www.ncdcr.gov/facts.asp
\textsuperscript{62}http://www.ncdcr.gov/research/JustTheTicket.pdf
Mountains. Not only does the state government participate in the business of historical tourism, but there are dozens of privately-owned and funded museums and attractions in North Carolina. These historical sites and museums are coupled with the many other national and state park sites including Fort Macon near Atlantic Beach and privately owned museums such as the International Civil Rights Center and Museum in Greensboro and the Biltmore Estate in Asheville. These popular historic sites, parks, and museums offer great opportunities for museum educators and the public to come together for unique learning experiences.

Every year, hundreds of thousands of tourists travel across North Carolina. Many are residents of the state while others travel from across the country and the world to visit the unique historical landscape of North Carolina. While many are visiting the natural wonders of the state, many others are making their way to the numerous museums and history sites which North Carolina offers. Over the last few years Carolina Publishing Associates in Matthews, North Carolina, has published a list of the top twenty-five most visited cultural attractions in the state. In 2009, ten of the top twenty-five visited sites were either history museums or historical sites, with the Biltmore Estate ranking first overall with over one million visitors. The next year saw slightly more success for these institutions. Eleven of the top twenty-five visited sites and thirteen of the top thirty of the most visited sites were again history museum or historic sites. Again, the Biltmore Estate ranked first overall with over one million visitors. The titles of these surveys describe

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63 http://www.ncdcr.gov/ataglance.asp
the whole list as historic attractions. However, that is misleading as many of the institutions on the list are science museums, zoos, aquariums, and natural resources parks.

The high frequency of visitation to these types of sites is important to this study because it lends itself to the number of visitors with cognitive disabilities to history museums and historic sites. These sites are important to the continuing education of the state. Many of the sites in North Carolina focus on local and state history which relates easily to the curriculum developed by the North Carolina Department of Public Instruction. Local schools and teachers utilize the historical resources of the state to connect their students to the literature they cover in their classrooms. School field trips offer young students the opportunity to experience history first-hand. North Carolina public school students do make up a significant percentage of visitors to history sites across the state. Museum educators need to know who their audience is in order to create valuable programming and part of their audience is the public schools of North Carolina. In order to understand the audience, educators have to know what types of learners they will encounter on school field trips.

North Carolina public schools have over one hundred local education agencies comprised of many different schools. These schools and local education agencies all have to define which students receive Exceptional Children’s services. The state department of public instruction sets out definitions and criteria of disabilities which students have to meet in order to receive those services as mentioned in the introduction of this thesis. Those students who qualify for Exceptional Children’s services under the state guidelines and the federal legislation of the Individuals with Disabilities Education Act make up a significant proportion of all public school students in North Carolina.
Over the last six years, according to the North Carolina Department of Public Instruction, the total number of students who received Exceptional Children’s services decreased. During the 2004-2005 academic year, 189,405, or 13.57 percent, of the 1,395,810 students enrolled in North Carolina Public Schools were served. By the 2009-2010 academic year, the number of students who received Exception Children’s services dropped by 1.13 percent to 179,983 students. They made up 12.44 percent of the total student enrollment of 1,446,650 students. While the total number of students receiving Exception Children’s services declined and the overall student enrollment rose over the last six years, students with disabilities still totaled over twelve percent of the public school population. That is a significant percentage of the public school population.

On a national scale, North Carolina, at 12.6 percent, falls just below the national average of 13.2 percent of total public school enrollment for students aged three to twenty-one years old who are served under the Individuals with Disabilities Education Act. The percent change in number served by North Carolina under IDEA rose by 8.5 percent from the 2000-2001 school year to the 2008-2009 school year. While not all students who received Exceptional Children’s services or are served under IDEA have only cognitive disabilities, they constitute a significant part of that population. The numbers for North Carolina sometimes conflict with the numbers published by the federal government, but the constant variable is that these students are always going to

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67 IES Table 47, Number and Percentage of Children Served under IDEA, Part B, by age group and state or jurisdiction: Selected years, 1990-91 through 2008-09.
68 Students who receive Exceptional Children’s Services are not the same as those identified as Academically Gifted.
exist. With funding and research increasing in the field of cognitive disabilities in the future it would make sense that diagnosis of those disabilities will only increase over the years.\footnote{http://www.acf.hhs.gov/programs/add/}

It is entirely possible that there is a large population in the United States that is going without being diagnosed with a cognitive disability. In many instances, students, parents, and teachers can miss tell-tale signs of disabilities. Most attribute their problems to being just a little slow in one school subject or another. Many cognitive disabilities like specific learning disabilities are invisible and hard to diagnose. Unless cognitive disabilities are identified early by a psychologists or child development specialists, many students are not tested for disabilities unless they are severely falling behind in school compared to their peers. Simon Whitaker of the University of Huddersfield in the United Kingdom said it was suggested in 2004 that, “\(2.5\%\) of the population (in the United Kingdom) as a whole should be regarded as having a mild-to-moderate learning disability, only about \(0.25\%\) of the population is registered as having a learning disability.”\footnote{Simon Whitaker, “Hidden Learning Disability,” \textit{British Journal of Learning Disabilities} (2004), 139.} If it is true that in the United Kingdom the number of people with a learning disability is far more than is recorded, then it is entirely possible for the same to be said about the United States and North Carolina specifically. While the number of students served in North Carolina under IDEA and by the Exceptional Children’s department is far below even a quarter of the population, these numbers and those that go undiagnosed suggest why museum educators have to be prepared to serve those students in their programming.
Not only have the numbers of students in North Carolina with cognitive disabilities remained relatively constant over the last six years, the resources for museum educators and families have begun to mature. Increasing numbers of advocacy groups are becoming more and more influential on a state and federal level. Their work ensures more recognition in government legislation and continued improvements in public facilities and programs. The Arc of North Carolina, Autism Speaks, North Carolina Disability Action Network, the Autism Society of North Carolina, and Disability Rights North Carolina all partner with government agencies and local communities to open more avenues for education, leisure, and civil rights for disabled North Carolinians. By partnering with these types of organizations and local education agencies, North Carolina’s museum and historic sites can move forward in providing educational opportunities for visitors with cognitive disabilities. But it is not only the individuals who enter the museum or historic sites that museum educators need to be aware of. Many museum and historic sites in North Carolina offer educational programs for area schools that are not based at the museum or site itself. Museums and history sites that offer traveling programs share the same responsibility as the programs in the museum.

The fields of public history and museum education have been evolving since the early republican era of the United States. Museum and historic sites expanded from their questionable exclusivity for much of their early history to representing more and more of America’s true and tangled history. Along with becoming more inclusive institutions, museums have expanded their staffs to include specialists in the field of education. Those changes have been necessary as teachers have looked to museums and historic sites as supplemental educational opportunities for their students during field trips. The
changes that have taken place in formal education over the last fifty years can be influential on museum education. Museum educators can adapt the different theories and practices which contribute to inclusive approaches to learning public schools. Universal Design for Learning, Howard Gardner’s theory of Multiple Intelligences, and Jean Piaget’s stages of cognitive development are helpful tools for museum educators when planning programs for visitors with cognitive disabilities. Those visitors with cognitive disabilities do in fact make up a significant number of potential visitors to museums and historic sites in North Carolina as over twelve percent of public school students in the state receive Exceptional Children services through the Department of Public Instruction as called for in the Individuals with Disabilities Education Act most recently passed in 2004.

The next step in fulfilling the needs of the cognitively disabled population in North Carolina is to survey the field of public history in North Carolina. A survey of a sample of North Carolina museums and historic sites reveals that the field has not taken notice of visitors with cognitive disabilities. While it is a small sample it is still informative of what type of museums currently have the resources to meet the needs of cognitively disabled visitors.
CHAPTER TWO: MEETING THE NEEDS OF THE COGNITIVELY DISABLED POPULATION: A SURVEY OF NORTH CAROLINA HISTORY MUSEUMS AND HISTORIC SITES

It is necessary to define a problem before proposing its solution. That principle applies directly to North Carolina’s history museums and historic sites. Is there a problem plaguing the history museums and historic sites of North Carolina? What are those problems and what are the best solutions to overcome them? These are the questions raised by Chapter One’s discussion of the prevalence of cognitive disabilities in North Carolina public school students. This chapter will look at what services, educational programs, and products are available to visitors with cognitive disabilities in North Carolina’s museums and historic sites.

This chapter also includes a survey of museums and historic sites from across North Carolina. The purpose of this survey was to find out if museums and historic sites offered specific programming for visitors with cognitive disabilities and what other resources were available to those visitors. History museums, historic sites, art museums, as well as science and children’s centers completed this survey. The results of the survey show that more resources need to be created for cognitively disabled visitors of history museums and historic sites in North Carolina.

In order to understand what is being done for visitors with cognitive disabilities it is necessary to uncover the policies and practices of museums in North Carolina. Every museum has a mission statement that details their overall purpose. That mission statement and their policies on meeting visitor needs usually reflect the standards set forth by federal legislation like the Americans with Disabilities Act and the policies of
umbrella groups like the American Association of Museums. These policies outline how
the museum and its staff will make their programs and facilities accessible as well.

Access is one of the most important policies that a museum or historic site will
create. Determining how visitors will access museum programs, exhibitions, and the
overall environment of the space ultimately determines who can access those same
things. This chapter, which features the results of a survey sent out to museums and
historic sites in North Carolina, will show a small sample of available programming at
history museums, art museums, historic sites, and children’s museums. This survey helps
to understand if museums and historic sites are accessible in all ways to visitors with
cognitive disabilities. Results show that there are differences in available programming
between history museums and other types of informal learning institutions.

As mentioned in the last chapter, museums, historic sites, and other informal
learning destinations are essential factors in the economy and society of North Carolina.
These institutions collectively receive hundreds of thousands of visitors every year. It is
important that North Carolina museums and historic sites meet the needs of every visitor
that opens their doors. Along with a completed a survey to see what the state of the
museum education field is like in North Carolina, it would be helpful to see how
museums and historic sites see themselves. The mission statements and policies of
museums and sites regarding visitors, access, and other features of public history express
how a museum or historic site views its role in the public sphere.

Governing bodies have some influence over a museum or historic sites’ policies.
The foremost authority on physical access to these types of institutions is the federal
government. The United States government addressed concerns about accessibility in
legislation like the Americans with Disabilities Act and the Rehabilitation Act of 1976.\textsuperscript{71} Those laws influence state level legislation as well. North Carolina has control over state-funded institutions like history museums and historic sites like Fort Fisher Historic Site and the North Carolina Museum of History. However, they cannot control privately owned and operated institutions like the Levine Museum of the New South and Asheville Art Museum. Private museums or historic sites rely on advisory boards, boards of directors, and consultants to develop their policies about accessibility that take into account the requirements put forth by the federal legislation.

North Carolina museums and historic sites that fall under the governance of the North Carolina Department of Cultural Resources have articulated policies by that governmental agency. They are required to meet the needs of the population of North Carolina as they are funded by that same population. Private institutions, on the other hand, are able to selectively cater to the needs that they see in their constituency. The North Carolina Department of Cultural Resources and the Office of Archives and History have the responsibility to make the resources of North Carolina’s history available to “all citizens”.\textsuperscript{72} In theory, making those resources available and accessible to all citizens is ideal. However, in practice it is much more difficult to realize that model. The American Association of Museums also emphasizes meeting the needs of the entire population in all of its diversity. In the American Association of Museums’ “Code of Ethics for Museums” the organization maintains that “programs are accessible and encourage participation of the widest possible audience consistent with its mission and resources.”\textsuperscript{73}

\textsuperscript{72}North Carolina Division of History and Archives, “Mission Statement,” http://www.history.ncdcr.gov/mission.htm
\textsuperscript{73}American Association of Museums, “Code of Ethics for Museums,” 4.
The desire to reach all visitors is very important, but it is important to note the last phrase of the American Association of Museum’s goal of including all visitors. It points out that not every museum has the mission or resources to reach every aspect of the population. Museums are continuously seeking increased funding. It is a fact of life in the field of public history that there is never enough money to complete every project or meet every need that an institution has. However, when it comes to a museum’s audience, they have the duty to be as inclusive as possible given their available resources. Resources are always a factor in developing exhibitions and programs at museums and historic sites and have with no doubt been a factor in those institutions in North Carolina. In the apprehensive economic uncertainty that has blanketed the nation in the last few years, it is understandable that museums today are unsure of whether or not to expand any programming that they already offer. In most cases, it would make sense for those institutions to cut back spending wherever possible. One curator of a museum in England described the problem of funding and museum accessibility in an editorial in the *Times*. He noted that funding towards making museum accessible was taking away from the available resources for collections conservation. He observed that, “if we do not fund collections’ conservation we will not have collections to make accessible, as many items will have perished through neglect.”

While this curator’s argument describes the problem as funding for access and not conservation, the main point is that there are not enough resources to go around.

Other museums have developed programs and events to make their institutions more accessible to all people. The Carnegie Museums in Pittsburgh, Pennsylvania, began offering a special service to area families who are financially disadvantaged due to

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overwhelming medical costs of the children with special needs. Carnegie Museums ACCESS program offers qualifying families an access card which costs the family one dollar every year. This is a great program for families with children who have cognitive disabilities. The cost associated with these disabilities can be very high. The Carnegie Museums in Pittsburgh have clearly expanded their institution’s definition of access to be more inclusive of visitors.

With that in mind, how have North Carolina’s museums adapted to changing definitions and qualifications of access and disability? At the beginning of the research process for this thesis, a list of museums and other informal learning institutions in North Carolina was compiled. This list was the basis for a survey to learn whether or not North Carolina museums and historic sites offered educational programs for visitors with cognitive disabilities. The idea was to survey all types of museums and other sites. This would give a view of history museums and historic sites compared to other, science-based institutions. The original hypothesis was that science museums would have more programs available to the disabled community. They have greater opportunities to provide tactile learning experiences and more access to technologies that are beneficial to those visitors.

The surveys were originally sent to each institution by email and accompanied with a description of the project. Participants were directed to complete the survey if they wished to part of the study. Once the survey was complete, participants were to told to return the document by either email or fax. Two weeks after the initial contact, only one institution had responded to the email. Participants were then emailed again in

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an effort to increase the response rate and gather data. The second round of emails produced only three more surveys being completed. After a longer waiting period, the remaining museums and historic sites were contacted by phone where interviews were conducted. Those phone interviews resulted in the remaining surveys being completed. Thirteen institutions either declined to participate or were not available to participate. Twelve responses were used in reporting the results of the survey.

The questions of the survey were a mix of closed and open-ended. Some questions were used for qualitative purposes only. Those questions were: 1. Do you provide educational programs for visitors?; 2. Do you provide educational programs for visitors with cognitive disabilities specifically?; 3. Do you have staff members who are trained in education, special education, psychology, or recreational therapy?; 4. Have you been contacted by families of or advocacy groups for individuals with cognitive disabilities about providing programming?; and 5. Do you have assistive technology devices available for visitors? The other questions on the survey centered on the previous questions. They inquired about the factors of providing or not providing programming, how often programs were held, and what resources would be helpful in developing more programs.

The survey was sent to twenty-five museums and historic sites across North Carolina. The sites were selected at random from a list that separated the different sites by geographical regions in North Carolina, to get an equal sample from across the state. The sites were defined as either being in the coastal region, which fell from the Outer Banks to the Raleigh area, the Piedmont region stretching from Raleigh west to Charlotte, and the mountain region west from Charlotte to the border with Tennessee.
The survey was sent to museum educators, directors of education or programming, and site managers and directors. The survey questions could best be answered by those individuals who work with visitors in educational settings and in the development process of programs. In some instances, educators and directors were not available to participate in the survey. However, other individuals were able to provide valuable information. For example, at one children’s museum, a staff member in charge of making reservations for group programs provided detailed information about how certain programs were created and what services were accessible for visitors at their institution.

With twenty-five surveys sent out to museums and other sites, only twelve were completed. That equals a return of just forty-eight percent. While a fifty-four percent return is not ideal, it does still supply important data in regards to this thesis. The twelve surveys that were completed offer a great insight into the programs that are available at North Carolina museums. Eight of the surveys were sent to history museums or historic sites, three were sent to children’s museums, three were sent to art museums, four were sent to science museums, and four were sent to cultural centers or biographical sites. Of the twelve surveys that were completed five were history museums or historic sites, two were children’s museums, three were science museums, one was an art museum, and one was a cultural center.
Table 1: Results from Survey of North Carolina Museums and Historic Sites

<table>
<thead>
<tr>
<th></th>
<th>Educational Programs</th>
<th>Educational Programs for Cognitively Disabled Visitors</th>
<th>Staff trained in Education or Special Education</th>
<th>Contacted about programs by families or organizations for disabled</th>
<th>Available Assistive Technology Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Sites (N = 12)</td>
<td>12 (100%)</td>
<td>3 (25%)</td>
<td>10 (83%)</td>
<td>4 (33%)</td>
<td>9 (66%)</td>
</tr>
<tr>
<td>History (N = 5)</td>
<td>5 (100%)</td>
<td>1 (20%)</td>
<td>3 (60%)</td>
<td>1 (20%)</td>
<td>3 (60%)</td>
</tr>
<tr>
<td>Science (N= 3)</td>
<td>3 (100%)</td>
<td>0 (0%)</td>
<td>3 (100%)</td>
<td>2 (66%)</td>
<td>3 (100%)</td>
</tr>
<tr>
<td>Children’s (N= 2)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>2 (100%)</td>
<td>1 (50%)</td>
<td>2 (100%)</td>
</tr>
<tr>
<td>Art (N= 1)</td>
<td>1 (100%)</td>
<td>0 (0%)</td>
<td>1 (100%)</td>
<td>0 (0%)</td>
<td>1 (100%)</td>
</tr>
<tr>
<td>Cultural (N= 1)</td>
<td>1 (100%)</td>
<td>0 (0%)</td>
<td>1 (100%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

The results of the survey, while limited, were not very surprising. The main question this thesis sought to answer was whether or not history museums and historic sites in North Carolina offered educational programs for cognitively disabled visitors. Other related questions helped to clarify what services are available for cognitively disabled visitors in North Carolina’s museums and historic sites. This survey cannot be taken as evidence of all museums and historic sites in North Carolina but only those that participated in the study. While it is not entirely inclusive, the survey and its participants lend to the current state of museums and historic sites. It helps to view which way the trend of accessible programming is moving in North Carolina. These results do show that resources available to cognitively disabled visitors to history museums and historic sites are lacking.
The first question asked of participants sought to see if they provided educational programs for visitors at their museum or historic site. Every museum or historic site that responded to the survey reported that they provide educational programs. Most museums do provide programs to attract many visitors to museums. They make the visitor’s trip more dynamic and participatory rather than static exhibition tours. Programs are separate educational experiences that take place away from the normal museum exhibition tours that are offered.

The second question on the survey asked participants if their museum provided programs for cognitively disabled visitors specifically. Unlike the first question concerning all educational programs, the response to this question shows how little is done in the way of educational programming for visitors with cognitive disabilities. Only one quarter, three out of the twelve, of the respondents said they provide programs for disabled visitors specifically. Of those three who did provide programming, only twenty percent, or one of the five history museums or historic sites that responded, provided programs for disabled visitors. None of the art, science, or cultural museums responded as having programs for these visitors while both of the children’s museums did have programs specifically for visitors with cognitive disabilities.

Seven of the museums or sites that said they do not provide these types of programs did note that many of their available educational programs could be adapted for different learning styles. Many noted that they often do adapt their programs for visitors with disabilities and that those groups that request adapted programs are usually school groups. This relates to the previously discussed-high frequency of public school students served by Exceptional Children’s services in North Carolina. Still, according to those
history museums that participated in this survey, history museums and historic sites in North Carolina have a long way to go in providing specifically designed programs for visitors with cognitive disabilities. It is clear from the examples provided by children’s museums that it is possible to develop those programs rather than solely adapting programs that are already in place.

The third question for survey participants inquired about the educational background of staff members. Participants were asked if any other their staff members had training in education, special education, psychology, or recreational therapy. Staff trained in those fields would have more experience with or education about cognitive disabilities and how to work with individuals who are disabled. Sixty percent of history museums and historic sites that participated did have staff members trained in one or more of these fields of study. Those that did not have staff trained in education noted that most of their staff members had education in history, public history, and historic preservation. Having staff members with a background in cognitive disabilities would be extremely helpful when staging programs for visitors with disabilities. History museums and historic sites could encourage their staff members, especially those working directly with the public, to attend professional development events about education and disability.

Participants were also asked if local families or advocacy groups about providing programs for visitors with disabilities had contacted their institution. Four out of the twelve respondents said they have requests from outside groups about developing programs for visitors with disabilities. Only one of those museums was a history museum or historic site. Some museums and historic sites said that they often have school groups, groups of retired adults, and one group particularly from a local
community college that request special programs for visitors. While few of the surveyed museums and historic sites reported outside requests for programs, there is an audience for programs designed to meet the needs of cognitively disabled visitors. The number of visitors to North Carolina museums and historic sites and the number of students identified as having a disability in North Carolina schools along with the trend of available programming for disabled visitors suggests that there is an underserved market for museums and historic sites.

The survey also inquired about assistive technology. Participants answered a question about what, if any, assistive technology devices were available to their visitors. Assistive technology devices are “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of a child with a disability.” Assistive technology devices help visitors participate more fully in museum exhibitions and programs. Nine out of the twelve museums or historic sites reported that they did have assistive technology available to visitors. Three out of the five history museums or historic sites said assistive technology was available at their institution, most commonly described as Braille for visually impaired visitors. However, Braille was mostly available for navigation through the museum. It was not available in exhibitions or programs. Two museums acknowledged that they had a need for assistive technology but that a lack of funding resulted in its absence. Another museum noted that they were in the process of planning for new assistive technology devices that involved tactile learning experiences. The results of the survey show that most assistive technology that

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is in place at these museums are required under the American’s with Disabilities Act which requires that buildings be accessible to visitors with disabilities. Here they mainly adhere to the needs of the physically disabled visitor.

According to the results of this survey, history museums and historic sites rarely offer educational programs specifically for visitors with cognitive disabilities, despite the audience for these programs. Rather, museums and historic sites in this study explain that they are able to adapt their available program to meet all of the needs of individual visitors. It is ideal if museum staff are able to make their programs inclusive; however, some visitors with cognitive disabilities need individualized direction from trained professionals. Simply saying, “We can adapt our program to accommodate people with disabilities,” does not mean the program is being completely inclusive and creates an equal environment for learning.

Museums and historic sites also mention a lack of funding for increased programming. One museum educator said, “An increase in funding and a greater demand for programs from disabled families and groups” would be helpful in developing more programs for cognitively disabled visitors. Better relationship between museums, historic sites, and local organizations would benefit the museums and the visitors. Increased awareness of cognitively disabilities could help bolster support for more programs and a stronger relationship with museums would help families feel more comfortable taking their cognitively disabled child to a busy museum.

It was also clear when speaking with some of the museum educators that they were including cognitively disabled visitors as visitors with physical disabilities. When asked about how they make their museum accessible to these visitors they discuss
wheelchair ramps, lighting, and elevators. They were viewing access in terms only of how visitors navigate the museum and not how they approach the learning process. In an attempt to understand how history museums and historic sites can become more accessible to cognitively disabled visitors, it would be helpful to look at an example from another type of museum that does fit that mold.

Marbles Kid’s Museum in Raleigh, has made its building, exhibitions, and programs accessible to visitors who have cognitive disabilities. Marbles is a privately owned museum. Marbles is one example of a museum that provides specific programming for visitors who have cognitive disabilities. The museum was formed in 2007 from the merger of two museums, Exploris and the Playspace. Marbles focuses on encouraging younger children to explore different ways of learning primarily through play and exercise. 

In 2008, a year after the museum’s opening Marbles began to offer a special program for children with special needs. Marble’s offers “Family Fun Night” once every four months to the local community. Family Fun Night is a partnership between Marbles Kid’s Museum and the Arc of Wake County, an advocacy group for people with intellectual and developmental disabilities, along with other organizations. The Arc of Wake County is a branch of the national The Arc, “an organization serving people with disabilities that was founded in 1950 by a group of parents concerned about the lack of services for their children with developmental disabilities.” The Arc of Wake County serves the 15,000 to 18,000 individuals with intellectual or development disabilities in

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78 http://www.marbleskidsmuseum.org/galleriesandexhibits
Wake County. The main idea of the program is to offer visitors with special needs and their families a venue for gathering, learning, and cooperation at the museum after normal business hours. The programs coordinator at Marbles was unsure of how the initial idea of Family Fun Night emerged. However, she did say that after only “two or three informal meetings the event was launched.”

Family Fun Night is an interesting event as it brings together a museum, local support organizations, financial benefactors, and local families all in one. Not only does Marbles offer this unique opportunity for visitors but it provides the event free of charge to all visitors. It is able to do this through generous donations from local foundations. It is truly a community-wide collaboration. Marbles takes advantage of its space and learning experiences and combines them with the expert advice from individuals who work with the Arc of Wake County.

The point of offering Family Fun Night is to give families of children with special needs an opportunity to visit the museum in a more suitable environment. Marbles, during its normal business hours, is a bright, loud, and energetic forum for learning. However, Marbles and its partners like The Arc recognize that an environment such as that is not beneficial for every child, especially those with cognitive disabilities. That is why they offer an after-hours program for those visitors and their families. By holding Family Fun Night during the normally closed hours of business, parents are able to accompany their disabled child to the event. Many families are much more comfortable visiting as a group rather than the child attending with a school group. The parents are able to keep a close eye on their children to see if they are handling the situation well.

80 “The Arc of Wake County, Did You Know?,” The Arc of Wake County, http://www.arcwake.org
81 Correspondence with Marbles Kid’s Museum, email, October 27, 2011.
Museum staff reduces the intensity of light and sound that is the norm during the regular day. This adjustment helps ensure that the visitors with special needs do not become over stimulated during the time at the museum. Marbles also sets up “cool down areas” for children that do become over stimulated. This is easily accomplished by setting aside a portion of the available space. The staff also reserves an area for organizations to set up tables of information for parents and guardians. Organizations like The Arc offer resources for families at these tables. Family Fun Night is not only an opportunity for visitors with special needs to learn in a conducive environment but it allows parents the opportunity to network and develop their own knowledge about disabilities and the resources that are available to them.82

The program has slightly changed since its inception in 2008. In the last three years, Family Fun Night has gone from being offered once a month to once a quarter. The program was also originally a pay to play event for non-museum members. The event originally cost visitors who were not members of Marbles Kid’s Museum five dollars per person over one year old.83 Today, Marbles offers the program free to all visitors but advertises that it is exclusively for children with special needs and their families.84

This type of program would be easily adapted to a history museum or historic site. Planning and staffing issues would be easy to handle as the event takes place only once every four months for a couple of hours a night. History museums and historic sites are just as capable of reaching out and collaborating with groups like The Arc of Wake

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82 Correspondence with Marbles Kid’s Museum, email, October 27, 2011.
84 “Family Fun Night Spooktacular,” Advertisement for Marbles Kid’s Museum.
County as Marbles Kid’s Museum is. While Marbles has a large population to support its programs (Raleigh’s population as of 2010 was 403,892) other areas in North Carolina could support similar programs. The Charlotte-Mecklenburg area has the largest population in the state at 731,424 in the city alone.\(^{85}\) Areas like Greensboro, Greenville, Asheville, and Wilmington also could support programs of this type.

Accessibility is a key issue in the past, present, and future of history museums and historic sites. The way museums and historic sites present their exhibitions and educational programming determines who is able to access them. In many ways, legislation like the Americans with Disabilities Act encouraged museums to be more inclusive in their policies of access. However, and unfortunately, those policies tend to only make buildings and exhibitions more accessible to the physically disabled. That, of course, is a positive step in making museums more inclusive. It also raises a question of how museums and individuals define access and disability, respectively.

A survey of museums and historic sites in North Carolina shed light on whether or not institutions offered educational programs exclusively for visitors with cognitive disabilities. The majority of the responding institutions reported that they did not offer such programs. However, by looking towards other types of museums as examples of progressive educational programming, lessons can be learned and transferred to the field of history museums and historic sites. In all, it shows that there is a need for new techniques and practices at North Carolina’s history museums and historic sites in regards to policies of access and visitors with cognitive disabilities.

\(^{85}\)http://charlottechamber.com/eco-dev/demographics-economic-profile/
CHAPTER THREE: RECOMMENDATIONS FOR THE HISTORY MUSEUM AND HISTORIC SITE: ASSISTIVE TECHNOLOGY, PROFESSIONAL DEVELOPMENT, AND THE PROGRESSIVE EDUCATOR

History museums and historic sites lack the needed educational programming to meet the needs of all segments of their audience. Visitors with cognitive disabilities are frequenting museums and historic sites at unprecedented numbers. Whether they are visiting as a part of school field trip groups, auxiliary groups, or with their friends and families, visitors with cognitive disabilities are significant members of the museum community. It is the responsibility of the field and museum educators to reach out to their constituency and explore new ways of enabling visitors to have a more worthwhile learning experience. Museums and museum educators need to become more familiar with new technologies and better practices. To increase access for visitors with cognitive disabilities, museums and historic sites need to hire knowledgeable educators and individuals who have experience working with cognitively disabled people. Museums and historic sites also need to take advantage of professional development opportunities offered by educational institutions and advocacy groups. Also, museums and historic sites need to employ the use of assistive technology devices in their exhibitions and educational programs. These steps will benefit the cognitively disabled community when visiting museums and historic sites.

Examples of successful museum programs for visitors with cognitive disabilities are available in other fields. Science museums, children’s museums, discovery centers, and formal education venues have all led the progressive charge towards making their exhibitions, programs, and curriculum accessible for those with cognitive disabilities.
These fields have been able to adapt their exhibitions and curriculum over the last few decades at an easier rate than history museums and historic sites. Historians tend to be more protective of their collections and exhibitions as the objects they contain are usually older and harder to replace. Making exhibitions and programs more accessible often includes an inherited level of risk that many in the museum field find troubling.

History museums and historic sites can apply any one of several different strategies to make their educational programming more accessible to all visitors and specifically to visitors who have cognitive disabilities. New technologies now make it possible for visitors to interact with exhibitions in ways that are more dynamic than in the past. Assistive technology and Universal Design for Learning make it possible for exhibitions and educational programs to be more inclusive of visitors with cognitive disabilities. There are also professional museum and education organizations that offer professional development opportunities for museum educators.

Advancement in technology has led to extreme changes in the way people live in the United States and across the globe. Technological innovations have changed the way food is prepared, how people travel, and even how they sleep. Technology has infiltrated and revolutionized almost every aspect of human life. These advancements extend into the realm of education as well. Assistive technology is a broad term that describes the technological hardware and software that helps individuals with physical and cognitive disabilities lead fuller lives. The legal definition of assistive technology can be found in the Electronic and Information Technology Accessibility Standards, which defines assistive technology as “any item, piece of equipment, or system, whether acquired
commercially, modified, or customized, that is commonly used to increase, maintain, or improve functional capabilities of individuals with disabilities."\textsuperscript{86}

Assistive technology is found in hospitals, rehabilitation centers, schools, and many public places. Depending on how recent a definition is used for assistive technology, the argument can be made that assistive technology has been around for centuries and is represented simplistically as a walking stick. Today, assistive technology takes on a much more sophisticated role exemplified by items that range from walkers or wheelchairs to computer programs that transform written text to audible sound for deaf individuals.\textsuperscript{87} Assistive technology is currently categorized into ten different subdivisions. There are assistive technology aids for communication, daily living, ergonomic needs, environmental, sensory, mobility and transportation, seating and positioning, sports, computer access, and education and learning.\textsuperscript{88} Technology now is developing at an exponentially increasing rate. Corporations like Apple and Sony are on the cutting edge of designing products that have and will continue to change the way people live their everyday lives. History museums and historic sites play an integral part in the lives of Americans and have the responsibility to help their visitors gain the most from their visit. Employing assistive technology is one way these places can help visitors with disabilities reach that goal.

The United States has a history of legislation that references assistive technology. In 1998, the federal government introduced the first piece of legislation in the United

States requiring states to provide assistive technology devices for individuals with disabilities. The Assistive Technology Act of 1998 required states to provide funding, education, and support for individuals who require assistive technology in order to complete everyday tasks. The Individuals with Disabilities Education Act, discussed previously, also stated that educational institutions must provide persons with disabilities access to technology if it is essential to them receiving a free and appropriate education.

While these laws acknowledged the need for assistive technology in society, they were narrow in their focus. The Tech Act of 1998 and IDEA, with its amendments, only mentioned the requirement of assistive technology in formal education environments. This exempted institutions like history museums and historic sites from having to invest in assistive technology.

History museums and historic sites could benefit greatly from employing aids of assistive technology. It is understood that many smaller museums and sites, especially those funded by private sources, do not have the financial capabilities to update their institutions with the most state-of-the-art equipment. However, the resources can be found in incremental amounts. Over time, small history museums and historic sites could become leaders in the field of implementing change in order to meet visitor needs. Other, well-funded museums and historic sites have the opportunity to institute change much more quickly. Larger museums are typically in more densely populated localities which lends to the notion that those museums often serve larger populations. They also have a greater chance of serving visitors with cognitive disabilities. In turn, those museums, then, have a greater need to provide assistive technology to their visitors.

89 http://atto.buffalo.edu/registered/ATBasics/Foundation/Laws/atlegislation.php
90 Family Center on Technology and Disability, Assistive Technology Laws, www.fctd.info
History museums can learn from examples put forth by formal education and other types of museums. Teachers and school personnel employ different techniques and technologies to help their students more fully participate in classroom activities and lessons. There is no single device or technology that is right for every disability. Educators have to understand the needs and abilities of individual students in order to employ the right assistive device or service. In the formal classroom, technology can be adapted to the specific individual needs of a person with a disability. Unfortunately, museums cannot always be prepared to meet specific needs. However, museums can institute assistive technology in a broad way and still help meet the needs of its visitors.

Assistive technology can be used not only to help visitors with disabilities fully participate in the museum experience but it can also be used to help every visitor, with or without a disability, become more engaged in the learning process. The use of devices like iPads, touch-screen computers, and robots can help visitors with disabilities in their visit but also gain and hold the attention of other visitors. The Minneapolis Institute of Arts uses iPads for the exhibit tours. Visitors are able to use iPads throughout their tour and receive information, pictures, and other multimedia sent from staff members.  

Assistive technology is not solely for individuals with disabilities. The benefit of assistive technology is that it is usually provided for those with disabilities but is universally utilized. For example, wheelchair ramps are specifically designed for individuals who cannot walk up stairs; however, the rest of the public commonly uses them.

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History museums and historic sites could make use of many different assistive technology devices. A shared characteristic of history museums and historic sites is that their exhibitions and programs require visitors to read at some point. The need to read label text, instructions, or handouts creates an opportunity for assistive technology in the museum. Individuals who have cognitive disabilities may be struggling readers since those disabilities can affect an individual’s ability to learn. Changing the way in which museum visitors consume information, specifically written text, can enhance the chance of learning.

Electronic text is one way museums and historic sites can help visitors overcome challenges with reading. Electronic text, as researchers Lynne Anderson-Inman and Mark Horney define it, is “textual material read using a computer or some other electronic device such as a Palm, iPod, or even a LeapPad.” Electronic text offers a myriad of ways to present information compared to written text. Anderson-Inman and Horney describe electronic text, or eText, as malleable. That is, eText can be adapted to fit the different needs of visitors with cognitive disabilities. eText can transform the same written text in museums and historic sites into a computer-based document where the visitor can adapt it to fit their own needs. Font sizes can be reduced or enlarged, links to other resources can be added by museum staff, definitions can be embedded into the text for unfamiliar words, and many other additions can be made so that the original text takes on a new form with different avenues of learning available to the visitor.

Anderson-Inman and Horney describe the features that support the original text as

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94 Ibid.
supported electronic text.\textsuperscript{95} While this type of assistive technology is reliant on museums and historic sites possessing relatively expensive devices, there are other ways to provide for visitors with cognitive disabilities in more “low-tech” and “no-tech” methods.\textsuperscript{96}

Low-tech assistive technology devices are very easy for museum educators to include in their planning and design of exhibitions and programs. These types of devices include simple items like pictures, symbols, sticky notes, and highlighters.\textsuperscript{97} Low-tech devices are relatively cheap to purchase and do not require much training for educators to use. Low-tech devices serve the purpose of helping those individuals who are minimally challenged in the learning process. Pictures and symbols help individuals struggling to read to associate the words they see with a visual aid that is more recognizable to them. Highlighters, sticky notes, and calendars are low-tech devices that help individuals better control their environment. They help with establishing structure, routine, and efficiency. Many museums use low-tech assistive technology in their exhibitions and programs. Christy Halterman, a former resident of Indianapolis, Indiana remembered using what would be described as a low-tech device on one of many childhood trips to the Indianapolis Children’s Museum. Halterman described interacting with a hands-on exhibit in the discovery room which used wind and hand power to direct the flow of water and objects through a trough. The wheel you turn to manipulate the air flow and water had hand grips on it.\textsuperscript{98} The hand grips on the wheel at the Indianapolis Children’s

\textsuperscript{95}Ibid.
\textsuperscript{97}Bugaj and Norton-Darr, \textit{The Practical and fun Guide to Assistive Technology in Public Schools}, 16-17.
\textsuperscript{98}Christy Halterman, interviewed by author November, 2011 in Wilmington, North Carolina; http://www.childrensmuseum.org/scienceworks.
Museum is just one of many examples of how museums can use low-tech devices to help visitors.

Med-tech refers to assistive technology devices that fall in the middle between low- and high-tech devices. These can include items like slanted tables, adjustable furniture and lighting, and captioning. Med-tech often can be associated with devices that help with physical disabilities. These devices are sometimes required under the legislation of the Americans with Disabilities Act. Moores Creek National Battlefield in Currie, North Carolina offers med-tech assistive technology to its visitors. In the Visitors Center, the site shows a short introductory video detailing the battle at Moores Creek. For visitors that are hearing impaired, they have included closed captioning which scrolls across the bottom of the screen as the movie plays.

High-tech assistive technology devices include computers, advanced circuitry, and specialized programs. While these devices can be expensive, their benefits could make the difference in a successful visit and an unsatisfactory one for visitors with cognitive disabilities. High-tech devices are those like screen-readers, scanning pens, and voice recognition software. These devices are geared more towards individuals with more severe cognitive disabilities and physical disabilities. They aid in reading, writing, comprehension, and communication. All of those tasks are essential to participation and learning in history museums and historic sites. High-tech devices can be more cost prohibitive for museums and historic sites. However, some museums and historic sites are able to offer these devices to their visitors. Both, the Fort Fisher State Historic Site in

“Facilities for people with learning disabilities or dyslexia,” Victoria and Albert Museum, http://www.vam.ac.uk/content/articles
Wilmington, North Carolina and the Bentonville Battleground State Historic Site in Four Oaks, North Carolina offer exhibits that utilize high-tech assistive technology. Fort Fisher offers a sixteen foot-long fiber-optic and three-dimensional map of the battle at the fort. The map takes visitors through the end of the assault and defense of Fort Fisher in nine minutes. The maps narration and 5,000 LED’s help visitors visualize the battle. It is engaging and informational. All visitors, not just those with cognitive disabilities, can regularly enjoy this type of assistive technology.

![Fiber-Optic Battle Map at Fort Fisher State Historic Site](http://www.nchistoricsites.org/fisher/fiber-optic-map.htm)

The site at Bentonville Battleground also employs a fiber-optic map that outlines the first day of the battle at Bentonville. The LED’s on the map light up as they depict the moving lines of Confederate and Union troops. It is by far the most popular exhibit.

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within the Visitors Center.\textsuperscript{104} Maps like those at Bentonville and Fort Fisher are suitable alternatives to large paper maps and label text that rely on visitors to be able to read at a certain level. There are other types of high-tech devices that are used in history museums and historic sites. Museums like The British Museum and the Albert and Victoria Museum, which are discussed later, employ high-tech devices for visitors with disabilities.

Another concept for high-tech assistive technology device is the “Virtual History Museum”. A Virtual History Museum, or VHM, is an internet-based program where a museum recreates its built environment and historical collections. A partnership with a school or other outside group allows for students to have access to the museum and participate in activities through technology. A research group from Michigan State University conducted an evaluation of a Virtual History Museum to discover if participation in VHM activities would have an effect on student achievement on the Michigan Education Assessment Program.\textsuperscript{105}

The evaluation of the Virtual History Museum compared the results of student achievement scores based on student subgroups. They compared the results of students with disabilities, students without disabilities, and those students who participated in honors level academic programs. The results showed positive growth for all student subgroups after the intervention with the Virtual History Museum. While this program did not physically take place in a history museum, the concept can be replicated with museums in North Carolina, given available and adequate resources. The Virtual History Museum example suggests that assistive technology can help improve learning for all

\textsuperscript{104} http://www.nchistoricsites.org/bentonvi/fiber-optic.htm.
visitors not only those with cognitive disabilities. The researchers note that “web-based learning environments may offer one means to improve the quality of history learning by embodying more effective instructional practices and by making it more feasible for teachers to supplement text-based instruction, improve motivation, and offer differentiated instructional activities.”

Some museum educators may be aware of where to begin to look for help when it comes to assistive technology. The state government of North Carolina created assistive technology lending centers from the coast to the mountains. The North Carolina Assistive Technology Program offers device loans, demonstrations, reutilization, training, public awareness, and collaboration with North Carolina’s public, schools, employers, and private and public institutions. The program has twelve offices and lending sites in cities like Wilmington, Raleigh, Winston-Salem, Greenville, and Sylva.

Not only are there state-funded assistive technology lending sites across North Carolina, there are many publications that focus on assistive technology. Didax, a company which focuses on providing resources for specific learning needs, publishes a catalog containing their products. Enabling Devices is another company which publishes multiple catalogs every year of assistive technology devices. Unlike Didax, Enabling Devices offers products specifically for individuals with disabilities. A final company, Augmentative Communication Consultants, Inc. also publishes catalogs with available products to the public. ACCI works with organizations to help provide expert

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106 Ibid, 424.  
107 http://www.ncatp.org/  
109 Enabling Devices.
consultations about assistive technology needs and solutions. These organizations continuously update their online databases and catalogs in order to help institutions stay up to date on the latest developments in assistive technology. It would be beneficial for history museums and historic sites to subscribe to the services of these organizations in order to know how to best meet the needs of their visitors. An alternative to the private corporations and public lending centers are the many reliable websites that discuss current trends and developments in assistive technology. Still, there are other ways for history museums and historic sites to meet the needs of the cognitively-disabled community.

Universal design for learning, UDL, as discussed earlier in Chapter One, is a methodology that museum educators can employ in their design of exhibitions and planning educational programs. Universal design for learning can be described as “a set of principles for curriculum development that give all individuals opportunities to learn.”\(^{110}\) Universal design for learning would help museum educators structure programs and lessons in a way that learners of all abilities would be able to benefit. By itself, universal design for learning can help individuals in the process of learning.\(^{111}\) However, when universal design for learning and assistive technology are paired, the results could be dramatic for learners. Both assistive technology and universal design for learning are needed to promote effective inclusive educational practices.\(^{112}\) Incorporating universal design for learning along with assistive technology requires the training of individuals in special education and disability studies. History museums and historic

\(^{110}\)http://www.cast.org/udl/

\(^{111}\) Margaret King-Sears, “Universal Design for Learning: Technology and Pedagogy,” 199.

sites would need to make an investment in training, resources, and time in order to gain the benefits that assistive technology and UDL hold. The Museum of Online Museums is an internet-based collection of museum exhibitions and collections. It allows anyone with an internet connection to explore museums in a way that can fit different learning styles. The National Center on Universal Design for Learning noted that The Museum of Online Museums “is a strong example and starting point for discussion about illustrating key concepts non-linguistically.”

Museums like this offer innovative ways of providing information to visitors that relies on multiple delivery types. Museums and other institutions outside of the realm of history and the social sciences have enhanced their abilities to offer suitable environments and programming for visitors with cognitive disabilities. These institutions like science museums, children’s museums, and discovery centers are capable of offering these services partly because of the type of institutions they are and the content they offer to visitors. The practical sciences like physics, geology, chemistry, and biology are more able to offer exhibitions and programs that are suitable to assistive technology. Science and technology tend to fit hand in hand. This does not mean that history museums and historic sites cannot take lessons away from other types of museums. Some of the best examples come from art museums like the Museum of Modern Art and The Jewish Museum in New York City. History museums in Britain like the Victoria and Albert Museum and the British Museum in London have set themselves as prime examples of making their institutions accessible to visitors with cognitive disabilities.

The Museum of Modern Art in New York has a set of programs in place for visitors with developmental or learning disabilities. They have trained educators who

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113 http://www.udlcenter.org/implementation/examples/examples2_5.
work specifically with these groups of visitors. On their website, the Museum of Modern Art has individual links for their access programs for visitors with disabilities. They are cognizant to distinguish between developmental and learning disabilities and other disabilities like dementia and physical disabilities. Every month the education department organizes different programs for visitors with disabilities. Their website notes that, “each month participants focus on a different theme, exploring various artworks in the galleries and creating artworks in the classroom.”114

The Jewish Museum in New York City has been innovative in creating programs and adapting its environment for visitors with disabilities. The Jewish Museum has a division within their organization for access services that works to ensure they meet the needs of disabled visitors. The museum offers free school tours to groups with special needs students. Like the Museum of Modern Art, The Jewish Museum also offers touch tours for blind or partially blind visitors. These tours help visitors explore the museum and collections and enjoy a tactile learning experience.115

The Jewish Museum also has focused programs for visitors with learning and developmental disabilities. The museum has educators trained to work with individuals with developmental, learning, and physical disabilities.116 It is clear that The Jewish Museum has made visitors with disabilities a priority in their planning of educational programming. The museum also offers an educational experience for teachers. They offer a workshop every month for teachers who work with students who have special needs.117 This type of professional development can create extremely useful ties between

114 http://www.moma.org/visit/calendar/events/13268
115 http://www.thejewishmuseum.org/accesseducators
116 http://www.thejewishmuseum.org/learninganddevdisabilities
117 http://www.thejewishmuseum.org/accesseducators
the museum community and the school systems. The common characteristics of The Jewish Museum and the Museum of Modern Art are that these two museums serve a highly populated area and are very well funded institutions. These factors contribute to the advanced level of programming for visitors with disabilities.

In the United Kingdom, museums like the Victoria and Albert Museum and the British Museum have developed tools and strategies to help better meet the needs of disabled visitors. Much of the work done to be more inclusive of visitors with disabilities in the United Kingdom can be attributed to the recent passage of the Disability Discrimination Act of 2005. The Victoria and Albert Museum along with the British Museum created a “Disability Equality Scheme” in accordance with the new regulations set forth by the legislation. These schemes, or action plans, detail the state of the museums planning for visitors with disabilities and the steps that are underway or have been completed to meet the new challenges. These action plans specifically mention visitors with mental illnesses and learning disabilities. History museums and historic sites in North Carolina could do similar work as modeled in the London museums. Museum educators or staff members could conduct an audit of available services and programming and then create a plan to make their institution more accessible. To do this they would need volunteers or paid consultants with experience in disability studies to work on the audit.

Both the Victoria and Albert Museum and the British Museum offer special tours and programs for visitors with cognitive disabilities and have incorporated the use of assistive technology with their programs and tours. Visitors with disabilities are able to

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119 British Museum Disability Equality Scheme,” 10.
use screen readers and scanning pens. Items like scanning pens are “helpful for people with dyslexia but may also prove useful for visitors whose first language is not English as the device can provide the meanings of individual words.”

Museum staff members, specifically museum educators, have many opportunities to continue their education. Professional development opportunities offer museum educators the chance to become more acquainted with new philosophies and practices that they can incorporate into their work. Professional development opportunities are held by educational institutions, research consortiums, as well as other museums and consultant groups. It is important for all professionals to continually update their knowledge in this area. Professional development events allow them to stay up to date on the new developments that can help them in their field.

Professional development can take place in several different forums. Some events are gatherings with expert speakers and presentations, but professional development can also take the form of workshops and online education courses. Museum educators can turn to local universities and public schools to find professional development opportunities.

The Hill Center in Durham, North Carolina, is one such institution that offers students with specific learning disabilities to enhance their achievement levels in the classroom. The program is based on the Hill Methodology. The Hill program follows a strict methodology which centers around a four-to-one student teacher ratio and is designed to meet specific needs of children. This private institution has served over 6,000 students and is nationally recognized and regionally accredited. The Hill Center’s

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120 http://www.vam.ac.uk/content/articles/f/facilities-for-people-with-learning-disabilities-dyslexia/
faculty is highly trained in dealing with children with disabilities as “approximately eighty percent of the teachers hold master’s degrees in teaching exception children.”

The Hill Center has translated their high success of educating children with learning differences into helping community members understand how to better work with those students. The Hill Center offers standard and customized professional development workshops in North Carolina as well as around the country. Over 8,000 teacher and school administrators have taken part in Hill Center professional development. These workshops would be very helpful for museum educators who have little to no background in cognitive disabilities, learning disabilities, or learning differences in general. Some of the workshops like “Understanding Brain Research and Learning Differences,” “An Introduction to Multisensory Instruction,” and “Diverse Learners: Meeting Individual Needs” are all suitable for museum educators as they discuss topics which are relevant to learning and can be applied to museums.

While most of the participants in Hill Center events are educators and administrators in public education, the Hill Center maintains its dedication to “agencies, school, and individuals interested in instructional methods or general information about learning disabilities and/or attention deficit disorders.”

Not only can museum educators look to private organizations like the Hill Center for professional development, they can also find help within the public university system in North Carolina. Most of the universities in the North Carolina system offer educational courses to their undergraduate students. Museum educators could enroll in one or more educational courses to enhance their own knowledge and abilities. Some

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121 http://www.hillcenter.org/index.php/about-us/who-we-are/faculty-degrees
122 http://www.hillcenter.org/index.php/about-us/who-we-are/overview
universities also offer workshops to the general public. The University of North Carolina Wilmington’s Watson School of Education offers such programs to the people of southeastern North Carolina. The Watson School also has a lending library where the public can checkout assistive technology devices. The library assists patrons with finding the right assistive technology for different disabilities. The staff of the library, along with university professors, conducts the informal workshops as well. Workshops like these benefit those who would not be able to afford events like those put on by the Hill Center.123

In a recent meeting with University of North Carolina Wilmington faculty, New Hanover County Public Schools Superintendent Dr. Tim Markley spoke about his desire for more cooperation and partnerships between his schools and the University.124 Partnerships like that should be expanded to include local museums. By combining higher education, public schools, and informal learning environments, area students would have a greater chance of having all of their needs met but their community. Experts in each area would be able to collaborate with each other in an effort to enhance learning achievement. Museum educators could greatly benefit from expert knowledge of university professors and researchers as well as from the everyday experiences of public school teachers.

Advocacy and support groups present opportunities for the development of community partnerships with history museums and historic sites. Local and state-wide groups like the Arc of Wake County, the Autism Society of North Carolina, and the Exceptional Children’s Assistance Center continually work with communities in

123 http://uncw.edu/ed/assist/
124 Notes from Dr. Markley talk. At UNC Wilmington Watson School of Education, Wednesday October 12, 2011.
promoting the needs and well-being of individuals with disabilities. The Arc of Wake County is an excellent example of a local organization collaborating with a museum to create programs and events for visitors with cognitive disabilities. As noted earlier, the Arc of Wake County works with Marbles Children’s Museum to host an after-hours event once a month for children with special needs and their families.\footnote{http://www.marbleskidsmuseum.org/content1422} This type of collaboration could easily translate from the children museum to a history museum or historic site.

There are many ways that history museums and historic sites can begin to meet the needs of the cognitively disabled visitor. Innovations in technology, teaching methods, increased awareness of disability, and cooperation with government agencies and local advocacy groups will benefit the history museums and historic sites of North Carolina. It will take a commitment and allocation of valuable resources to do so, but in the end, North Carolina’s museum and historic sites will become accessible centers of learning for all individuals. It is necessary to look to other types of institutions as well as out of state and abroad for successful programs and events that can provide guidance through the process of becoming inclusive. One of the biggest steps history museums and historic sites in North Carolina can take is educating their own staff about the prevalence and diversity of disability within their visitor groups. A more informed staff will contribute to better-developed exhibitions, programs, and events.
CONCLUSION

The field of museum education has grown over the last two decades to become one of the most important areas in public history. Museum educators design programs, train volunteers, and collaborate with other museum professionals in the development of exhibitions. Museum educators have a responsibility, shared by museums generally, to make their programs and other events accessible to the widest range of visitors possible. However, current museum and educator practices neglect visitors with cognitive disabilities. In North Carolina, specifically, a small survey of museums and historic sites shows a lack of programs for cognitively disabled visitors.

Individuals with cognitive disabilities have trouble with the basic functions that allow people to learn. In North Carolina, almost twelve and half percent of the public school population is served by Exceptional Children’s Services. 12.17 percent of those students having some sort of cognitive disability, whether it is learning or developmental. Individuals with disabilities have had a tenuous history with museums in the United States. Early on, disabilities were exhibited as attractions of the bizarre. Throughout the twentieth century, museum designers and curators largely ignored the disabled population. Buildings were constructed in such a way that physically disabled people could not access the exhibitions. During the same time, museums ignored the variations in the ability to learn of the visitors. Even though progressive educators like Howard Gardner and Jean Piaget demonstrated that all people learn in different ways, or by multiple intelligences and that people progress through different stages of learning.

Federal legislation helped to address the needs of disabled individuals from the 1960s to present day. Congress passed the Rehabilitation Act, Individuals with
Disabilities Education Act, and the Americans with Disabilities Act during this period and significantly affected the treatment of disabled people in the United States. Unfortunately, these laws failed to be completely inclusive of individuals with cognitive disabilities. They had a greater influence for individuals with physical disabilities.

A survey of North Carolina museums and historic sites revealed that most places in the state do not offer programs specifically designed for visitors with cognitive disabilities. Even though history museums and historic site are prime locations for school field trips, they do not have a large demand for these programs. The survey, along with the statistics of disabilities in North Carolina schools, reveals that there is a need for more educational programs at history museums and historic sites for visitors with cognitive disabilities.

In order for history museums and historic sites to become more accessible to visitors with cognitive disabilities, they will need to take proactive steps to be more inclusive. History museums and historic sites can take advantage of the large quantity of assistive technology devices on the market. These devices could help visitors with disabilities in a number of ways, from amplifying sound to using robots to help children with autism communicate better. Assistive technology is already making differences in school classrooms and other types of museums. The benefits for history museums and historic sites could be just as fruitful.

History museums and historic sites in North Carolina also can look to museums likes Marbles Kid’s Museum in Raleigh, North Carolina, as an example of how to conduct programming for disabled visitors. Marbles shows that a museum can provide
programming for special needs visitors and be successful in doing so. Marbles has held Family Fun Night for special needs visitors one every four months for the last three years.

If history museums and historic sites in North Carolina can recognize they have an underserved population in their audience, educational programs for visitors with cognitive disabilities can begin to take shape. It will take progressive museum educators to develop those programs and an involved community to help make them successful. North Carolina history museums and historic sites have the responsibility at community trustees to meet the needs of all of their visitors. Creating programs for visitors with cognitive disabilities is a big step in the process of meeting those needs.
WORKS CITED

**Primary Sources -**


Arc of Wake County. Arcwake.org


“British Museum Equality Scheme.” The British Museum Center for the Advancement of Science and Technology. Cast.org

Charlotte Chamber of Commerce. Charlottechamber.com


“Disability Schemes.” UK Legislation


Hill Center of Durham. Hillcenter.org

Indianapolis Children’s Museum. Childrensmuseum.org

Marbles Kids Museum. Marbleskidsmuseum.org

Marbles Kids Museum. Email Correspondence, October 27, 2011.

Markley, Tim. “Notes from a talk to faculty and students at Watson School of Education.” October 2011.

National Center for Educational Statistics. Nces.ed.gov

“Mission Statement.” North Carolina Division of History and Archives.
Museum of Modern Art. Moma.org

North Carolina Assistive Technology Program. ncatp.org

North Carolina Department of Cultural Resources. NCDCR.gov

North Carolina Department of Public Instruction. NCDPI.gov

North Carolina State Historic Sites. Nchistoricsites.org


The Jewish Museum. Thejewishmuseum.org

Universal Design for Learning Center. Udlcenter.org

University of North Carolina Wilmington. Uncw.edu/ed/assist

Virginia and Albert Museum. Vam.ac.uk


Secondary Sources -


Acf.hhs.gov/programs/add/.


King-Sears, Margaret. “Universal Design for Learning: Technology and Pedagogy.”


Nolen, Jennifer L. “Multiple Intelligences in the Classroom,” *Education* 85, 3, Fall 2003.


