Transforming School Museum Partnership:
The Case of the University of Florida Harn Museum Teacher Institute

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ABSTRACT

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Transforming School Museum Partnership: The Case of the University of Florida Harn Museum Teacher Institute (190 pp.)

Director of Dissertation: William S. Howard

This study examines the teacher museum institute experience at the Harn Museum in Gainesville, Florida. The proposal this study is built on is that museum education in general and museum teacher programs could function as effective tools that the school system can utilize to help promoting the educational reform movement. The ultimate argument this study attempted to make is that developing educational programs and activities will help to make museums more open towards their communities and will help to attract more audiences.

The study focused on the first five teacher institutes that have taken place at the Harn Museum in the years 2002, 2003, 2004, 2005 and 2006. The idea of choosing this number of institutes is to acquire enough data that will make it possible to make comparative study between these institutes in terms of the organizational and administrative aspects as well as in their professional outcome. Also choosing this many number of museums made it possible to examine different teachers’ experiences based on their year of participation.

The decision of using a combination of qualitative methods including questionnaire and documents analysis in this study was tied to the interest in reaching an interpretive and descriptive analysis of the museum teacher institutes’ experience. The
qualitative methods employed in this study have proven to be flexible and allowed
developing a level of contact with the institutes' participants that eventually made it
possible to learn about their perspectives and expectations. They also made it possible to
produce rich and detailed data that provided a solid ground for analysis evaluation of the
final results.

The study showed that a well-planned and carefully executed museum teacher
program will result in positive results relating to the advancement of teachers’
professional development and the creation of better teaching and learning environments.
The findings of this study highlighted the fact that museum and schools share similar
objectives and missions, and any effort to strengthen their joint ties and partnerships will
be in the best interest of the educational system and the teachers’ professional
development.

Approved

William S. Howard

Professor of Telecommunications
This dissertation is dedicated to the soul of my father, Osman Alhadi
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CHAPTER 1: INTRODUCTION

Personal Motivation in Research Topic

I remember very well my first visit ever to a museum in my country, Sudan. That visit happened by pure accident. Before that visit, I had no idea what the museum was for and what are its contents. Museum visits were not among the known extra-curricular activities in the school system where I was brought up. I spent three hours at the museum, primarily in the prehistory section, observing and reading the labels. By the end of my visit, I felt very impressed by the countless number of pieces dating back thousands of years ago. The memory of that visit remained in my mind for a long period of time, and soon after that visit I found myself starting my own collections of personal items and written records. This is contrary to the dominant vision in Sudanese society around me, which values primarily oral documentation and rarely thinks of preserving history through material evidences. Cultural and historical materials and items are widely thought of as not worth keeping.

That first visit ignited a deep interest in museums inside me. However, to my great disappointment, when I made my second trip to the same Sudan National Museum a few years later, it was the same exhibition with the same captions and labels. The only change I noticed was that I had to pay extra money for the entrance fees. My expectation was to see new acquisitions added to the museum exhibitions, to find new exhibition styles and to see new information added to the labels following the new archaeological discoveries in the country. The fact that nothing seemed to have changed and no new items had been added shocked me. This made me less enthusiastic to accompany my friends a few years later when they proposed a visit to the same museum.
However, this incident did not cause the feelings ignited during my first visit to waver. Visiting museums continued to be one of my top leisure activities whenever I visited a city or a country. Having lived in Cairo for a few years, I used my free time to visit some of the glorious Egyptian museums in the city and in other major cities in Egypt. I did the same in Jordan, Syria, England and the USA. After I joined the Faculty of Archeology at Cairo University and later the Yarmouk University Institute of Archeology and Anthropology in Jordan, visiting museums became a routine activity related to my study assignments and academic research requirements. However, the personal motivation has always been present, and I continued to visit museums during the school break or whenever I got free time. I developed a feeling towards museum visits similar to reading a book, watching a movie, or attending a live performance. All are self-educating experiences that generate new ideas and meanings, and provide a platform to aid in thinking of knowledge and life facts differently.

One practice that I continued to develop was to make any museum visit an opportunity to generate more questions or subjects to think about, rather than accepting ready-made facts. I question and later research many things, starting with the name of the museum, the style of display, who decides the historical and cultural facts that accompany the display and who has the authority to change them. I remember the first question that jumped to my mind after my first visit to the Sudan National Museum was how could a museum be “National” and at the same time concentrated on displaying cultural items and historical information related to specific regions in the country, ignoring the rest?

I also pondered the fact that the greater portion of visitors to the museums in my
country (and in most of the African countries, as I later came to know) is mainly composed of the Westerners who were in the country for tourism or other business purposes. This caused many questions to surface in my mind. Why did museums in these countries fail to attract local visitors, and who are they intended for in the first place? When I got the chance to work for the same National Museum in Khartoum, I noticed that the museum’s local visitors showed less interest in the museum contents than their Western counterparts, and that they spent the greater part of their short visits in the cafeteria or the museum’s garden, enjoying a private time.

My interest in museums led me also to question their purpose and function. My undergraduate academic training taught me to look at museums in a way that doesn’t differ much from seeing them as “cabinets of curiosities”. This approach started to change after being exposed to many museum methods and philosophies. When I first encountered the idea of the educational role of museums, it brought to my mind another set of questions. Why do we need other institutions to get involved in educating people, if we have schools? Why not pour all the educational resources into the school system to make them stronger and better qualified to undertake their intended mission? What makes the quality, methods and principals of education at these institutes different from the ones that schools offer? My graduate courses raised my awareness of different educational philosophies, new pedagogical models, advanced theories of knowledge, leadership concepts and learning that can be linked to the philosophy and purposes of museums.

Another motivation behind my interest in museum education is that this field is still in its early infancy throughout all of Africa, and it is almost totally unpracticed, or may even be unheard of, in my own country. By bringing back research experience and a
developed knowledge of this field, I am hoping to assist in the decolonization of the idea and practice of museums in my country, and in Africa in general, to make them more open, indeed truly representative and attractive to all sectors of the population. Museums are still seen in that part of the world as exotic institutions that have no roots in homeland soil. Promoting a wider perspective of museums as institutes with missions of education and edutainment, and associating them with the planning of economic, cultural and social policy and development in Africa will help their roots deepen, and their stems grow stronger.

In the first days after I arrived in Gainesville, Florida in the summer of 2005, I visited the Samuel. P. Harn Museum (The term “The Harn Museum” will onwards be used in this dissertation). I knew about its collections, educational programs and activities. Among these is their annual teacher institute program. After consultation with the museum department of education and my advisor, I came to the decision of choosing this topic for this dissertation.

**Introductory Framework**

Museums around the world feel a mounting pressure on a daily basis to abandon their classic model and to develop a new vision and practical theory in order to better develop and reshape their cultural and social agendas and ties to communities (Walsh-Piper, 1994). Among the number of services museums currently offer to communities, education stands out as the most prominent in making museums change their profile dramatically. Many museums have worked restlessly to transform their practice of education from being one confined to school visits only into a broad series of activities such as teacher training and professional development programs, continuing education,
educational community outreach projects, lesson plans designing and online and distance learning services (Roberts, 1997).

This transformation is intended to elevate museum education to the horizon of an inclusive educational experience aiming to make visitors view issues from multiple perspectives and break down any stereotypical assumptions regarding representation and interpretation of cultures and materials. This intersects with the continuous and serious efforts by general education specialists and theorists to reform concepts and practices of education.

A central assumption this research raises in relation to the discussion on educational reform is that a well founded partnership between schools and other community-based institutions such as museums is an essential component for any education reform movement to reach its destination. This happens through the creation of a broader learning environment that makes education less academic and more firmly connected to people’s lives and needs. This introductory framework will attempt to establish some links that make museum education an effective and essential agent in support of school system reform movement.

The fields in which museum education appears to be in support of general education reform are multiple. The following sections in this chapter will briefly present and discuss the impact of museum education on transforming the concept and practice of school teaching, and the contribution it makes to the diversification of school teaching resources. Another area that will be discussed is the effect museum education has on the development of lifelong learning habits, and making it a true aid to school education.

There have constantly been voices and efforts to reform the prevailing perception
and practice of education to make it a process involving cognitive, emotional and social
dimensions as well as different levels of engagement and reflection. The search for a
school system that offers consideration to activity-based and hands-on learning, inquiry-
based learning, problem solving techniques and advancement of cultural and social
intelligence has never weakened.

J. Dewey (1997) suggested creating learning environments that are social,
dynamic, and learner-driven, while still being well designed and orderly. He proposed
that planning such learning environments involves being “flexible enough to permit free
play for individuality of experience and yet firm enough to give direction towards
continuous development of power” (p. 58). These assertions are foundations of inquiry-
based education and informal learning. A. Whitehead, in his “Philosophical Essays”
(1967), called for education to be a process of continuing inquiry and the role of teachers
to be to facilitate self-directed inquiry. Howard Gardner's works and theory of Multiple
Intelligences (1975, 1989, 1993 and 2001) have opened new horizons to educators and
school administrations to reconsider methods of testing, evaluation and teaching in
general and to reflect on curriculum assessment and pedagogical practices.

A major thrust towards the realization of these awaited qualities could be
achieved by combining the efforts of an articulated network of cultural and educational
institutions such as museums, galleries, public libraries and others, with schools.
However, in seeking partnership with other institutions, schools need partners whose
contribution is more than periodic projects, casual events, and field trips. Schools need
partners who will be willing to embed their resources within the school system to create
an environment of critical thinking and help schools to withstand changes and meet community needs.

Museums are known to have a varied nature of educational activities and concepts, and a collection of authentic learning resources such as objects and documents. Combining their efforts with schools will generate a unique educational domain that can energize school curricula, and eventually help in changing the way instructional delivery is conceptualized.

Reform of educational systems is not confined to introducing new theoretical concepts. Equally essential here is to give teachers more opportunities to diversify their professional development and teaching resources. According to the Organization for Economic Co-operation and Development (OECD) (1992), “.. improving educational quality has become widespread priority and in this the role of teachers is pivotal. Successful reform is realized by and through them” (p. 79).

By associating themselves with museums and their different teaching techniques, teachers recognize the constant need for new interdisciplinary teaching methods and non-traditional ways to reinforce their existing curricula (Mackety, 2003). By using authentic materials to develop information, observation skills, discussion and dialogue, teachers get to understand the importance of making available to students an authentic learning methods to shape their own knowledge. These benefits are the core of teachers’ relationship with museums, and will be the focus of the coming chapters in this research.

The quest to reform educational systems has included, among other solutions, developing a new profile of education that gives more attention to nontraditional educational approaches, such as lifelong learning. Lifelong learning is a self-directed
learning process focusing on the value of the learning experience in its own, and emphasizes the learner and his making of choices. Some of the recent writings on lifelong learning (Claxton, 2000; Hiemstra, 2002; Jarvis, 2004) attest to its effect on the educational system, and transformation of understanding of both education and learning. The message conveyed through lifelong learning programs to school children is that education has burst explosively from its physical and temporal boundaries and should become a lifelong activity. Pedagogically, this shows lifelong learning as a very effective tool in demolishing the artificial boundaries between the classroom and outside institutions and bringing students into direct contact with these institutes. It also shows that the decisive elements in learning are the individual’s willingness and interest rather than the classroom and the authoritative teachers.

Since the early 1970s, following the students upheavals in much of the world during the late 1960s, an international UNESCO committee was formed to redefine, “the new aims to be assigned to education as a result of the rapid changes in knowledge and in societies, the demands of development, the aspirations of the individual, and the overriding need for international understanding and peace” (Delors, et al., 1996, p. 43). The Committee’s report “had the great merit of firmly establishing the concept of lifelong education” (p. 43) to challenge the ailing traditional education systems. This was later supported by the recommendation of the UNESCO general conference of 1976 which linked restructuring the existing school system to developing an entire educational potential outside the formal educational system. This recommendation indicates that the entire formal educational system should be restructured to produce lifelong learners.

Lifelong learning is another area that brings museums in focus because of their
primary involvement in free choice lifelong learning. The potential contribution of
museums to lifelong learning has been widely acknowledged (Illeris, 2006, Durbin,
1996). In Gbmez’s view, “Museums have several uses in lifelong education, in particular
in stimulating inventiveness and the desire for discovery and by affording a global and
integrated view of ecosystems” (1973: 159). Linking students to museums through
partnership projects will expose them to new ideas and alternative perspectives on
education and learning and will locate them within an environment that understands the
culture and nature of learning differently. Museums’ practice of lifelong learning
encourages learners to develop a highly individualized commitment to learn, to advance
and change according to their personal choices and interests.

Research Problem and Research Questions

Quoting K. Dhingra (2001)

In the absence of effective teacher education with a focus on the
power of informal learning experiences and learning experiences in
the museum context, museum school partnerships frequently end up
being no more than field trips that are sometimes unconnected to the
classroom curriculum. (p. 4).

A glimpse through the academic and research data pertinent to museum education
confirms the fact that more emphasis has been placed on student-related programs, and
only very scanty information is available regarding the characteristics, organization and
results of museum teacher programs. This brings to the fore the same misconception in
the school system education that students are the primary focus of the education process.
This research proposes that museum teacher programs in general and museum teacher
institutes specifically represent a crucially important component in developing the collaborative process between schools and museums. In order to explore this proposal, this study will seek to answer a series of questions including:

- What are the logistic and organizational needs involved in setting up a successful museum teacher institute?
- What are the determining factors that make museum teacher institutes a successful asset in support of teachers’ professional development and improving classroom environment?
- What are the factors that museum education departments and school teachers need to direct their consciousness towards to make a museum teacher institute experience best used in promoting museum teacher relationships, improving school education, and in the same time, developing museum educational mission?
- How can museum and school participation and co-operation in museum teacher institute programs be sustained and improved?

**Statement of Purpose**

This research will attempt to present an analytical description of the teacher institute experience of the Harn P. Samuel Museum of Art in the state of Florida. The purpose behind this study is to provide an in-depth understanding of the role and purpose of museum teacher institutes in terms of their ultimate contribution to both museum and school system development. This discussion will bring to light the role of museum-school partnership in promoting teachers’ professional development and the ultimate contribution it offers to school system development and reform. It also intends to explore museum education's role in providing school teachers with enhanced knowledge, new
teaching techniques, advanced training and also offering them a well-prepared 
environment to design and practice new and creative teaching methods and progressive 
curriculum development strategies.

**Significance of the Study**

Studying museum teacher institutes as part of museums’ educational role will 
reflect on the prominent changes taking place within the concept and practice of 
museums. In recent years, the most prominent characteristics within the established 
formal educational institutions are the rising numbers in students’ enrollment, 
introduction of new school systems and educational policies, the changing school 
economics and demographics, development in quality of education and the community 
; Cohen & Hill, 2001). All of these factors combined pose a unique set of challenges 
within any school system to search for the best venues for promoting a teacher's 
professional qualifications as well as to ensure that schooling is conducted in the best 
manner possible. These factors, tied to the growth in the number and quality of museum 
educational programs and the rising popularity of museums among communities have 
made museums an unmistakable destiny in the search for teachers’ professional 
development. Yet, more research on each aspect of museum educational programs needs 
to be conducted. This research undertakes the part of studying museum teacher institutes. 
The significance of studying these programs is threefold:

For museums, the study is thought to offer an analytical critique for one 
important activity within their educational area. This is expected to help museums build a 
better understanding of the weaknesses and strengths of this aspect, and further advance
their planning skills for future programs. It will also show what benefits museums obtain from organizing and implementing museum teacher institute programs. The study will reflect on the opportunities museums get during these institutes to listen to educators’ insights and comments and use them to develop the contents of their educational programs. The study will also show how these institutes help museums to strengthen their educational service by acquiring new audiences, publicizing their mission through media coverage, disseminating scholarship, and moreover, improving staff skills and experience.

For schools and teachers, the study is important in showing that museums could top the list when they seek teacher professional development and teaching resources outside of the school system. The study will reflect on how these programs may form a big leap in the right direction of making teachers more open-minded, confident and knowledgeable. It is also important in bringing to the awareness of schools and the surrounding communities other approaches and resources that will eventually help promote the overall educational reform process.

For the community, the study is significant in providing evidence that whatever support they give to museums is indeed paying off through programs such as the teachers’ training. It is also important in helping communities to understand one of the practical aspects of museum education. In addition, it will demonstrate to the communities that the gap some people have perceived between themselves and museums is gradually being bridged.
Definition and Discussion of Major Research Terms

Museum

The roots of modern museums trace their beginnings to the private collections of the Renaissance period when wealthy merchants, nobilities, ruling houses and the dignitaries of the church in Europe created their private collections to symbolize social prestige, power and enlightenment (Ames, 1993; Edson, 2003). The same concept accompanied the first public museums of the eighteenth and nineteenth centuries which were constructed to reflect the Western concept and classification of world civilization, culture and power. Through their role in defining cultural identity, and consolidating social and economic status, museums were developed and continued to be an integral part of the mainstream political, cultural and social power establishments and ideologies (Ginsburgh & Mairesse 1997; Sandell, 2002).

The 19th century is marked by a steady and gradual shift in museums’ concept from being “cabinets of curiosities” into institutes of public nature (Walsh, 1992; Macdonald 1998). The striking growth in the number and scope of museums and their breathtaking monumental architecture as seen through the numerous newly opened encyclopedic public museums in Europe and North America during the 19th century stimulated an active discussion about their role, purpose and contribution to society. This discussion continued through the 20th century and attempted to understand and evaluate the impact of museums on the social, economic and political environments at the local and world-wide levels (Leon & Rosenzweig, 1989; Ginsburg, 2006).

The first part of the 20th century brought to the world a number of social and political events and new technologies that made social, demographic and cultural
structures throughout the world change drastically. These developments were also reflected in museums’ procession and development, and many challenged the dominant conservative policies and views of museums at the time. An example is the move by the progressive and influential patrons of arts, Ms. L. Bliss, Mr. Cornelius J. Sullivan, and Mr. John D. Rockefeller, Jr., in 1929 (Kantor 2002). Their collective efforts and persistence lead to the creation of The Museum of Modern Art in NY City. The founding director of this museum, A. H. Barr made it clear that he was determined to, “create an institution that would offer different and challenging exhibition materials and pedagogical approaches” (Message, 2006, p. 27).

These efforts and others made museum professionals question the scholastic and scientific definition of museum, and to specify its role towards communities. The answer came in the founding resolutions of the International Council of Museums (ICOM) in 1946, which defined museums as, “… collections open to the public, of artistic, technical, scientific, historical or archaeological material, including zoos and botanic gardens, but excluding libraries, except in so far as they maintain exhibition rooms”. ¹

A step further towards restructuring and changing museums’ thinking and practice came in the birth of the New Museology movement. The core of New Museology is the changing role of museums towards education and community service in general. It represented, "a movement of criticism and reform aimed at incorporating new developments in the social and human services; revitalizing techniques of display, exhibition and communication, and ultimately altering the traditional relationship between the institution and the public” (Poulot, 1994, p. 67). M. Ross (2004) views New

1 “www.icom.museum.org”
Museology as a “transformation of museums from being exclusive and socially divisive institutions” (p. 84).

The term “New Museology” first appeared in 1958 in the USA when it was used to voice a concern that museum practice and ideology were no longer relevant and the whole museum profession had to renew itself as part of a new social movement and commitment (Mills, et al., 1958). The contributions of the French museologist Andre Desvallées in the 1980s (Desvallees, 1992) are recognized to be the main pillars in the New Museology movement. Another remarkable milestone in laying the theoretical foundations of this orientation in museums’ history and development came with the publication of “New Museology” in 1989 (Vergo, 1989). This volume comprised a number of articles reflecting on the dominant debate on the subject from different directions. The wide acceptance to the idea of New Museology guided its supporters to organize themselves in the “Movement for a New Museology” which sets its objectives in making museum professionals and cultural institutions aware of today's major social problems, to organize activities relating to cultural property and to participate as a mediator in museology debates within their communities.

Throughout its history of existence, the definition of museum has witnessed a series of changes and developments. This is due to the evolving internal and external museum structures and to the rising desire to make museums true community-based institutions. The current standard international definition of museums is the one suggested in 2001 by (ICOM) and published on their web site\(^1\) in which the museum is seen as a "permanent institution in the service of society and of its development, open to

\(^1\) www.icom.museum.org
the public, which acquires, conserves, researches, communicates and exhibits, for purposes of study, education, enjoyment, the tangible and intangible evidence of people and their environment”.

The changing definition and the rising number and categories of museums all over the world are indicators that museums are increasingly gaining popularity and their concept is evolving. The US Institute of Museum & Library Services\(^1\) (IMLS) estimated that a total of 17,500 museums are operating in the USA, while the UK online National Library Statistics\(^2\) estimated a number of 2,500 museums in the UK. The National Register Publishing (2006) published the Official Museum Directory and indexed more than 70 groups of museums, with each group concentrating on a particular subject. These categories include fine arts, applied arts, craft, archaeology, anthropology and ethnology, history, cultural history, military history, science, technology, children's museums, natural history, numismatics, and philately. Within these categories many museums specialize further, e.g. museums of modern art, local history, aviation history, agriculture or geology.

One of the recent additions due to the changing thinking in the museum profession and the impact of the New Museology movement is the growth of “ecomuseums”. The concept of ecomuseums varies, but according to S. Peer (2006), it “portrays a local community and its history, whether rural or urban, through the depiction of its geography, natural resources and built environment, as well as the customs, skills and subjective experiences of local population” (p. 296). The vital factor in measuring ecomuseums success is the participation and involvement of local inhabitants and the

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\(^1\) [www.imls.gov](http://www.imls.gov)

\(^2\) [www.lboro.ac.uk/departments/dils/list98/nat.html](http://www.lboro.ac.uk/departments/dils/list98/nat.html)
degree to which they become an effective part in museum authority rather than passive consumers.

While the ecomuseum movement was flourishing in Europe in the 1970s and 1980s, the related but distinct "interpretation centers" movement appeared in North America. These interpretation centers basically integrate information on natural and cultural resources and seek to “organize and display to varied audiences the significance of a theme or territory, and its corresponding values, by means of all conceivable forms of communication” (Organization for Economic Cooperation and Development, 2005, p. 71).

The fact about the rapidly and dynamically evolving communities around museums is forcing museums to think not only about the present but also to have future plans. Long before the beginning of the 21st century, many of those in the museum profession realized the need to plan ahead to make museums ready to face responsibilities and challenges of the new century.

In 1982, a “Commission on Museums for a New Century”, under the umbrella of the American Association of Museums, began work. The Commission objectives were “to explore current social, economic, political and scientific trends that will affect the future of museums; to identify trends in the operations and needs of museums; and to describe the resulting opportunities and responsibilities facing the museum community” (Bloom, et al., 1984, p. 11). The seven conditions pointed out by this commission that need to be approached with fresh insight have indeed become a road map for museums all over the world in their search of a better future. These recommendations can be summarized as follows:
• Pressing needs concerning the growth and care of museum collections must be addressed.

• More collaboration is needed between museums and cultural and educational institutions.

• Museums' system of governance needs re-examination to ensure that they will meet future demands.

• Museums need a better approach to market their assets in relation to the contributions they make to the quality of human experience.

• Museums must commit themselves to greater diversity of their internal community (workforce) to be fully representative and reflective of the society they seek to serve.

• More data concerning museums profile is needed and must be collected and made available to researchers.

• The unstable economic condition most museums encounter must be addressed.

**Museum Teacher Institute**

The central term in this research, Museum Teacher Institute, is used in reference to one category of teachers’ professional development programs, organized and carried out entirely or partially by museums to help school teachers successfully integrate museum materials into their curriculum and classroom activities. Through presentations, museum illustrations, panels, demonstrations, hands-on projects, and interactive discussions, teachers typically receive a multidisciplinary training in understanding and teaching with and about museum collections, acquire advanced knowledge and methodologies, and create and test new teaching modules (Shore, 2005). This occurs by
introducing teachers to museum teaching techniques and offering them the necessary background about the museum and its educational programs and materials.

The ultimate target of these institutes is to build up a creative educational process by bringing to the awareness of teachers the importance of focusing on discourse and new methods of exploration. It also aims at providing them with the opportunity, techniques and knowledge to turn their class instruction into an attractive and interactive experience. When designed effectively, organized systematically, and carried out professionally, their outcome is expected to have positive marks on the pedagogical and learning process in both museum and school. These will be discussed further in the course of this research.

Although the idea remains the same, different museums use different names for these programs. Since most of these institutes are organized in the summer; the majority of museums call them “teacher summer institutes” while others call them “teacher training institutes”. In this dissertation, the term “museum teacher institute” will be used because it is the most dominant and widely used one. However, the other terms will also be used interchangeably depending on the context and reference.

As mentioned before, promoting the teaching force is a crucial component towards implementing and sustaining school education reforms. Museum teacher institutes and museum resources in general contribute to this end by putting their resources and skills at work. Teachers come to these programs academically and professionally able, but there is always room and a need for a better educational planning, high quality instruction, and to acquire any possible assistance that makes teachers teach more effectively.
It is important here to highlight what museum teacher institutes possess to make their contribution to teacher professional development profitable and different from other non-museum training programs. Juan Navarro & Aimee Verdisco (2000) listed a series of training programs that teachers usually join in their search to promote their professional performance such as classroom-based training, continuing education and intensive use of group training and networking. With the common denominator in these programs being the focus on the direct, immediate and practical need of students, they are still, in J. Little’s view (1993), “not adequate to the conceptions or requirements of teaching embedded in present reform initiatives” (p. 129).

There is an urgent need for a training that teaches more than the prescribed curriculum. Museum teacher training is different in the sense of its distinctive practice and meanings where teachers become exposed to the use of hands-on activities, observe modeling teaching, and get acquainted with effective ways to use museum resources in classroom teaching (Chin 2004). The essence of this experience is tied to the new meaning museums are advocating by having culture, education, enlightenment and entertainment appear inseparable. This is, in short, the kind and meaning of education museums try to dispense through their programs including teacher institutes.

It is important to realize that not all museum teacher institutes are identical. Although the basic idea of these institutes is planted in using museum resources in classroom teaching, their techniques and methods are as varied as the museums’ mission, range, types and nature of collections and area of specialty. Teacher institutes in science, technology and natural history museums focus on helping educators to use museums and their exhibits and collections to develop science and environmental hands-on activities
and field projects. Programs of arts, archaeology, anthropology, ethnography and history museums are oriented towards cultural appreciation and acknowledgment, diversity and multiculturalism.

The focus of this research is teacher institute programs in arts museums. It is initially important for the ultimate analysis of these programs to look at them through the museums curatorial concepts that drive their collection acquisitions and their agendas of public display. These approaches are usually rooted in academic disciplines such as anthropology and fine arts which contribute to their understanding of knowledge and the way it should be presented in a classroom setting.

In my review of the teacher programs of a group of cultural anthropology oriented museums such as the Museum of Anthropology at the University of British Columbia and the Anthropology Museum at Northern Illinois University, I found that these museums offer teacher programs that lean towards bringing anthropological information, concepts and issues to the classroom. These issues cover a range of subjects including the dynamics and the complex process of culture, continuity and change, multiculturalism and cultural identity (Dobkins, 2003). Here, programs utilize museums’ cultural artifacts to provide teachers with cross-cultural teaching tools to assist them in acquiring and developing the necessary analytical skills in order to understand different cultural phenomena. Anthropology-led teacher programs help teachers become familiar with the meanings behind various cultural expressions and experiences and the use of cultural products as a source of identity, creativity and diversity (Bean 2000).

On the other hand, museums with fine arts curatorial traditions direct their training programs to help teachers of all subjects and grade levels to integrate art into
their daily classroom teaching and curricula and to think about museums as a virtual extension of their classrooms. These programs strive to present art-related education as an approach capable of connecting a wide range of creative expressions with classroom learning (Cahan & Kocu 1996).

**Teachers’ Professional Development**

This research presents “teachers’ professional development” as one of the major benefits teachers can get from joining a museum teacher institute. In order to decide if these institutes actually help teachers to achieve this goal, we need to know what the concept “teachers’ professional development” entails. The too many attempts to study the subject of teachers’ professional development (Little 1993, Lord 1994, Clement & Vandenberghe 2000, Calderhead & Shorrock 1997) focused on its impact on many aspects in the teaching profession such as:

- Providing teachers with advanced teaching skills, qualifications and knowledge to help them accomplish their teaching task in a better way.
- Improving and increasing teachers’ knowledge of the academic subjects and teaching approaches and enabling them to become better qualified.
- Giving educators the knowledge and skills to provide students with the opportunity to meet challenging state and national academic content standards and student academic achievement standards.
- Advancing teacher understanding of effective pedagogical strategies and classroom management skills.

This research will adopt a museum-based concept of teachers’ professional development which stresses the importance of assisting teachers to become more
acquainted with collaborative authentic content knowledge teaching and the creation, management and development of interactive learning environments. This perspective shows teachers professional development as a continuum process that doesn’t end with acquiring new academic and technical teaching skills. The core issue in museums’ contribution to teachers’ professional development is to offer them an extensive expertise in making their teaching a continual process of trying different teaching approaches, exploring a variety of possible solution to different situations, and constructing ideas, and testing those ideas through discussion and sharing personal and professional experiences with peers and learners alike.

Teaching resources is a crucial element in making teachers reaches a high degree of preparedness. By using museums instructional resources such as audio visual and written resources, teachers get a big boost to their teaching quality that helps them to carry out their duties in a more relevant method.

Research Organization

This study will come in six chapters and a conclusion. The first chapter introduces the study and includes a research background, statement of the problem, research questions and hypothesis, significance of the study, discussion and definition of research main terms, limitation and delimitations and research layout. Chapter two will include a review of literature. It will summarize the state of research and knowledge relating to museum education, theoretical framework, school-museum partnership, museum teacher institutes and museum teaching methods and techniques. Chapter three will introduce the research methodology. It will also present the research design, research participants, and will discuss my research setting and ethics, reliability and validity and research timetable.
Chapter four will present the results obtained from analyzing the records related to the first five teacher institutes at the Harn Museum to highlight their programs and organization. This will be followed by analysis of the teachers’ gains from participating in these institutes. Chapter five will analyze the results from the survey that has been conducted among the teachers who took part in the Harn Museum teacher institutes. Present include discussion and analysis of research results. This will be followed by a concluding chapter where summaries of research findings and recommendations for future studies will be presented.
CHAPTER 2: REVIEW OF LITERATURE

Introduction

This chapter surveys relevant literature on the theoretical models in museum learning, museum school partnership, museum teacher institutes and museum teaching techniques. It includes an analytical overview of previous research in the major themes related to the subject of this research.

A Synthesis of Theoretical Models in Museum Learning Research Approach

Museum education has its theoretical roots grounded in many disciplines including sociology, psychology, anthropology, history and philosophy. However, in order to find the extent to which a museum learning model is coherent, solid and applicable, there are specific conditions it has to meet. It should possess a clear understanding as to how learning happens. It should also have a clear vision as to what factors influence learners’ engagement and promote their motivation to learn. Also it should possess a foresight to help with the conceptualization, design and presentation of the subject curriculum, how it plans to handle the highly diversified capabilities and interests of learners, and the way it visualizes educators’ role in facilitating the instruction. These are all decisive elements relating to the effectiveness and validity of a museum learning model that need to be considered very carefully.

Practically no two teaching situations are exactly identical. What museum education departments and teachers need to be aware of when choosing a theoretical path is that it gives meaning to what they do, and it makes learners generate meaningful questions about what they think they know. This makes teachers as well as museum
education departments responsible for developing an understanding to both the common
and the specific aspects of the model they opted to follow.

Many theoretical models came out in the area of school education following the
writings of John Dewey, the works of Piaget, and the socially situated theories of learning
of Vygotsky. Examples of these new theoretical models are the inquiry-based and event-
based learning models, constructivist, adult learning theory, cognitive dissonance model,
connectionism, elaboration model, experiential learning, functional context, information
processing model, phenomenonography, the social development model, and the structural
learning model. Over the course of the last two decades, museum education professionals
and theorists have been closely observing the many different ways in which these
theories and models have impacted educational research and school education. This
convinced them to adapt some of these learning and teaching models and to use them in
museum contexts given the similar mission and the intended educational outputs the two
institutions are sharing.

Museum education will not be correctly conceived and successfully carried out
without conceptualizing the wide range of roles and functions of museum. Museums
“represent the coexistence of a range of different convictions and beliefs, from the past
and present, between different epochs of the past, and between different value-systems in
the present” (Hooper-Greenhill, 1999, p. 22). This has led to making museums very
effective agents in communities’ economic life, cultural policy, and social change and
elevated them to assume a remarkable role in the formation and development of
communities’ knowledge and enlightenment. The fact that the role of museums is rapidly
becoming a “synthesis” of a wide range of roles has to be reflected in museum research- a task this research intends to shoulder.

The idea of looking at the museum’s role from a synthetic approach is not new. This is, in fact, a characteristic of the first half of the twentieth century, when researchers in museums field as well as in others fields such as anthropology, music, theater, visual arts and literature fell under the influence of this approach. The synthetic approach is selected because it can provide a basis for an expanded range of interpretive museum education models which will eventually be synthesized into a unified whole model. In this sense, synthetic approach is not a synonym of analysis. It is an interpretive approach that offers, in Rogers’ words (1996, p. 14) “the analysis of the analyses”. Jackson (1980, p. 438) suggested that this research approach could be used to:

- Appraise new development in the field of research.
- Verify existing theories or develop new ones.
- Synthesize knowledge from different lines of research.
- Infer generalizations about substantive issues from a set of studies directly bearing on these issues.

The sharp distinction between the different phases of synthesis and analysis is best described in Gharajedaghi and Ackoff’s (1985) account:

Synthetic thinking is required to explain system behavior. It differs significantly from analysis. In the first step of analysis the thing to be explained is taken apart: in synthetic thinking it is taken to be a part of a larger whole. In the second step of analysis, the contained parts are explained: in synthetic thinking the containing whole is explained. In the
final step of analysis, knowledge of the parts is aggregated into knowledge of the whole: in synthetic thinking understanding of the containing whole is disaggregated to explain the parts. It does so by revealing their role or function in that whole. Synthetic thinking reveals function rather than structure. It reveals why a system works the way it does, but not how it does so. Analysis and synthesis are complementary: neither replaces the other (p.23).

With too many theories and interpretive models of museum educational activities already existing, the synthetic approach will provide a more interdisciplinary and comprehensive framework for discussing, analyzing, interpreting, and conceptualizing museum teacher institutes.

**Theoretical Models in Museum Learning**

The following discussion will present some of these theoretical models and their reflection on both the school system and museum education. However, it is important to emphasize that learning models are interconnected, intersect with each other, rely on each other, and borrow from each other. No single model is adequate and capable of efficiently shouldering the task on its own. It is now clear that museum education departments have realized the importance of integrating various facets from a variety of educational theoretical models into their activities and programs. By doing so, this will result in enriching their programs and will help them form a better perception of how learners develop new ideas and skills, perceive, understand and process information, and how they can be motivated to learn.
The Constructivist Model

The late 1970s was marked by a shift in school instruction from the behaviorist model to constructivism (Brooks & Brooks, 1999). To understand the constructivist theory in education, we have to make a flash-back, to be aware of the factors that led to the rise and demise of behaviorism, the predecessor of constructivism. The behaviorist model draws from the ideas of Pavlov, J. Watson and E. Thorndike, but B. Skinner’s (1957) contribution to the theory of behaviorism is the most remarkable in this field. Skinner’s theory contends that human behavior is controlled by the environment and can be shaped through reinforcement and punishment.

Behaviorism led to designing school curriculum models that depended on direct instruction, detailed objectives, and a system of rewards and punishment. Teaching, according to behaviorists is an activity “in which some people (teachers, etc.) control others (students) by using means which do not respect their purposes or personhood” (Daniels & Coombs, 1990, p. 139). Behaviorists looked at learning as a simple cause-and-effect proposition, scaled by learners’ outputs (achievement measured by right and wrong answers and structured feedback).

A decisive factor in the behaviorist model is the educators’ work to shape a series of stimulus-response events, and the learner's feedback and responses to these stimuli. This made the whole educational process dependent on the knowledge of the “experts” who package it, disseminate it, test it, and then reward its consumers with credentials and grades. The behaviorist model has been discredited for denying “the existence of the persons in the moral sense of the word” (Daniels & Coombs, 1990, p. 139), and for giving no consideration to learners’ prior knowledge and their knowledge-acquisition
structures. These qualities have come to be valued as key factors in the constructivist learning model.

The constructivist model stands on a central concept that emphasizes “the mental processes of the individuals and the ways in which they construct knowledge of the world from within” (Gergen, 1995, p. 28). This perspective views learners as potential contributors to the meaning making process when the teaching medium and subjects are designed in a way that makes them closely relevant to their interest.

The process in this model involves learners’ active seeking and making of meaning supported by learners-based instruction. The teacher’s role here is to facilitate the environment in which “students undergo a certain amount of cognitive dissonance, and devising tasks that hopefully lead to a reorganization of existing cognitive maps” (Richardson, 1997, p. 5). Teachers’ encouragement to students to voice out their opinions, questions and give feedback is important as the overall learning assessment occurs while students are engaged in activities and discourse.

Physical involvement in constructivist contexts is a necessary condition and highly desirable for the learning to take place, but it is not sufficient. Hands-on activities should lead to minds-on activities in order to engage the thinking, memorizing, and sensing skills to work collectively in support of the learning process.

The 1990s have witnessed museums’ wide acceptance to the idea of constructivist learning concepts in their educational activities. This is based on the view that visitors are not a passive, homogeneous mass of people. They are individuals who have their own particular needs, preferred learning styles, and social and cultural agendas. Many museum professionals have expressed their opinions as to how the constructivist museum
should be. T. Caulton’s (1998) very inclusive statement and description goes as follows:

The constructivist museum accepts that visitors construct their own
knowledge based on their personal, social and physical context for the visit.
Material is presented so that it meets the educational needs of the visitor
rather than the subject of the storyline, the social, political, cultural or
historical context, or the properties of the object. In other words, there is no
single way to interpret the material presented. Visitors can enter and leave the
exhibition at any point, as each exhibit stands alone on its own merit. A range
of interpretive devices are introduced to stimulate all Gardner's Multiple
Intelligence. Opportunities are provided for visitors to make connections with
familiar concepts and objects, for it is only by making connections with the
familiar that we reinforce or challenge our existing knowledge, to make
meaning of our experiences (p. 37).

G. Hein (1999), a strong advocate of the constructivist museum theory, agrees that
using the constructivist approach in museum education contexts helps museums to
respond to the dispositions of visitors and maximize the potential for learning. Hein’s
constructivist museum model takes both epistemology and psychology into account. His
proposed museum lacks predetermined sequence in order to prompt learners to move and
explore freely at their own pace. It also provides multiple modalities and different
possible interpretations and expressions to encourage multiple intelligences. It
emphasizes the importance of giving opportunities to visitors to make connections with
familiar objects on a personal level to develop personal experience with real objects and
at the collective level to encourage group interaction and sharing to promote collaborative learning.

To trace the shift from behaviorist to constructivist learning models in museums, we need to examine the developments in the methods of how information is transmitted, and the criteria of determining whether or not learning is actually occurring. A behaviorist would argue that knowledge is transmitted through dissemination of information from the exhibit to the learner while a constructivist would suggest that the essence of an exhibit lies in providing learners with the opportunity to experiment with the process of trial and error. Moreover, to make a judgment on whether or not learning is taking place, a constructivist, on the contrary from behaviorists, would pay exceeding attention to the visitor’s prior knowledge. Constructivists value the fact that it is upon this prior knowledge structure that learners establish their new information, create new links and meaningfully integrate new knowledge into their conceptual structure (Jeffery-Clay, 1997, p. 3).

**The Critical Pedagogy Model**

Critical pedagogy has no static definition and accordingly has undergone many transformations following the continuous search by educators for new teaching strategies to match the rapidly changing social and cultural contexts. An important entrance to this model is to understand that it is not just about schools. It is, borrowing Kanpol’s (1999, p.185) description, a "multidimensional” approach that considers many areas and factors dealing with schooling and the wider cultural environment. These include multiculturalism, gender and race issues, educational leadership, literacy, professionalism, educational reform, popular culture, and spirituality.
The theoretical foundations of this model rest on the perspectives of Freire (1970) and other later theorists such as H. Giroux (1992). They strongly opposed the traditional student/teacher relationship (the banking concept of education), where the teacher is the active agent, the one who knows, and the students are the passive recipients of the teacher's knowledge. In his stand against the banking concept of education, Freire was actually expressing his opposition to an educational system that subordinates students and propagates oppressive political and cultural structures. The banking education system uses teaching methods and concepts aiming to make students believe that there is no other situation better than the current situation and any questioning of that system is wrong and unacceptab.

A priority of critical pedagogy when used in school circles is to voice out the “the contradiction between what schools claim to do and what they actually do” (Giroux, 1992, p. 153). This occurs, according to Freire, by liberating and questioning education (Freire, 1970), by turning it into a “humanizing” process to make learners feel powerful enough to question their lives and position in society. In this regard, critical pedagogy firmly depends on the efficiency of educational theory and teaching and learning practices and their impact in raising learners' critical consciousness towards any appearances of unjust social, political, and economic power systems.

Critical pedagogy envisions classrooms as a site where both educators and learners are jointly and equally responsible for a meaningful dialogue, by which new knowledge, grounded in the experiences of students and teachers alike, is produced and developed. In this sense, the critical pedagogy model intersects with many other learning models such as constructivism through their joint emphasis on meaningful investigation,
creation of a student-based interaction, problem solving techniques, and a content related curriculum.

Critical pedagogy in museums is helpful in “articulating the relationship between museums as cultural organizations and museums as sites for learning” (Hooper-Greenhill, 1999, p. 22). Using this model in museum contexts means designing exhibitions and presenting materials in a way that accepts learners’ questioning and challenges dominant cultural and political interpretive views. In other words, it is a model to help learners and visitors reach a level of critical consciousness and extract meanings that are empowering and supportive. In this environment, teachers and museum educators encourage students to question exhibition ideologies and museum practices that might be socially and culturally demeaning or exclusive, and to generate liberatory collective and individual responses based on their own understanding and life experiences.

The critical pedagogy model in museums also examines the position of public cultural institutions in expanding the meaning and relevance of the culture of communication and its role in consolidating concepts of identity, knowledge and power. It works to make learners develop concepts of critical thinking and to challenge the collective mind of their communities. Examples of these can be through:

- Encouraging learners to use museums’ collections to critically investigate and evaluate a concept or event in their community.
- Encouraging learners to use museums’ collections as a foundation for their dialogue on power, social justice, and multicultural policies.
- Leading learners to examine the underlying messages of museum learning culture and the methods of presentation and interpretation.
• Encouraging learners to search for the truth about the proposed distinction between high and popular culture, and to use the museum materials to criticize this concept.

**The Contextual Learning Model**

The contextual learning paradigm is based on the concept that learning takes place when learners develop a meaning making process in a way that makes sense to them in their own frame of reference “experience, expectations and prior knowledge” (Johnson, 2002). This model works through close connections learners develop with each other, with educators and materials, and by relating the outcome of these connections to real life situations. These connections are energized through the interaction between teaching methods and content on the one hand, and the encouragement of educators to learners to utilize their own personal and cultural references and develop positive connections on the other.

The contextual learning draws heavily on the theories of Jerome Bruner, Jean Piaget and John Dewey, but more notably on Howard Gardner’s Multiple Intelligence Theory (1993). It is in Parnell’s opinion (1995, 2001), a model that works for all learners’ levels and age groups.

The contextual learning model in museums brings education in touch with real life situations. This is where learners move from being passive viewers into active participants who interact appropriately with the surrounding environment including other visitors, museum staff, and objects. It focuses on creating an educational process to turn a museum visit into an authentic and rich learning experience.

Falk and Dierking (1992, 2000) suggest that to grasp the essence of this model,
we need to rest our analysis of learning processes in museums on a combination of personal, physical, and sociocultural factors. According to this proposal, the personal context incorporates a variety of experiences and knowledge of the content and design of the museum. It also covers the pre-visit expectations and motivations, prior interest, perceived choice, and control. These personal factors reflect what personal agendas each visitor has upon arriving at the museum. The sociocultural context deals with how the visitors’ sociocultural background impacts their perception, processing, and meaning making. Therefore, a study of learning should be widened to focus not only on the individual, but his whole group and its sociocultural milieu. The physical context relates to physical space and environment, the way learners are oriented based on the design of the exhibit, including the sights, sounds, and smells, all of which strongly influence the free-choice learning option of visitors.

**The Situated Learning Model**

Since the late 1980s, situated learning theory is increasingly becoming an alternative to the individualist approaches and theories of knowledge and learning. To Weller (2002), "situated learning is important for the emphasis it places on co-participation within a community, rather than learning as something that takes place within individuals" (p. 76) At its depth, situated learning theory envisions learning and knowing as processes which can’t be disintegrated from everyday life practices either in workplace, family, or any other social settings. This theory sees learning and knowledge taking place and students are better able to construct meaning in practical ways through authentic activity, social interaction, and participation within communities of practice. Herrington & Oliver (2000) counted many major elements that are essentially important
in situated learning settings including authentic context; authentic activity; expert performance; multiple perspectives; opportunities to reflect; collaborate and articulate; coaching and scaffolding, and authentic assessment.

Museum educational programs are aware of the importance of having as many of these elements as possible in their context. The use of this model in a museum education setting offers a basis to connect learning to learners’ interests and to develop the contextual relevance of knowledge. Through social interaction, authentic activity, and participation in museum educational programs, learners will have the tools to construct appropriate meanings in a way that makes knowledge inseparable of life experiences. The next two chapters will explore the practical steps that are needed to translate the selected research approach and the aforementioned theoretical concepts into activities that are appropriate for the classroom.

**Museum School Partnership**

Museum teacher institutes are usually organized within the frame of museum school partnership projects. These partnership projects give museums a better opportunity to show their society-based side and to express their nature as community service institutions and their commitment to social and cultural services and development. In this regard, museums initiate partnerships with many community-based institutions and organizations such as art galleries, public libraries, universities and colleges, hospitals, other museums and even prisons. Museums’ partnerships with different levels of schools and school districts are not only the largest in number compared to their partnerships with other institutions but also “the most longstanding and successful example of the interest
and ability of museums to join forces with other institutions in working toward common goals”. (Noel, et al., 1984, p. 66)

Understanding the dynamics and perspectives of museum school partnerships is a cornerstone to the topic of this research. It helps in clarifying the concepts of the institutional cooperation and the organizational frame and system in which museum teacher institutes develop. The following discussion will present a review of the data relevant to the idea and mechanism of museum school partnership. The discussion will cover the reasons behind museums’ and schools’ decisions to partner with each other and what is required from each side to sustain this relationship and make it prosper. It will also cover the main problems that partners should expect to encounter in their joint partnership procession.

**Partnerships: Purposes and Motivations**

It is important in the initial partnership planning phase to develop a clear understanding as to what partnership means, what are its goals, levels of complexity, and organization. When schools and museums agree to form a partnership, they in fact commit themselves to a relationship where each one is simultaneously a provider and receiver of services. (Kavanagh, 1995). In this sense, museum school partnership is a half-way point where the two institutes meet in their search to promote their resources and extend and strengthen their mission. S. Hord (1986), quoting Intriligator, defines partnership as when “two or more independent organizations agree to pool together their authority, resources, and energies in order to achieve a goal or goals they desire” (p. 23). To Sheppard (1993), partnership means parties “willing to work together to create, develop, design and implement a program which … both [institutes] want” (p. 16).
J. Stanley (n.d.) proposed a partnership classification system that includes three levels of partnerships. The following quote highlights the structure and clarification of this system.

Primary Stage Partnerships may involve a museum working with one or two schools using its collection or an exhibition to meet an identified learning need. Second Stage Partnerships will generally be better suited to more experienced museums and galleries and are likely to involve a gallery or museum coordinating additional partners or resources to meet the needs of schools. Umbrella Partnerships, which bring together a large number of museums or galleries and schools, can be an effective way to share resources and experience. Umbrella partnerships have shown themselves to be a way in which small museums, lacking experience in education, can progress reasonably quickly and surely. (p. 9).

B. Wilson (1997) draws the borders between the levels within partnership. In his view, a partnership of cooperation and another one of collaboration are different. “Cooperation exists when two or more individuals or organizations agree to work together on a project with the anticipation of mutual benefit. . . . . the organizations may agree to share resources, time, or capital, but the primary shared commodity is expertise.” (p. 191).

Collaboration has more requirements than cooperation. These include:

• Shared needs and interests.

• Commitment of time to the process.

• Energetic individuals imbued with the collaborative spirit.
• Ongoing communication
• Pooled resources, including staffing and funding
• Relinquishment of personal control, resulting in increased risk.
• Continual checking of the perceptions of those involved in the collaboration
• Positive leaders, and
• The personal traits of patience, persistence, and willingness to share.

(Wilson, 1997, p. 191).

When partners reach a mutual initial vision about their joint partnership, the next step is to set “a clear understanding of the common goals of the collaboration as well as the specific needs of each partner” (Richer, 1993, p. 7). Sheppard (1993) suggests that these common goals should revolve around finding the best ways to “bring the classroom teacher and the museum educator together, not only physically, but intellectually as well” (p. 15).

It is also important to know the motivations that make the two sides think of establishing their joint partnership. This decision is usually motivated by many different circumstances and varied factors. From the museum side, these can be summarized into political pressure, preconditions of grant applications, planning and management necessity, professional preference or as part of their search for effective ways to serve their societies, strengthen their community involvement and enrich their educational capacity (Kavanagh, 1995; Harper, 2002). To these reasons, Hirzy (1996) adds the museums’ desire to “build an enlightened audience, and signal a commitment to educational reform and improvement” (p. 49).
Based on interviews with administrators from a selected number of American community foundations and cultural organizations involved in partnerships, F. Ostrower (2005) identified several factors that motivated the initiation of partnerships. They all agreed on viewing partnership as “an effective way to build organizational capacity” (p. 37). This occurs as partners get help to expand their resources and develop new programs. Partnerships are also seen as “a way to bridge the divide between [partners], thereby expanding and diversifying audiences … and reach out into community.” (p. 38) Partnerships also help partners to “expand their networks”, spark “future collaboration and reducing isolation”, “build social capital’ and make “new connections through their partners” (p. 38).

The joint educational mission and the community-based nature of both museums and schools make them likely to succeed in their partnership. Sheppard (1993) gives more elaboration on the specific reasons that make museums and schools natural partners.

They offer complementary experience, combining two languages of learning - the words of the classroom and the objects of the museum. Their educators offer two kinds of expertise - classroom teaching methods and visual learning techniques. Together they can present students with an enriching partnership of ideas, discovery, challenge and fun, a partnership worth developing and sustaining. (p. 2).
Defining Partners’ Role

On the perception that partnership is an equal give and take relationship, the following paragraphs will discuss what each of the museums and schools can give to develop a smart partnership connection. Museums’ contribution to partnerships depends, among other things, on “what kind of collection the museum has, whether there is a collection or not, and what kind of resources the museum is willing and able to commit to school programs” (Williams, 1981, p. 16). A museum’s unique learning environment is one vital factor that it can offer to partnership initiative. B. Sheppard (1993) provides the following insight on museums’ contribution to partnerships with schools from a museum professional standpoint.

Museums are compelling environments. They offer a tangible dimension to learning, engaging the senses and stimulating inquiry. The common denominator in all museum education is that in museums we communicate ideas through objects. Objects have a great deal of power. They can allure and entrance; they can provoke new questions and insights. Our job as museum educators is to facilitate the interaction between students and objects. We need to teach the visual and perceptual skills that engage students in sensory learning – encouraging them to look, examine, compare, contrast, collect data, analyze and evaluate. This visual approach to learning offers a distinct complementary experience to the classroom where the learning vocabulary is primarily verbal. (pp. 2-3).

Museums offer a wide range of activities that help to maintain and sustain a successful and productive partnership with schools. Museum visits remain the most
common educational activities. Other programs include school visits by museum staff or volunteers, pre-visit activities to build links with classroom studies, and in-service training and orientation for teachers. Furthermore, museums offer traveling exhibits, sequenced or multiple museum visits, living history and archeology events and hands-on workshops. The 2003 online Art Museum Education Programs Survey results reveal 82.6% of the museums surveyed have partnerships with K-12 schools or with other museums who offer K-12 teacher workshops (Wetterlund & Sayre 2003). All museums covered in this survey reported that they offer K-12 school programs other than tours for school groups. According to this online survey, these programs included:

- Materials for use in the classroom.
- Programming for a preschool audience.
- Traveling art exhibitions that visit schools.
- Literacy programs for ESL students.
- After school art programs.
- Programs for home schools.
- Resource centers for teachers.
- Classes specifically for teachers.
- Advisory boards of teachers.

Sheppard (1993) compiles a list of “useful ideas” that museums may offer to make partnerships more effective. These include “teacher open houses” where museums can introduce their programs to teachers and provide a face to face sharing of ideas and interests. The “teacher advisory committees” is another idea aiming to identify teachers who are well acquainted with the museum and its collection to “form a nucleus of
teachers to serve as ongoing advisors and evaluators of new program ideas”. “The field
trip directories” is another service that aims to provide teachers with program information
from all museums in any specific region. The “educator’s pass” is a free admission
service to encourage teachers to become familiar with the museum and its educational
offerings. These passes “allow the teacher to survey collections and special exhibitions in
advance of field trips” (p. 20).

On the other side, the schools’ role in such partnerships is more notable through the
contribution of classroom teachers. According to Sheppard (1993):

There is a kind of synergistic relationship between classroom learning and
museum experience. No one could be more expert on classroom students than
their teacher. The teacher’s sensitivity to the needs of the students, their
learning styles, abilities and interests is an asset [museums] cannot do
without. The museum teacher’s familiarity with the collections, the ideas
inherent in them and the nature of object-based teaching is the other half of
the equation for successful programming (p. 4).

Upon their agreement to partner with museums, schools expect to find “enrichment
of learning, the opportunity to encounter rare and unusual objects, informal and hands-on
learning experiences, and responsiveness to teachers” (Hirzy, 1998, p. 8). Schools see
partnerships as opportunities “to enhance the teaching of academic subjects through
contact with museum collections” (Harper, 2002, p. 97).

Schools also expect their students to find a comprehensive learning environment
which, according to R. Nummela and T. Rosengren (1986), includes “an absence of
threat, careful orchestration of multidimensional teaching strategies, real-life experiences
and an understanding of barriers to learning” (p. 50). A well planned partnership, as seen by the British National Advisory Committee on Creative and Cultural Education report (1999), is expected to make students able to:

- Develop their understanding of the wider community, and their roles within it.
- Develop skills and techniques for creative work through contact with skilled adults.
- Deepen their understanding of different disciplines and their practical application.
- Develop their understanding of the key skills and how they apply to real-life situations.
- Deepen their understanding of, and practical experience in the creative process, including imaginative thought, problem-solving, research, technical skills, editing, risk-taking, reflection, presentation, and dialogue.
- Experience working as part of a team.
- Build self-confidence and self-esteem in learning new skills, meeting new people, and in sharing ideas.
- Increase confidence and expertise in making judgments and evaluating experience with a wider range of people. (pp. 142-143).

**Partnerships’ Support to Curriculum Development**

The purpose of this section is to explore the theoretical perspectives and practical measures of how museums offer teachers the opportunity to interact with a wide range of
resources to aid their classroom curriculum development. Designing an effective museum education curriculum requires in the first place a collaborative effort with subject-matter qualified experts. They will be needed to provide information about contents and requirements relating to all aspects of the subjects and topics for which curriculum is to be designed. The target in this early phase has to be oriented to reach as much of a consensus as is possible between all relevant and experienced educators to assure that the outcome curriculum matches the standards laid forward by the state or the specific school district it purports to serve. An initial insight in museums’ involvement in curriculum design is that it should relate to the fact that museum education programs are now paying too much attention to giving learners opportunities to use and build on their existing knowledge. The path to a museum classroom curriculum design success should, therefore, consider the orientation that sees teaching as a system of contextual inquiry rather than an unrelated collection of contents and topics.

Museum education departments have been looking into different theories and approaches of curriculum design to produce a model that is parallel to museums’ nature and function. Among these is the “Outcome-based Learning” approach where the focus is on what students can actually do after they attend a museum educational session. According to Towers (1996), making the best of this curriculum design approach depends on a clear definition and knowledge of what learners need to learn, and the ample time and assistance they will get in order to reach the ultimate potential of the subject.

Another curriculum design approach that museum education specialists consider is the “character education” approach. This approach works towards developing a good character in students by focusing on the core personal values, morals, and behavior on
one side and on the other, to guide them to understand their rights and responsibilities as citizens and future leaders of their communities (Kilpatrick, 1992). When school educators base their curriculum design on “character education”, they do so knowing that the communities’ expectations from schools have now grown far beyond helping students to be smart and knowledgeable. Educators understand that the role of school curriculum is also to have the theoretical background and the practical dimension to develop the students’ understanding of moral values and high ethic standards. Many of the researchers who focus on character education curriculum (Kilpatrick, 1992, Lickona, 1991; Wynnc & Ryan 1992) agree on seeing it as a way for educational institutions to extend bridges to communities by attracting parents’ support and involvement to reinforce and expand the experiences earned by the children.

Character education has a fertile soil in museums. This is because of the opportunity they offer to students and visitors in general to understand, not only the historical frame, but the essence of events, experiences and personalities that have contributed significantly to shaping the course of history and culture. The message of museums today is not only to inform but also to inspire and influence their visitors in general and the youngsters in particular to relate individuals and societies from past to present. The National Museum of Patriotism in the State of Georgia\(^1\) has made character education a focus of its mission. The Museum develops curriculum programs that offer teachers a guidebook to “educate students, Kindergarten through college, and the public, about patriotism and citizenship”.

\(^1\) [www.museumofpatriotism.org](http://www.museumofpatriotism.org)
Another curriculum frame is the multicultural approach, which according to Morey & Kitano’s view (1997), should be oriented to provide a complete and comprehensive, accurate, intellectually honest view of reality; prepare all students to function in a multicultural society, and better meet the learning needs of all learners. The fact that our present world is increasingly becoming culturally, racially and ethnically diverse imposes a huge challenge that all educational systems should be prepared to face. Subjects and issues related to social justice, prejudice, diversity, representation and cultural pluralism and the impact of globalization and mass migration on local, regional and national cultures are all very pressing subjects that deserve to be thoroughly addressed in formal and informal education curriculum. The multicultural education approach is not just about the idea of multiculturalism. It is also in Banks & Banks’ view (2005):

…an educational reform movement, and a process whose major goal is to change the structure of educational institutions so that male and female students, exceptional students, and students who are members of diverse racial, ethnic, language and cultural groups will have an equal chance to achieve academically in school (p. 1).

Incorporating a multicultural curriculum approach in museum education makes it possible for visitors and students to understand and appreciate cultural differences and similarities as represented by the museum collection, and to recognize the artistic, cultural, and intellectual accomplishments of diverse ethnic, racial, and socioeconomic groups. Museum collections and exhibitions can be a source to suggest new ways to integrate multicultural topics into many school disciplines. S. Donley (1993) suggests that in order to have a multicultural educational model that is comprehensive, practical
and applicable in both school and museum it has to:

- Recognize the hierarchy of cultural attitudes.
- Teach methods as well as content.
- Build self-esteem.
- Examine the role of culture in family, community, nation, and the world.
- Integrate multicultural topics into all discipline areas.
- Starting with similarities is the best way to interpret cultural diversity.
- Make cross-cultural connections and comparisons.
- Provide as much context as possible.
- Balance ecological (contextual) and systematic (cross-cultural) exhibits.
- Involve people from the cultures in exhibit and program design.
- Be on the alert for stereotyping.
- Help learners and visitors see cultural diversity all around them.

The practical aspect of museums’ involvement in school curriculum development remains an area of dispute. On one side, there are those who stand firmly in favor of integrating museum educational materials into interdisciplinary curricula and making them available to schools to use in the classroom. One voice in favor of this orientation comes from the report by the British National Advisory Committee on Creative and Cultural Education (1999), which stresses the importance of partnership in curriculum development based on the notion that partnership promotes and develops innovative working methods and provides a wide set of opportunities for cross-curricular links throughout the school to demonstrate that each teaching field can affect the development of others. According to the same report, the importance of partnership in curriculum
design appears in the opportunities it provides for “issue-based work” which offers a broader perspective on current affairs and on cultural development; such as “equal opportunities, gender, and cultural diversity” (pp. 140-141).

On the other side, some museums are not in agreement with the notion of providing written materials to schools. They base their disagreement on a vision that sees the only effective classroom material is the one prepared and written by teachers in the context of the topic and approach they prefer to follow (Durbin, 1999). Durbin goes on to suggest a middle area where curriculum and other written materials could be developed, based on “discussion between the teacher and the museum education department where the teacher’s knowledge of the class and the curriculum can be married to the museum educator’s knowledge of the collection and specialization in writing ideas and information from apparently mute objects” (p. 97).

One case of the teacher institutes that is against tailoring classroom curricula is the teacher institute of the National Gallery of Art in Washington D.C. K. Walsh-Piper and E. Berk (1994) provide the following description and analysis of the institutes’ position on classroom curriculum development:

The design of the institute does not support or espouse any specific curriculum theory or develop curriculum per se; that is the proper role of the teacher and the school district. Rather the Gallery’s role is to provide access to works of art as a primary source for learning as well as information about works of art, their context and creation. The Gallery’s purpose is also to model methodology for teaching about objects and to provide resource
materials for the classroom. The teacher is regarded as a professional who will adopt and use the information and resources (p. 20).

**Practical Terms in Partnerships**

To help schools’ expectations of partnership with museums become a true experience of “learning and enjoyment”, Richter (1993) suggests three learning variables that must be considered: transfer, practice, and meaning. Transfer refers to bridging the learning gap between museum and school to help students find a relation between what they learn in both environments. According to this perspective, “items to be transferred must be referred to and the relationship between them must be specifically demonstrated” (p. 11). Practice is to encourage students to talk about their museum experience before it happens (in terms of expectations) and after it happens (in terms of findings and results). Meaning is the most powerful learning variable students can get from a museum visit. Meaning in a museum visit happens by relating museum materials to personal experience through direct interaction.

Schools’ gains from partnerships are numerous. The British National Advisory Committee report on Creative and Cultural Education (1999) lists the following benefits:

- Strengthen the schools’ relationship with its community through sharing skills, expertise and resources.
- Strengthen the relationships between schools in the same area through cross-phase or cross-disciplinary projects.
- Raise the profile of the school and the part it plays in the social, cultural and economic life within the community.
• Develop the school itself as a community by building strong and supportive relationships between students, staff, parents and governors (p. 141).

**Elements of Partnerships’ Success**

Different suggestions have been offered to make partnerships beneficial to both museums’ and schools’ communities. One of the most compelling proposals is offered by Hirzy (1996), in which he lists 12 conditions that partners have to be ready to fulfill in order to drive partnership successfully to achieving its targets. Meeting these conditions in full requires an unlimited willingness to change in the first place. This should be expressed by breaking out of the “familiar ways of doing business,” leaving behind the paralyzing and restricting bureaucracy and adapting a policy of dialogue, vision, and genuine collaboration. Hirzy stresses the importance of integrating all of these conditions, not just some of them, and to make each one part of an overall institutional strategy for educational collaboration. The following is a summary and discussion of Hirzy’s twelve conditions for partnership success.

1) The first condition is to “obtain early commitment from appropriate school and museum administrators” (p. 50). These include “school principals, curriculum specialists, the museum director and department administrators”. This emphasizes the importance of leadership involvement and support from high officials in the museums’ administrations. Museums may initiate this by, for instance, inviting school administrators to the museum for a reception, a behind the scenes tour and a project overview. Harper (2002) also highlights the role of leadership to the success of partnership projects by saying:

   The administrative teams on both sides must fully support and approve the partnership by providing time and money, enabling committed teachers and
museum staff to work together to enhance what children are learning in the classroom (p.97).

2) “Establish early, direct involvement between museum staff and school staff” (p.51). This aims to create an environment of mutual respect, trust, and dialogue that will provide a solid basis for partnership. This stage is the best time to explain to teachers that a relationship with museums means more than field trips or periodic classroom visits. This early relationship gives school educators an opportunity to be part of the early planning phase.

3) “Understand the schools’ needs in relation to curriculum and state and local education reform standards” (p. 52). This means that partnership has to acknowledge and identify “a problem to be solved or a need to be fulfilled and then [work] to match museum resources to what is happening in the classroom”. Museums are urged to “know and understand education reform and its impact on teachers”; accordingly, they need to think about how they can make their role in partnership to support reform and teachers’ efforts. Understanding schools’ needs also requires needs assessment to identify curriculum reform requirements and obtain background information about the schools.

4) “Create a shared vision for the partnership, and set clear expectations for what both partners hope to achieve” (p. 53). This is the phase where basic partnership ideas are translated into a vision of what all the participants would like the partnership to be. At this stage, needs of the museum, the school, students, teachers, museum educators, parents and the community are assessed and considered. Planning a shared vision also involves thinking about what each partner wants to accomplish. “The overall vision of the program must be communicated to all partners, because then it becomes a shared vision.”
5) “Recognize and accommodate the different organizational cultures and structures of museums and schools” (p. 53). Each partner has an organizational culture and internal values and assumptions. These may have an impact on many aspects of a partnership including planning style, short-term and long-term schedules, communication and the perceived accessibility of museums.

6) “Set realistic, concrete goals through a careful planning process, integrate evaluation and ongoing planning into the partnership” (p. 54). This is in order to provide a framework, orientation, and reference point that will eventually help in assessing partnership progress periodically. The goals and strengths of each partner are expected to inform the planning process and lead to realistic goals that capitalize on each partner’s respective strengths. This step also demands an expert planning committee, a successful communication network and the appropriate allotment of planning time.

7) “Allocate enough human and financial resources” (p. 56). This condition is essential in making teachers have full participation. Financial resources can be used in a variety of ways, such as compensating personnel involved in planning, supervising the program, and paying stipends for teachers attending workshops.

8) “Define roles and responsibilities clearly” (p. 56). This takes place by recognizing the respective strengths of each partner and preparing them to encounter areas of weaknesses and challenges. It is also important to define clearly which responsibilities are more appropriate for schools and teachers which are more appropriate for museums. Schools’ administrators and personnel may supervise the task of scheduling
and arranging transportation and student evaluation, while a museum teacher advisory
council may guide teacher participation.

9) “Promote dialogue and open communication” (p. 57). This is a cornerstone in
reaching positive results of partnerships. The goal of this step should be to inquire, learn,
generate thoughts, discover and discuss shared vision, offer common meaning, and
explore ways of learning from each other. This can be assisted by advisory teams or by
calling for open houses for teachers and administrators. The Museum for a New Century
report considers the lack of “communication among museum educators, schoolteachers,
and administrators about their mutual objectives and about the quality of experience they
together offer schoolchildren” a source of dissatisfaction and frustration in partnerships.

10) “Provide real benefits that teachers can use” (p. 58). These include “time,
professional development opportunities, and relevant curriculum and materials that they
can use in the classroom”. Professional development opportunities include in-service
workshops, site visits, teacher-museum internships, and research trips.

11) “Encourage flexibility, creativity, and experimentation” (p. 59). Providing an
environment where educators from both institutes can have the freedom to experiment,
shift directions and grow professionally will have an impact on making museum-school
partnership grow stronger and richer.

12) “Seek parent and community involvement” (p. 59). In their search to
consolidate and renew their relationships with communities, schools and museums may
seek parent and community involvement. This will have short-term and long-term
benefits for both the museum and community. It helps by building an audience
community that appreciates the museum as an educational institution. Parents and community members can be involved in program planning and curriculum development, as content specialists and as general resource people. The central purpose of parent and community involvement is to create sustained parental participation and to strengthen their relationship with the museum, the school, and their children. The benefits of community involvement are also evident to museum staff members who understand that working and thinking together in the community are the key components for creating a real partnership.

**Obstacles in Partnerships’ Path**

Besides considering factors of partnership success and looking for ways to sustain them, it is also crucial to think about what might make partnerships stall. F. Ostrower (2005) listed many factors that lead partners to be less collaborative and partnership to be partially successful. These include:

- Insufficient resources and funding.
- Tangential to mission.
- Logistical difficulties.
- Contention between partners

Other problems that most partners find to pose serious challenges to partnerships are lack of efficient communication and sufficient coordination (J. Stanley n.d.). These have resulted, according to Wilson (1997), in a “lack of understanding about how the educational missions of schools and museums could reinforce one another” (p. 193).

The *Museum for a New Century* report sheds more light and looks more closely at the lack of communication problem from the sides of both museums and schools. From the
museum side, the report offers the following statements:

Museum educators express frustration that teachers think museums are little more than a convenient respite from classroom routine. Most programs are aimed at elementary school audiences. When the curriculum gets “serious” in high school, museum visits are hard to coordinate with class schedule, and most high school students have little organized exposure to museums. Programs in which the museum experience is a consistent, fully integrated part of the formal school curriculum are few and far between. Where museum programs are used to enrich curriculum, they are shaped by the needs of the school, not the strengths of the museum. The museum experience seems auxiliary, and museum educators feel constricted by the limits they feel the schools establish (Bloom, et. al., 1984, p. 67).

From the other side of the equation, the report quotes the school administrators and educators’ parallel frustration:

You don’t let us know what you have to offer ……. How can we give our teachers and students the full benefit of the museum experience if you don’t tell us what museums can contribute? (Bloom, et. al., 1984, p. 68).

In the case of some umbrella partnerships, according to J. Stanley’s (n.d.) system of partnership classification, the problem of commitment may surface. Some “individual museums and schools had varying degrees of ownership and commitment to the project and parts of the project had to be trimmed” (p. 9)

The Idea of Museum Teacher Institutes

One of the research questions traces the factors and steps that museum education
departments need to be aware of in order to make a museum teacher institute experience a successful one. This section reviews data relevant to museum teacher institutes’ goals and organizational structure which are both very decisive in leading museum teacher institutes to the success they anticipate.

The idea of associating teachers with museums and offering them museum-based training programs has an extended history. In 1932, Roberta M. Fansler, a museum educator, voiced his opinion that teachers rather than museum educators should lead museum tours”. She is quoted in B. Newsom & A. Silver (1978) as saying:

I believe that theoretically it is better for us to teach the teacher and leave the important task of taking the children through the gallery to the one who knows the children best. A small staff of museum instructors cannot hope to supply teaching service to an entire city school system once that entire system of teachers is alive to the value of this type of visual education. on the other hand, if we act as museum assistants to the teachers, we will be able to make one hour’s teaching go a very much longer way … The teacher can then bring her own children to the museum and from her intimate knowledge of their capacities use the material to the best possible advantage (p. 462).

This vision gained further support from T. Low (1948), who, motivated by the heavy demands for museum instruction from public schools and fearing teachers instructing in the museum without enough background, suggested a possible solution to this problem through “the introduction of courses designed to instruct these teachers in the use of museum material” (p. 125).
In support of the argument that it is better for museums to “teach the teachers”, than to teach the students, B. Newsom & A. Silver (1978) list the following reasons:

1- By the simple arithmetic of the multiplier effect, understaffed museum education departments can reach through teachers far more students than they can reach alone. In times of austerity, as museum budgets are cut and there are fewer staff members to take care of school groups, it becomes all the more important for teachers to be trained to lead their classes themselves.

2- Professional teachers who have become confident in using the museum would be doing the job that is now often done by part-time volunteers who are not professionally prepared to teach the young.

3- Because the same teacher, who knows his students and is clear about what he wants them to learn in the museum, would be teaching in both places, he could achieve a better integration between museum gallery and classroom.

4- Museum educators would have more time to work with teachers, students, and schools on the special projects that many consider their first responsibility. Many of these projects include those meant to help teachers and school groups become more independent- simple guides and training sessions to show teachers how to conduct their own visits, educational exhibitions and orientation spaces, and resource centers designed for teacher use (p. 463).

The professional development benefits that teachers get from museum training are
widely varied and new ones are always expected to be recognized. The report prepared and presented by The British National Advisory Committee on Creative and Cultural Education (1999) makes teachers professional growth a focal area in the partnerships between formal education and cultural institutions (such as museums). Teachers, according to this report, get to:

- Learn new skills and techniques for use in the classroom.
- Develop professional relationships with a wide variety of other skilled adults beyond the school.
- Develop and promote a wider understanding of their subject from different social and cultural perspectives.
- Deepen their understanding of pupils in different social and cultural situations.
- Develop their understanding of different disciplines and how they can interact with each other.
- Try out new teaching strategies. (pp.141-142)

Museum teacher institutes offer an important tool to help teachers achieve these professional expectations. They reflect museums’ growing awareness of teachers’ role in the success of educational and tour programs and other school outreach activities (Walsh-Piper & Berk, 1994). Teachers’ positions make them the most capable of understanding and handling students’ needs; therefore, they are targeted as key players in any school museum partnership project. This led J. Hodgson (1986) to believe that "the primary audiences and target of museum education must be the nation's teachers" (p. 30).
Defining Museum Teacher Institutes’ Goals

The definition of museum teachers’ institutes has been presented and discussed in Chapter 1. The idea of these institutes is basically a museum collection-based training that serves a variety of purposes. Among these is to bring teachers of different grade levels and subject areas together with museum education specialists, activists, historians, scientists, artists, performers, and curriculum designers to learn how to incorporate learning from museum collections into their classroom teaching and to use museum instructional resources as curriculum design aid. Another goal behind these institutes is to help teachers get the training they need in a variety of new instructional methods and to get the skills necessary to motivate their students and to address their shifting learning needs (Cross, 1976).

The specific goals behind museum teacher institutes are primarily shaped, on the one hand, by the type and nature of the museum collection, and on the other hand, by the teachers’ understanding of their students’ needs and expectations. D. Mackety (2003) supervised a survey among 130 teachers in the state of Michigan to “identify individuals and factors most likely to influence teachers’ decisions to visit the museum with their students, as well as their needs and preferences regarding the content and characteristics of museum programs” (p. 41). The survey found that the teachers’ understanding of students’ top priority is their concern to have an experience that is equally fun and educational. This is followed by the students’ desire to be exposed to an experience that helps them apply what they are learning to their daily lives. The teachers also wanted their students to be in a system that uses a variety of learning styles where hands-on activities can be integrated. They have also shown interest in critical thinking skills. A
final concern is to guarantee the existence of an environment where it is safe for students to make mistakes.

**Examples of Museum Teacher Institutes**

The following few examples are presented to show how museums specify the goals behind their teacher institutes programs. The idea of one of the early examples of museum teachers’ training programs in museums was brought up during the winter of 1947-48, when the department of Fine Arts at John Hopkins University asked T. Low to design and implement a course to instruct teachers in the use of museum material. The idea behind this course was:

To demonstrate to teachers of history, Latin, English, Modern Foreign languages, and related fields the practical use which museum objects might have in the teaching of their subjects; to acquaint with the material in such a manner that they would feel sufficiently confident to bring students into the museums themselves; and, to show how, by using this material in courses not specifically concerned with art, teachers could yet instill an interest in art in their students. A secondary purpose was to acquaint teachers of a specific geographic area with the resources available to them including not only the actual objects in museum collections but also the services—slides, reproductions and traveling exhibitions—offered by these institutions (Low, 1948-1949).

The teacher institute of the Museum of Fine Arts in Boston, Massachusetts, through its “Art Deco: Making the Modern World” teachers’ programs, aims to help “high school teachers to use the museum’s extensive collection to learn about traditionalism and
modernity; concepts targeted by the state’s high school history curriculum standards” (Shore, 2005, p. 251).

Virginia Historical Society organizes two teacher institutes every year. The goal of these institutes is to “encourage teachers to be scholars—to read, research, and discuss history with historians and their colleagues in a professional setting………… [and] to give teachers access to resources that would help them, in some way, teach their students to think like historians” (Obrochta & Evans, 1996, p.49).

The process of the Virginia Historical Society institutes required teachers to “develop a teaching unit based on the lectures, discussions, and their own research. This unit could focus on any … of the …topics [discussed during the institute], but had to use primary sources in a way specific to the needs of their students. The units … received were all very different, reflecting the teachers’ interests, their individual research and the requirements of their respective curricula. Individual units examine letters written by slaves, compare textbooks published …. around the turn-of-the century, and trace how the land use around a current school house has changed over two centuries” (Obrochta & Evans, 1996, p.49).

The 1974 Cleveland Museum of Art teacher summer institute followed the steps of the 1972 and 1973 institutes held at the University of Cincinnati and the University of Maryland in search of ways “to wedge art history into high school curriculum” (Newsom and Silver, 1978, p. 472).

In the case of the “Annual Teacher Institute” of the National Gallery of Art in Washington D.C., the goal is directed towards “building connections between teachers and cultural institutions”, and “by offering substantive programs for teachers, the gallery
and other art museums can provide teachers with a unique opportunity to integrate their firsthand experience of art into their lives and classrooms” (Walsh-Piper & Berk 1994, p. 19-20).

The process of the “Annual Teacher Institute” of the National Gallery of Art in Washington D.C., as described by K. Walsh-Piper & E. Berk (1994), consists of:

An immersion model: a one-week course designed to provide maximum learning opportunities. The syllabus provides a balance of content and instructional formats. Traditional lectures and gallery talks alternate with artist demonstrations, hands-on sessions with art materials, writing activities, musical or dance performances, discussion groups, and model teaching sessions … Participants also have time for reflection and personal encounters with works of art (p. 19).

One successful museum teachers’ institute experience is the one held at the San Francisco Exploratorium. This institute began in 1984 following an initiative by a group of local high school physics teachers who asked for the opportunity to spend their summer at the museum to learn how to use the Exploration educational resources and to infuse their teaching with hands-on science and inquiry. By the mid 1990s, the teacher institute had matured into a comprehensive professional development program, offering a series of activities such as summer institutes, weekend workshops, after school sessions, a teacher library, and web-based resources to both middle and high school science teachers (Shore, 2005, p.247).

The following account gives a description of the San Francisco Exploratorium teacher institute process.
Experienced teachers begin the programs with a 4-week Introductory Summer Institute, where middle and high school teachers become learners. They receive science content preparation through authentic science inquiry experiences. Exploratorium exhibits challenge teachers intellectually with unusual or counterintuitive physical phenomena. They offer a launching point for classroom activities that allow teachers to deepen their own science knowledge and experience inquiry-based teaching and learning. The teachers have access to a "machine shop", where they can build smaller versions of museum exhibits. These teacher created exhibits are brought back to classrooms where, in a likewise manner, they become catalysts for inquiry for students (Shore, 2005, p.247).

One experiment that is highly critical and worth noting with more attention to understand even the minor details of teacher institutes’ process is the “Discipline-Based Art Education” (DBAE) initiative of the Getty Education Institute for the Arts. DBAE is a comprehensive teaching and learning approach that builds on the idea that, “art can be taught most effectively by integrating content from four basic disciplines- art making, art history, art criticism, and aesthetics (the philosophy of art)- into a holistic learning experience” (Wilson, 1997, p. 10). The goal behind DBAE is basically to create a broad platform that offers, “opportunities for relating art to other school subjects as well as to the wide range of personal interests and abilities of young learners” (Wilson, 1997, p. 10).
To bring this initiative to light, the Getty Education Institute planned and funded one hundred summer teacher institutes within six regional consortia in the period between 1985 and 1995. These consortia and summer institutes took place at different locations including museums, art education institutes and universities in the states of Ohio, Florida, Minnesota, Nebraska, Texas, and Tennessee.

The findings from the teacher institutes organized under the DBAE are, according to Wilson (1997), exemplary of what to expect from these institutes in general. In the case of the Getty DBAE case, the organizers noted a remarkable improvement in art instruction. Art teachers, contrary to what was taking place in the past, complained no more of isolation and felt they had become useful members of the teaching staff. The participants in these institutes expressed their conviction and satisfaction that visual art had become a major source in generating subjects and expanding new thematic programs, thus changing the educational community's attitude and perceptive towards visual art instruction. Class teaching in the schools that participated in these institutes, according to Wilson (1997), “is enriched when museums and other community institutions provide settings for immersion in their respective words and content for instruction. Actual artifacts, primary documents, and texts viewed from multiple perspectives hold the greatest power to educate”.

One key factor to the success of teacher institutes is to be aware of what teachers want (Hamblen 1988). It may be possible to conclude from the DBAE experience that teachers’ preference is to have a true professional development and curriculum and instructional planning pursued simultaneously. The Annual Teacher Institute of the National Gallery of Art convinced teachers to prefer “content-rich programs” designed
for them as adult learners. They also preferred an interdisciplinary approach, in terms of both content and audience (Hamblen 1988).

**Teachers’ Recruitment**

In her list of the problems that create “lack of understanding” between museums and teachers, K. Walsh-Piper (1989) points out that “most teachers receive little training in the arts, much less museum literacy, in their preparation” (p. 194). One factor of success in the museum teacher institutes’ organization requires defining clearly the target audiences and the way to recruit and encourage them to take part in the institute activities.

Museum teacher institutes target teachers of all school and grade levels from early childhood and pre-school to elementary, middle and high school. In the case of the 1974 Cleveland Museum of Art teacher summer institute, English and French language teachers were invited to join besides studio art teachers (Newsom and Silver, 1978). Until recently, museums faced obstacles in contacting and attracting teachers to their teacher programs due to different organizational, logistical and other practical reasons. With the modern advancements in techniques of communication, museums have better chances in publicizing their programs and reaching out to their targeted audiences.

Museums attract teachers to their educational programs by coordinating with school districts, teachers’ professional associations and other local or state study groups and regional networks (Harder, 1981, p. 82). Personal contacts, mailing lists, web site postings and word of mouth have all proven to be very effective in passing on the message. D. Mackety’s (2003) research found that peer educators play a major role in spreading the word and encouraging teachers to be in touch with museums. M. Alexander
(1981) shares her experience in reaching out to social studies teachers to participate in museum activities:

We spent time in Washington area school meetings with coordinators of social studies, department chairmen, and classroom teachers. We joined the National Council for the Social Studies and faithfully read teachers’ magazines like Social Education, Social Studies, The History Teacher, Learning, and American Education. Furthermore, we offered to write articles for these journals describing our efforts to bring the resources of the National Archives. At the same time we collected social studies textbooks and used them to gauge how our materials might best supplement those ubiquitous teaching tools (pp.88-89).

In addition, Lehman (1981) adds other techniques of recruiting teachers including reception and conferences for teacher organizations, open house with hands-on activities and tours for school administrators and their families, invitations to teachers to evaluate and review materials and inviting teachers to take their sabbaticals at the museum.

K. Walsh-Piper (1989) suggests that:

It is important for museum educators to attend local educators’ meetings, where they can distribute information and make connections..... Also, offer to speak to groups of principals, PTA meetings, or to provide a free program on in-service days for local school districts. Another way to promote programs is to have a special day or reception for educators (p.200).

Museums’ teacher recruitment efforts focus on engaging participants with different levels of teaching experience and areas of specialty such as curriculum design, text-book
writing, language arts, science and art. These programs are for all teachers, but those who possess specific personal qualities such as enthusiasm, emotional stability, pleasant personality, creativity and good communication skills will help the program to succeed. Selection of teachers should consider if school districts are truly committed to working closely with museums to provide quality professional training to teachers.

Teachers are usually overburdened with their profession’s duties and requirements. They need to be encouraged to join these museum institutes. Besides professional development, museums generally propose to offer other incentives at both professional and personal levels to encourage teachers to take part in join their programs. These include:

- In-service credit to be used for licensing or promotion.
- A grant for course supplies.
- Professional assistance in curriculum development from experts related to museum collection subjects.
- Early Registration fees waivers.
- Free breakfast, lunch, parking, instructional and reading materials.
- Resource materials for personal enrichment and classroom use.
- Graduate credit.
- Unlimited access to museum professionals and educational resources.

**Museum Teaching Techniques**

Teachers are the central nerve system of education. Motivated teachers who are well-trained and highly qualified are essential to delivering a high-quality education. Relevant curricula, teaching techniques and educational materials, adequate financial
resources, well equipped schools and classrooms, an effective and supportive administrative structure and an engaged community that supports teachers and students all are key components that work collectively towards reform of educational system. These varied tasks are the responsibility of a wide range of institutes and bodies. A major contribution from the museums’ sector is to help by adding to the teachers’ pedagogical and technical knowledge through a series of teaching techniques and strategies.

Object-based Learning

Object-based learning has long been strongly linked to and deeply rooted in museum education. According to this method, objects are exhibited not only for personal amusement but also as a source of knowledge pertinent to the social, political, and economic environments and contexts of their time. This strategy rests on the belief that there is a strong interconnection between an object and the ideas that it communicates. These factors, combined with the learner’s personal experiences, feelings, and thoughts, blend together to produce a unique authentic learning experience.

The current debate on object-based learning attempts to define and describe the features of transition from what S. Conn (1998) calls “object-based epistemology” to “object-based discourse”. Object-based epistemology is a product of the way many of the late 19th early 20th century American museums looked at the world and, based on their collections, attempted to define, shape and set rules of representations and interpretation of the different bodies and forms of knowledge. Through this vision, the museums’ main focus was create “an environment of excitement” where the physical presence of these objects, their description, classification and display design and layout are the decisive factors that keep the visitors overwhelmed and, accordingly, accept the museum’s vision.
of interpretation and meaning making. The practical side of this vision was the exhibition tradition where museums’ halls and floors were densely packed with showcases filled with a wide range of objects. The intention was to make the physical presence of objects dominate the scene and to show the organization and display of objects as the ultimate goal of museums.

By moving to object-based discourse, the concern has shifted towards making objects open to different interpretations and subjects of contextual explanation, besides providing a system of understanding of their participation in the history and culture of their communities. With this new orientation towards discourse and interconnected relationships, a room has been created to mediate many and sometimes conflicting voices and interpretations such as that of the museum professionals and curators, educators, exhibit designers and, more importantly, visitors. Evan, Mull and Poling (2002) summarize the characteristics of this transition:

In an object-based epistemology the focus was on the clear presentation of unembellished facts regarding the natural history and taxonomy of the subject. In this case, the perspective of the visitor was virtually ignored. An object-based discourse, on the other hand, centers on the participation of the object in the cultural and lived history of the visitor. In the latter case ….

instead of bare facts, we maintain that there is an emphasis on explanation, which could be that of the expert, or that of the visitor, or both (p. 56).

The move to make objects an effective tool in the process towards a visitor-centered museum required developing a theory and practice of a new form of museum communication. This is needed to ensure the creation of a learning environment with
different possible interpretive venues to help people make sense of their museum experience.

Hooper-Greenhill (1991, 1999) proposes a model of communication in museums based on the work of the French semiotician and linguistic theorist, George Mounin. In this model, a team of communicators sends the message, not to dictate the meaning, but rather to activate meaning-making process on the receiving end. For this model, Hooper-Greenhill suggests that in order to have a smoothly flowing communication in museums, a “team of communicators” is needed. This team includes curators, designers and conservators in addition to the audience. The “receiver” in this model is an active maker of his/her own meaning, utilizing previous knowledge and experiences that shape the interaction process.

In terms of communication techniques, two of them have historically dominated over museum exhibitions development plans. The first one, according to Hooper-Greenhill (1999) is the "transmission approach" which makes communication to happen through “a process of imparting information and sending messages, transmitting ideas across space from a knowledgeable information source to a passive receiver” (p. 16). The second one is the cultural approach which assumes that knowledge “is not found intact, it is shaped through a process of continuous negotiation, which involves individuals in calling on their prior experiences to actively make their own meanings, within the framework of interpretive communities” (p. 16).

Object-based learning is becoming the heart of the situated learning process in museums. Museum objects have become a subject of multiple interpretations, including the one provided by museum visitors. This makes objects a site for multiple stories,
varied meanings, and open interpretations, and makes the visitor an active player in the
process of museum interpretation (Roberts, 1997).

Many researchers have looked into object-based learning and recognized the high
validity of this method and its undeniable contribution to the visitors’ meaning making.
To B. Pisciteli & K. Weier (2002), objects are intrinsically motivating and they provide a
starting point for social interactions that facilitate young children’s learning about art.
They also stimulate children’s curiosity and ongoing interest and invite comments and
reflection, arouse memories and encourage sharing of personal stories.

Among J. Shuh’s (1999) list of advantages of using objects in instruction is to
recognize that objects are neither age-specific nor tied to a particular grade level. In other
words, students do not have to have attained specific reading level or stage of conceptual
development in order for them to be able to see an object and engage in an educationally
worthwhile discussion about it.

Objects are physical evidence of human experience across cultures, geographical
regions, time, and belief systems. Objects are also products of/ and relate to all layers of
communities. One particular importance of focusing on objects in teaching, according to
Shuh’s list, is that they can help teachers and students alike to understand something
about the lives of ordinary people who were their ancestors. Those ordinary people are
often neglected in written documents and archives and history books and lessons. By
using museum objects that relate to different layers of societies in teaching, teachers will
provide students with an interdisciplinary field that teaches them about a wide range of
human behavior, creativity, and the impact of economic, environmental, and
technological forces on the all sectors of societies.
Objects are very important, in Shuh’s view, in giving students a chance to promote their capacity for careful, critical observation of their world. Providing students with critical observation skills will promote their critical analysis skills and help them to think and to express themselves through different mediums of expressions.

**Teaching with Museum Tours**

It is understandable that museum tours are necessary at a first level to introduce the museum, its collections and galleries to the visitors, especially those who come to the museum for the first time. Including museum tours to be a fixed part of any teacher training program “as in the case of the Harn Museum teacher institutes” signals a message that there is more to these tours than just being introductory and ceremonial ventures of a recreational nature.

It is very important to state initially that a museum tour without a careful planning, predefined objectives and without being integrated into a school subject or topic, or linked to a specific classroom activity is no more than a day off school for both teachers and students. A profitable museum tour starts in class and finishes in class also. This means that an educational museum tour is not just the few hours that the students spend in the museum. It is in fact a series of preparatory activities that should be thoroughly accomplished prior to the trip and other follow-up ones that should be undertaken after the tour is completed.

**Pre-museum Tour Educational Activities**

In D. Anderson and K. Lucas’s perspective (2001), there are many important factors that need to be considered when teachers plan to make a museum tour aid their teaching activities. Among these are the student’s prior knowledge, culture, attitudes,
and beliefs which all influence significantly how the students will experience and interpret exhibits, events and will manage their social interactions within the museum. S. Allard & M. Boucher (1991) suggested three categories of preparatory effective activities. The first category covers the area of basic knowledge and skills that are necessary to read and understand the exhibit labels, interpret a plan of exhibition, and analyze an item from different perspectives. Teachers help in this phase may be in the form of remarks and information to assist the students to identify the main events and locate them in chronological order and to understand the concept of time-line. Since the main focus in a museum tour is the museum objects and collections, the activities of this first category need to be directed in a way that makes the students conceive the social and cultural meanings and conclusions contained in these objects.

The second category in Allard and Boucher’s model of activities is proposed to provide an introduction to the subject of the tour and clarify its guidelines in order to create a link between the objectives of the classroom subject and those of the museum activity. These activities also help the students to understand the need to connect their museum visit to their learning process. In the classroom, teachers tailor some activities that may help in elevating the students’ curiosity, interest and eagerness during the process of data gathering at the museum. It is very important to include among the objectives of these activities making the students ready to develop, formulate and test hypotheses.

The purpose of the third category of activities in Allard and Boucher’s model is to familiarize the students with the museum to be visited. Therefore, these activities should be planned right before the students heading off to the museum. The activities of this
category deal with the technical organization and definition of the museum setting, its major functions, typology and roles.

**Post-tour Activities**

The importance of post-tour activities is that they have the potential to extend the effect of a museum-based learning beyond the physical museum setting. The purpose of designing post-tour activities is to enhance the students' learning about a particular topic or phenomenon that they have encountered during their visit to the museum. To many researchers (Anderson, 1989; Anderson & Lucas, 2001; Bitgood 1989), post-tour activities have proven to be highly influential and powerful knowledge building strategies when they consider the nature of learning outcome for the students as a result of their museum experience. They have also been proven to be very effective in consolidating and enhancing the students' knowledge and understanding consistently with the constructivist style of learning.

In Anderson and Lucas’s model of principles for developing post tour activities (2001), these activities need to be founded on the students' experience during their visit to the museum and their pre-existing knowledge, understanding, and related learning experiences so as to consolidate and/or extend their understanding of the themes portrayed in the galleries and their classroom-based curriculum. Teachers may also suggest a set of follow-up activities such as directing the students to draw images of their favorite artwork, create an artwork of their choice inspired by anything that they have seen at the museum or to use descriptive words to describe their feeling and what they have seen at the museum. This shows that a museum tour with its pre and post activities can become an effective pedagogical and educational tool that teachers can use to
maximize the students’ learning process and make their museum experience informative, exploratory, and truly educating.

The first and by far the most important gain teachers might get from museum tours is their positive impact on developing the students’ visual literacy skills. Schools and teachers have realized that the effort they make to develop the students’ competency in the traditional areas of reading, writing, math and science should be supplemented by an equivalent effort to develop other areas that are equally important to the ultimate educational process such as visual literacy (Housen 1992). Visual literacy according to Yenawine (1997) and Rice (1989) refers generally to a group of vision-competencies a student can develop by seeing and at the same time having and integrating other sensory experiences. The development of these competencies is fundamental to the students’ learning process. They, according to Debes (1969), help students to “discriminate and interpret the visible actions, objects, symbols, natural or man-made, that he encounters in his environment” (p. 27).

Museum tours help teachers to develop new attitudes towards the understanding of, and the use of visual literacy skills in teaching their classroom subjects. Using museum tours in developing the students’ visual literacy skills means helping at the level of simple identification of objects, naming what they see to complex interpretation at contextual, metaphoric and philosophical levels (Yenawine 1997). It also means an opportunity to interact with the surrounding environment to advance their imaginative thinking, active learning, interest, curiosity, and skills of debating.

To have a complete perspective of the museum tours pedagogical and educational dimensions, a discussion of their curriculum-structured design and who might be more
appropriate to lead them is needed. A curriculum-structured museum tour “is created specially for the particular needs of a particular class” (Matthias, 1987, p. 83). This makes this category of tours academically oriented and related to a specific discipline, theme, issue, or idea expressed in a classroom subject curriculum, such as math, geography, science, history or languages. It has been documented through a group of research projects that students obtain greater cognitive learning when participating in structured tours led by their classroom teachers (Stronck, 1983). This demonstrates the importance of getting teachers acquainted with the importance of these tours.

It is also important to strike a balance between making museum tours fulfill the teachers and schools’ requirement of curricular accountability, and the museum’s emphasis on free-choice exploration. Bridging the gap between the two has been suggested to come in the form of carefully constructed worksheets where curriculum-related conversations could be monitored and documented. These worksheets have been proven to be helpful in increasing the students' exposure to curriculum during museum visits, and thus help in establishing better connections between teacher needs and museum free-choice requirement (Mortensen & Smart 2007).

What qualifies museum tours to become part of an interdisciplinary learning experience is that they offer the students a unique opportunity to hear from a variety of people with different areas of museum specialties such as curators, docents, conservators, and exhibition designers. The students will also get an opportunity to familiarize themselves with a collection of explanatory means such as maps, photographs and drawings which all integrate to make the idea behind the exhibition clear. It is also important to consider in designing a plan for a museum tour a different outcome
depending on the students’ readiness to learn, each individual concept of the tour and the accompanied activities or level of interaction with the exhibits, the different lengths of time periods and the range of previous knowledge they may already have.

**Teaching with Live Performance in Museums**

Museum have recognized the high importance of integrating a variety of live performance activities and audio-visual effects such as storytelling, traditional dances, drumming and bands in their educational programs. The following sections will highlight the significance of live performance in museums as a form of entertainment education. They will also reflect on the advantages of creating a combination of different forms of performances and museum collections that teachers might find beneficial to use in teaching about the social and cultural contexts in which both of them are created and practiced.

Using different aspects of entertainment education to convey a particular educational message with the aid of museum resources is a tradition with a long history and different perspectives. In 1919, the American Association of Museums (AAM) endorsed the inclusion of music among the activities of art and other types of museums as an appropriate addition to their educational activities (Alexander 1979). This is followed by a group of American museums and other art institutions and centers who incorporated music and other forms of live performance into their educational programs. Examples of these are the Pennsylvania Academy for the Fine Arts, the Metropolitan Museum free Saturday evening concerts, the Toledo Museum of Art, the May festival of contemporary music of the Cleveland Museum of Art, the Los Angeles County Museum of Art and the Walker Art Center in Minneapolis.
Alexander (1979) refers to a survey conducted by The National Endowment for the Arts which produced very important indications as to the use of live performance in museums. Among these results is that art museums are more inclined to include performance art presentations comparable to other categories of museums. The survey also reported that the number of art museums that have their own performing arts groups is steadily on the rise. The rest of the art museums who don’t have their own performing groups either cosponsor such activities or use groups sponsored by other institutions. According to a study supported by the University of Wisconsin Center for Arts, the live performing activities in the art museums included chamber music, film shows, instrumental recital, drama, vocal recital, folk music, poetry, guest artist series, ethnic dance, jazz, modern dance, blues, mime and puppet shows.

Live performance in museums fits appropriately within the varied categories of entertainment education. In Bouman’s perspective (1999), entertainment-education is a “process of purposely designing and implementing a mediated communication form with the potential of entertaining and educating people in order to enhance and facilitate different stages of pro-social behavior change” (p. 27). This definition seems more in alignment of the purpose of using entrainment education activities in museums. The reason is that it proposes a theoretical foundation of entertainment education based on a blend of core communication theories, entertainment pedagogy and social development. Putting this definition in practical terms requires designing activities that involve direct interaction and participatory, encouraging dialogue and creating an appropriate environment of factual information dissemination. These are the true motivations behind
museum education activities in general, and the inclusion of live performance in their educational activities in particular.

From these and many other resources dealing with the subject of entertainment education in general, the benefits of using this approach in teaching could be summarized as follows:

- Helps in keeping the students’ attention.
- Helps in discovering and consolidating prior knowledge
- It helps in teaching character education.
- Provides a very influential classroom management tool.
- Works with students with different learning styles.
- Helps the students to learn verbally and visually, develop their self-confidence and enhance their critical thinking ability through visualization, prediction and anticipation.
- Helps in learning contextualized vocabulary.
- Helps students to relate ideas and concepts in the activity to their own lives and to the surrounding world.
- Elevates students’ interest and motivation to know more of the subject presented through the exhibited activity.
- Exposes students to cultural diversity by listening to and watching a variety of multicultural events and shows.
- Reinforces appropriate listening behavior and retelling skills.
Using storytelling, drumming, dancing or any other format of live performance in a museum setting in connection to other museum resources adds to the academic and educational content of these techniques. To the Kotler brothers (2002):

Objects and collections alone may not be the most effective means to cover a particular topic or tell a particular story, and museums may offer displays with hands on and interactive elements, immersive environments, multiple media and narratives.

Creating this extra narrative happens by making use of the museum exhibited objects and its guiding and explanatory materials such as signs, maps, text labels and exhibit catalogues to produce a well-balanced mixture of learning, creative imagination and expression activities and a sense of authenticity that eventually helps in improving the museum communication strategies and creates an attractive and engaging learning environment.
CHAPTER 3: RESEARCH METHODOLOGY

Introduction

In this chapter, a detailed review of research methodology and data collection techniques will be presented and discussed. In addition, this chapter will outline the research design and layout, define research participants, discuss research setting and ethics, and chart research reliability and validity.

This research focused on presenting a combination of field-based experience and theory relating to museum teacher institutes. Selection of effective research methods and the appropriate theoretical frame is best determined based on research subjects and objectives and by the problem the research is tackling. The fact that this research studied a subject that has connections to teacher professional development, teaching methods and interactive learning made it appropriately fitting in the education research spectrum. This is further supported by the research intent to offer classroom teachers new ideas and insights towards improving their pedagogical and professional skills. The ultimate contribution of this research is expected to add to the existing body of knowledge in one field of education other than the formal class-based education. It aims to assess the primary importance of museum teacher institutes in supporting school museum partnerships and school education reform.

Research Methodology

The interest of this research is to reach an interpretive and descriptive analysis of the museum teacher institutes’ experience. This required using a research approach that is flexible and allows developing a level of contact with the institutes' participants to learn about their perspectives and expectations. It also required an approach that is capable of
producing rich and detailed data to provide a solid ground for analysis and convincing results. It, furthermore, required an approach that supports the existing theories and models in the field of museum education and help generating new ones. These are compelling factors to believe that the qualitative method best suited the nature, philosophy and the intended purpose behind this research.

Qualitative research methods have been an option for researchers whose interest is to assess museum learning programs to synthesize, examine, or review their outcome. They are also appropriate when the desire is to generate data that will be used to describe and interpret fundamental principles in museum education activities. Related to this view is B. Engel and G. Hein’s conclusion (1981) that “qualitative means, with a stress on documentation, observation and use of the program activities as part of the project, were the most appropriate form for studying of most on-going [museum] programs” (p. 39).

Data Collection

This research employed a combination of qualitative techniques including documents analysis and questionnaire in the data collection stage. The decision to use multiple data collection techniques in a qualitative research required a well controlled balance between the positives and precautions of this procedure. On the positive side, multiple data collection techniques help to increase data accuracy, availability, and credibility and to ensure rigor in the inquiry (Patton, 2002). On the other side, it requires a careful bias-checking procedure for each individual technique, extra time, wider repertoire, effort and extra preparation. It also requires the use of a similar unit of analysis for the data from each of the methods used (Patton, 2002).
Documents Analysis

Analyzing archival records provides qualitative researchers with rich ethnographic data and information about situations and cases that are no longer observable. The usefulness of documents depends on whether they are easily accessible, accurate, authentic and well preserved. When documents analysis is incorporated with other research techniques, this method according to Glesne (1999) will bring more trustworthiness into research findings, help in bringing new insights in the topic being researched, and will provide a better understanding of the problem being investigated. However, document studies are generally not without shortcomings. One of these is that documents may sometimes be incomplete, inaccurate, inconsistent or of questionable authenticity. Access and photocopying in some cases may be difficult or completely or partially restricted. Another problem that faces benefiting from documents to the full extent is that their presence in huge numbers might make sorting, classifying and coding them a challenging task.

The use of documents analysis method in this research aimed at making possible comparisons between the first five teacher institutes at the Harn Museum in order to identify events, activities and people who relate to the subject of the study. The main sources of documents that have been used in this research are the archives of the 2002, 2003, 2004, 2005 and 2006 Harn Museum teacher institutes. Permission from the museum education department administration to use these documents had been granted. The classification, analysis and study of these documents helped in setting the stage to understand and evaluate the Harn museum teacher institute experience from both the teachers and the museum perspectives. The institutes’ documents have also been helpful
in highlighting the teachers’ perspective of how different they expected their teaching to be after they returned back to school. They also helped in identifying the change in the teachers’ understanding regarding the appropriate educational activities that needed to be developed and incorporated in their class teaching. This collection of documents included “Participant Learning Assessment” forms and “Teacher Institute Evaluation” forms in addition to organizational, administrative and correspondence records.

**Qualitative Questionnaire**

In a museum teacher program research such as this, qualitative questionnaire could be used to acquire general and specific details to help in evaluating the institute’s process and the experience it offers to teachers after they go back to their classrooms. The main advantage of this technique is that it is simple, flexible and easy to conduct. It helps to acquire data that is representative of all participating individuals within a relatively short period of time and with minimal expenses.

The fact that the teachers who participated in the first five teacher institutes at the Harn Museum came from allover the state of Florida posed logistic and practical considerations in regards to the way the questionnaire for this survey will be conducted and distributed. It became apparent that face to face or telephone interviews and postal survey techniques are not practically applicable in the case of this research and a form of electronic survey technique was considered to be more suitable. Electronic survey techniques are now gaining wide acceptance in the educational academic research settings. Such survey techniques might come in a web page-based survey form or through email communication. The web page-based survey technique is usually used to
study large numbers of online users while the email-based survey is used to study smaller
and more homogenous groups of online users.

Following consultation with the Harn Museum department of education, a
decision of using the email-based survey technique was favored. Some of the factors that
supported the decision of using the email-based survey technique included cost
efficiency, the fast and easy execution, and the likelihood for a much higher response
rate.

In spite of the wide acceptance the email-based survey technique is gaining, it is
not without downside aspects and problems. Some of these relate to anonymity,
confidentiality, sampling problems and inaccuracy of addresses. This last one had been
frequently encountered in using this technique for this research. Twenty one survey
forms bounced back undeliverable due to inaccuracy or dysfunctional in mailing address.
Most of the teachers used their school email addresses in their correspondence with the
Harn Museum, and these addresses usually change or get disabled following any change
in the teachers’ employment affiliation.

The Research Setting

This research aimed at drawing conclusions relating to what museum school
partnerships would offer to classroom teachers to help in their professional development
and the promotion of their teaching skills. Museum teacher institute programs represent
one category among many museum programs targeting classroom teachers. The selection
of the museum teacher institutes category to be studied in this research is based on the
view that they are becoming popular among classroom teachers and have already proved
to be fruitful in many cases. One of these programs is the teacher institute at the Harn
Museum of Art in Gainesville, Florida, where this study will be conducted.

The Harn Museum is an important cultural resource of the University of Florida in Gainesville, FL, and is accredited by the American Association of Museums. It is one of the largest visual arts facilities in the State of Florida and among the largest university art museums in the southeastern United States. The museum's collection currently consists of about 7,000 works of art covering areas of African Art, Modern Arts of the Americas and Europe, Asian Art, International Contemporary Art and Photography. The museum programs are partially sponsored and supported by the State of Florida, The Division of Cultural Affairs of the US Department of State, the Florida Arts Council, The National Endowment for the Arts, The University of Florida, The Harn Program Endowment Fund, the Harn Alliance and many private donors.

The Harn Museum Department of Education offers a vast array of educational programs, materials and activities for adults and children including “Educator Workshops” and family activities such as the “Tot Time” program for children ages 2 – 5 and “Family Days”. It also offers programs aimed at senior citizens. Through its Bishop Study Center, the museum offers considerable multi-media resources for extended study in art and culture. It also has a two week loan of curriculum design materials and other educational items such as books, CD-ROMs and videos. The Harn Museum Education Department in partnership with the Curriculum Department of the School Board of Alachua County in Florida, has implemented the “School and Educator Program”. The program produced 5 “Curriculum Resource Units” that are now available for use in elementary and middle school classrooms. The Harn Museum Education Department started the summer teacher institute initiative in 2002 and continued on annual basis up to
this date. Around 25 teachers from different school levels, teaching different class subjects, and from all over the State of Florida participated every year.

The decision to choose the Harn Museum to be the setting for this study is based on the following reasons:

- The Harn Museum has an ideal environment for a successful partnership relation through its well established links with the area school district, schools administrations and teachers.
- The Museum has a considerable amount of data and material from previous institutes that has not been studied before.
- The unlimited support and encouragement from the museum education department to make use of the museum resources for this research.
- For logistic considerations including my work at the university of Florida to which the museum belongs.

**Research Participants and Sampling**

In order to acquire a variety of perspectives related to the teachers’ experience at the Harn Museum teacher institutes, all the 125 teachers who took part in the first five institutes at the Harn Museum have been requested to participate in this research. Through the assistance of the Harn Museum Department of education, it has been possible to get the list of names of all the teachers who took part in the Harn Museum teacher institutes and to arrange for contacting them for the purpose of participating in this research. The participant’s basic role was to respond to a questionnaire of 18 questions dealing with different professional aspects relating to their experience at the Harn museum teacher institutes. The answers to these questions were anticipated to
highlight the teachers’ insights and concerns in regards to the knowledge and experience they gained through these institutes.

The initial idea was to use 60 of the respondent teachers as a research sample. This number has been selected on the basis of being appropriate to provide data from teachers who attended the five Harn Museum teacher institutes, have different areas of specialties, from varied levels of schools and have different ranges of teaching experiences. Since the actual number of the respondent teachers did not exceed 69 (55.2%), this led to a modification of the original sampling plan by including all respondents in the research sample.

Research Limitations and Delimitations

Research limitations are a set of constraints on the data and resources available to execute the research (Fellows & Liu, 2003). They generally pre-exist at the beginning of research and are usually out of the researcher’s hand. Delimitations are another set of conditions imposed by the researcher prior to the initiation of research or while the research is in process. The purpose of imposing delimitations is to keep the range of the study in focus and to have control over the research subject.

This research will be conducted with several limitations and delimitations in mind. Some of these characteristically face museum education research in general, while others relating to this research in particular.

One of the common problems that affect museum education research is that most museums generally complain of the fund shortage of their educational activities. This leads to designing limited educational activities, or in many cases canceling some programs all together. Limited finance is also responsible for forcing some museums not
to make education a top priority and to continue focusing on their collection-based exhibitions. This creates a situation where communities, school districts administrations and even teachers become not fully aware of the educational potential of museums. Another problem that faces museum education research is the copyright issues. This affects accessibility to some materials which may seriously affect educational programs and any research project that might follow.

Of the several programs and activities within the school museum partnership framework, this study addresses the teacher training area as presented through the museum teacher institute programs. The emphasis of this study is to show how the field of museum education contributes to teachers’ professional development. The findings of this study are thus limited to museum teacher training in art museums. Other museum teacher programs and museums of different areas of specialty may have a different approach and philosophy to teachers’ training, both at the theoretical and experimental levels. For this reason, the findings of this study are not meant to be generalized and replicated in all museum teacher training research projects.

The most serious limitation in this research is that it is practically impossible to conduct direct in depth interviews with the research participants. This is due to the fact that the participant teachers are from schools or towns scattered all over the state of Florida.

Museum education, on the one hand, and museum school partnership, on the other, have both evolved congruently following the stronger connections museums are building with other community institutions. Although museums around the globe are now rushing to embrace new developments, theories and methods related to museum
education, this field largely and remains up to the moment a US phenomenon. For the purposes of accessibility and manageability, this research will limit its literature coverage and example references to American samples.

**Ethics of Museum Teacher Institute Research**

The ethical factor in museum education research stems from the fact that museums are institutions with educational, social and cultural agendas. Societies assume that museums should be “value-neutral” and, accordingly, any research that is designed in relation to them is expected to reflect a higher level of accountability (American Association of Museums, 2000).

To carry out a museum education research, it is important to consider basic procedural safeguards. Among these is to realize that museum education research is a multi-faceted research. On one side, it deals with museum collections, documents and materials. On the other side, it connects to school communities including teachers, students and administrations. It also deals with museum education personnel including educators, docents and curators. Furthermore, it relates to museum visitors and families who take part in museum education programs. Accordingly, the ethical commitments in an environment with such wide spread connections are also varied.

This section will touch on the issue of museum research ethics as they relate to research sponsorship, research relations and research data dissemination. These correspond to the pre-research work, the actual research work, and post research work phases of the project.

Research relations ethics handle the question of informed consent as a key issue in field research. Participants have been informed of the purpose, agendas, nature, and
importance of this research. This was followed by requesting their consent to participate in the research and were given ample time to withhold cooperation if need be. Participants were fully assured that research data and findings will be used only by the researcher for the intended academic and research purposes.

A very decisive factor in the research relations ethics is to secure permission for doing the research from the administration of the proposed research site. In the case of this research, written correspondences have been exchanged and personal meetings have been held with the Director of the Harn Museum Department of education. Following these meetings, archival data and a wide collection of records and documents have been made available for the purpose of this research.

Research relations ethics require a great concern about cultural and social sensitivity towards research participants. As the main target of this research was to obtain views of participants regarding a museum teacher institute experience, personal information such as age, gender, sexual orientation, race and religion of research participants were not of primary importance and have not been requested. The only data variables that have personal nature necessary to this research are those related to professional status such as the class subject(s) and the grade a teacher is teaching and the school level (Elementary, Middle or High). Still, the research kept the subjects’ identities protected so that information collected does not cause harm, negative consequences, deception, exploitation or embarrassment in any way.

Data dissemination ethics are concerned with the ways and methods of making the collected data available to a large number of the interested educational and academic community members in the first place and to the public in general. Some of the key
ethical issues here are data ownership and intellectual property rights. These will be addressed according to the legal and professional guidelines without jeopardizing confidentiality and secrecy.

The data dissemination ethical obligations in this research are governed by many factors such as accessibility, accuracy, clarity, comprehensiveness, confidentiality, relevance, objectivity and quality of presentation. All legal foundations that control data dissemination have been examined in order to identify any possible conflicts in data ownership. The major form of data dissemination will be the publication of results. This will take place by presenting the results through journal articles, conferences and workshops, electronic mediums and potentially by rendering the dissertation into a publishable book.

In designing a museum teacher institute, it is a professional as well as an ethical obligation to abide by the ethical standards proposed by many professional museum associations. To name only a few, there are the US National Standards for Art Education, proposed and published by the Consortium of National Arts Education Association (1994); the American Association of Museums Code of Ethics for Museums (reviewed and amended in 2000); and the 1986 ICOM Code of Professional Ethics for Museums (reviewed and amended in 2004). Section 3-5 of the ICOM Code is devoted to museum research which, according to the Code, “should relate to the museums’ mission and objectives and conform to established legal, ethical and academic practices”.

The academic ethical obligations in this research are governed by the principles outlined in the Guidebook for Institutional Review Boards (IRBs); the statutes and ordinances of academic integrity at Ohio University; and all other accepted regulations,
codes and laws of academic research in general in order to provide the utmost protection for its human subjects. As research in the field of education, it has been conducted in full conformity with the “Ethical Standards of the American Educational Research Association” (Strike, et al., 2002). These include ethical obligations and responsibilities towards the field, research populations, educational institutions, sponsoring and supporting institutes and the public in general.

**Research Validity and Reliability**

Research validity is a combination of factors working collectively to assure that the research is measuring what it purports to be measuring. Validity is governed by research design, approach, techniques and methods (Gliner and Morgan, 2000). In the case of this research, the validity issue has been to prove that the research design and techniques are appropriate enough to test the research hypothesis, answer research questions and ultimately solve the research problem, and to show that its findings can accurately be interpreted. In qualitative research, this is called “internal validity”, where the researcher’s perspectives together with the supporting evidence become an important element in research credibility (Mertens, 2005; Schutt & Engel, 2005).

Research validity is also measured in terms of whether the findings can be generalized to other similar contexts and conditions. For example, is it possible, based on the results of this research, to conclude how other similar experiences elsewhere would work and what to expect from them? This “external validity” factor shows that the question of validity is closely related to research relevance (Gliner and Morgan, 2000).

Reliability is the consistency of research material, categorization and process. As in validity, qualitative research reliability can either be internal or external. Internal
research reliability is the extent to which data collection, analysis, and interpretation are consistent and can be reproduced given the same conditions. External research reliability is the extent to which other researchers can replicate results in the same or other conditions (Anderson & Arsenault, 1998).

A test of research material reliability occurs by realizing the impact of factors such as the researcher’s objectivity and influence on the interview situation and the design of the questionnaire. Research categorization reliability is measured by how the classification of information and data is correct and logical. Reliability of the research process is the correct and logical estimation and calculation of the entire research scheduling including interview days and time and timing allotted for data collection.

**Overall Research Design and Timeline**

According to Maxwell (2005), designing qualitative research is:

An ongoing process that involves “taking” back and forth between the different components of the design, assessing the implications of goals, theories, research questions, methods and validity threats for one another. It doesn’t begin from a predetermined starting point or proceed through a fixed sequence of steps, but involves interconnection and interaction among the different design components (p. 3).

All steps in this research including setting up research framework, agendas and objectives; selecting research methods and data collection techniques; conducting fieldwork and collection of data; analyzing, interpreting and writing-up and defending final results; and making recommendations for future research were my sole responsibility. I spent four months (August-December 2007) classifying and reviewing
the archival materials at the Harn Museum. This has simultaneously been accompanied by drafting, distributing and retrieving the questionnaires. After the primary data is collected and organized, I moved to my final data analysis process and extraction of final results and drafting my dissertation. This has taken a period of 5 months (January-May 2008).
CHAPTER 4: DESCRIPTIVE AND ANALYTICAL EVALUATION OF THE
HARN MUSEUM TEACHER INSTITUTES EXPERIENCE

Introduction

This chapter draws on the Harn museum teacher institutes’ experience to provide a description of the program contents and the participant teachers’ evaluation of each of the first 5 Harn Museum teacher institutes. The data related to these institutes which will be presented in this chapter comes from the Harn Museum teachers’ institutes’ archived documents and filed records. The rationale behind the institutes’ description is to highlight the features of museum teacher institutes’ programs and to shed light on the varied range and types of teaching activities and techniques they use.

Each institute’s description will be followed by a presentation of findings and results based on the participant teachers’ evaluation as recorded in the Harn Museum’s archives and records in order to show how the participant teachers viewed each institute in terms of activities, objectives and organization. These will be used to generate a comparative data to help in determining if there is a consistent pattern of factors that contributed to the success or failure of the Harn Museum teacher institute experience.

The section on the definition and development of museums in chapter one and the literature review in chapter two illustrated the museums’ multi-faceted function and reflected on their nature as centers of entertainment, education and social inclusion missions. It has also been highlighted that museums are one group among a fabric of institutions and establishments that contribute to the task of advancing teachers’ professional competence and teaching creativity. The ultimate conclusion this chapter
aims to reach is to identify and analyze the characteristic variables that make museums’
contribution to teachers’ professional development influential, genuine, and qualitatively
different compared to what other institutions would offer.

**The Harn Museum Teacher Institutes**

The idea of organizing teacher institutes at the Harn Museum in Gainesville, Florida was first brought up following an informal, hand-out count survey during the 2001 Florida Art Education Association (FAEA) conference. The surveyed participants indicated their willingness to come to a local or regional teachers’ institute for up to 3 days. A tentative plan was drafted by the museum department of education, submitted to the museum administration and was later approved with a recommendation to keep the institute small and limited to 40 participants in maximum.

A major and initial step towards a successful organization of a museum teachers institute is to make sure that the information about the institute reaches the intended population effectively and timely. The cooperation and partnership between the Harn Museum, the Alachua County School District and the Florida Art Education Association “FAEA” played a major role in spreading the word about the Harn Museum annual summer institutes. According to the records of the 2004, 2005, and 2006, the teachers who participated in these institutes knew about the institute through a variety of channels including the Harn Museum flyers, emails from FAEA, FAEA website, the Harn Museum website, the Harn Museum Educator Resource Guide and word of mouth. Other mediums included FAEA conference, email from the Harn Museum, attending previous Harn Museum teachers’ institutes, emails from the district resource teacher and through information sent to schools.
The records from the first 2 institutes of 2002 and 2003 are silent about the specific methods used in teacher recruitment. However, the museum records show that in May 2002, the museum circulated a letter to the “District Coordinators, Art Supervisors and Professional Development Directors” informing them of the upcoming summer institute and requested their help in distributing the news to art teachers and other interested educators. Table 1 shows the different methods that were used to inform teachers about the Harn Museum summer institute in 2004, 2005, and 2006, and the number of teachers who responded to each method. According to this table, the distribution of the Harn Museum flyer and the contacts with FAEA are the two effective means in informing the teachers about the Harn Institutes.

Besides effective teachers’ recruitment methods, there are many other factors that the Harn Museum paid attention to in order to secure a successful organization of the institutes. These included selection of an appropriate date to carry out the institutes’ activities, length of the institute, value for cost, arrangement of the daily schedule, offering of meals and reception, staff support and communication, provision of materials and resources and preparing the museum facilities.
Table 1

*Methods of teacher recruitment*

<table>
<thead>
<tr>
<th>Recruitment method</th>
<th>Number of teachers responded in 2004</th>
<th>Number of teachers responded in 2005</th>
<th>Number of teachers responded in 2006</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harn Museum flyer</td>
<td>12</td>
<td>7</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>Email from FAEA</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td>FAEA website</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Word of mouth</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>13</td>
</tr>
<tr>
<td>Harn Museum website</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>11</td>
</tr>
<tr>
<td>Harn Museum Educator-Resource Guide</td>
<td>2</td>
<td>6</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>
The 2002 Institute

The Museum organized its first teacher institute between July 21st and July 23rd, 2002 to train the participant teachers on using the 2nd unit of its curriculum resources series “Exploring African Arts: A Discovery of African Cultures”. Twenty two teachers from across the state of Florida participated in this institute. The 3 days institute’s program included a museum tour, an African drumming and storytelling performance, a gallery talk presented by the museum curator of African Art, group activities and open discussion with the teachers on the subject of art criticism by comparing and contrasting African art with art from other cultures, an interactive slide lecture on the history of African art and a studio workshop on printmaking.

Teachers’ Evaluation of the 2002 Institute

Table 2 displays the participant teachers’ rating of each of this institute’s activities. The museum tour activity received (88%) being the lowest rate of satisfaction while the interactive slide lecture on African art history scored the highest rate of 96%. The rest are in between. The average of rating of the entire activities of this institute is 92%. The average percentage rating of the entire organizational aspects of this institute is 98%. The “length of the institute” ranked the lowest of 94% rate of satisfaction while each of the “reception, breakfast and lunch”, “staff support and communication” and the “facility” aspects scored a 100% rate of satisfaction. These statistics indicate the high degree of teachers’ satisfaction of this institute’s program, activities and effort of organization. Table 3 shows the teachers’ ratings of the institute’s organizational aspects.

1 The information pertinent to this institute is extracted from the institute files at the Harn Museum
Table 2

*Activities’ rating of the 2002 Harn Museum Institutes*

<table>
<thead>
<tr>
<th>Day</th>
<th>Activity</th>
<th>% of rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>General tour of the museum</td>
<td>88%</td>
</tr>
<tr>
<td></td>
<td>Performance: African Drumming and story-telling</td>
<td>92%</td>
</tr>
<tr>
<td></td>
<td>Gallery talk</td>
<td>94%</td>
</tr>
<tr>
<td>2\textsuperscript{nd} day</td>
<td>Art Criticism: Compare/contrast African Art with Art- from other cultures</td>
<td>92%</td>
</tr>
<tr>
<td></td>
<td>Interactive Slide Lecture: African art history</td>
<td>96%</td>
</tr>
<tr>
<td></td>
<td>Studio workshop: printmaking</td>
<td>90%</td>
</tr>
<tr>
<td>3\textsuperscript{rd} Day</td>
<td>Talk by the UF center for African Studies Assistant director</td>
<td>94%</td>
</tr>
</tbody>
</table>
### Table 3

*Ratings of the 2002 institute’s organizational aspects*

<table>
<thead>
<tr>
<th>Organizational aspect</th>
<th>% of those who chose least effective (1)</th>
<th>% of those who chose most effective (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dates of the Institute</td>
<td>0</td>
<td>96%</td>
</tr>
<tr>
<td>Length of the institute</td>
<td>0</td>
<td>94%</td>
</tr>
<tr>
<td>Value for cost</td>
<td>0</td>
<td>98%</td>
</tr>
<tr>
<td>Arrangement of schedule</td>
<td>0</td>
<td>96%</td>
</tr>
<tr>
<td>Reception, breakfast and lunch</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Staff support and communication</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Materials and resources</td>
<td>0</td>
<td>98%</td>
</tr>
<tr>
<td>Facility</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>
The 2003 Institute

The 2003 Harn Museum teacher institute took place between July 20 and July 22, 2003. The museum put together a program that consisted of a variety of activities and applications to help the participant teachers increase their knowledge and experience related to Asian arts and cultures and to familiarize them with the museum resources unit “ExploreASIA”. These activities included a museum tour, a traditional Indian dance performance, a gallery talk by the museum curator of the Asian arts, a video show on Chinese brushwork, a demonstration of Chinese brushwork and a lesson on Chinese poetry. It also offered a lecture on Chinese history followed by studio activities on Chinese brushwork, an information session on Asia and Asian art presented by specialists from the University of Florida’s Center for Asian Studies followed by a lesson on avatars from the “ExploreASIA” Curriculum unit. 24 teachers (23 female and one male), mostly art teachers from 16 cities and towns in the State of Florida participated in this institute.

Teachers’ Evaluation of the 2003 Institute

Table 4 summarizes the teachers’ level of satisfaction of this institute’s daily activities. The museum tour activity received the lowest rate of 84% among the activities that were chosen to be “most effective”, while the part on the Chinese brushwork studio activities received 100% as the highest rated among the activities of this institute. The other activities are rated in between. The average rating of all the activities of this institute activities and program come from the Harn Museum records.
Table 4

*The 2003 institute’s activities rating*

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of those who chose least effective (1)</th>
<th>% of those who chose most effective (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tour of the museum</td>
<td>0</td>
<td>84%</td>
</tr>
<tr>
<td>traditional Indian Dance</td>
<td>0</td>
<td>91%</td>
</tr>
<tr>
<td>Gallery talk</td>
<td>0</td>
<td>86%</td>
</tr>
<tr>
<td>Video on Chinese Brushwork</td>
<td>0</td>
<td>88%</td>
</tr>
<tr>
<td>Demonstration of Chinese Brushwork</td>
<td>0</td>
<td>87%</td>
</tr>
<tr>
<td>Curriculum lesson on poetry</td>
<td>1%</td>
<td>85%</td>
</tr>
<tr>
<td>Lecture on Chinese History</td>
<td>0</td>
<td>86%</td>
</tr>
<tr>
<td>Studio activities on Chinese brushwork</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>UF Center for Asian Studies information session</td>
<td>0</td>
<td>87%</td>
</tr>
<tr>
<td>Curriculum lesson on avatars</td>
<td>0</td>
<td>86%</td>
</tr>
</tbody>
</table>
Table 5

*Ratings of the 2003 institute’s organizational aspects*

<table>
<thead>
<tr>
<th>Organizational aspect</th>
<th>% of those who chose least effective (1)</th>
<th>% of those who chose most effective (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dates of the Institute</td>
<td>0</td>
<td>86%</td>
</tr>
<tr>
<td>Length of the institute</td>
<td>0</td>
<td>82%</td>
</tr>
<tr>
<td>Value for cost</td>
<td>0</td>
<td>95%</td>
</tr>
<tr>
<td>Arrangement of schedule</td>
<td>0</td>
<td>91%</td>
</tr>
<tr>
<td>Reception, breakfast and lunch</td>
<td>0</td>
<td>82%</td>
</tr>
<tr>
<td>Staff support and communication</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Materials and resources</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>Facility</td>
<td>0</td>
<td>95%</td>
</tr>
</tbody>
</table>
institute is 88%. This is makes it 4% lower than the 2002 rating, but still indicates a high
degree of teachers’ satisfaction of the institute’s programs and activities.

The participant teachers in the 2003 institute were also asked to rate the institute’s
organizational aspects. The length of the institute received a rating of 82% being the
lowest among the “most effective” organizational aspects. The two aspects of “staff
support and communication” and the provision of “materials and resources” scored 100%
both being the highest among the “most effective” organizational aspects of the 2003
institute. The average rating of the organizational aspects of this institute is 91%. This
might be taken as another evidence of the high satisfaction among the participant teachers
of the organizational aspects of this institute.

The 2004 Institute

The museum organized its 3rd teacher institute in the summer of 2004 to offer the
teachers a training opportunity in using its 4th curriculum unit entitled “Reading the
World of Art” in their classroom teaching, to learn about the museum resources, and to
plan classroom activities in relation to Florida art collection in the museum. Thirty
teachers took part in this institute including teachers of visual arts and language arts from
a number of elementary schools, middle schools and high schools in Florida.

The institute’s program included a tour of the museum, a gallery talk by the
museum Curator of American Art, a lecture by a guest professor on “Florida’s Visual
Mythology” and discussion of the museum curriculum unit “Reading the World of Art”
led by the museum Coordinator of School and Family Programs. The program also

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1 Details and information related to this institute are collected from the Harn museum records
consisted of gallery interactive activities, a studio workshop and a discussion of some of the interdisciplinary ideas and classroom applications.

**Teachers’ Evaluation of the 2004 Institute**

The evaluation form used by the teachers to evaluate the activities and contents of this institute is different from the one used previously. This one asked the teachers to mark any number of the institute’s activities they deemed “most successful” or “least successful”. Once again, the museum tour activity ranked the lowest among the “most successful” activities with a rating of 86%. The session on the studio activities ranked at the top with an average rating of 97%. The overall rating of this institute’s activities yielded an average of 90% in support of evaluating the institute’s activities as “most effective”. This makes it 2% above the average rating of the 2003 institute and 2% lower than the 2002 institute. Table 6 summarizes the teachers’ opinions in regards to the institute’s activities and daily schedule.

The organizational aspect form has not been used in this institute. Instead, another form was used to record if the teachers “strongly agree”, “agree”, “undecided”, “disagree” or “strongly disagree” to the following:

- This institute helped them to prepare for using the “Reading the World of Art” curriculum resource in their classroom.
- The institute gave them valuable information about the educational resources available at the Harn Museum of Art.
- The institute met the objectives for the participants.

The institute’s records show that the teachers overwhelmingly strongly agree to the three items in this form. Their evaluation produced an average rating of 93%, 87%
and 92% of the three statements listed above respectively. The teachers’ strong agreement to these items matches their high rating of this institute’s daily activities and program content. Table 7 summarizes the teachers’ responses to these items.

\textit{The 2005 Institute}\(^{1}\)

The Harn Museum 4\textsuperscript{th} institute was held in the period between July 17\textsuperscript{th} and July 19\textsuperscript{th} 2005. Twenty seven teachers from different school levels from all over the State of Florida participated in this institute. They are mostly art teachers in addition to teachers of humanities and language arts. The objective behind this institute was to help the participant teachers get acquainted with the museum’s educational resources related to the state of Florida.

This institute’s main focus was the museum 5\textsuperscript{th} curriculum unit, issued in a CD format in 2005 and entitled “Making a Case for Florida Art”. The museum envisions its Florida-themed artwork to be an educational tool that “provides an excellent opportunity to educate students about the state in which they live while also cultivating an appreciation for the connection between literature and images”.

\(^{1}\) The information regarding this institute as well as the teachers’ evaluation come from the Harn Museum files
<table>
<thead>
<tr>
<th>Activity</th>
<th>% of those who chose</th>
<th>% of those who chose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tour of the galleries</td>
<td>86%</td>
<td>14%</td>
</tr>
<tr>
<td>Gallery talk by curator</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>FL’s Visual mythology lecture</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Discussion of curriculum unit themes</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>Language arts activity</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Activities in the galleries</td>
<td>93%</td>
<td>7%</td>
</tr>
<tr>
<td>Studio session</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td>Sharing classroom ideas</td>
<td>88%</td>
<td>12%</td>
</tr>
</tbody>
</table>

Table 6

*Ratings of the 2004 institute daily activities*
Table 7

*Ratings of the 2004 institute’s level of objectives achievement*

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect 1</td>
<td>93%</td>
<td>5%</td>
<td>3%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aspect 2</td>
<td>87%</td>
<td>7%</td>
<td>6%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aspect 3</td>
<td>92%</td>
<td>5%</td>
<td>3%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Aspect 1: This institute’s help in preparing teachers to use the “Reading the World of Art” curriculum resource in their classroom.

Aspect 2: This institute gave teachers valuable information about the educational resources available at the Harn Museum of Art.

Aspect 3: This institute met participants’ objectives.

The institute’s program schedule included a tour of the museum, a gallery talk by the museum’s curator of modern art, an overview of the museum educational resources presented jointly by the museum Director of Education and the museum Coordinator of School and Family Programs. The program also consisted of interactive activities, a visit to the neighboring Florida museum of Natural History, a printmaking workshop by a Florida artist, and presentation and discussion of interdisciplinary teaching ideas and classroom applications.
**Teachers’ Evaluation of the 2005 Institute**

The teachers’ evaluation of this institute followed the same method used and previously mentioned in the summary of the 2004 institute. The form asked the teachers to choose “strongly agree”, “agree”, “undecided”, “disagree” or “strongly disagree” if they feel that:

- This institute helped them to prepare for using the “Making a Case for Florida Art” curriculum resource in their classroom.
- The institute gave them valuable information about the educational resources available at the Harn Museum of Art.
- The institute met the objectives for the participants.

The institute’s records indicate that an average of 88%, 86% and 91% of the participant teachers strongly agree with the three statements listed above respectively. Table 8 summarizes the percentages of the teachers’ responses. These are the in the same level of rating of the previous institute and indicates a high level of satisfaction.

The teachers’ evaluation of this institute’s activities produced an average rating of 91%. The studio activities session scored a rating of 89% being the lowest among the “most effective” parts of this institute. The museum tour activity is rated at 97% being the top of the “most effective” activities this year. Table 9 summarizes the teachers’ opinions in regards to the institute’s daily activities and program.

**The 2006 Institute**

The 2006 institute was held in the period between July 16\textsuperscript{th} and July 18\textsuperscript{th}, 2006. Besides sharing the same common goals with the previous institutes, another specific

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1 Information and details related to this institute were collected from the Harn Museum files
objective behind this institute was to offer educators an opportunity to develop their knowledge of modern art studio techniques and to plan interdisciplinary classroom activities. This institute focused on the 6th unit in the Harn Museum’s curriculum resources development series entitled “contemporary art: The visual language of our time” issued in a CD format. The educational rationale of this unit that shaped this year’s institute activities is to introduce selected contemporary artworks from the Harn Museum’s permanent collection to teachers and students, and to provide related materials and resources for classroom use to engage students with contemporary artworks.
Table 8

*Ratings of the 2005 institute’s level of objectives achievement*

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect 1</td>
<td>88%</td>
<td>11%</td>
<td>1%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aspect 2</td>
<td>85%</td>
<td>12%</td>
<td>2%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aspect 3</td>
<td>91%</td>
<td>7%</td>
<td>2%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Aspect 1: This institute help teachers to prepare for using the “Making a case for Florida art” curriculum resource in classroom.

Aspect 2: This institute gave teachers valuable information about the educational resources available at the Harn Museum of Art.

Aspect 3: This institute met the objectives for the participants.
Table 9

*Ratings of the 2005 institute’s daily activities*

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of those who chose</th>
<th>% of those who chose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highlights Tour of the Harn</td>
<td>97%</td>
<td>3%</td>
</tr>
<tr>
<td>Gallery talk by curator</td>
<td>93%</td>
<td>2%</td>
</tr>
<tr>
<td>Introduction to FL Resources</td>
<td>89%</td>
<td>1%</td>
</tr>
<tr>
<td>Activities in the galleries</td>
<td>93%</td>
<td>2%</td>
</tr>
<tr>
<td>Visit Natural History Museum</td>
<td>90%</td>
<td>3%</td>
</tr>
<tr>
<td>Studio session</td>
<td>88%</td>
<td>3%</td>
</tr>
<tr>
<td>Application to classroom session</td>
<td>89%</td>
<td>2%</td>
</tr>
</tbody>
</table>

The 2006 institute’s program consisted of a museum tour, a gallery talk by the museum’s curator of contemporary art, institute overview by the museum director of education, a guest artist presentation followed by questions and discussion related to different subjects in the area of modern art. It also consisted of an overview of the educational resources from the Harn Museum presented by the museum Coordinator of School and Family Programs followed by studio activities. The final day covered discussion of interdisciplinary ideas and classroom applications. 24 teachers came from different parts of the state of Florida to take part in this institute.
**Teachers’ Evaluation of the 2006 Institute**

The participant teachers followed the same form used in the 2004 and 2005 institutes to evaluate each one of the institute’s activities. The average rating of this institute’s activities is 91%. The “gallery talk by the museum’s curator of contemporary art” scored 87% being the lower among the most effective activities while the “studio session on appropriate art” ranked at the top with an average approval of 93%. Table 10 summarizes the teachers’ opinions in regards to the institute’s daily activities and program.

The teachers’ evaluation of this institute followed the same form used in the institutes of 2004 and 2005. The form asked the teachers to choose “strongly agree”, “agree”, “undecided”, “disagree” or “strongly disagree” to the following:

- This institute helped them to prepare for using the Harn Museum’s resource materials in their classroom
- The institute gave them opportunities to increase their professional knowledge about using contemporary art in their classroom.
- The institute met the objectives for the participants.

The institute’s records indicate that an average of 92%, 88% and 92% of the participant teachers strongly agree with the three statements listed above respectively. Table 11 summarizes the percentages of the teachers’ responses. These ratings offer another indication of the teachers’ high satisfaction of this institute’s level of objectives achievement.
The Learned Lessons

The high ratings of the institutes by the participant teachers give an indication that it takes a combined organizational, planning and design efforts to create a museum teacher institutes that satisfactorily meets its objectives. It also became apparent that efforts of parties other than the museums are needed to be incorporated to present an experience that is interdisciplinary and not single-vision oriented. As the above summaries have shown, the Harn Museum teacher institutes used resources and efforts from other museums, invited specialists from the University of Florida and hosted bands to present live performance as part of the institutes’ program.
Table 10

*Ratings of the 2006 institute’s daily activities*

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of those who chose most effective (1)</th>
<th>% of those who chose least effective (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gallery talk by curator</td>
<td>87%</td>
<td>0</td>
</tr>
<tr>
<td>Introductory Activities in the Galleries</td>
<td>88%</td>
<td>7%</td>
</tr>
<tr>
<td>Guest artist presentation</td>
<td>93%</td>
<td>1%</td>
</tr>
<tr>
<td>Introduction to the Harn Resources</td>
<td>90%</td>
<td>4%</td>
</tr>
<tr>
<td>Studio session on appropriate art</td>
<td>93%</td>
<td>0</td>
</tr>
<tr>
<td>Application to classroom session</td>
<td>91%</td>
<td>8%</td>
</tr>
</tbody>
</table>
Table 11

*Ratings of the 2006 institute’s level of objectives achievement*

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspect 1</td>
<td>92%</td>
<td>8%</td>
<td>1%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aspect 2</td>
<td>88%</td>
<td>12%</td>
<td>2%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Aspect 3</td>
<td>92%</td>
<td>8%</td>
<td>2%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Aspect 1: This institute helps teachers to prepare for using the Harn Museum’s resource materials in my classroom.

Aspect 2: This institute provides opportunities to increase teachers’ professional knowledge about using contemporary art in classroom.

Aspect 3: This institute met the objectives for the participants.

**Analysis of the Harn Museum Teacher Institutes Findings**

The teachers who participated in the 2002 and 2003 institutes used a “Participant Learning Assessment” form to provide their insight in regards to their museum institute experience. The form consisted of two sections. The “knowledge” section covered the important ideas, themes and activities that the participant teachers have been introduced to during their attendance of the institutes. The “Application” section in the same form dealt with the techniques and methods the teachers will consider in using the museum
educational resources in their teaching assignments and other educational activities. The teachers who participated in the 2004, 2005 and 2006 institutes did not use this form. They were, instead, asked to provide any comments or recommendations they deem important.

The analysis conducted on the teachers’ input and comments from the five institutes’ documents and forms showed many evidences that testify to the professional education nature of these institutes. The teachers’ comments in these forms, apart from the ones expressing complements and appreciation, could be grouped into three main categories. One group found in the Harn Museum teacher institutes’ an effective support to the ideas of ‘teaching across curricular disciplines’, “breaking subjects isolation and bridging them with other content areas”, “encouraging teachers collaboration” and “promoting education beyond the normal curricular boundaries” These and many other similar comments were grouped together and considered in this research as an endorsement of the museum teacher institutes to the interdisciplinary teaching techniques and approaches.

Another closely related set of comments focused on the institutes’ efforts in “making lesson plans and activities responsive to real life situations”, “connecting teaching to the world beyond the classroom”, “using real world references to motivate the students to learn” and “focusing on student-based activities”. These will be taken in this analysis as strong indications to the institutes’ encouragement and adaptation of “authentic instruction” approach. A third similar group of comments cherished the institutes’ emphasis on addressing cultural subjects and communicating social concepts through visual means. These comments also highlighted the institutes’ idea of creating
where “visuality” complements with “textuality” to produce a unique learning environment. This set of comments will be considered in this analysis to be in support of the institutes’ orientation towards emphasizing the “visual culture” principles and philosophy in teaching. The following analysis will focus and discuss these categories as attributes of a “museum-based pedagogy”.

**Museum Education’s Support to Authentic Instruction**

Authentic instruction is an emerging pedagogical approach that works by placing the learner in an environment where it will be possible to assimilate the practices, skills and beliefs associated with a particular subject (Brown J. et al., 1989). Newman and Wehlage (1993) suggested that authenticity of instruction could be judged based on five standards. These are:

- Use of higher level of thinking.
- Depth of knowledge.
- Content which has value and meaning beyond the instructional context.
- Substantial conversation about the topic.
- Peer support for the achievement.

It has been pointed out in this chapter that one category of the participant teachers’ comments could be aligned with the authentic instruction approach. This conclusion is supported by the techniques and contents of a number of activities and lesson plans that have either been part of the institutes’ program or included in the Harn Museum curriculum resources units. These activities and lesson plans revolve around the same authentic instruction standards suggested by Newman and Wehlage (1993). The
following paragraphs will present and discuss examples of this type of activities to show that the claim of these institutes’ support of “authentic instruction” is not baseless.

One aspect of authentic instruction that clearly appears in some of these activities is their tendency to sharpen the students’ skills of extracting facts, ideas and concepts from an authentic museum work of art, and to use these qualities in the process of building hypothesis, providing explanation and concluding a synthesis. An example of these activities comes from the Harn Museum curriculum resource unit “Exploring African Arts: A Discovery of African Culture” which has been the focus of the 1st Harn Museum teacher institute in the summer of 2002. In this activity, the curriculum unit suggests introducing the students to two pieces from the museum African collection. One of them is a young woman’s apron and the other one is a married woman’s apron, both from the Ndebele people of South Africa. The ornamental motifs on these artworks were known to represent ethnic and social identities and solidarity in the days of apartheid in South Africa. The unit suggests using these artworks in a social studies activity to get the students to extract facts and ideas after examining the outfits and clothing they wear for special occasions. This is followed by a discussion and comparison of findings. The unit builds on this activity to make the students research different cultures in South Africa and to focus on aspects such as rank, status, and roles within society. The element of authenticity in this activity appears in making the students extract facts and build a hypothesis and reach a conclusion by referring to a material object (clothing) to which they can relate.
Another aspect closely embedded in the authentic instruction approach and could be spotted in some of the teachers’ comments is the importance of incorporating activities that are founded on effective communication and collaboration between the students in order to guide each other to understand and handle a real life situation. One example of these activities comes from the “contemporary art: the visual language of our time” curriculum unit which has been the focus of the 2006 institute. The unit suggests getting the students involved in a science activity after examining Donald Sultan’s “eight yellows with flocked centers” modern woodcut artwork. Since the use of rubber is an essential technique for the artist to create his artwork, the activity suggests a students-based discussion and exchange of views regarding the use of materials and tools that might turn to be chemically or physically hazardous. There are of course instances where the students will be faced by situations of using these materials in real life.

*Museum Education’s Support to Interdisciplinary Teaching*

The second characteristic variable of these institutes revealed through the teachers’ comments reflects the high opportunity of acquiring a teaching training of an interdisciplinary nature. In their comments, the teachers’ highlighted the wide assortment of interrelated teaching techniques, the varied collection of ideas and activities and theoretical and practical approaches which are closely dependent on each other that the museum has employed in each institute’s program. These all attest to the interdisciplinary nature of these institutes.

Producing museum activities and lessons plans of interdisciplinary nature requires a museum educational plan that aims at building a broad and interrelated understanding of the principles, practices, and critical analyses of museums. This requires continuous
collaboration between museum education personnel and specialists from multiple school disciplines to produce an integrated classroom curriculum in addition to engraining museums in research, management of cultural heritage and an active role in building cross-cultural relationship within their communities. It is also important to stress the fact that an interdisciplinary museum works to present an example of educational environments where all the senses are used. The idea of producing museum educational activities of an interdisciplinary nature is built on the same theoretical foundations of interdisciplinary teaching in the schools’ system. It refers to a cross-curricular teaching technique that requires the combination of efforts of teachers to teach about a theme across different curricular disciplines (Barton & Smith 2000, Bolak, Bialach, & Dunphy 2005, Gatewood 1998).

A collection of comments pointed out that some of the proposed activities will have the advantage of helping the students to advance their learning find the most effective way to approach a given subject from different perspectives. This fits within the wide paradigm of interdisciplinary teaching. One example of these comes from the 2006 curriculum unit proposal of a combination of interdisciplinary visual art, language arts and social studies activities based on a modern gelatin silver print by the American artist Carrie Weems from the museum’s contemporary art collection. The artist executed this paint as a part of a series of works entitled “Dreaming in Cuba” to express her commitment to the idea of social change and diversity. The unit suggests that the students combine their visual, textual and analytical skills to produce artworks that reflect their own view of the subject in Weem’s artwork.
Other comments by the participant teachers refer to the institutes’ efforts in showing the impact of close collaboration among teachers in creating a dynamic exchange of ideas that will lead to enriching the teaching and learning settings of all academic disciplines. This is clear in the combined science and social studies activity proposed in the “Exploring African Arts” curriculum unit associated with a wooden elephant mask of the Ogbodo Enyi people in southeastern Nigeria. This artwork is one of the pieces in the Harn Museum’s African collection. The activity builds on comparing and contrasting animal masks from different cultures in terms of the materials, animal parts shown and their general appearance (being friendly or scary). The activity suggests the use of maps and other resources to research the land regions of Africa. The research could be expanded to include animal habitats and any other special traits the students might think of in relation to their chosen animals.

**Museum Education’s Support to Visual Culture**

Visual culture is a rising field among the postmodern academic disciplines focusing on a variety of cultural phenomenon that depend on visual mediums to be communicated. The discussion of a series of definitions, concepts and the principal theoretical sources of visual culture cited by M. Dikovitskaya (2005) and N. Mirzoeff (1999) all point to the main function of visualization in the construction of knowledge and in the creation of an effective pedagogical tool that could be used to understand and analyze how cultural dynamics, power and social relations are expressed through a variety of visual means.
Museums have come a long way in presenting history, art, culture, and visuality in a way that is firmly interconnected. It is not just the strategies and concepts of display and exhibitions that make visual culture at home in museums but also the fact that museums’ objects are now considered to be a central source in the ongoing debate about the semiotic notion of representation and the process of meaning making in museums. E. Hooper-Greenhill (2002) takes this argument further by stressing the importance of visual environment in museums for the reconceptualization of the museum audience relationship, and in founding a structure that is solid enough to take our understanding of aesthetics to new horizons.

The Harn Museum teacher institute experience, according to the participant teachers’ comments, has contributed to elevating the teachers’ visual awareness. One group of comments is centered on the notion of the museum institutes’ efforts in helping teachers produce balanced visual and textual statements in order to arrive at an effective means of communication and interpretation. This aspect is one major concern in the field of visual studies.

There is a group of activities in the institutes’ programs and the museum curriculum resources units that attest to the above-mentioned aspect of visual culture. One of these activities comes from “ExploreAsia” resource unit which has been the focus of the 2003 teacher institute. This visual arts activity refers to a large jar in the museum Asian collection from the Chinese Han Dynasty (206 B.C.E.-220C.E.) that has many images of dragons and phoenix. The main idea behind this activity is to discuss the meaning behind the representation of these animals on the jar’s surface. The unit suggests to the teachers some of the semiotic meanings behind dragons’ representation
such as good luck, indication of rain coming, wisdom and strength, and also as a sign of the dominant power as it is used to represent the Chinese emperor with his exceptional power of flying between heaven and earth. Through the visual representation of these animals, the teachers will be able to direct the discussion into different venues such as power, religious beliefs and cultural differences.

Another group of comments that falls within the area of visual studies highlighted the immense value of museum resources in developing the students’ visual literacy capacities. Visual literacy is not only the ability to evaluate visual products but also to help the students to possess and refine their skills of producing them in the final visual product is meaningful and communicative.

One of visual arts activities in the curriculum resource unit “reading the world of arts” aims at developing the students’ visual literacy through the production of a work of art based on the concept of animal symbolism in art. The activity builds on examining two small 8th century earthenware horses from the Tang Dynasty of China in the museum’s Asian collection. These two horses were originally used as tomb objects to protect the dead and unite them with the spiritual realm. In order to bring the idea of animal symbolism in artworks more closely to the students’ minds, the unit suggests a hands-on visual arts activity by asking the students carry-out the following:

- Research an animal that has special symbolism to them and find another culture that uses that animal as a symbol, but in a different way.

- Reflect upon what that animal symbolizes to them in their current society and how do social, cultural, ecological, economic, religious or political conditions influence the symbolism of this animal?
Create a detailed, finished and colored two-dimensional form of their version of the animal and give it individualized characteristics with special significance such as exaggerated body parts, interesting color combinations, or combined animal features.

The main idea in this activity is to make the students explore, understand and visually express their understanding of the subject of animal symbolism in artworks from different perspectives inside and outside their culture. This activity will have the potential of bringing to the classroom a hands-on experience accompanied by a series of discussion topics resting on the subject and idea of animal symbolism. Since animal symbolism is known in all cultures and religions and by all ethnic groups throughout the history, the subject could form a solid foundation for a pedagogic practice that makes the students feel encouraged to initiate a discussion with others in relation to their selected animals.

One possible positive consequence in making elementary school students visually explore the subject of animal symbolism is to make them motivated to think about the relation of their society and other societies to nature through the animals they show in their artworks. It also provides an opportunity to make the students engaged in a discussion of the relation of animal symbolism to religious believes where different cultural and ethnic groups believe that some animals possess a magic and superpower and for that reason they worshiped and protected them.

It is also possible that visual art teachers may find this activity appropriate to turn the class into interdisciplinary teaching experience by inviting teachers of other subjects to contribute to the discussion from their academic perspectives. Science teachers may,
for instance, cast some zoological information related to the specific animal such as its scientific name and classification as well as its habitat and behavior. Social studies teachers might have the chance to provide information related to the animal history of domestication and uses throughout the historical eras and other general references on the cultural, chronological and geographical areas in relation to this animal.

This activity stands on the ground of interaction between the students on one side and with their teachers and families on the other in order to exchange views about their selected artworks and to explain their perspectives on animal symbolism in art. In this case, the method of integrating museum resources in classroom teaching is used to create a platform for live discussion and a process of discovery and questioning.

Besides these main attributes of a museum-based pedagogy as seen in the participant teachers’ comments, other comments valued the opportunity to learn about the techniques of using artworks in teaching subjects that have for long remained outside museums’ interest such as math and language arts. Many of the curriculum resource units contained activities based on a variety of artworks from the museum collection in relation to these two classroom subjects.

One example of the math activities is founded on of the paintings by Herman Herzog. This is one of about 250 oil paintings of Florida by this artist. The work is entitled “Florida Marsh Scene”, dated c.1900. Building on the scene of birds in this painting, the unit suggests a fun elementary school math activity entitled “What’s My Wingspan?” This activity allows the students to find out what bird they would be by measuring their wingspan. Each child’s wingspan will be measured from fingertip to fingertip in order to find out which bird they are with the corresponding chart that the
teacher will provide. An extension to this activity is to calculate each child’s flapping rate by using a stopwatch to time how many wing flaps the student can complete in ten seconds in comparison to the chart. The activity continues by making the student flap for a full minute and note the level of fatigue in shoulders, and then discuss the distance some birds fly. The activity concludes by asking the students to research their bird and its habitat and to create a landscape scene, similar to the one in Herzog’s painting.

The idea of making math activities part of the Harn Museum educational efforts matches a growing movement by museums to create educational environments where their artworks and other educational resources and collections are integrated to encourage students to discover and develop their math skills. The St. Louis Science Center in St. Louis, Missouri, the Fort Worth Museum of Science and History in Worth, Texas, the Oregon Museum of Science and Industry in Portland, Oregon, and the Buffalo Museum of Science in Buffalo, New York and many other museums have already designed sections of their exhibitions and educational activities around specific mathematical practices and concepts.

The activity proposed in relation to Herzog’s painting demonstrates the positive role that could be anticipated from integrating museum resources in classroom teaching in creating a social and interactive learning environment. The active elements in this activity such as flapping, spreading wingspans, measuring and calculating combined with the silent ones such as researching and reading about birds and constructing exemplary habitats are could be combined to initiate a learning process that relies on creative discovery and interaction rather than handling the subject in the common rigid mathematics formats. In addition to these, this activity consists of a group of elements
that are highly necessary in creating a model social learning environment such as teaming
the students in pairs or small groups to monitor each other’s performance, and to
communicate their ideas with each other and to discuss each one’s results. Through this
process, teachers will have an opportunity to apply the constructivist notion of learning
where the students develop their discovery of meanings and facts while examining the
artwork and practicing the activity.

Another example that supports the teachers’ comments regarding the integration
of museum resources to teach a math lesson comes from the 2006-2007 Curriculum
Resources Unit. This unit includes a math activity in association with ceramic sculpture
by Jun Kaneko, an artist of Japanese origin who is best known for his series of rounded,
hollow, large-scale forms called dangos (a Japanese term for steamed, sweet dumplings).

The proposed math activity directs the students to list as many as possible of the
sorts of foods that have geometric shapes. The next step in this activity is to ask the
students to draw a chart of geometric-shaped foods and to include three-dimensional
figures like cubes, cones, spheres, as well as two-dimensional shapes like trapezoids,
triangles, and ovals. The activity concludes by asking the students to subdivide their food
chart into right, acute and obtuse angle, and rounded-shaped foods.

Applying the idea of discovery learning as this activity implies will help to lead
the students through a process of discovering facts and knowledge and generating new
concepts and views related to geometry by using unfamiliar medium of learning (food
shapes). This will have the potential of turning the classroom into a healthy learning
environment where the students find it extremely encouraging to make comparisons of
different food shapes, ask questions, and formulate their own answers and conclusions.
This is in contrast to using didactic models of teaching where the students remain passive, receive less support to their active engagement and find no incentives to foster their curiosity. The use of unfamiliar learning medium in this activity will encourage the students not only to remember the facts, but also to practice it at home or wherever they can find different shapes of food. In this sense, this activity creates a continuum of learning process that doesn’t limit itself to the classroom limits.

Summary

This chapter relied on the Harn Museum records and documents to present a critical view related to the organizational and administrative aspects of the teacher institutes. It also presented insights related to the museum-based pedagogy based on the participant teachers’ evaluation of the institutes’ activities and programs. The conclusion this chapter came with is that the ultimate success of a museum teacher institute could be judged based not only on a carefully and well-designed program, but also by the impact it imposes on the teachers’ way of conducting and understanding their profession. It also became clear that the institutes presented a bundle of professional development and teaching skills that teachers can utilize in their teaching.
CHAPTER 5: ANALYSIS OF THE SURVEY FEEDBACK

This chapter presents an analysis of the data obtained from the survey that was distributed among the teachers who participated in the first 5 Harn museum teacher institutes. The obtained data will be used to highlight different aspects pertaining to the teachers’ experience at the Harn Museum teacher institutes and will also be used in obtaining answers for the research questions that are posed in Chapter one.

The chapter starts with a demographic analysis of the respondent teachers. It then describes the results of each of the three categories this survey was intended to cover. The survey questions in the first category cover the respondent teachers’ evaluation of the Harn Museum teacher institutes’ impact on their professional development. The questions in the second category deal with the teachers’ views of using the subjects, teaching ideas and instructional materials proposed in the Harn Museum curriculum to help in improving the teaching and learning classroom environment. The third category analyzes the teachers’ responses in relation to the impact of these institutes in supporting the museum-teacher relationship and communication.

Demographic Analysis

The first 4 questions in the survey (see appendix A) were intended to collect demographic information about the participant teachers. 69 out of the 125 teachers who originally participated in the in the first five Harn Museum teacher institutes responded to this survey yielding a 55.2% response rate. 43 of the respondents (62%) are elementary school teachers, 25 are middle school teachers (36%) and 2 are high school teachers (2%). 13 of the respondent teachers (22%) attended the 2002 institute, 13 teachers from
the 2003 institute (19%), 14 teachers from the 2004 institute (20%), 14 teachers from the 2005 institute (20%) and 15 teachers from the 2006 institute (19%). The number of years of the participants’ teaching experience ranged between 3 to 13 years among the respondent elementary school teachers, 2-8 for the middle school teachers and 4 to 6 for the high school teachers. According to the data gathered in this survey, the respondent teachers came from 31 counties in the state of Florida. Apart from one English language teacher and another social studies teacher, all the other respondents are teachers in the different fields of arts.

**Museum Teacher Institutes’ Impact on Teacher Professional Development**

Following an approval of a new legislation in Florida in 2000, the nature of teacher professional development system in the state has changed. According to this legislation, school districts will be evaluated on yearly basis to ensure that teacher professional development programs are judged on their ultimate contribution to increasing the student's achievement. According to this legislation, the overall evaluation of these programs will be based on their adaptation to/ and relation to a variety of areas including:

- Sunshine State Standards
- Classroom management
- School safety
- Teaching methods and approaches
- Assessment and data analysis
- Family involvement and participation
- Technology integration
It has been discussed in chapter one that in addition to the content-based aspects of teacher professional development programs, they also aim to make teachers exposed to a variety of cultural, social and pedagogic experiences. This will not be possible without diversifying teachers’ training sources and including other venues that have an educational nature different from the one of the formal school system. This is what the questions in this section attempted to find.

The first question in this section intended to explore the teachers’ experience with professional development programs in general. The question asked the teachers to choose the group they fit in according to the times they took part in professional development programs. The groups are labeled as follows:

- Group 1 (between 0-4 professional development programs)
- Group 2 (between 5-8 professional development programs)
- Group 3(between 9-12 professional development programs)
- Group 4 (12 professional development programs and up)

The analysis of answers to this question showed that 50 of the respondent teachers belong to Group 2 (72%), 17 teachers belong to Group 1 (24%), 2 teachers belong to Group 3 (4%) and none of them fall within Group 4. This question is followed by another question that attempted, based on the teachers’ participation in professional development programs, to find if the teachers “agree”, “disagree” or feel “undecided” to rank their museum teacher institute experience among their top 4 professional development sources. The data pertinent to this question has been categorized as follows:

- 54 teachers agree (78%).
- 2 teachers disagree (3%)
The above numbers and percentages indicate that the majority of the respondent teachers accept the idea that the museum teacher institute programs are qualified to be among their top 4 training programs. This leads to assume that teachers are convinced of the positive impact of the museum teacher institutes in helping their professional development to further advance. The analysis also showed that there has been a consistent pattern of rising numbers from one year to the next in the numbers of teachers who accepted the idea of ranking the museum teacher institute experience among their top 4 training programs in spite of the fact that the difference in numbers has not been strikingly sharp (Table 12). This could, however, indicate the museum’s continuing efforts to improve and increase its efforts to make the institutes effective, better designed, well organized and more appealing.

The numbers and percentages of teachers in table 12 do not say much unless being supported by an insight into the exact reason(s) behind the teachers’ decision to “agree” or “disagree” to the idea of ranking the museum institute among their top 4 in-service professional development programs. The reasons listed by the teachers who agreed to this idea make a strong case to the Harn Museum teacher institutes’ full support to the guidelines that the state of Florida has proposed for all teachers’ professional development programs to consider. For the purpose of this analysis, the reasons listed by the respondent teachers were grouped in accordance to their close affinity to two of the Florida State guidelines of professional development programs. These are the support to the “Sunshine State Standards” and “teaching methods and approaches”.

- 17 teacher undecided (19%)
The first group of reasons was identified based on their reference to the “Sunshine State Standards”. The reasons listed in this group pointed to the teachers’ satisfaction of the support the Harn Museum teacher institute program and materials have provided to the enforcement of the Sunshine State Standards. It is worth mentioning that the each activity in the Harn Museum curriculum resource units is designed on the basis of supporting a set of the Sunshine State Standards. By referring to this to be one of the reason of ranking the Harn Museum teacher institute among their top 4 in-service training programs, a clear statement has been made that one of the practical objectives behind organizing these institutes has been met. The following are few examples of the reasons’ listed by the teachers in reference to the institutes’ support to the Sunshine state Standards:

- “It provided me with clear, accurate and direct connections to the Florida Standards”.
- “Great help to standards-based curriculum”.
- “Presented valuable thoughts to the implementation and alignment of educational standards to classroom setting”.
- “Offered practical guides to help me determine where, when and how to begin using standards in lesson and activity planning”.
- “A great support to the integration of standards into lessons and units”.
- “Helped me to validate my standards-based curriculum”.
- “a good opportunity to incorporate good teaching methods with standards and subject curriculum”.
The other group of reasons listed by 40 teachers of those who agreed to rank their museum teacher institute experience among their top 4 professional training programs pointed to a variety of teaching methods and approaches their participation in the Harn museum teacher institute helped them to appreciate and develop. The analysis of these teaching techniques and approaches listed by the respondent teachers showed that they fall within/ or relate to the following areas:

- Integration of artwork and objects in classroom teaching and curriculum design.
- Cross-curricular and interdisciplinary teaching.
- Multicultural and intercultural teaching.
- Hands-on and interactive learning.
- Educational entertainment
Table 12

Numbers of and percentages of the respondent teachers who ranked the Harn Museum teacher institute programs among their 4 top in-service training programs.

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of teachers who agree</th>
<th>% to the total number of respondents (this year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002 Institute</td>
<td>8</td>
<td>62%</td>
</tr>
<tr>
<td>2003 Institute</td>
<td>9</td>
<td>69%</td>
</tr>
<tr>
<td>2004 Institute</td>
<td>11</td>
<td>79%</td>
</tr>
<tr>
<td>2005 Institute</td>
<td>12</td>
<td>85%</td>
</tr>
<tr>
<td>2006 Institute</td>
<td>14</td>
<td>93%</td>
</tr>
</tbody>
</table>

The two teachers who didn’t agree to the idea of ranking the Harn Museum teacher programs among their 4 top in-service training experiences mentioned that the tight time and overcrowded program made it hard for these institutes to be of any true professional benefit to them. This brings to the fore the views of the teachers who criticized the institutes’ organizational aspects by referring to their short period of convention.

One aspect of teacher professional development programs is to act as an eye-opener to a specific set of the students’ learning needs based on the nature content of these programs. This section attempted to find if the Harn Museum teacher programs
helped them to identify and become more aware of any of their students’ learning needs. The respondent teachers have anonymously agreed that they became more aware of the importance of establishing a learning environment dominated by dialogue, conversation and exchange of views. Forty three teachers appreciated the fact that the institutes’ emphasis on the methods of teaching across the curriculum made them, in one teacher’s words “to understand the students’ need to break the rigidness of class subjects”. Another teacher pointed to the importance of adding elements of fun, new voices and perspectives that eventually address their different learning styles and interests. This, according to another teacher will “keep the students’ learning process move smoothly without loosing momentum through distraction, interruptions or intrusions”. Another teacher mentioned that the intensive museum teacher institute program made him “more aware of the students’ need for a balanced combination of textual and visual methods of teaching”.

**Advancement of Teaching and Learning Environment**

The second section in this survey focused on the teachers’ use of the Harn Museum curriculum resources units to advance the classroom teaching and learning environment. It has been highlighted in chapter four that one main target of these institutes is to help the teachers become more familiar with the museum curriculum resource units and to utilize them in classroom activities, lesson plans and in creating connections to the Sunshine State Standards. This section attempted to collect data relevant to the ideas, instructional materials and subjects from the Harn Museum curriculum resources units that the teachers might have been able to integrate in their classroom curriculum design and teaching.
The analysis of the data in this section revealed that only 39 teachers (57%) used the proposed activities and instructional materials in the Harn Museum curriculum resource units in their teaching. This number and percentage are relatively low and indicate that one of the institutes’ objectives has not been satisfactorily met and needs to be revisited and addressed by the Harn Museum Department of Education.

For the purpose of this analysis, the ideas, instructional materials and subjects from the Harn Museum curriculum resources units that the teachers have been able to integrate in their classroom curriculum design and teaching have been categorized into 4 groups according to their nature and the approach they purport. Group one consists of activities that are basically depending on hands-on approach and interactivity. Group two is for the subjects and ideas that are more embedded in visual culture and literacy. Group three consists of the activities and subjects that require working in small groups to promote conversation, debate and cooperative and social learning skills. Group four is for the activities and subjects that are intended to advance the students’ discovery learning skills.

The 39 teachers who used the Harn Museum curriculum resource units in their teaching listed 106 of the proposed activities, lesson plans, instructional materials and teaching ideas. 42 of them fall within “Group one” making the hands-on and interactivity approach the most popular followed by the activities with discovery learning nature. Table 14 lists the numbers of activities, lesson plans, instructional materials and teaching ideas that the teachers have used according their nature and approach.
Museum-teacher Relationship and Communication

This section of the survey builds on the assumption that a positive and strong teacher-museum relationship is in the best interest of the educational practice at both school and museum. There are multiple directions for museum-teacher relationship to take depending on the institutional partnership objectives and commitment. The primary focus of this section is to explore the role of the museum teacher institutes in making the teachers understand the concepts and dynamics of their relationship with museums. The data gathered through the teachers’ responses to the questions in this section indicated that the teachers have become more open minded and appreciative to their relation with museums and willing to see it developing. Their answers indicated that their relationship with museums have grown stronger after they participated in the Harn museum institutes. The following analysis presents the data pertinent to this aspect.

Teachers’ Contacts with Museums

This part aimed at collecting data about the teachers’ contacts for professional purposes with museums in order to compare and evaluate the nature of the teachers’ relationship with museums before and after attending the Harn teacher institutes. 46 of the respondent teachers (66.6%) reported that they had contacts for professional purposes with different museums before they started arranging for their attendance of the Harn institute. Those who had previous contacts with museums listed a variety of reasons behind these contacts including:

- Arranging for class visits and accompanying students. (20 teachers)
- Visiting temporary exhibitions (11 teachers).
- Requesting information regarding a classroom subject. (13 teachers)
• Checking on museum educational programs for pre-K Children (1 teacher).

• Attending live performance (1 teacher).

• Inviting a museum professional to come to school and have conversation with the students (1 teacher).

The number of teachers who reported that they had contacts with museums after they returned from the Harn Museum institute went up to 54 (82%) including 40 of the teachers who already had contacts pre to their Harn Museum teacher institute experience.

The teachers who reported contacts with museums after they attended the Harn institute listed the following reasons to be behind their contacts:

• To arrange for participating in another Harn Museum teacher Institute (3 teachers).

• Attending other museum teachers’ programs including:
  
  o Open house (9 teachers).
  
  o Curriculum development coaching (13 teachers).
  
  o A two hours in-service workshop (3 teachers).
  
  o Teachers' exhibition preview (5 teachers).
  
  o Teachers' Advisory Council (2 teachers)
  
  o Temporary exhibitions (5 teachers).
  
  o Teachers’ hands-on workshops (6 teachers).

• Accompanied classroom visits (27 teachers).

• Attended Gallery talks (7 teachers).

• To obtain curriculum resources (6 teachers).
Comparing the responses from the two categories revealed that not only the number of teachers who had contacts with museums after attending the Harn Museum went up, but also the nature and purposes of their contacts became qualitatively different. This points to an important conclusion that the teachers’ participation in the Harn Museum institutes and the relation they started with the museum personnel might have helped in developing their relation with museums and make it more professionally-oriented.

**Expanding the Museum-Teacher Relationship**

The effectiveness of peer-to-peer recommendation comes from the fact that most teachers convey to each other the negative and positive aspects of their professional experience. Finding more of teaching resources and curricular and instructional materials and making them easily accessible and available in a variety of formats and methods are crucial factors to make teachers recommend to their peers to join a museum teacher institute. These also help making future participant teachers come prepared with their own set of expectations and pre-conceived thoughts of the museum institute.

This part of this section of the survey investigated the teachers’ role in attracting other teachers to join the teacher programs at any museums. The answers to this question revealed that the teachers who participated in the Harn Museum teacher institutes played a notable role in attracting other teachers to establish contacts with museums. 53 out of the 69 respondents (77%) reported that they have or will “likely” to recommend to other teachers to join a museum teacher program. This means that the museum teacher institute programs not only help to clarify and shape the teachers’ relationship with
museums, but also to make them convinced of attracting their peers to take part in future museums’ teacher programs. 3 teachers reported that they did not and will “unlikely” to recommend to other teachers to participate in a museum teacher institute program while 13 were “unsure” if they will recommend to other teachers to take part in a museum teacher institute.

Table 13

*Numbers of activities, lesson plans, instructional materials and teaching ideas that the teachers have used according their nature and approach*

<table>
<thead>
<tr>
<th>Group</th>
<th>Number of activities, lesson plans and subjects utilized by teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Group one” hands-on approach and interactivity</td>
<td>42</td>
</tr>
<tr>
<td>Group two “visual culture and literacy”</td>
<td>18</td>
</tr>
<tr>
<td>Group three (Social and cooperative learning)”</td>
<td>20</td>
</tr>
<tr>
<td>Group four “discovery learning”</td>
<td>26</td>
</tr>
</tbody>
</table>

Expanding the teachers’ circle of relationship with museum is not limited to other teachers. One question in this section attempted to collect data regarding the teachers’ effort to expand the circle of their relationship with museums to include their students as well. Including the students in the teacher museum circle of relationship could be tested
not only by their level of preparedness to take their students on a museum tour, but also by the ways the teachers employ to make the students see the museums’ impact on the advancement of their education. This requires the teachers to pass over the essence of their museum teacher institute experience to their students by making them realize that museums are also educational environments and can add to their learning process.

In their answers to the question about the steps they may take to help building strong foundations for their students-museum relationship, 50 teachers listed a variety of techniques that are highly likely to make the students’ museum relationship to grow stronger. As Table 15 shows, there has been an obvious preference to the hands-on activities and the friendly learning environments in museums to be the most attractive factors for students to associate themselves with museums.

**Museum’s Role towards Developing their Relationship with Teachers**

Understanding that museum-teacher relationship is the backbone of museum-school partnership, there is always a high need from each partner to be up to the level of the other partner’s expectations. A 3 days teacher institute experience might provide an intensive and considerable museum experience, but certainly not enough to make the relationship between the two parties reaches its final destination. According to their responses to this survey question, teachers’ expectations from the museum side to push the joint relationship further vary. These could be grouped into the following two categories:

- Organizational needs such as
  - Extending institute time (9 teachers).
• Providing grants and fellowships to help the teachers participate in museums’ programs (2 teachers).

• Open more effective channels of communication (5 teachers).

• Core professional issues such as:
  
  o Organize follow-up workshops (8 teachers).
  
  o Make teacher programs worth of credit hours (4 teachers).
  
  o Help in establishing schools’ museums (5 teachers)
  
  o Organize customized in-service workshops for teachers of all grade levels and classroom subjects (6 teachers).
  
  o Initiate teacher residence programs (2 teachers).
  
  o Organize joint teacher-students-parents programs (4 teachers).
  
  o Develop museums’ online and distance educational services. (6 teachers).
  
  o Organize annual or semi annual events for art teachers’ exhibitions (4 teachers).
  
  o Organize teacher guest speaker programs (1 teacher).
Table 14

*Suggested activities to build up a stronger student-museum relationship*

<table>
<thead>
<tr>
<th>Institute’s year</th>
<th>Activities suggested to build up museum-student relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>Focus on hands-on activities</td>
</tr>
<tr>
<td></td>
<td>Include live performance</td>
</tr>
<tr>
<td></td>
<td>Follow-up activities</td>
</tr>
<tr>
<td></td>
<td>More of art integration in classroom curriculum</td>
</tr>
<tr>
<td></td>
<td>Small groups discussions of artwork</td>
</tr>
<tr>
<td></td>
<td>Students’ camps</td>
</tr>
<tr>
<td>2003</td>
<td>Focus on hands-on activities</td>
</tr>
<tr>
<td></td>
<td>Discovery learning activities</td>
</tr>
<tr>
<td></td>
<td>Start personal collections</td>
</tr>
<tr>
<td></td>
<td>Homework assignment related to museum collection</td>
</tr>
<tr>
<td>2004</td>
<td>Focus on hands-on activities</td>
</tr>
<tr>
<td></td>
<td>Student art projects</td>
</tr>
<tr>
<td>2005</td>
<td>Focus on hands-on activities</td>
</tr>
<tr>
<td></td>
<td>Read books and watch movies about museums</td>
</tr>
<tr>
<td>2006</td>
<td>Focus on hands-on activities</td>
</tr>
<tr>
<td></td>
<td>A mixture of games and questions related to museums.</td>
</tr>
<tr>
<td></td>
<td>Encourage self-guided tours</td>
</tr>
</tbody>
</table>
Summary

The analysis of this survey gave solid evidence that the teachers’ experience at the Harn Museum teacher institutes was successful and productive. The high ratings of the teachers experience after they returned to their classrooms matches the high ratings they gave to the institutes directly after they finished their training. It also became clear that the museum training contributed immensely to different aspects of the teachers’ professional development and to their skills of designing instructional materials and lesson plans and activities that work for a better quality of education of their students. The analysis of the teachers’ responses highlighted the fact that these teacher institutes help in supporting the teachers-museum and the students-museum relationships and make them grow more steadily.

These benefits are strong indicators that when museums and schools work together within a partnership frame, they develop a better understanding of each other’s approaches and techniques. They also signified the fact that museums and schools are generic partners that can work together to provide state-of-the-art instructional materials for the classrooms and supporting the students’ learning process.
CONCLUSIONS

This research emphasized the museums’ contribution in making the educational reform movement advance forward. Through the study of the Harn Museum teacher institutes, an example of the museums’ effort to advance teachers’ professional skills, open new channels for communication and discourse, support classroom curricular and add relevant and new instructional resources to schools has been presented. These are very crucial components that will, on the one hand, keep any attempt seeking educational reform to remain constantly energized and progressing and, on the other hand, attest to the fact that museums’ contribution to this field can hardly be overlooked.

By presenting an experience that combines curriculum and teacher professional development, educational activities in all classroom subjects of interactive, cooperative and interdisciplinary nature and approaches that encapsulate constructivist, critical pedagogy, contextual and situated learning models, it became evidently clear that museum education share the grounds the school system stands on. Therefore, creating a partnership between the two institutions seems natural, and appears to have a great chance to succeed. One of targets in this research was to examine the impact of a museum school partnership frame on the process and outcome of museum education programs. This research showed that there are many ways to consolidate the museum school partnership not only in terms of the organizational and administrative components and procedures, but also by instilling its values and concepts. One example that has been noted in this research is that the partnership between the museum and the school system plays in favor of highlighting the community-driven mission of both institutions. This was evident through focus on supporting teachers from local communities, using and
developing community resources and offering educational opportunities that facilitate the sharing of ideas, information and training resources.

Incorporating museum teacher training into mainstream teacher education programs requires museum education department to design lesson plans and activities that meet the national and state standards in multiple subjects in order to fit into classroom curricular. Integrating museum resources into existing classroom curricula and core subject teaching provides not only a more responsive educational system but an interdisciplinary academic model. The teachers’ comment revealed that following the museum’s curriculum proposal of using interdisciplinary approach will eventually help their students to learn how to relate different classroom subjects to each other and to connect their classroom learning to real world applications.

The current movement of museums towards making their programs educationally-oriented is largely motivated by the communities’ rising interest and demand for new forms and shapes of knowledge. Museums have their hands on a considerable part of the communities’ cultural resources which contribute in different ways to the continuing build-up of knowledge. By integrating these resources and artworks in the heart of their educational programs in general and teachers’ institutes in particular, museums offer educators an opportunity to explore different ways to interpret this cultural heritage, understand it, and use it in their arts-based teaching. This allows teachers to motivate their students to think about their connections to their communities beyond the classrooms and to develop their academic as well as social skills. In this sense, the role played by museums through their teachers’ programs is to make them more aware and
knowledgeable of the communities’ social and cultural progress, values and intellectual advancement and also to consider them in their teaching.

These institutes have shown that the benefits of integrating museum instructional resources into classroom teaching and curriculum are numerous. Museums have become more politically and economically powerful, socially inclusive, culturally neutral and easier to access than ever before. This has made their educational benefits very influential. Training teachers on the use of museum instructional resources applications in the curriculum provides the opportunity to enhance authenticity, interactivity and a room to accommodate different students’ learning preferences.

Based on classroom experience, the participant teachers have attested to the fact that the use of museum resources in teaching provides learning opportunities that support a highly interactive learning settings, allowing students to interface with the available data according to each one’s learning style.

**Recommendations and Suggestions for Further Research:**

1- This study has shown the high quality professional and pedagogical gains teachers may obtain by associating themselves with museums. The majority of teachers who participated in the Harn Museum teacher institutes are teachers of art. It is very important to look into proposals and ideas to diversify the participant teachers’ areas of specialty. Attracting teachers of different classroom subject expertise and interest will bring more insights, new approaches and teaching perspectives. It will also give a better opportunity to train teachers who teach subjects other than art-related areas to understand better the idea and the importance of integrating artworks and museum collections in their curricular.
2- The full dimension of any educational program will not be fully measured if it focused solely on the side of the teachers or the students. One of the results of this research is that teachers believe that including the students in their circle of relationship with museums will help the students’ learning process to advance. Therefore, to achieve a comprehensive evaluation of any museum educational program, the students’ voices and views should be included and examined. It is recommended that a study focusing on the museum teacher institutes’ impact on the promotion of the students’ perspectives of learning and the resulting change on their level of academic, social and cultural advancement and awareness should be conducted.

3- Achieving a systematic evaluation studies of museum educational programs depend in the first place on the provision of the information in a quality that makes the evaluation possible and feasible. It has been reported in this research that the Harn Museum has not been following a unified system of evaluation for teachers to follow in their evaluation of the institutes’ activities. The evaluation system has also been largely descriptive and very limited window for analytical comments had been provided. It is recommended that the Harn Museum uses a unified analytical system of evaluation.

4- This research attempted to cover different areas and aspects that will make the idea of a museum-school partnership prosper. However, the emphasis in this research has been mainly on the museum part in the partnership process. It is recommended that the role of schools and school districts should be examined more thoroughly. This will help to clarify many principal organizational and
administrative aspects from the school side relating to their partnerships with museums, as well as highlighting the professional factors that drive schools to partner with museums.

5- Museum teacher programs are part of the museums’ educational activities which all target supporting the museum ties with communities. It is, thus, crucially important to establish well defined measurement tools to find out how these programs play in favor of the community-based museum image. A possible research idea might be to conduct a survey project that takes the opinions of members from the surrounding communities or parents of school children to cast their views regarding the museum educational initiatives and efforts.

6- Chapter one started with highlighting my personal motivations in exploring the topic of this research. One of these motivations is to acquire new insights and research experience that can be utilized in making African become more open towards their surrounding communities. This year (2008), the International Council of Museums (ICOM) announced that hundreds of African museums are expected to be among the estimated number of 10,000 museums from all over the world to celebrate the theme “Museums: Agents of Social Change and Development”. The results of this research showed that museum education in general and teacher programs in particular can be the spear head in the movement of making the museums’ social change agendas to materialize. It is, therefore, recommended that the departments of education in African Museums promote
their personnel qualification and policy planning in order to be able to contribute positively to making their institutions true “Agents of Social Change and Development”.
REFERENCES


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(Eds). Handbook of Research on Teaching Literacy through the Communicative
APPENDIX A: CONSENT FORM

Ohio University Consent Form Template (must be in 12 point font)

Title of Research: Transforming School Museum Partnership

The Case of the University of Florida Harn Museum Teacher Institute

Principal Investigator: Esameddin Alhadi__________________________

Co-Investigator: _____________________________________________

Department: Educational studies____________________

Federal and university regulations require signed consent for participation in research involving human subjects. After reading the statements below, please indicate your consent by signing this form.

Explanation of Study

Purpose of the research

The purpose of this research is to present an in-depth understanding of the role of museum teacher institutes, and to establish a well-founded conclusion of their ultimate contribution to both museum and school system development. The research intends to shed light on the role of museum school partnership in promoting teachers professional development and the ultimate contribution it offers to school system development and reform. The ultimate goal of this research is to bring to light one area of museum education that provides school teachers with enhanced knowledge, new teaching techniques, and advanced training. It also offers them a well-prepared environment to design and practice new and creative teaching methods and progressive curriculum development strategies.
Procedures to be followed

1- Teachers will be contacted by email to get their consent to participate in this survey. Objective and purpose of research will be explained to them.

2- Those who respond positively will receive the survey and will be requested to send their feedback as soon as possible.

3- Records and archived Documents at The Harn Museum will be studies

Duration of subject’s participation

No more than 30 minutes to respond to the electronic survey.

Identification of specific procedures that are experimental

None

*Risks and Discomforts*

No risks or discomforts are expected from this survey because it will avoid collecting any information of personal nature.

*Benefits*

This research is expected to provide evidence to the community that whatever support it gives to museums is indeed paying off through programs such as the teachers’ training. It is also important in helping communities to understand one of the practical aspects of museum education. In addition, it will demonstrate to the communities that the big gap that some people have perceived between them and museums is gradually being bridged through educational programs that eventually play in favor of the whole community.

*Alternative Treatments* (if applicable)
Confidentiality and Records

Compensation

No compensation of any sort will be offered to the participants

Contact Information

If you have any questions regarding this study, please contact (Researcher/Advisor & email/phone number).

Esameddin Alhadi

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664.

I certify that I have read and understand this consent form and agree to participate as a subject in the research described. I agree that known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. I certify that I am 18 years of age or older. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I certify that I have been given a copy of this consent form to take with me.

Signature ___________________ Date _______________________

Printed Name ___Esameddin Alhadi_________________________
A determination has been made that the following research study is exempt from IRB review because it involves:

Category 2: research involving the use of educational tests, survey procedures, interview procedures or observation of public behavior

Project Title: Transforming Museum: School Partnership: The Case of the Harr Museum Teachers' institute

Project Director: Esameddin Alhadi

Department: Educational Studies

Advisor: William Howard

Rebecca Cale, Associate Director, Research Compliance
Institutional Review Board

The approval remains in effect provided the study is conducted exactly as described in your application for review. Any additions or modifications to the project must be approved by the IRB as an amendment prior to implementation.
APPENDIX C: CERTIFICATE OF TRAINING IN THE PROTECTION OF HUMAN RESEARCH SUBJECTS

Human Research Curriculum Completion Report

Printed on Sunday, May 18, 2008

Learner: Esameddin alhadi (username: )

Institution: Ohio University

Contact Information

Stage 1. Basic Course Passed on 05/04/07 (Ref # 1010986)

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<td>History and Ethical Principles - SBR</td>
<td>05/04/07</td>
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<td>Defining Research with Human Subjects - SBR</td>
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<td>The Regulations and The Social and Behavioral Sciences - SBR</td>
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<td>Informed Consent - SBR</td>
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</table>
Paul Braunschweiger Ph.D.
Professor, University of Miami
Director Office of Research Education
CITI Course Coordinator
APPENDIX D: APPROVAL OF PROPOSAL FOR DISSERTATION

Ohio University
College of Education
Student Services
124 McCracken Hall

APPROVAL OF PROPOSAL FOR DISSERTATION

Student's Name: ESAMEDDIN ALHANI
Department: Counseling and Higher Education

Title of Proposal:
TRANSFORMING SCHOOL MUSEUM PARTNERSHIP: THE CASE OF THE UNIVERSITY OF FLORIDA MAST MUSEUM TEACHER INSTITUTE

Dissertation Director: STEVE HOUPTER (Chairman)

PRINTED NAME

Chairperson of the Dissertation Committee
FACULTY OFFICIAL

Committee Member
FACULTY OFFICIAL

Committee Member
FACULTY OFFICIAL

Dean's Representative

I have read the Ohio University Student Code of Conduct concerning Academic Dishonesty and understand the terms and conditions of the policy. I have accurately acknowledged all language, ideas, or other original (not common knowledge) material through proper citation.

ESAMEDDIN ALHANI
Student Name Printed

Student Signature

Does this research involve human subjects?
Yes  No

If yes, the proposal has been approved by the Institutional Review Board of Ohio University. (The approval letter is attached.)

Signature: CHAIR, DISSERTATION COMMITTEE
Signature and Date: DEPARTMENT CHAIR

Revised: 8/05, 8/06, 3/06
APPENDIX E: SURVEY QUESTIONS

School district area and county:

What grade(s) and subject(s) are you teaching and how long have you been a teacher?

In what year(s) did you participate in the training at the Harn Museum Teachers Institute?

Choose the group you fit in according to the number of in-service teacher professional programs have you taken part in.

- Group 1 (between 0-4 professional development programs)
- Group 2 (between 5-8 professional development programs)
- Group 3 (between 9-12 professional development programs)
- Group 4 (12 professional development programs and up)

Do you (agree), (disagree), or do you feel (undecided) that the nature, content and results of the Harn Museum teacher institute program qualify them to be among the top four in-service training programs you have taken part in.

What motivated you to consider or not to consider ranking your Harn museum teacher institute experience among the top four in-service training programs you have been to?

In what terms do you think your participation in the Harn Museum teacher institute helped you to identify and address your students’ learning needs?

What ideas, instructional materials and subjects from the training at the Harn Museum Teachers Institute(s) or from any of the Harn curriculum resources units are you able to integrate in your classroom curriculum and utilize in your classroom teaching?

Before your participation in the Harn Museum teacher institute, did you have any contact with any museum for any professional purpose? If yes what is the purpose and nature of that contact?
After your participation in the Harn Museum teacher institute, did you have any contact with any museum for any professional purpose? If yes what is the purpose and nature of that contact?

Did you participate in any museum teacher program or any other museum activity after you attended the Harn Museum teacher institute? If yes, what is the purpose and nature of that activity?

Based on your experience at the Harn Museum Teacher institute how (likely), (unlikely), or (unsure) that you (have recommended) (will recommend) to a fellow teacher to attend a museum teacher program?

Based on your Harn museum teacher institute experience, what steps would you consider taking in order to help your students’ relationship with museums to foster?

Following your Harn Museum teacher institute experience, what do you expect museums to do in order to further develop and strengthen the museum-teacher relationship?