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How a Museum Exhibit Functions as a Literacy Event for Viewers

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HOW A MUSEUM EXHIBIT FUNCTIONS AS
A LITERACY EVENT FOR VIEWERS

A Dissertation

Submitted to the Graduate Faculty of the
University of New Orleans
in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy
in
The Department of Curriculum and Instruction

by

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August, 2005

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ABSTRACT

The purpose of this study is to investigate museum learning by describing the experiences of selected museum visitors who viewed a specified exhibit. The research question is: How does a museum exhibit function as a literacy event for viewers? The responses to interview questions described what viewing was like for two subjects.

The paradigm for this research is New Literacy Studies (NLS). NLS considers the cultural issues surrounding literacy experiences. NLS assumes that language arts reflect cultural differences and literacy involves the process of constructing meaning (Barton, Hamilton, & Ivanic, 2000; Gee, 2000; Street, 1995). This model of literacy considers three factors of literacy: the literacy practice, the literacy event and the text (Barton & Hamilton, 2000). The literacy practice for this dissertation was museum visiting. The literacy event was viewing one museum exhibit. Through research in multiliteracies (Cope & Kalantzis, 2000), objects and written discourse constituted the text.

Two high school subjects viewed a specified exhibit on separate occasions for 15 minutes each. They were asked seven questions designed to aid their recall. The Contextual Model of Learning (Falk & Dierking, 2000) was used for describing the phenomenon and for the analyses of the data.

The Contextual Model of Learning describes museum learning as the interaction of three spheres: the Physical Context, the Personal Context, and the Socio-cultural Context. The Physical Context was analyzed through narrative description, the Personal Context through micro-analysis (Corbin, 1998; Miles & Huberman, 1994), and the Socio-cultural Context through Critical Discourse Analysis (Fairclough, 1995; Meyer, 2001; van Dijk, 2001; Wodak, 2001).

The results show the Physical Context of a museum exhibit facilitates viewers in accessing their Personal and Socio-cultural Contexts to make meaning. The data indicated the subjects of this study formed global concepts, supported main ideas with specific details, constructed cause and effect relationships, formed comparisons, and engaged in other types of cognitive behaviors as they interacted with the text. The results also indicated that the Contextual Model of Learning would best describe the literacy event if the model showed the dominance of the Personal and Socio-cultural Contexts over the Physical Contents.

CHAPTER ONE: INTRODUCTION

Background of Study

The purpose of this phenomenological study was to investigate the nature of museum learning by describing and analyzing the experiences of selected museum visitors who have viewed a specified museum exhibit. This analysis was completed through the lens of the New Literacy Studies (NLS) paradigm, and describes the museum learning phenomenon in terms of its relation to the meaning making process of literacy, thereby broadening the meaning making process to include multiliteracies. This dissertation is rooted in three areas of study: material culture studies, museology, and literacy. It is an outgrowth of the continuing metamorphosis of our perception of language as a technology, a change that reflects a new understanding of the dynamics at play within literate societies and how both oral and written language have affected the development of the cultures and sub-cultures which form their infrastructures. This dissertation is based on the conceptual framework in which literacy is more than the ability to read and write language. It is anchored to the broader and more encompassing idea that literacy is the process of making meaning in various ways, including through photographs, graphics, art, symbols, and other systems of signs (Barton, Hamilton, & Ivanic, 2000; Berghoff, Egawa, Harste, & Hoonan, 2000; Cope & Kalantzis, 2000; Dyson, 2003; Flood, Heath & Lapp, 1997; Gee, 1996, 1999, 2000; Goodman, 1996; Heath, 1983; Lankshear & Knobel, 2003; Olson, 1974; Piazza, 1999; Street, 1984, 1995).

The infusion of material culture studies and museology into the area of literacy is appropriate for two reasons. First, material culture studies, which is the study of how people construct meaning from objects (Miller, 2003), and museology, which is the study of the role of museums in society (Woodhead & Stansfield, 1994), are intertwined and interdependent. The

material objects upon which we attach meaning eventually become the contents of the museum exhibits from which we learn about the past and through which we perpetuate cultural ideologies. Second, the nature of learning from museum exhibits, which convey messages in many modes and which immerse viewers in a multi-media learning environment, coincides with the model from which we form contemporary concepts of literacy. Material culture studies, museology, and literacy studied together, therefore, can bring to light a deeper understanding of the workings of language in our lives.

Conceptual Framework

The paradigm from which current ideas about literacy emerge is termed New Literacy Studies, often referred to as NLS (Barton, Hamilton, & Ivanic, 2000; Cope & Kalantzis, 2000; Gee, 1996; Lankshear and Knobel, 2003; Street, 1995). NLS does not accept the idea that a single model of language, usually that of the dominant culture, can properly function as a standard of correctness with which we can use to evaluate other language behaviors. Neither does the NLS paradigm accept such a standard such as an appropriate justification for the making of negative assumptions about the general cognitive abilities of other cultural groups (Delpit, 1995; Freire & Macedo, 1987; Heath, 1983). Instead, NLS supports the concept that there are multiple ways of demonstrating linguistic expertise (Berghoff, Egawa, Harste & Hoonan, 2000; Flood, Heath & Lapp, 1997; Gardner, 1999; Goodman, 1996; Noddings, 1992; Piazza, 1999).

NLS is a paradigm for literacy that considers the varying cultural issues and diverse social situations surrounding every literacy experience. From the NLS perspective, all language arts (reading, writing, speaking, listening, viewing, and visually representing) reflect cultural and social differences, indicating that literacy involves the personal process of making meaning

(Goodman, 1996; Pearson & Johnson, 1978; Spiro, Bruce, & Brewer, 1980). The meaning derived from literacy experiences, therefore, is shaped by the totality of who learners are, which is also influenced by the situations from which language product emerges (Barton, Hamilton, & Ivanic, 2000; Gee, 2000; Street, 1995). In other words, NLS views language as a social practice rather than merely a means to an end (Gee, 1996; Street, 1995).

New Literacy Studies in Practice and Pedagogy

NLS proposes that contemporary literacy pedagogy should, in turn, reflect an awareness of how variations in the situations of learners contribute to variations in their language and literacy outcomes. With regard to educational research, it is a natural step to view literacy not merely as a skill, but as a cultural practice that occurs in multiple forms (Street, 1995).

Furthermore, this perspective has led scholars to acknowledge that each culture, each social group, and even each social situation can be seen as having its own communication system where the rules and regulations may share a common foundation, but where the language product may vary according to what has developed through actual language practice. In other words, each culture, each social group, and each social situation can be seen as having its own *literacy* (Barton, et.al., 2000; Gee, 1996; Kalantzis & Cope, 2000; Lankshear & Knobel, 2003; Street, 1995).

On the personal level, we move in and out of these varied social situations as we take on multiple roles and belong to multiple groups during the course of our existence. We function as friends, family, workers, players, parents, children, etc. and accordingly, language practices which are considered acceptable in one group may differ from another. Therefore, in the normal course of our lives we come to master *multiple literacies* (Street, 1995).

Literacy research from the NLS perspective focuses on the interconnectedness of language and culture and emphasizes the idea that literacy cannot be extracted from that culture. NLS research diverts the focus away from the language outcome and places it on the language process, bringing into consideration the emotions, experiences, histories, and artifacts (both abstract and concrete) of the meaning-makers themselves (Barton, et.al., 2000; Gee, 1996, 1999, 2000, 2003; Kalantzis & Cope, 2000; Lankshear & Knobel, 2003; Street, 1993, 1995).

The New Literacy Studies Model of Literacy

When the context surrounding literate behavior is taken into account, the perception of literacy as a social practice becomes viable. We are all affected deeply by our existence within social configurations. They are integral parts of our lives that are greatly responsible for making us who we are. From self-image to world-image, the layers of our social contacts form the tapestry of human life, which makes communicating through the language arts a fundamental thread woven throughout the “big picture.” NLS research examines the nature of literacy through a three-pronged model that represents the factors involved in the practice of language. These include literacy practices, literacy events, and text (Barton, Hamilton, & Ivanic, 2000). This dissertation is written from the perspective that museum visiting is a literacy practice, and its purpose is to examine how a single museum exhibit functions as a literacy event for learners. Literacy practices and events are explained below.

Literacy practices refer to the repetition of similar patterns of behavior that in one way or another involve written text. In this context, the word *practices* does not refer to repetition in the sense of consciously repeating activities with the desire to improve on performance. It refers to routines that are rooted in the experience of daily life. They are social practices which also involve written text (Barton & Hamilton, 2000; Gee, 1996).

Literacy practices may be formal in nature. In other words, they may be connected to cultural institutions, such as schools, governments, or businesses. The requirements we must meet to earn a diploma and the forms we must complete to pay income taxes or to apply for a job are all formal literacy practices. However, literacy practices may also be informal, tied to expectations of family, peers, or small social groups. Practices such as reading a recipe, emailing friends, opening the mail, or visiting museums are informal literacy practices. This means that literacy practices are different from culture to culture, as well as different among subcultures, and even between units as small as the individual family (Barton & Hamilton, 2000).

In both senses, literacy practices refers to the way in which text is utilized within a specific social situation. However, a series of separate, but connected instances involving text may be included within a single literacy practice. The literacy practice of opening mail, for instance, consists of individual literacy events as each piece of mail is dealt with in the appropriate way. The literacy practice of visiting a museum also consists of individual literacy instances because the museum itself is divided into separate and distinct exhibits. Each exhibit that is viewed or each activity that is completed as the museum visit unfolds can be seen as a separate occurrence. These instances are referred to as *literacy events* (Barton & Hamilton, 2000; De Pourbaix, 2000; Heath 1983).

From this perspective, a three-pronged approach to viewing literacy, consisting of the *practice*, the *event*, and the *text*, has emerged from NLS research. This approach can be used as a guide as we continue to discover the nature of literacy and its function as a cultural and ideological practice. This is the model that was applied to the viewing of a museum exhibit as this dissertation was completed.

Summary of Conceptual Framework

The premise of this dissertation, therefore, is that learning through viewing a museum exhibit can be more fully understood by investigating this experience through the lens of contemporary language and literacy pedagogy. In other words, making meaning from being immersed in a learning environment consisting of artifacts, written text, photographs, and other modes of communication is considered similar to making meaning through written text alone. The broad definition of literacy supported by NLS allows for the melding of material culture studies, museology, and literacy in order to better understand the nature of meaning making as a cognitive process.

Additionally, just as literacy is an ideological practice, museum visiting is also ideologically based. There is a cultural purpose behind the creation of museums, and the ideology of the creator is reflected in the concepts conveyed by the individual exhibits. Furthermore, viewers bring to the viewing process lifetimes of experience and backgrounds that mediate the interpretation of what they view. The intersection of institutional and personal ideologies is, therefore, an important aspect of the museum viewing phenomenon, and studying the nature of museum learning may bring about more information concerning the belief systems underlying the entire process.

Definition of Terms

This section reviews the operational definitions of the terms that have been explained in previous sections of this dissertation and introduces other important terminology.

Museum: A museum is an institution created for the purpose of preserving and

displaying elements of culture that are of lasting value or interest. Museums include a wide range of informal education institutions including art, history, and natural history museums; as well as zoos, botanical gardens, science centers, historic homes and buildings, and other environments of educational or historical interest (Falk & Dierking, 1992).

Material Culture: Material culture refers to the pieces of the material world to which cultural value has been ascribed. These pieces include those which can be moved from place to place as well as the larger physical world of landscapes affected by humankind (Pearce, 2003).

Material Culture Studies: Material culture studies refers to the study of human social and environmental relationships through the evidence of people's construction of their material world. This term finds its roots in anthropology, but also refers to the aspects of ethnography that analyze the production and symbolism of contemporary artifacts (Miller, 2003).

Museology: Museology is museum science; the branch of knowledge concerning the purposes and organization of museums, their role in society, their systems of research and education and their relationship to the physical environment (Woodhead & Stansfield, 1994). This term stands in contrast to museography, which covers the methods, practices, and techniques involved in the operation of museums (Woodhead & Stansfield, 1994). Since this dissertation does not investigate the business related aspects of museum management, museography was not addressed in this dissertation.

Literacy Practice: Literacy practices are the routines and repeated patterns of behavior that have developed through the use of written text. Differences exist among literacy practices on the macro-level of cultures and societies as well as on the micro-level of single families and specific situations (Barton & Hamilton, 2000).

Literacy Event: Literacy events are instances of language use that involve text (Heath, 1983). They form literacy practices (Barton & Hamilton, 2000). In other words, literacy events are the individual parts of a literacy practice, which is the broader term. Literacy practices refer to the behavior of a culture or sub-culture, whereas literacy events refer to the components of that literacy practice that constitutes more singular literacy activities. For instance, in the American culture there is a literacy practice of parents reading bedtime stories to our children. The literacy event attached to that practice would be the one instance of one parent reading one story to one or more children at one specific time. It would, therefore, be understood that the characteristics of any literacy practice would also apply to any literacy event.

Importance of the Study

In 2004, one hundred sixteen museums were listed as members of the Louisiana Association of Museums (Louisiana Association of Museums, 2004). Within the walls of these institutions material artifacts of the history of our culture are preserved and a wealth of information is available to learners and educators who incorporate the museum facility into their curriculums. Over the last fifteen years, the museum community has become more aware of its role in the education process, which is shown by the increased reliance upon certified educators in the conception, design, and application of new museum exhibits (Roberts, 1997).

At the same time, contemporary cognitive theory supports the idea that learners respond disproportionately to information presented to them according to physiologically-based individual differences. Gardner (1993, 1999) has identified several ways in which a learner's intelligence can be stimulated. His theory of Multiple Intelligences (MI Theory) suggests that we all possess eight ways of being intelligent and that each of us utilizes our own singular blend of cognitive processes to gather information. Yet, traditional schooling environments focus

predominantly on linguistic and mathematical modes of learning (Gardner, 1999). Other intelligences, which include musical, spatial, bodily-kinesthetic, naturalist, interpersonal, and intrapersonal, do not exercise a major influence in a formal school curriculum, even though it is suggested by MI theory that some learners would perform more efficiently when presented with information in various modes.

In addition, Paivio (1990) contends that memory is positively affected by the presentation of stimuli in multiple modes. Paivio developed the Dual Coding Theory, which contends that cognitive activity occurs in two separate representational systems: one for language and one for images. According to Paivio, these systems can work independently as well as together, and activity in one system can trigger activity in another. In effect, Paivio offers much experimental evidence that indicates differences in the recall of lists of words presented with and without accompanying images. He found that the presence of images had an “additive” (p. 160) effect on the memory that is associated with better recall.

The Dual Coding Theory and Multiple Intelligences Theory relate to the viewing of museum exhibits in more than one way. First, the presentation of information in multiple modes appeals to more than the linguistic and mathematical intelligences of the viewer. Museum exhibits use music, artwork, and hands on activities to teach concepts and facts that address musical, kinesthetic and spatial intelligences. Nature museums, such as zoological gardens, appeal to the naturalist intelligence, and the opportunities provided for dialog with docents or other visitors appeal to the interpersonal intelligence. In addition, the fact that a museum exhibit simultaneously conveys messages in both the verbal and image modes would suggest that a learner’s recall of the museum experience would be superior to some other forms of data presentation.

However, although the museum experience theoretically has the potential to appeal to learners of varied backgrounds, ages, interests, and abilities and may enhance the recall of facts and concepts, the most common way educators use museums is for informally structured field trips that occur one time during a nine month school year (Falk & Dierking, 2000; Hein, 1998). The reasons for the disparity between how educators use museums and how museums could potentially be used are difficult to discern. Nevertheless, this study of the learning that happens in a museum environment deepens our understanding of the processes involved in making meaning from a museum exhibit. This may affect a change in the way museum learning is viewed by educators.

Finally, the investigation of learning in museums from a literacy perspective adds to the body of research emerging from the NLS paradigm as well as addresses a gap existing in the literature of museology. Falk and Dierking (2000, 2002) present a three-pronged learning model, The Contextual Model of Learning, designed to represent the multi-faceted nature of learning in museums. In this dissertation, the Contextual Model of Learning is used to help explain what is going on during the process of making meaning from a specified museum exhibit. There is no existing research which uses The Contextual Model of Learning to explain museum learning phenomena. Instead, much of the museum research addressing what viewers learn from museums amounts to an evaluation of the extent to which a single museum exhibit has achieved its goals (Hein, 1998; Woodhead & Stansfield, 1994). The results gleaned from this dissertation, therefore, are different from the existing work in material culture studies and museology, and it broadens the understanding of literacy processes as well.

Additionally, the joining of museology and material culture studies under the umbrella of NLS helps to develop a vocabulary among educators that would help them to incorporate

museum learning into the traditional learning curriculum. In addition, it will introduce aspects of literacy that can help museum educators, curators, docents and designers understand the process in which visitors engage as they view museum exhibits. This deeper understanding of the experience and what it means to learners could, perhaps, help educators to use museums in new and productive ways and could help museum personnel to create exhibits that most accurately accomplish their purposes.

Purpose of the Study and Research Question

The purpose of this phenomenological study is to investigate the nature of museum learning by describing and analyzing the experiences of selected museum visitors who have viewed a specified museum exhibit. The analysis of viewer responses enhanced our understanding of the process in which viewers engage as they make meaning from what they view and of how museum exhibits function as instructional tools. Therefore, this dissertation investigated the nature of viewing a museum exhibit as a literacy event.

This dissertation describes museum learning from the perspective that viewers approach the contents of a museum exhibit as they do the contents of written text and that viewing a museum exhibit is, therefore, a literacy event. The questions asked of subjects prompted their recall of the viewing experience and the analysis of their responses adds to the bodies of research in the areas of material culture studies, museology, and New Literacy Studies. To this end, this dissertation addresses the following research question: How does a museum exhibit function as a literacy event for viewers?

The museum chosen for this study is The National D-Day Museum in New Orleans, a non-profit entity which was funded by private donations, the United States government and the State of Louisiana (<http://www.ddaymuseum.org/>). The National D-Day Museum focuses on the

role the United States played in World War II and in D-Day, the day the Allied Forces invaded France. The museum exhibit that serves as the learning environment is called “The Home Front.” Subjects were asked to spend a specified period of time viewing The Home Front. The only instruction given to the subjects was to learn as much as possible in the allotted time. More time was allotted at the request of the subject.

At the end of the viewing period, the comments of the subjects were recorded and an oral interview based upon 7 target questions was conducted. The purpose of these questions was not to discern how much learning occurred or the accuracy of any information. The purpose of the questions was to provide evidence that outlined a general profile of the subjects’ experience as viewers and a description of what this literacy event was like for them. The details of the procedures of this study are provided in Chapter Three of this dissertation.

Delimitations and Limitations

The most salient delimitation of this study is that the results of the data analysis cannot be transferred to subjects other than those selected as viewers for this particular experience. Any conclusions drawn regarding similarities between the experiences described by these subjects and those that would be described by others is mere speculation. In addition, there are other delimitations that should be identified.

For instance, the study of learning from any museum exhibit is constrained by the fact that museum exhibits are one-of-a-kind creations. The learning that occurs as viewers experience one exhibit cannot be said to transfer to other exhibits or other situations, because no two museum exhibits are exactly the same.

Finally, the results of the study can be applied only to the specific visit that is described in this dissertation. Pearce (2003) explains that once an object is viewed, the observer has been changed by the experience, and a second viewing is altered by the first experience. In other words, the results of a second project using the same selected subjects and the same museum exhibit cannot be expected to yield the same results. In essence, the delimitations of the study constrict the results to pertain to this one-time experience with this single museum exhibit.

Limitations of this study include the following circumstances that could not be controlled by the investigator. For instance, the number of total visitors present at the exhibit at the time the data were collected may have altered many aspects of the experience for the subjects. These aspects include factors such as noise level, comfort level, distractibility, visibility of objects, etc. These factors generally affect the total time viewers spend in the exhibit, the time they spend viewing each object separately, their ability to read passages or see artifacts, their ability to concentrate on what they view, etc. These issues are inherent in any visit to a museum, and, at the request of the management of The National D-Day Museum, they will not be altered or controlled. These factors, however, were weighed into many of the procedural decisions that are explained in Chapter Three of this dissertation.

There are also factors concerning the individual differences of the subjects of the study that could not be controlled. The general background knowledge of the subjects and their prior knowledge about the facts and concepts conveyed by the exhibit are impossible to control. Also, any past personal experiences they have had with the various artifacts that are included in the exhibit may have altered their interpretation of the data. The subjects' level of interest in the exhibit materials, their preferred learning style, their motivation for agreeing to participate in the study, and other affective variables were not controlled for. Certain criteria limiting the

participation of certain subjects can lessen the effect of these individual differences, however. They are also explained in Chapter Three of this dissertation.

Organization of the Dissertation

The remainder of this dissertation is organized as follows. Chapter Two consists of a review of the most relevant literature regarding the three areas of study that form the basis for the dissertation: material culture studies, museology, and literacy. This research is divided into two parts.

Part One of the literature review discusses the information gathered from research in NLS. It provides a theoretical foundation for understanding how NLS emerged from the language and literacy knowledge base as a new paradigm, and discusses the important empirical research that exposed the need for this paradigm shift and influenced its development. Part One then provides examples of studies that reflect the contemporary perspective on literacy research and delineates the characteristics of literacy practices and events in more detail. This section then closes by describing how museum learning is explained from the perspective of NLS.

Part Two of the Review of Literature integrates information from material culture studies and museology by discussing relevant research in museum learning. A theoretical background is developed by first discussing museum learning as a form of informal learning. This culminates in a detailed presentation of the Contextual Model of Museum Learning (Falk & Dierking, 2000). This model serves as the basis through which the literacy event is analyzed and discussed. Part Two closes with a discussion of the types of research that have been completed in the area of museology and gives examples of these studies.

Chapter Three of this dissertation details the procedures that were carried out to gather the data necessary to answer the research question. The data collected help to describe the viewing of a museum exhibit as a literacy event. No data was collected to describe the culturally- based literacy practice of museum visiting, and the collection of such data is well beyond the scope of this investigation. However, because the Contextual Model of Learning integrates aspects of the socio-cultural background of the viewers into the literacy event, and because the subjects of this study are products of their culture, some discussion of these aspects will be included in this dissertation in order to describe the nature of the phenomenon as completely as possible.

Chapter Four presents the analysis of the literacy event using the Contextual Model of Learning (Falk & Dierking, 2000) that was described in Chapter Two. This model describes museum learning as involving three components that include the material culture that constitutes the contents of the exhibit (called the Physical Context), the viewer's prior knowledge and experience (called the Personal Context), and the viewer's connections to the institutions and ideologies that are a part of his social milieu (called the Socio-cultural Context).

Each component of the Contextual Model of Learning, the basis for the examination of the literacy event, required a different type of analysis. The Physical Context was analyzed through narrative description. The Personal Context was analyzed through microanalysis (Fairclough, 1995; Miles & Huberman, 1994; Strauss & Corbin, 1998; Creswell, 1998). The Socio-cultural Context was analyzed through Critical Discourse Analysis (Fairclough, 1995; Meyer, 2001; Van Dijk, 2001; Gee, 2003).

A discussion of the results of these analyses is presented in Chapter Five. This discussion offers an explanation of the implied connections between the data analysis and the three areas of

study addressed in this dissertation: material culture, museology, and literacy. The viability of the Contextual Model of Learning in describing the phenomenon is a point of discussion as well as a discussion of how the results of the data analyses may impact instruction. Chapter Five concludes with suggestions for further research.

CHAPTER TWO: REVIEW OF LITERATURE

Overview

The purpose of this dissertation is to investigate how a museum exhibit functions as a literacy event for viewers. It draws connections between three areas of study, material culture studies, museology, and New Literacy Studies (NLS). Relevant contributions from the literature in each one of these areas are, therefore, presented in this literature review. Also, a learning model from the area of museology, the Contextual Model of Learning, plays an important role in the data analysis of this dissertation. That model will also be discussed in this chapter.

This literature review is divided into two parts. Part I elaborates on the theoretical framework of this dissertation, which is NLS. There are three sections to Part I. They include discussions of the underlying influences involved in the rise of NLS, a discussion of the important research that led to NLS, and a discussion of the connection between NLS and museum learning.

Part II will concentrate on selected literature that focuses on museum learning. There are four sections to Part II. The first section discusses museum learning as a type of informal learning. Incidental learning will be discussed in this sub-section as well. The second section discusses the Conceptual Model of Learning developed by Falk and Dierking (1992), which is the foundation for the analyses of the data. Finally, the fourth sub-section will review the existing empirical literature on museum learning and what we know about the museum learning process.

Part I – New Literacy Studies

Underlying Influences of New Literacy Studies

Introduction

This review of the literature begins by describing some of the issues that contributed to the development of New Literacy Studies (NLS). The writings of two scholars of the 60's and 70's, Marshall McLuhan and Paolo Freire, are selected as representative of what predates the development of the NLS paradigm. Both authors offer theories that changed the worldview of their audiences. They write about different aspects of literacy, yet converge on their assessments of how literacy has influenced the way our world has evolved.

Five publications which clearly delineate the foundation of the ideas of these scholars will be represented here. They include *Understanding Media: The Extensions of Man* (1964) by Marshall McLuhan, *Laws of Media: The New Science* (1988) by Marshall McLuhan and Eric McLuhan, and the following works by Paolo Freire: *Pedagogy of the Oppressed* (1970), *Pedagogy of Freedom: Ethics, Democracy and Civic Courage* (1998) and *Literacy: Reading the Word and the World* by Freire and Donald Macedo (1987). With regard to *Understanding Media*, the 1994 MIT Press edition will be the reference. This version is a re-print issued at the 30-year anniversary of the original 1964 publication. With regard to *Pedagogy of the Oppressed*, the reference will be the 30th Anniversary Edition of the original 1970 issue. For the purpose of providing accurate quotations, references from these books will be cited as McLuhan (1994) and Freire (2000).

McLuhan and Freire

McLuhan (1988, 1994) and Freire (1987, 1998, 2000) are important to the present study because, through their works, a strong foundation can be laid to facilitate an understanding of why a new paradigm of literacy has developed and is beginning to supersede a paradigm that is now considered outdated and no longer representative of literacy as it is manifested in a modern world. McLuhan wrote about how societies are affected by our technologies, which are “ways of translating one kind of knowledge into another mode” (1994, p. 56). This transference of knowledge occurs through the use of media, an area that has experienced extraordinary advancements over the last 50 years. McLuhan based his ideas on the power of these technological advancements to affect fundamental changes in every aspect of our lives (McLuhan, 1994).

Freire also wrote about the effects of technology on society. He focused, however, solely on the technology of literacy. Freire based his ideas on the power of literacy to stratify social groups within a culture and to lend support and validity to the power structures that form during the course of its existence. Lankshear and Knobel (2003) credit Freire as a major force in the paradigm shift to NLS. They explain that Freire was among the first to critically examine literacy as a specialized skill and to suggest that elitist social groups use their more refined linguistic skills to foster separation within the whole society and to maintain their position of power over groups who have less linguistic expertise.

Both McLuhan and Freire wrote about the fragmentation that occurs in societies that are dominated by the written word. Freire saw the fragmentation as occurring among different social groups, with literacy serving as the enabler. McLuhan saw the fragmentation as occurring within the individual, with literacy serving as the cause.

McLuhan asserted that, prior to the development of writing, we gathered all of our information through direct experience. We used our senses simultaneously in that process: tasting, touching, smelling, hearing, and seeing. Literacy, however, diverted our attention from the integrated world of experience, and, at the expense of the other four senses, we began to concentrate on the sense of sight as a way to decode arbitrary symbol systems, which became the main mode of learning. Furthermore, the acquisition of a specialized skill that translates arbitrary symbols into abstract concepts became a necessity, and this specialized skill of interpreting printed space literally transformed our patterns of perception.

As specialization became part of the human psyche, the practices of literate cultures eventually took on qualities decidedly different from cultures that remained oral in nature. Literate cultures, already accustomed to splitting and dividing things as a means of gaining control over them, attached this inherent behavior to the acquisition of a highly specialized skill that was not available to all people in all stations of life. The linear nature of written language carried itself into science, rhetoric, logic, and many other modes of knowing. The development of the scientific method as a way to isolate and study elements of the environment is one example of this development. Another example is seen in Western production practices, which includes the development of the assembly line as a way to create complex artifacts in a sequential manner from part to whole. Written language enhanced the human condition by providing a way for making the abstract manifest, but it fragmented man's faculties in the process, causing a change in the way other aspects of life were perceived (McLuhan, 1994; McLuhan & McLuhan, 1988).

The kind of fragmentation of the human faculties McLuhan described began in ancient Greece and developed into a mechanism that allowed one man to distinguish himself from

another according to the level of expertise in acquiring a particular competence. As Freire suggested, the power of the literate turned into dominance as more and more of us began to view the printed word as a symbol of authority and began to place greater value on what was learned from the word than on what was experienced in the world (Freire, 1998, 2000).

This authority transfers to those who control the written word and is manifested in the form of textbooks, curricula, standards, requirements, traditions, and any number of overt and subtle ways bureaucratic control over others can be exerted by the dominant culture. The resulting bias fragments society further, lending truth to McLuhan's belief that "man cannot trust himself when using his own artifacts" (1988, p. 95). The model of literacy derived from this perspective, the autonomous model of literacy, is discussed in the research of Street (1984), which is presented later in this chapter.

New Technologies and the Global Village

To complete the connection between technology and the development of NLS, it is important to consider how electronic technologies have become the new scale by which we measure our world and have, once again, initiated profound changes to our patterns of perception. Electronic communication, which includes the telegraph, telephone, radio, television, and computer, has reduced our dependence on the written word. Even though typography is a part of these media, it is integrated with images and sounds, both of which can convey information without depending on written language. Contemporary forms of communication are instantaneous, multi-modal, multi-mediated, and use a simultaneous integration of the language arts.

The result is that the necessity of a specialized skill such as literacy to gather information no longer exists, and all members of all classes can be reached through media in some form.

Therefore, the individual's perceived reliance on a higher, centralized authority as the dispenser of appropriate and correct information is lessened, more opportunities to challenge the status quo emerge, and perceptions of traditional bureaucracies and institutions, such as formal schooling, are transformed. McLuhan wrote,

Electricity does not centralize, but decentralizes. It is like the difference between a railway system and an electric grid system: the one requires rail-heads and big urban centers. Electric power, equally available in the farmhouse and the Executive Suite, permits any place to be a center, and does not require large aggregations (1994, p. 36).

Here we find the foundation of McLuhan's concept of the *global village* - the entire world connected by instant communication and automated information (McLuhan, 1994). The changes in our patterns of perception have been profound. One change has been in the adoption of a new paradigm of literacy that veers away from the concept of a centralized, exclusively correct form of language that is the authority. This is the New Literacy Studies paradigm.

The Rise of New Literacy Studies (NLS)

Societies across the world were affected in at least three important ways by the rise of the global village. First, various cultures became more aware of each other. Differences and similarities among them found exposure through personal contact as well as through art, literature, music and other expressions of self. Also, socio-political changes, such as the desegregation of American schools in the 1960's, fostered this new state of awareness. Second, it became apparent that literacy was only one of many ways in which information gathering can be accomplished and scholars began to investigate other modes through which learning may occur (Olson, 1974). Third, educators began to engage in a more critical examination of the process of literacy itself. They began to realize the influence that the technology of language and

literacy has on the structuring of societies and began to consider the possibility that it involves more than a sequential accumulation of individual skills.

Although their ideas were published long before the concept even had a name, the ideas of both McLuhan and Freire support the concept of NLS. McLuhan, for instance, alluded to our reliance on typography as having contributed to a cultural bias that equates literacy with intelligence. He says that this bias eliminates “the ear man” and the “tactile man” (1994, p. 17), who are apt to demonstrate what they know in alternative ways. His view stands as precursory support for considering more than just the ability to read and write as evidence of cognitive expertise (McLuhan, 1994).

With regard to Freire, the concept of learning as an integrated process is interwoven throughout the three publications mentioned earlier in the literature review. Language, Freire believed, and life experience are dynamically interconnected and his statement that, “First we read the world, then we read the word” (1987, p. 32) is a reference to how literacy is tied to the oral language we acquire as we grow and develop as human beings. Language is, therefore, directly or indirectly, tied to nearly everything we have come to know within the context of our personal experience, our culture, and our numerous social groups. Freire states, “Literacy and education are social structures [and therefore] they cannot be conducted outside of culture” (1987, p. 51). Freire’s ideas, therefore, also pre-date, yet support, a paradigm in which language is seen as a function of interacting with the world, that it is preceded by knowledge of the world, and that it cannot be separated from the experience of the world (Freire, 2000; Freire, 1998; Freire & Macedo, 1987).

Summary of Underlying Influences of New Literacies Studies

Part I of this literature review described how the work of Marshall McLuhan and Paolo Freire complement each other and help to describe some of the influences which affected the development of NLS. McLuhan's work shed light on the effects of our technological advancements as a factor in the paradigm shift. Freire's work exposed the way in which dominant patterns of perception extended into social and political patterns of practice, leading to the formation of power structures that served to perpetuate certain ideologies and to marginalize others.

This examination of the writings of McLuhan and Freire reveals a society constructed upon a foundation of the autonomous model of literacy, which is discussed in the following section. The fragmentary attributes of literacy permeated our culture and were manifested in every artifact we produced. When technology became electronic, however, our literate society moved into a new phase, one that we are still coming to know and understand. Both McLuhan and Freire described their vision of how they believed literacy should be approached as we come to better understand the intricacies of the human condition. The following section will discuss in depth the theories and pedagogy developed by those who advocate NLS.

New Literacy Studies Research and Pedagogy

Introduction

In this section important research pertaining to New Literacy Studies (NLS) will be discussed. This research will be covered in two sections. Section One will introduce research that contemporary scholars in NLS credit as important to the development of the paradigm. Section Two will examine some of the research that is based upon the NLS model of literacy research. The basis of this discussion will be the following publications: *Social Literacies:*

Critical Approaches to Literacy in Development, Ethnography and Education (1995) by Brian Street, *Social Linguistics and Literacies: Ideology in Discourses* (1996) by James Gee, *Multiliteracies: Literacy Learning and the Design of Social Futures* (2000) edited by Bill Cope and Mary Kalantzis, *Situated Literacies: Reading and Writing in Context* (2000) edited by David Barton, Mary Hamilton and Ron Ivanič, and *New Literacies: Changing Knowledge and Classroom Learning* (2003) by Colin Lankshear and Michele Knobel.

Foundational Research of New Literacy Studies

NLS is, at least in part, a product of changes in our society that fostered a wider awareness of the variations among us, including differences and similarities in the uses and functions of language among members of different social classes and geographic areas. This awareness was validated by research that exposed the complexity of social power structures and how literacy played an important role in developing those structures and in continuing to promote the ideology of the dominant class.

In *Literacy in Theory and Practice*, Street (1984) drew clear differences between what he called the “autonomous model” (p. 19) and the “ideological model” (p. 95) of literacy. The autonomous model parallels what McLuhan and Freire refer to when they discuss a higher, centralized authority which is considered the dispenser of correct information. It parallels Freire’s reference to the social power structure that stands as oppressor over those social groups who do not meet the expectations of the dominant culture. Street brought these concepts into discussion through an examination of the mindsets of those who subscribe to the autonomous model.

The scholars used by Street as examples of proponents of the autonomous model include Hildyard and Olson (1978), Greenfield (1972), and Goody (1968, 1977). Street explained that

literacy, in the view of these scholars, “rests on the assumption that it is a neutral technology” (p. 1). That it has its own qualities that are universal regardless of the social context surrounding it. In other words, the power of the word is seen as residing in the word, itself, rather than in the writer or reader of the word.

Each of these scholars also shares, according to Street, the viewpoint that, as a form of communication, writing is superior to oral speech because it expresses meaning in a more abstract way. This idea stems from the belief that oral language is based completely in context; that the “meaning of any spoken language is not simply altered, but actually determined by dialect, accent, facial expressions, etc.” (p. 73). The qualities of written language, according to the autonomous model, make its relationship to meaning more removed, more abstract, which fosters intellectual growth through the development of logical thought patterns. It is an easy jump from here to the belief that, because a society is a literate society as opposed to an oral society, that it is intellectually superior.

Street contended that the fact that speech and writing are different media does not support the belief that one is superior over the other. Literacy is not, he claimed, evidence of more abstract thought. In fact, to speak a language at all is to employ abstract thought as well as logic. McLuhan’s description of how patterns of perception were affected by the introduction of literacy helps to explain Street’s assertion. McLuhan described literacy as linear, rule-driven behavior that fragments man’s faculties, causing him to apply this perspective to all areas of his life. This does require logical thought. However, it does not preclude logical thought from being prevalent in non-literate societies. In the same respect, a society that values literacy over oral language creates fragmentation within itself and, as Freire described, sets up power structures that are designed to perpetuate the dominance of one group over another due to its

attachment to a specialized skill that is acquired disproportionately across societal groups (Street, 1984; McLuhan, 1994; Freire, 2000, 1998).

On the other hand, Street's ideological model of literacy is based on the belief that skills and concepts associated with literacy are not qualities of technology, but are qualities of the society. The belief in the power of literacy to foster cognitive development and to serve as evidence of superiority is a culturally learned phenomenon. It becomes manifest in the value placed on such things as institutionalized schooling, where standards are established and used to evaluate all language behavior. Therefore, the practices and concepts of reading and writing are embedded in the ideology of that society and cannot be isolated or treated as a neutral technology (Street, 1984).

Street indicated that the ideological model of literacy stresses the importance of how literacy is used in society, which must, therefore, take into consideration the nature of the context from which it emerges. Street's ideological model is reflected in the New Literacies paradigm and supported by those researchers who began to study literacy from a new point of view (Street, 1984).

These differences in viewpoint were further illuminated as researchers began to recognize the value and importance of ethnographically documenting the varying characteristics of language users from all areas of society (Lankshear & Knobel, 2003). One of these studies was by Shirley Brice Heath (1983), and was published as *Ways with Words: Language, Life, and Work in Communities and Classrooms*.

Heath acted as participant-observer in her study of the language practices of two Carolina communities, one white and one black. She analyzed the way literacy was embedded within community cultures. Heath observed how children in both of these textile communities acquired

language and describes the role literacy played in their assimilation into their respective social groups. The results of Heath's work indicate that, although two communities may be close in location, they may be quite different in terms of their social development.

For instance, the nature of oral interaction was different in many instances. These included the amount of time children spent in conversation *with* adults as opposed to being *observers* of adults in conversation. The amount of encouraging talk children received from adults as opposed to aggressive talk, and the kinds of child responses that were considered acceptable by adults also revealed a difference between the groups. Additionally, the creative discourse deemed acceptable among children as they interacted in play differed from one community to another, and finally, the presence of books in the home and the availability of other printed matter, such as newspapers and magazines, were also different. All of these factors were reflected in the value placed on literacy by the two communities, which, in turn, affected the relationship that members of each community shared with mainstream America.

The results of Heath's work also indicate that literacy practices existing within the cultural milieu of children strongly influence the odds of their finding success outside of their own family situations. They indicate that, through the modeling of various behaviors, adults instill in their children ways of using literacy skills to acquire knowledge that will eventually affect their ability to adapt to already-established expectations of schools, business, government, and many other bureaucratic and institutional settings. Gee (1996) used Heath's bedtime story scenario as an example of the realizations her work brought forward. He states, "The bedtime story sets patterns of behavior that recur repeatedly through the life of mainstream children and adults at school and other institutions" (p. 62). For example, the reading of bedtime stories by a parent to a child (a literacy practice) facilitates a series of questions about meaning and meaning-

making to which the child responds. This scenario is important because it exposes a child to new vocabulary and the culturally accepted structures of literary discourse. It is also important, however, because the resulting parent/child interaction is quite similar to the type of questioning and answering that is found in traditional classrooms. This is especially true in situations where teachers follow the autonomous model of literacy. Children of families who do not engage in this literacy practice may not as readily adapt to the instructional environment this interaction replicates. Their school experience, therefore, is a process of learning more than just the content of their lessons, but also the *context* in which those lessons are presented. They must then reproduce that context in order to prove their knowledge in a way that is recognized as proof.

Furthermore, after these children are introduced to the routine, their assimilation is further hindered by the fact that this is not a behavior that is reinforced in the home. “School behavior” becomes separate and isolated from “home behavior,” and this dichotomy serves as a disadvantage to those who must master both. On the other hand, Heath’s findings also support the idea that, although these two communities may have had distinct styles of communication, each style was appropriate for and reflective of the values and beliefs of the culture. They were not, in other words, indicative of inadequacy in the ability to communicate or navigate within their own environments. Members of each group were, in their respective ways, “literate.”

Heath’s findings drew attention to the close ties between the school and the home, but what is of equal interest for proponents of NLS are the procedures she used in gathering her data and the perspective from which she observes and reports on the phenomenon. Her purpose was not to isolate units of observation from the social milieu in order to categorize them for study. It was to observe how language and literacy were integrated with and embedded within the social practices of the groups. She did not observe from the outside as a critic, but from the inside as a

participant observer whose purpose was to describe and to explain, not to validate one over the other. This interest in the more socio-cultural aspects of literacy, along with the use of research procedures of a more qualitative nature, is evidence of a shift in the view of what literacy entails, a change in the definition of being literate.

Street (1995), Gee (1996), Cope and Kalantzis (2000), and Barton, et. al. (2000) each credit Heath's work as a cornerstone to the rise of NLS in that it revealed the interconnectedness of language and culture. Heath demonstrated that if language is extracted from culture and examined as a separate entity, the results of that examination are merely evaluations of the outcomes and products of literacy and does little to help us understand the process of making meaning. NLS diverts the focus from the symbol system and places it on the human system, bringing into consideration the emotions, experiences, histories, and artifacts (both abstract and concrete) of the meaning- makers, themselves.

Furthermore, this perspective has led all of the scholars discussed in this section to acknowledge the coexistence of more than one way of creating and interpreting the artifacts of man. These modes of interpretation are as numerous as the cultures themselves, each of which is as valid and representative of meaning-making as the other, none of which are exactly alike, only some of which, in all its complexities, are satisfactorily comparable to the pre-determined and long-standing ideal held as the correct standard by the dominate culture.

The Characteristics of Literacy Practices and Events

Literacy practices always refers to how text is utilized within a specific social situation. It refers to relationships among people, not to a set of abilities found within a single person. When the way people put literacy to use is considered, we must also take into account the person's attitudes, values, feelings, and many other non-observable behaviors surrounding the

use of written text. Literacy practices are, therefore, tied to our individual histories and the histories of the various cultural activities we have developed through everyday living (Barton & Hamilton, 2000).

Literacy events are instances of language use that involve text (Heath, 1983). In other words, they are individual occurrences of activities functioning within a literacy practice. For instance, reading the newspaper may be considered a literacy practice of the American culture. This practice can consist of one literacy event for each article that is read, which means a literacy practice can consist of several literacy events as several articles are read and as the activity of reading one article stops in order to begin another.

In addition, watching television is also a literacy practice because it involves written and visual text. The practice of watching television consists of many literacy events as different programs are viewed. Other literacy practices include attending the theater or the movies where the attendee experiences such literacy events as reading the program, the marquee, or the ticket. Literacy practices include completing income tax forms, applying for a job, attending school, and surfing the internet. For the purposes of this study, the literacy practice involved is the practice of visiting museums and the literacy event is viewing the contents of one museum exhibit, The Home Front.

In consideration of these definitions, it must be noted that *literacy practice* is the broader term, and that *literacy events* are smaller instances of language use that constitute and occur within a literacy practice (Barton & Hamilton, 2000; Heath, 1983). Therefore every characteristic of a literacy practice is also a characteristic of a literacy event. This is important when considering the research studies that are to follow.

The following research studies are included here for three reasons. First, they give a coherent portrayal of four different literacy practices, which consist of various literacy events and which help the reader to achieve a deeper understanding of the meaning of the terms. Second, they offer examples of methods used to study and analyze the various literacy practices that make up our culture. Finally, they discuss two important characteristics of literacy practices and events. These are that literacy practices and events are historically situated and that literacy practices and events are evolutionary in nature. The studies are grouped according to the characteristics of literacy practices and events.

Literacy Practices and Events are Historically Situated

Tusting (2000) supports the statement of Barton and Hamilton (2000) that, “Literacy practices are historically situated” (p. 8). Therefore literacy events are also historically situated. She examines how literacy practices and events help to establish memories of important times in the lives of children and, thus, shape the history of individuals. In her qualitative discourse analysis of a church newsletter and a First Holy Communion ceremonial event, one of the sacramental rites experienced by Catholic children at the age of 7 or 8, Tusting (2000) focuses on the concept of time and the role it played in literacy practices and events surrounding this rite.

First, she describes written communication between the church parish and the parents of the children emphasizing the importance of the First Holy Communion ceremony and creating a context for the occasion to be remembered as something special. She also described the artifacts developed around the occasion, including illustrations and written text created by the children and which were taken home afterward as keepsakes. Some of these artifacts, along with text explaining their meaning, were displayed on public bulletin boards during the 9-months of study in which each child participated. This display was viewed by many who were not a formal part

of the process. This activity served to publicize the event, which enhanced its importance and historical significance for the subjects.

On their day of First Holy Communion, many family members gave greeting cards to the celebrants to commemorate the occasion. The cards included printed and visual texts of a religious nature and personal notes written to the children. They served as additional mementoes of the day and also brought further attention to the importance of this event in the histories of the lives of the celebrants. Tusting states,

Through an analysis of the literacy practices involved in preparation for First Holy Communion, I have demonstrated how an investment in time is used as a measure of commitment; how these literacy artefacts are produced as a material proof of this commitment; how these literacy artefacts are used both permanently and in recurrent literacy events to achieve the social goal of community awareness of candidates' progress; and how literacy is used to transcend the temporary nature of the ceremony itself and create a permanent historical record of a once-only event (p. 50).

Tusting continues her analysis of time as it functions in literacy practices by discussing the contents of a weekly Catholic Church newsletter. She cites this document as an important factor in how the church succeeds in meeting its social goals and maintaining its community identity. "One of the important aspects of community identity is the knowledge that many people are doing the same thing at the same time," she states (p. 50). She found that the church newsletter achieved this objective both on a local level, by informing parishioners of the times of religious activities, and on a global level, by using literacy as the institutional voice of the Catholic Church.

Tusting's investigation supports the notion that literacy practices and events are historically based. Tusting (2000) uses the artifacts surrounding a religious ritual to establish a relationship between literacy and time. The time devoted to creating the artifacts gave testimony to the importance of the ritual in the lives of the subjects. Also, the artifacts lengthened the time for which the subjects remembered the literacy events and they became material evidence of this important occasion in the history of the subjects. Finally, the artifacts associated with the ritual, as well as the church bulletin included in Tusting's study, served to ensure the continuance of the ritual as an historical event.

Literacy Practices and Events are Evolutionary in Nature

Because they are so deeply embedded within our identity, literacy practices and the events that constitute them also take on the quality of being evolutionary. As we continue to precipitate changes to our world through developing new technologies, our literacy practices evolve along with us (Ormerod & Ivanič, 2000). McLuhan would agree that the technology of the written word initiated important evolutionary changes in us all when it became electronic, and his global village metaphor is a representation of that evolution. Furthermore, because each past experience influences each experience yet to come, no two can be exactly alike, and literacy practices and events will always be in a state of change (De Pourbaix, 2000).

Ormerod and Ivanič (2000) completed a year-long study of 37 children from a middle-class, small town in north-west England, observing the changes over time in the literacy practices and events of these fourth, fifth, and sixth graders. They collected data from independent projects completed in and out of school. They focused mainly on the physical characteristics of the projects in order to learn what these material objects say about literacy practices.

The children had freedom in choosing their topics, guided by a very broad field of study, such as “animals.” They were required to demonstrate what they had learned about the topic by producing written outcomes of their work. The researchers explain, “In developing their understanding of what it means to ‘do a project’, the children bring with them values, attitudes, and ways of working rooted in both individual personal histories and shared school learning experiences. While the school and the teacher are to some extent shapers of these activities, as the initiators and ultimate readers of the children’s work, they do not exercise as much control over it as they do over many other forms of school work” (p. 92). This type of work, therefore, is a better representation of the children’s own interests and enthusiasm, bringing into play both the school and the home and integrating decision making, conceptual representation, information processing and many other complex behaviors under an atmosphere of freedom.

Ormerod and Ivanič (2000) utilized two research approaches in its methodology. The first was a detailed textual analysis of the content of the projects including linguistic, visual and physical features of each one, such as size, number of pages, text content, materials and techniques used by the creators. The researchers then interviewed the children in order to learn more about the relationship between the texts and the situations from which they emerged.

The results of the study revealed information about the children who designed the work. The textual analysis identified the specific materials the children chose to use, how they decided to use them, and the progression of their skills with their chosen techniques and technologies. The interviews allowed the children to explain the reasons behind their choices as well as express the enjoyment or frustration they experienced as they worked. The results indicated that the literacy practice of school projects and literacy events in the form of the activities that constitute the project are rooted in the children’s experiences both in and out of school,

fluctuating and changing as they do. The data indicated that the children did not choose their materials and methods at random, but made informed decisions on the basis of their personal concept of their project as a literacy artifact. This literacy practice was shown to be a multi-faceted experience that evolved over time. Ormerod and Ivanič explain,

In the many varied situations which the children described to us, we get a sense of the ways in which project work involves them in a continual process of informal sense-making, in learning about the kinds of practices which are relevant to the production of this kind of literacy artefact (p. 106).

De Pourbaix (2000) studied the changes over time that occurred within an online study group formed by students in an English as a Second Language class at a Canadian university. Her data was taken from the students' personal reflections written over a twelve-week period of time. She describes a stratified discussion community that began with an "official" group meeting as required, and a sub-group of students who joined together on a more informal level, meeting voluntarily outside of class time.

Her findings indicated there were three identifiable literacies emerging from these meetings. They included what she called "academic literacy," which was the externally imposed goal of the class and was concerned with correct grammar, punctuation, correct expression, etc.; "information literacy," which included ways to find and document correct information; and "computer literacy," which refers to technology and its uses. She also identified behavior she called "emergent practices" that developed and changed as the members of the group each reacted to new knowledge and experience in their individual ways.

For instance, while the academic purposes of the group remained the strongest influence throughout the existence of the group, as familiarity with each other's personal identities grew,

there was shown to be an increasing awareness of the importance of effective and clear communication as well as English that was grammatically and structurally correct. Also, perceptions of what was acceptable in terms of content changed as discussions about things other than the given topic became more and more common as the twelve weeks progressed.

Other changes in the emerging practices of this group include: increasing concern about correct 'netiquette' (specific techniques in the method of posting to the web); increasing comments on content that went beyond the strict scope of the discussion; and increasing inclusion of the discussion group into the everyday life of the subjects, measured by the increased usage of computers off campus as well as on. De Pourbaix also reports that the practices that developed with this particular discussion group were not always those she had observed developing in other groups. Rather, they were unique practices, some of which were viable only within this small community.

Also, she reveals that all three of the literacies she identified in the study showed evolution and change; that they all intertwined with one another, each change affecting another as the interests and communication needs of the group evolved. She states, "A view of literacy should be considered which moves beyond skills and considers the constantly evolving nature of communication needs, events and practices, the overlapping of communities and domains, and the inclusion in educational practice of a recognition of the multiplicity of communities, domains and literacies which constitute everyday life, both from internal (community members) and external (non-member) viewpoints" (p. 144).

Ormerod and Ivanic (2000) and De Pourbaix (2000) each discusses how the subjects' behavior changed as they participated in literacy practices and events that occurred for the duration of a school year and the duration of a college semester. In all of the cases, the literacy

events could not be replicated because each event influenced the outcome of each future event. This supports the idea that literacy practices and, therefore, literacy events are evolutionary in nature.

Summary of NLS Research and Pedagogy

The analysis by Street (1984) of research based upon the autonomous model of literacy gives a clear description of the differences between two distinctive viewpoints of how language should function in everyday life. Followers of the autonomous model of literacy believe in the credibility of a form of language existing outside of everyday experience that can be used to judge the quality of the language within everyday experience. They also use this perceived standard to make far-reaching assumptions about the overall cognitive abilities of all language users. The results of Heath's (1983) study of the literacy practices of two American communities indicate that these assumptions are misguided.

Followers of NLS, on the other hand, believe that language cannot be extracted from its everyday use and should be examined within the context from which it emerges. Barton and Hamilton (2000) state, "Work in the field of literacy studies adds the perspective of practice to studies of texts, encompassing what people do with texts, and what these activities mean to them" (p. 9). The studies discussed in this section show that the NLS approach places equal value upon text, the literacy practice in which the text occurs and the literacy event which facilitates the use of the text

In the studies examined above, the First Holy Communion ceremony, the church newsletter, the independent school projects, and the second language internet support group each constitute a literacy practice. The various activities of which these practices are comprised, such as reading greeting cards and bulletin boards, writing reports about animals, and communicating

via message board, are literacy events. The analysis of these practices and events show that they were each rooted in the daily life of the subjects of the study; connected to belief systems, traditional institutions, contemporary behaviors, and personal histories. These literacy practices and events were also shown to be dynamic in nature; reflecting the growth and change of the individuals involved in the practice. Literacy practices and events are, therefore, historically based and evolutionary in nature.

New Literacy Studies and Museum Exhibits

Introduction

The paradigm of NLS opened the door for scholars to consider the many ways literacy is interwoven into our everyday living. The written texts that are found in museums, whether in the form of simple labels that identify artifacts, longer discourses that explain historical events, or even in the form of a building floor plan, allow us to include visiting museums in the long list of literacy practices of our culture. Furthermore, the separate exhibits which make up the totality of the museum can be seen as a series of connected literacy events, which together form the essence of the learning experience.

Museum learning applies to a wide range of informal learning environments. These include art, history, and natural history museums; zoos; botanical gardens; science centers; historical homes; and other similar institutions (Falk & Dierking, 1992). In the past, museum learning has been investigated as one of the many informal forms of education, meaning that it takes place outside formal participation (Gorard, et. al., 1999). Hein (1998) contrasts the formal learning of schools and informal learning of museums as follows:

Schools provide primarily formal education; they teach a specific, hierarchical curriculum, and they usually have rules about attendance, time spent in classes,

classmates, and requirements for successful completion. Museums, even when overtly engaged in education, usually offer informal education; they do not have a set curriculum that progresses from lower to higher levels, usually do not require attendance, and do not certify mastery of specific knowledge at the conclusion of a visit (p. 7).

Research in informal learning will be discussed further in Part II of this literature review, but is mentioned here so that some general observations about museum learning can be drawn.

In this section, three important terms found in the current literacy research will be discussed. These terms are: “situated literacies,” as presented in the Barton, Hamilton, and Ivanič (2000) publication *Situated Literacies: Reading and Writing in Context*; “new literacies, as presented in the Lankshear and Knobel (2003) publication *New Literacies: Changing Knowledge and Classroom Learning*; and “multiliteracies”, as presented in the Cope and Kalantzis (2000) publication *Multiliteracies: Literacy Learning and the Design of Social Futures*. The discussion will reveal that each of these terms applies to museum learning; that the new paradigm of NLS invites us to view museum learning as a situated literacy, a new literacy, and a multiliteracy.

Museum Learning as a Situated Literacy

All literacies are situated. In other words, they are located in particular times and places and perceiving literacy as embedded within specific contexts contributes to the understanding of the ways in which literacy fits into our social processes (Barton, et.al., 2000). Gee (1996) expresses the same idea in this way,

There is no such thing as ‘reading’ or ‘writing,’ only reading or writing something (a text of a certain type) in a certain way with certain values, while at least appearing to think and feel in certain ways (p. xviii).

These values and feelings are social constructions and are subject to influences stemming from outside the individual, as well as from within. This prompts Gee to add, “Types of texts and the various ways of reading them do not flow full-blown out of the individual soul (or biology); they are the social and historical inventions of various groups of people” (p. 45).

The studies cited earlier, therefore, not only exemplify the characteristics of literacy practices and events, but are, by default, studies of situated literacies. Two of those studies examined literacy practices embedded within the context of the traditional school; the Ormerod & Ivanič (2000) study occurred within the elementary school and the De Pourbaix (2000) study involved college students. It is important to note here that, prior to the rise of NLS, research based on the autonomous model was focused mainly on traditional schooling (Street, 1984).

The Ormerod & Ivanič study and the De Pourbaix study are different from previous literacy research in that the researchers were interested in different outcomes. There is no reference in these studies to test results or measures of achievement. The concern was more to illuminate the phenomenon of literacy by observing how it helped to shape the meaning making process. In these studies there was no emphasis on a pre-set interpretation of the literacy event against which the outcome was judged; rather there was a presupposition that the outcomes would be revealed in multiple forms, each reflecting the circumstances in which they were situated.

The Tusting (2000) study examined selected literacy practices in the Catholic Church, an institution other than the traditional school. There are other studies that investigate literacy outside of the school and through the lens of the NLS paradigm. For example, Dyson (2003) described her view of literacy practices from the inside of the personal culture of five first graders, as they utilize experiences from their family situations to meet the demands made in

their school situations. Her research showed that, as they learned to write, these children situated themselves within the school society through a process of what she calls *re-contextualization*, borrowing textual material from one environment and re-voicing it in the other to negotiate success in their meaning making.

In Dyson's (2003) view, earlier literacy research offered a very narrow look at literacy from inside the world of the traditional school. But by describing literacy practices and events that include the literacy resources from the children's church experiences as well as their manipulation of hip-hop and rap songs, television programs, movies, and even traditional jump-rope rhymes, educators see in Dyson's research a view of how children adapt their personal language resources to situations that are imposed from the outside. Dyson explains, "Those resources evidence children's powers of adaptation and improvisation; and it is children's exploitation of these cross-cultural childhood strengths and their ways of stretching, reconfiguring, and rearticulating their resources, that are key to literacy learning in contemporary times" (p.5-6).

However, since situated literacies are multiple literacies by nature, not every NLS study is concerned with schooling. Wilson (2000) investigated literacy practices and events occurring in a prison and discussed how they extend the institution's control over inmates through processes such as the classification and labeling of both prisoners and personnel, and by documenting the rules of the prison lifestyle. She also indicated that literacy practices and events differ according to the length of time to be served. Prisoners tend to write longer letters, read more books, and enroll in more classes if they are serving longer sentences. As Wilson explained, literacy events are an integral part of an inmate's attempt to stay in touch with the

outside world. The longer prisoners are kept out of the mainstream, the harder they will try to hang on to literacy practices and events in which they were once engaged.

Jones (2000) examined literacy practices and events embedded within the bureaucracy governing the Welsh agricultural industry. She investigated the literacy events of record keeping and completion of forms, and how the mixture of written text and verbal speech worked in tandem to maintain the power structures that had already been formed by the long-standing social practices of the culture. She concluded that written texts are crucial to the functioning of large-scale bureaucracies, that individual farmers become incorporated into the bureaucracy as they sell their products, and that the combination of talk and text is important to accessing this bureaucratic system. Jones states, “Texts embody and mediate the conceptual and categorical order of a bureaucratic system. Inscribing talk into text incorporates local historic processes and circumstances within the discursive order of an abstract and disembedded bureaucratic system” (p. 88).

Cowan (2004) examined both written text and visual images in a study of a sub-culture existing within the Mexican American community of a Latino district in California. The group he investigated referred to themselves as “lowriders” because of their interest in lowrider cars. A lowrider is a genre of customized cars that have been lowered, through hydraulics, within inches of the ground. What Cowan calls “lowrider culture” is found in the Mexican American/Chicano community and can be recognized not only by automobile types, but by mode of dress and icons and images that identify members as a part of this group.

Cowan completed two qualitative studies of the lowrider culture which indicate that, although written text often accompanied the various symbols and icons identifying the group, it was the visual image that was most substantive in creating group unity and even initiating new

members into the lowrider culture. He discovered that it was these drawings, some of which were in the form of elaborate artwork painted on the outside of the lowrider vehicle, were collected and kept as a record of the history of the group. They were also shared and sometimes commissioned by members who preserved them as symbols of identity and ideology.

Furthermore, these symbols were used not only to identify the lowrider culture, but also to set lowriders apart from the gang members of the Latino culture. What Cowan first considered typical gang-type behavior common in this community was in actuality a visible statement of something else. Cowan states,

When lowriding and Latino adolescent artwork are seen as products of social processes of taking and making meaning valued in one's community, they can be seen to exist in opposition to and as challenges to pejorative assumptions. They can be read as counterdiscourses to dominant discourses about young Latinos (p. 73).

In other words, Cowan recognized that, although the outward manifestations of gang membership and lowrider culture may have been the same, a more in-depth examination of the processes associated with the creation of these literacy products revealed otherwise. Therefore, a study of these literacy practices in particular yielded a far more accurate and three-dimensional view of a certain sub-culture of language users.

These examples demonstrate one commonality among studies of situated literacies. The purpose of each of these is to do more than increase our understanding of the complexities of literacy practices. They also attempt to illuminate the connection between these practices and the broader social structures that have developed over time. Barton, et. al. (2000) explains, "One result of the focus on literacy as a social practice is that literacies are positioned in relations to the social institutions and power relations which sustain them" (p. 1). Because museum visiting

is a literacy practice, it is also a situated literacy. It is not only situated within a physical building, it is situated within a social practice and a social institution. According to Roberts (1997) museums as we know them are inventions of American culture. It was the establishment of democracy in our country that made the initial connection between the museum and the public good. Museum learning is, therefore, a situated literacy shaped by Western ideology and embedded within the social structures of that ideology. The purpose, then, of investigating the nature of museum learning will not only add to the body of literacy research, but also to the understanding of how social structures use museums to exercise influence over the members of society.

Museum Learning as a New Literacy

Lankshear and Knobel (2003) describe how, in contemporary culture, the meaning of literacy has changed in practice as well as in theory. The introduction of computer technology is an example they give of this phenomenon. Computer literacy is an important element of our ability to function in the modern world, and we describe ourselves as being computer literate or illiterate, according to how well we have been able to adapt to this new technology.

Areas of knowledge and study that were once nouns in our language are now sometimes used as adjectives. We place them in front of the word *literacy* in order to indicate a certain level of expertise in a field. Terms such as math literacy, science literacy, visual literacy, media literacy, and information literacy have become common. Lankshear and Knobel attempt to clarify this multiplicity of new literacies by dividing them into two distinct groups. They contend that some literacies are *ontologically new* while others are *chronologically new*.

Ontologically new literacies emerge when fundamental changes occur in the character or substance of the literacy practices embedded within associated social practices. In other words,

whole new mindsets surrounding these practices have been formed. Computer literacy is a good example of an ontologically new literacy.

Computer technology introduced a host of new and recycled words such as window, mouse, click, byte, hard drive, RAM, software, and many, many others. Furthermore, internet communications have continued to expand the text of computer literacy practices by introducing even more new concepts such as link and hyperlink, email, website and webpage, emoticons, chatrooms, and more.

However, when Lankshear and Knobel speak of ontologically new literacies, they go further than just the intertextuality of computer text. They refer to the introduction of new patterns of perception of the people who put the text into actual practice. Computer literacy involves much more than the use of esoteric language. It requires a different perspective on how information is gathered, manipulated, replicated, and stored.

As one example, the internet, in particular, requires the expansion of one's ideas about the location of information. Information once commonly found inside a physical building, such as a library or a museum, is now a part of McLuhan's global village. Information is acquired from an unseen place where it is stored as files and placed in folders that are never touched by human hands. When we are finished with it, we save it by clicking on an iconic symbol that sends it to another intangible place. Computer literacy practices, therefore, have not only created new vocabulary, they have initiated a revolutionary change in the patterns of perception of a literate society, which makes it a good example of an ontologically new literacy.

The second type of new literacy described by Lankshear and Knobel is one that is chronologically new. In their discussion of NLS and of the change in how literacy is being perceived, Lankshear and Knobel acknowledge that the previous conception of literacy was tied

to the autonomous model, and specifically to the parameters of schooling. They contend that, as the body of research about new literacies has grown, some activities we now consider literacy events were not considered valid forms of making meaning under the old paradigm. One example Lankshear and Knobel use to illustrate this idea is the development and publication of “zines.”

‘Zines refers to the many self-published magazines printed and distributed by sub-cultures of people sharing a common interest. They have been in existence in America at least since the self-published pamphleteer Thomas Paine gave voice to the ideals of the first Americans. Oulette (2002) indicates that, today, literally thousands of amateur, grass-roots publications exist. She says, “ ‘Zines tend to cover a diverse range of subjects that are usually ignored by (or sometimes unknown to) the mainstream media (p. 104). ‘Zines cover topics from music genres, to politics, to classic cartoon shows, anything that could be of interest to groups of people whose needs are not satisfied by what appears in mainstream print. Therefore, these people write, edit, print, and distribute to other parties their own versions of magazines (‘zines) to share information and to keep each other informed about their special interests.

As Lankshear and Knobel explain, these underground communications were not considered a form of literacy until scholars began to make the connection between literacy and social ideology. As the world became decentralized and autonomy began to be challenged, activities that had existed for generations outside the parameters of institutionalized schooling began to be seen as valid literacy practices and events worthy of investigation.

Some new literacies put familiar literacy practices into contemporary mindsets, sometimes using computers to experience well-known literacy events in new ways. Journal writing, called “blogging” or “weblogging,” is a way for individuals to write about themselves

and to immortalize their personal stories. Blogging puts a long established practice, journal writing, into a new and contemporary context by taking texts that were at one point handwritten and considered highly private, and placing them on the internet to be shared with McLuhan's global village.

Along that same line, Trainor (2004) studied the new literacy practices of a group of writers who shared a common interest in the pop culture television program *The X-Files*. Members of this group formed a cyber-society who regularly visit a self-constructed website where they participate in writing fan-fiction using the characters from the television show. These members write their own original stories as well as write alternative endings for existing screenplays.

After legal challenges brought about by the producers of the television show, members had to include a disclaimer on the website stating that, although these works of fiction are published for public consumption, they were not, however, published for profit. Trainor concludes, however, that this extension of popular culture into the personal realm invites viewers to "construct different understandings of the self (p. 136)" as they participate in a literacy practice that allows them to enjoy a form of expression that is "mediated by the fundamentally disembodied space of the Internet (p. 136)." In other words, technology has allowed this sub-culture find a voice, to find an audience and to become accessible to members of society who would otherwise be silent.

Addressing the nature of museum learning is appropriate here as it qualifies as a chronologically new literacy. This is indicated by gradual changes in how contemporary educators view museums as well as how the museum community views itself. First, as stated above, NLS has encouraged literacy experts to expand the definition of literacy in such a way

that would support the acceptance of visiting museums as a valid literacy practice. As in the cases of 'zines and journals, visiting museums has been a part of the American culture for generations and now, through the NLS perspective, can be connected to literacy.

Secondly, a change in perspective among the museum community, itself, as to the nature and purpose of museums has also occurred. Falk and Dierking (2000) state,

Learning is the reason people go to museums, and learning is the primary 'good' that visitors to museums derive from their experience. In large part responding to both of these realities, the museum community currently justifies and boldly promotes itself as the bedrock member of the learning community (p. 2).

They go on to say, however, that this was not always the case. The initial focus of museums was on the collector, the founder, the visionary, and the researcher. The first museums were personal collections usually held by the wealthy and the viewing of these artifacts were conducted in private; hence, the connection of museums to the elite and to the intellectual (Falk & Dierking, 1992; Roberts 1997). In the 1980's, concurrent with the work of Street and Heath and after the development of the global village concept, the focus shifted from the artifacts and their owners to the viewers, to what they could learn from the artifacts, and to the role of the museum in facilitating that process.

Hein (1998) contributes this shift of attention away from collections and onto what can be learned from them to four factors. They are: an increasingly self-conscious society, the expanding socio-political roles of museums in society, the changing of the definition of learning, and the pressure put upon museums to justify their own existence. These are ideas that have been discussed in various forms elsewhere in this dissertation. They are reflected in the discussion of the decentralization of information in the global village as per McLuhan, the desire

and need of the dominate ideology to maintain the status quo as per Freire, and the shift in the focus of literacy from text to context as per NLS. It is for all of these reasons that the literacy practice of museum visiting is a chronologically new literacy.

Museum Learning as a Multiliteracy

Cope and Kalantzis (2000) introduce yet another new term arising from the shift toward the NLS paradigm. In their publication *Multiliteracies: Literacy Learning and the Design of Social Futures*, they explain their choice to use a one-word term, *multiliteracies*, to embody a two-point argument they pose as the basis for a systemic change in literacy pedagogy. They state the following with regard to literacy pedagogy of the past, “Literacy pedagogy, in other words, has been a carefully restricted project – restricted to formalized, monolingual, and rule-governed forms of language” (p.9). They suggest that, "Literacy teaching and learning need to change because the world is changing” (p. 41). Their two-pronged argument in favor of pedagogical changes is explained below.

Cope and Kalantzis parallel the global village metaphor as per McLuhan in that they believe our increased awareness of global diversity initiated changes in both our personal lives and working lives that must be addressed by expanding our ideas on what constitutes literacy. They suggest that we adopt literacy pedagogy that extends its scope to take into account both cultural and linguistic diversity and the plurality of texts that circulate among us.

Lo Bianco (2000) discussed an interesting phenomenon occurring in the English language today. He described a paradox in which on the one hand English is becoming a “lingua mundi” (p. 93), a world language, while at the same time, it is becoming ever more diverse. In other words, as English is adopted as a common base for much of the communication in the global village, it also reveals itself as increasingly differentiated by accent, national origin,

profession, sub-culture, etc. This clearly reflects the work of Heath (1983) and Dyson (2003) who report on this very same diversity within American schools. Cope and Kalantzis (2000) state, “Dealing with linguistic and cultural differences has now become central to the pragmatics of our working, civic, and private lives” (p. 6). Literacy pedagogy, they believe, should be the foundation of that ideal.

The second argument Cope and Kalantzis offer to support a need for pedagogical change is the introduction of new electronic technologies which have revolutionized the way we communicate. They suggest that traditional literacy, which is centered on language only, no longer adequately represents the way we communicate in the contemporary world. Making meaning in today’s world includes the integration of multiple modes manifested in mass media, multimedia and electronic hypermedia; what they refer to as “textual multiplicity” (p. 46).

Textual multiplicity includes making meaning through symbol systems other than written language, i.e. the use of visual images, body language, symbols and signs, and any other way we can convey messages without the use of language. Multiliteracies is particularly concerned with the integration of these symbols with spoken and written language, and how they are all used simultaneously to make meaning. Therefore, information gathering through electronic media such as television, multimedia, hypertext, etc. is a part of multiliteracies.

Gee’s (2003) investigation of learning and literacy through playing video games is an example of new research that has emerged and has influenced our attitudes and understanding about the process of literacy. Gee suggests that the multiliteracied environment of video game playing is one where thought, language, image, and action are melded together as a form of entertainment. He claims that several learning principles associated with video game playing can potentially enhance a learner’s ability to reflect and to think. One of these is that video game

environments are set up to encourage active, not passive, learning. Another is that familiarization with different types of video games helps players to appreciate design, which Gee claims is core to the learning experience. Another is that playing video games helps participants to navigate across multiple sign systems that are very complex.

Gee describes video games as immensely entertaining and attractive interactive technologies that, regardless of the eventual learning outcome, operate using good principles of learning and educative strategies. Gee concedes that video games are powerful teachers that can be a force for both good and bad. He also states, however, that, although players may not always be learning good things, playing video games very often constitutes good learning.

Cope and Kalantzis explain the importance of including these modes of meaning making into pedagogy and instruction by stating, “When technologies of meaning are changing so rapidly, there cannot be one set of standards or skills that constitute the ends of literacy learning however taught” (p. 6). In other words, multiliteracies fits firmly into the NLS paradigm because it not only allows literacy to include meaning making in multiple forms, but also embraces the idea of literacy as being manifested through multiple modes.

The incorporation of museum learning into the multiliteracies concept is facilitated by the realization that a display of material culture conveys messages about the people who created them and the times in which they were used. Exhibits are not simply displays, but systems of signs that express messages about culture. The act of creating an exhibit is parallel to the act of producing knowledge. Also, the interpretation of messages is similar to the deciphering of text, using the signs, symbols, objects, etc., of a museum exhibit as part of the process of creating meaning (Roberts, 1997).

In addition, in the same vein that “There is no such thing as ‘reading’ or ‘writing,’ only reading or writing something . . .” (Gee, 1999), the same would hold true for creating exhibits. There is no such thing as displaying an artifact without displaying something about that artifact. Note the following statement from Roberts (1997) about exhibiting artifacts and how exhibits are “interpreted” by museum designers.

As a practice, exhibits were first developed for the sole purpose of presenting collections to public view. Over time, they were embellished in ways that were thought to improve that view: draped fabrics, painted backdrops, illustrative props and graphics were incorporated into exhibits. Such elements served to frame an object, providing not only the intended ambience but also shaping the object’s apparent meaning. Literary critics have shown how messages may be borne by nonverbal texts. The props surrounding an object may thus carry a message in their own right by creating a visual context that shapes the way an object is seen and thus comprehended (p. 75).

In other words, museums and their exhibits reflect the ideology of those who create them. Such mediation is shown in practices such as: choosing which messages are to be conveyed to viewers, choosing the artifacts with which to convey those messages, and choosing the manner in which those artifacts will carry the message.

For example, Carliner (1998) describes how designers of an urban history museum decided to represent the racial strife (an abstract artifact) that was a part of their city’s history. Displaying a Ku Klux Klan robe juxtaposed with an original copy of *Gone with the Wind* was chosen as an effective way of presenting this aspect of the city’s story, as well as a way of “promoting interpretation” (p. 83). This example indicates that at least two modes of representation were used to express the concept of racial strife, objects (the robe and the book)

and written text (the title of the book). Additional elements to this display, including lighting, drapery, text describing the artifacts, etc., serve to further mediate the experience for viewers. The interpretation of an overall meaning, however, remains for those who see the exhibit and who determine the value of the artifacts and the nature of their presentation.

Because museum exhibits make meaning through the use of multiple media, multiple modes, and multiple symbol systems, the literacy practice of museum visiting is a multiliteracy. The content of the exhibit as a whole can be referred to as a multiliterated text. The deciphering of that text is a literacy event.

Summary of New Literacy Studies and Museum Learning

This section establishes the differences between the terms that have been the focus of this literature review. New Literacy Studies refers to the paradigm established by the rejection of an autonomous model of literacy in favor of a model that views literacy as an ideological practice of cultures and societies.

Situated literacies refers to the examination of literacy events and how they are connected to the institutions and power structures that have emerged from literate societies. The study of situated literacies involves identifying and learning more about the nature of literacy as it applies to existing bureaucracies and institutions such as those that were the focus of the studies presented above. They include the institutions of the church, the government, the penal system, the family, and most importantly for educators, the school. Also included is the museum as an institution which preserves and displays the history of social events as seen through the eyes of those who fund the creation of museums, select their contents, and decide how those contents will be displayed.

New literacies examines the evolving viewpoints of literacy that emerge in reaction to both outside influences and systemic changes inherent in the dynamic interaction of written language, oral language, and real world experience. New literacies suggests that two basic phenomena are at play in this evolving viewpoint. Ontologically new literacies are those that develop from the introduction of novel technologies that bring with them elements of language that have not previously existed. On the other hand, chronologically new literacies refers to situations in which long-established social practices that heretofore had never gained attention as literacy practices, but are now being recognized as such. As the NLS paradigm becomes established in the body of literacy literature, new perspectives on social events, such as religious rites, family traditions, museum visiting, etc., are emerging and the connections of these practices to language and literacy are being examined by NLS researchers.

Finally, multiliteracies introduces alternate symbols systems into the meaning-making process, gathering activities involving viewing and visually representing, under the umbrella of literacy practices and events. Multiliteracies supports a viewpoint that portrays literacy as an amalgam of sensory activity. The integrated literacy experiences of television, internet information gathering, and museum exhibit viewing are examples of multiliteracied events.

Part II – Research in Museum Learning

A Museum Learning Model

Introduction

The body of literature on museum learning is extensive, but most studies are descriptive or evaluative in nature (Stevenson, 1991). Much of the research consists of anecdotes and commentary. Many reports investigate the effects of exhibit design on how visitors react to an exhibit. The empirical literature reveals information about how much visitors learn from

exhibits, but it is difficult to transfer any of this information to new situations because so many individual factors are involved in the process of learning in museums (Hein, 1997).

The research that comprises a majority of this section is theoretical and places museum learning within the many kinds of learning we can experience as we live in the world. Falk and Dierking (1992) have developed an interactive model of museum learning based in museology, however museum learning is often investigated by scholars from the area of informal learning. In this section, research on informal learning reveals how well museum learning fits within these parameters.

Falk and Dierking's (1992, 2000) Contextual Model of Learning, will also be explained, followed by a discussion of Free Choice Learning, which Falk and Dierking identify as an aspect of museum learning that sets it apart from informal learning. The Contextual Model of Learning will then be compared to the literacy model developed from the NLS paradigm. The section ends with a discussion of what has been discovered about museum learning through the empirical research.

Museum Learning as Informal Learning

Because museum learning takes place outside of the traditional classroom, it is considered a type of informal learning; although there are aspects of museum learning that set it apart from this broad range of activities (Falk & Dierking, 1992, 2000, 2002). The current literature defines informal learning by contrasting it to what we know as traditional schooling (Cairns, 2000; Gerber, Cavallo, & Marek, 2001; Gorard, Fevre & Reese, 1999; Korpan, Bisanz, Bisanz & Boehome, 1997; Marsick & Watkins, 1990, 2001; Neathery, 1998; Silver, 2001). Much of the research, however, has been reported anecdotally and consists of commentaries or

descriptive research which do not approach an examination of the process involved in learning outside of the formal classroom (Gorard, Fevre & Reese, 1999).

Definitions of informal learning describe it as taking place in reality (Neathery, 1998), taking place outside of formal participation (Gorard, Fevre & Reese, 1999), or existing as an alternative to traditional courses (Silver, 2001). Cairns (2000) states that informal learning is learning that fulfills the purpose of the learner as opposed to the purpose of others such as the government or the education system, while Gerber, Cavallo & Marek (2001) characterize informal learning as learning that occurs during the learner's personal time.

A more complete definition is offered by Marsick and Watkins (1990) who define informal learning by not only contrasting it to formal learning, but by drawing contrasts between informal learning and incidental learning. They state:

Formal learning is typically institutionally sponsored, classroom-based, and highly structured. Informal learning, a category that includes incidental learning, may occur in institutions, but it is not typically classroom-based or highly structured, and control of learning rests primarily in the hands of the learner. Incidental learning is defined as a by-product of some other activity, such as task accomplishment, interpersonal interaction, sensing the organizational culture, trial-and-error experimentation, or even formal learning. Informal learning can be deliberately encouraged by an organization or it can take place despite an environment not highly conducive to learning. Incidental learning, on the other hand, almost always takes place, although people are not always conscious of it (p.121).

Museums are, therefore, contexts in which both incidental and informal learning take place. However, a further examination of the research, which describes characteristics of informal

learning and the activities and experiences included therein, more clearly delineate the unique nature of learning in museums.

Marsick and Watkins (2001) state, “Informal and incidental learning take place wherever people have the need, motivation, and opportunity for learning” (p. 28). Museums clearly are environments that provide these conditions (Falk & Dierking 1992, 2000, 2002; Hein, 1998; Pearce, 2003; Roberts, 1997). However, the details in the model Marsick and Watkins have developed are framed within the environment of the workplace, where it often occurs. They explain via their model that informal and incidental learning are integrated with the daily routine and that the impetus behind them comes from an internal or external prompt that creates dissatisfaction with current ways of thinking. Furthermore, they contend that this impetus for learning is “often a surprise, such as the sudden departure of a leader” (p. 29). Therefore, although they offer a definition of informal and incidental learning which is broad enough to encompass museum learning, their model is primarily a description of the processes of informal and incidental learning within a business context.

Informal and incidental learning is an area of interest for other scholars (Bell, 1977; Day, 1998; Dobbs, 2000; Eraut, 2004; Guiles & Griffiths, 2001; Marsick & Watkins, 1990; Nicholls, 1984; Russel, 2000). Additional points of interest represented in the literature include informal learning in the home (FisherKeller, 2000; Liebes, 1992; McGivney, 1999; Riccobono, 1986), informal learning through the use of media (Cook & Smith, 2004; FisherKeller, 2000; Frenette, 1990; Kwape, 2000; Liebes, 1992), and informal learning taking place within the formal classroom environment (Cullen, 1998; Hatcher, 1987; Jeff, 2000; Melber, 1999; Pressick-Kilborn, 2000; Stamp, 1983). Furthermore, many scholars who have addressed the cross-section of informal learning and museum learning have done so in the content areas of science (Allen,

2004; Anderson & Luca, 2000; Bennett & Thompson, 1990; Cox-Peterson, et.al., 2003; Fox, 1993; Frenette, 1990; Gerber, et.al, 2001; Kelly, 2000; Ramsey-Gassert & Walberg, 1994; Salmi, 1993; Taylor, 2002; Thomas, 2000; Thomson & Diem, 1994) and the arts (Podhurst, 2001; Watts, 2003; Wolff, 1999; Zeller, 1987).

With respect to museum learning, however, there is a basic difference in the reason why learners place themselves in this environment. Workers learn informally, but while they are employed to do something else. In other words, their learning may often be a surprise because it happens in a place where learning is not the stated or official purpose. Museum visitors go to museums, however, with the specific idea of learning in mind (Falk & Dierking, 1992, 2000, 2002; Hein, 1998; Roberts, 1997). They make a concerted effort to visit the museum at a time when they could have chosen to do a myriad of other things. Therefore, one important component of the Marsick and Watkins model of informal and incidental learning is missing. This model does not address the idea that museums are places where visitors spend leisure time (Falk & Dierking, 1992; Melton, et.al. 1936). The model for museum learning must, therefore, be different.

Museum Learning as an Interactive Model

Another factor that makes museum learning unique is its connection to material culture. Museums exist to preserve material things; selecting from their entirety those important objects which best represent the history of our past. The past survives in three ways. One is by the evidence that is left on the physical landscape of the earth. Another is through the narratives of its people. The third is through the objects (the material pieces of culture) that people leave behind (Pearce, 2003).

Objects are displayed in museums for a variety of reasons, and it is the selection of that piece, perhaps from many others, that turns an ordinary object into a museum piece (Pearce, 2003). The reason behind the selection is due to the meaning objects have been given by members of the culture that created them. Any object can be given meaning by a culture and, according to Hodder (2003), objects are given three broad types of meaning.

First, they are given meaning through the information they convey about the past. By viewing objects, we can talk about how they were used and what they reveal about the societies that used them. Second, we give objects meaning because they play a part within a structured code of behavior, a social practice, or even a literacy practice. These include objects to which a culture has given symbolic meaning, which situates the object within a system of behavior developed by that culture. The third type of meaning is based in the historical associations belonging to objects. Unlike the other types of meaning, which can be applied to arbitrary objects, the objects that are meaningful because they are based in specific histories (such as the ink pen used by a president to sign an important treaty, or the sword used by Napoleon at the Battle of Waterloo) cannot be given to arbitrary objects. However, all objects may be given meaning in any or all three ways (Hodder, 2003).

Prown (2003) describes giving meaning to objects as a movement of the viewer's awareness from the object itself to the viewer's relationship with the object; an asking of the question, "What does this mean to me?" Pearce (2003) states:

The meaning of the object lies not wholly in the piece itself, nor wholly in its realization, but somewhere between the two. The object only takes on life or significance when the viewer carries out his realization, and this is dependent partly upon his disposition and experience, and partly upon the content of the object which works upon him" (p. 26).

This bears significant resemblance to how literacy scholars characterize the deciphering of written text. That is, that through an interaction between a reader and the text, meaning is given to otherwise arbitrary symbols (Adams, 1980; Pearson & Johnson, 1978; Rumelhart, 1980). It can be said, therefore, that interpretation of the meaning of objects is subject to the same or similar influences of background knowledge, gender, age, culture, or any of the many qualities or characteristics viewers bring with them to the interpretation process.

It is through the lens of interactive interpretation that Falk and Dierking (1992) developed their first model of museum learning, the Interactive-Experience Model. The model consists of a three-dimensional set of three interactive spheres, representing the three contexts within which the museum experience occurs. These three contexts are the Personal Context, the Socio-cultural Context, and the Physical Context. Each of these will be explained as this discussion continues.

Falk and Dierking (2000) refined the model by adding the influence of the passage of time on the learning process and renamed it the Contextual Model of Learning. They explain that none of the three contexts is ever stable or constant, but always changing; and they characterize making meaning as a never-ending integration and interaction of the Personal, Socio-cultural, and Physical Contexts over time. They state,

Perhaps the best way to think of it is to view the Personal Context as moving through time; as it travels, it is constantly shaped and reshaped as it experiences events within the Physical Context, all of which are mediated by and through the Socio-cultural Context (p. 11).

From the material culture point of view, Pearce (2003) concurs with this concept when she says that objects are “inexhaustible” (p. 26). When it is seen again, it has already become part of the viewer’s experience and has already changed viewers’ ultimate perceptions of that object.

The Personal Context

The Personal Context of the Contextual Model of Learning includes those individual qualities and characteristics that reside within the learners. First of all, there are physiological factors that affect the abilities of learners to interpret what they see. These include such things as eyesight, attention span, general intelligence, etc.

Secondly, other influences are more behavioral in nature. They include the learners' motivation for visiting the museum, which is affected by the expectations they may have about what they will see and learn during their visit. Learning is further influenced by the visitors' personal interests and beliefs that form their worldview.

Furthermore, the knowledge viewers have prior to visiting the museum also affects learning outcomes. This includes schema they have developed about museums in general as well as their previous experience with the various topics presented by the museum they intend to visit. It also includes schema already developed about the individual objects they view, perhaps through the formal preparation some visitors receive in classroom meetings before field trips, or through other extra-curricular events (Falk & Dierking, 1992; 2000; 2002).

The Socio-cultural Context

Falk and Dierking (2000) describe "culture" as that which is non-genetically passed on to individuals via other individuals who make up the society in which they live. Learning, therefore, is both a personal activity as well as a group activity that is inextricably bound to cultural and historical contexts. Therefore, it is impossible to understand learning without considering those contexts (Falk & Dierking, 2000). McLuhan parallels these ideas when he says that the technologies we develop to share information are mediated by the society that produced it (McLuhan & McLuhan, 1988).

The Contextual Model of Learning takes into account the socio-cultural aspects of museum learning on two levels. First, museums are institutions of learning that preserve material culture and, as a whole, are representations of a certain cultural ideology. This component of the model concurs with Roberts (1997) who described museums as American cultural inventions.

Second, there is also the cultural aspect of the people who visit museums. Most people visit museums in groups. Museums are first and foremost social environments, especially for family groups (Falk & Dierking, 1992). This characteristic of the literacy practice of museum visiting has important implications for the roles played by society and culture in museum learning.

Heath (1983), Street (1984), and Gee (1996) uphold the concept that every person is a product of the integration of personal abilities and characteristics that are mediated by what has been lived and experienced as a member of social cultures and sub-cultures. This viewpoint, which is the basis of New Literacy Studies, indicates that the Personal Context and the Socio-cultural Context of the Contextual Model of Learning are highly intertwined with each other. They are an integrated mesh of experiences that form the totality of the background knowledge, ability, and ideologies of each one of us. The integration of Personal and Socio-cultural Contexts makes each person unique, yet, at the same time, very much alike due to the common characteristics that are shared with other members of the same group.

Therefore, elements of what Falk and Dierking (2000) include in the Personal Contexts of museum visitors are influenced by the make-up of their Socio-Cultural Contexts. For instance, Falk and Dierking (1992) indicate that people of higher socioeconomic status are more likely to visit museums of all kinds, while people of lower socioeconomic status tend to visit only those

museums that are well known and popular. Since a visitor's past experience with museums (a part of the Personal Context) is a factor in the outcome of any museum visit, socioeconomic status (a part of the Socio-cultural Context) has an influence on the development of the Personal Context.

Furthermore, it stands to reason that the influence of one context upon the other is circular in nature. If membership in a certain group predisposes a person to visit, or not to visit, certain museums, then the exposure or the lack of exposure to those experiences by individual members of the group serve to support the status quo, extending its effects to the group as a whole. The reiterative nature of personal and socio-cultural influences is another way to explain that the Personal and Socio-cultural Contexts are intricately interwoven and interdependent.

It is very difficult, therefore, to identify characteristics of a person's ideology and attribute those elements as distinctly emerging from either the Personal Context or the Socio-Cultural Context. In fact, the integration of these two Contexts is so complete that one cannot be definitively extracted from the other (Gee, 1996; Street, 1984). Therefore, the Personal Context and the Socio-cultural Context will very often be discussed simultaneously in this dissertation.

The Physical Context

Falk and Dierking (2000) include several things in the third component of their model; the most obvious being the objects and artifacts that constitute the individual exhibits, which are the main reasons why people visit museums. Theories about how objects are interpreted were included in the beginning of this section in the discussion of material culture. Those theories will not be re-addressed here.

However, in addition to the material culture found in museums, Falk and Dierking (2000) include in the Physical Context component of the Contextual Model of Learning aspects such as:

the aesthetic design of the exhibits, the comfort of the museum area, the lighting, the sitting/relaxing space, and other things that make the entire museum experience enjoyable for visitors. They explain that learning experiences are situated in the environment where they take place. In other words, they are integrally associated with the context of the event, and the recall of what was learned during a museum visit also conjures up many of the other sensory and emotional memories that were peripherally attached to the experience.

By including every aspect of the physical environment as a part of the total learning experience; everything seen, heard, touched, smelled, and even tasted in the museum restaurant (should one exist), Falk and Dierking give a multi-faceted and integrated view of learning as an experiential process. It considers the nature and make-up of individuals, the individuals with whom they share the world, the artifacts the individuals create, and the media through which messages are received by them.

In addition, it is important to consider that museums and museum exhibits are created and produced by human beings who, themselves, are products of cultures and societies. These creators are subject to the same influences of ideology and experience as any other member of society and they create products of culture. Furthermore, museums are institutions that are created to make manifest the purposes and ideologies of those who fund them. The Physical Context that is viewed by museum visitors is, therefore, a product of all kinds of social and cultural influences.

Application of the Model

Basic to this study is the viewpoint derived from material culture that says objects are given meaning by those who view them. With the complete absence of written text, it is easier for us to lay aside our culturally connected belief systems about the power of written language,

and to embrace the possibility that the process of giving meaning to material objects is very much like the process of making meaning from written text. The phenomenological study completed here uses the Contextual Model of Learning to investigate the experiences of museum visitors from the NLS perspective that museum visiting is a literacy practice, viewing a museum exhibit is a literacy event, and the contents viewed in the exhibit is the multiliteracied text with which viewers interact to make meaning.

It is the opinion of this investigator that the Contextual Model of Learning is operating within the literacy event. As viewers interact with the Physical Context, they construct meaning during the literacy event by connecting new information with what is already a part of their Personal and Socio-cultural Contexts. Therefore, although the purpose of this project is to examine the phenomenon of the specific literacy event of making meaning from one museum exhibit, and not the broader literacy practice of museum visiting, aspects of the literacy practice that affect the literacy event for these two subjects may be discussed in order to more accurately describe the phenomenon as explained by the Contextual Model of Learning.

The Contextual Model of Learning is a description of meaning making that has risen from museology, but will be used to help describe a literacy event. If museum learning is described in literacy terms, terms that teachers understand, it may be possible that the nature of the literacy practice of museum visiting will change to better meet the educational needs of students and to enrich the way museum visits are incorporated into the traditional school curriculum.

Free Choice Learning

Marsick and Watkins (1990) describe incidental learning as a by-product of some other activity, one that is so spontaneous that learners may not even be aware that it has occurred.

Their treatment of informal learning indicates that, like incidental learning, it can also happen spontaneously, but that learners are much more involved in choosing whether or not the learning occurs. Falk and Dierking (2002) contend that the term “informal learning” does not completely capture the nature of learning in museums. They claim that the museum experience not only offers learners a wider range of learning opportunities than many forms of informal learning, but that learners have much more of a choice in when and how learning occurs. They liken free choice learning to the *flow experience* described by Csikszentmihalyi (1990).

Csikszentmihalyi (1990) defines flow as, “the state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at great cost, for the sheer sake of doing it” (p. 4). It is logical to assume that learners who become engaged in simultaneous interaction among the physical, socio-cultural, and Physical Contexts through a self-chosen and self-directed activity may, indeed, experience flow. Therefore, Falk and Dierking’s (2000) use of the term *free choice learning* rather than *informal learning* is important in that it positions museum learning under the umbrella of informal learning, yet more accurately conveys the true nature of the experience.

The Nature and Content of Museum Research

Donald (1991) grouped experimental museum research into four categories. The first includes descriptive studies about the demographic characteristics of museum visitors. Some of these findings are included in the summary at the end of this section. However, no studies of this nature are reviewed in this chapter because this information has no impact on the proposed study of museum learning.

Donald (1991) describes another type of museum research he calls *evaluative studies*. These studies measure the extent to which visitors understand the concepts presented by

individual exhibits or exhibit components. It is here where another feature of museum learning comes into play. Museum exhibits are singular in nature and are not duplicated. They are one-of-a-kind creations that provide one-of-a-kind experiences (Hein, 1998). The results of any study of learning via interaction with a museum exhibit are not applicable to any exhibit other than the one serving as the context for that investigation. Therefore, even those studies that are quantitative in nature yield information that applies only to that one, particular exhibit and should not be generalized to all exhibits.

Also, there is another reason why results of museum learning studies cannot be generalized. When visitors are used as impromptu research subjects in experimental designs, factors such as cognitive ability, age, gender, and other important variables are uncontrolled. And the fact that museums are frequented by repeat visitors (Falk & Dierking, 1992) makes it impossible to control for the effects of prior experience, which greatly alters the conditions of the study (Hein, 1998). In essence, this means that those studies reporting on the content of what was learned from any museum exhibit are actually evaluations of the success of that particular exhibit in reaching the educational goals developed for it by the exhibit designers.

Hein (1998) explains, “The actual situation in museums is that a vast preponderance of visitor studies are limited efforts to evaluate specific exhibitions or exhibit components and are governed more by immediate practical constraints than by the overarching concerns about research methodology” (p. 77). For that reason, the body of research that forms our knowledge of what viewers learn from specific museum exhibits will not be reviewed here because they do not have an impact on the proposed project.

A third type of research Donald (1991) identified consists of studies of how visitor behavior is influenced by factors that exist within the confines of the museum exhibit, itself. A

large portion of this data was gathered by Melton (1936) whose quantitative research was sponsored by the American Association of Museums. Melton made thousands of observations of regular museum visitors under varying conditions and measured such factors as the effects of variations in the number of paintings displayed in an art gallery, the relationship between the number of paintings and the interest level of visitors, and the effects of the placement and number of exits to an exhibit. The information from Melton (1936) is included in the summary of the research on visitor behavior presented near the end of this chapter.

In more recent times, Falk (1997) designed a quantitative analysis of the effect of labels on the comprehension of exhibit concepts. Two exhibits were used; one on air pollution and one on the early development of vertebrates. Treatment I consisted of the two exhibits without labels or signage. Treatment Two consisted of the same exhibits, but included the signage that ordinarily accompanied the exhibit contents. Falk (1997) administered pre-tests and post-tests to 174 visitors between the ages of 11 and 15, or over the age of 20, and discovered a statistically significant difference ($t=5.67$, $p < 0.001$) in favor of using signage in the display of museum exhibit contents.

The fourth type of research Donald (1991) identifies is that which examines the effect of different external variables on the learning behavior of viewers. For instance, Melton, Feldman, and Mason (1935) used thousands of school children in grades five through eight to test the effectiveness of prior preparation on what children learned from science museum exhibits. Melton, et. al. prepared groups of visitors in various ways, altering the length and type of lecture or discussion they experienced before interacting with the exhibit. They used a post-test to measure the influence that the type of preparation had on the understanding of concepts

presented at the exhibit. Once again the many findings of this study are included in the information given near the end of this chapter.

More recent research of this type includes Scriven (1975), who tested the effect of various guidance systems on museum learning. An existing exhibit on artistic glass pieces was used as a context for 736 off-the-street visitors who viewed the exhibit while utilizing such devices as a taped transcript using review questions, a non-audio booklet, question labels attached to exhibit cases, and self-scoring punchboards keyed to the question labels. An Analysis of Variance of pre- and post-tests for the total of ten experimental groups revealed a statistically significant difference ($F=83.32$, $p < .01$), favoring the taped transcript and the non-audio booklet over the labels and the keyed punchboard.

Allen (2004) investigated the impact of various activities on what visitors learned about the mechanism of shadow construction at a science museum. Allen (2004) guided 392 visitors between the ages of seven and adult through seven randomly assigned activities. The findings revealed that visitors were better able to interpret the exhibit than to predict what the exhibit would be about, and that they were better at choosing from two explanations of the exhibit than they were at designing an experiment involving what they learned.

The examples of research above discuss the influence of external factors on museum learning, but do not measure the existence of new knowledge gained from the museum experience. Neither do the examples describe the experiences of the learners as they engaged in the learning process. Pre- and post-tests were the only measure which documented changes in the learners who had viewed the exhibits.

Past research in museum learning, therefore, has focused on the attributes of the exhibit and on how altering those attributes can cause changes in visitor behavior, including learning

behavior. However, meaning making as a process cannot be examined unless learners' literacy experiences are the focal point of the investigation, and these studies do not provide this. Furthermore, the fact that the findings of research using specific exhibits cannot be readily transferred to other exhibits makes it even more important for research to shift its focus away from the exhibit contents and place that focus on the exhibit viewers in order to perhaps discover those qualities residing within viewers that could be constants in the process of learning from museum exhibits. Hein states:

Consequently, our knowledge about learning in museums seems remarkably incomplete. We have many documented instances, but little coherent theory. There is considerable evidence about what visitors do in museums, yet what the results of these experiences are for the visitor is ill-defined (p. 135).

The investigation carried out for this project is a step toward increasing our knowledge about learning in museums. In none of the four types of museum research outlined by Donald (1991) is learning from museum exhibits addressed as a process that takes place within viewers. The investigation carried out for this project, however, uses a three-pronged learning model to describe the phenomenon of museum learning as a literacy event. The museum learning model, the Contextual Model of Learning, focuses on the roles played by three factors: the contents of the exhibit, the learners, and socio-cultural influences. This dissertation, therefore, does not rely upon the manipulation of variables, but is a qualitative examination of the process learners experience when they interact with a museum exhibit as a literacy event.

The investigation carried out for this project does not fit into any of the four categories delineated by Donald (1991) and is noticeably absent from the museum learning research in general. The proposed study, therefore, addresses a gap in the body of literature on museum

learning. In addition, it enhances the body of literature on literacy from the NLS perspective. Finally, the exploratory nature of this dissertation may open new avenues through which other researchers may continue to increase our knowledge about learning in museums.

Visitor Studies Information

This literature review closes with research on visitor behavior. Visitor studies information does not strongly impact this study. However, some of the decisions about the design of this project are based on the results of these studies. Therefore, including what we know about visitor behavior is important in providing a well-rounded and comprehensive review of relevant research.

This knowledge comes from six sources. The first two are the early Melton studies discussed earlier in this chapter. The other visitor behavior information is taken from three other sources, all of which offer simplified summaries of what has been learned in numerous studies about museum visitor behavior.

It is from the Melton, Feldman and Mason (1936) study that we learn of the importance for preparing students in advance of their visit to science museums. Children in grades 5-8 showed improved learning when preparation activities were completed no more than one week prior to their visit. We also learn that preparatory lessons that include pictures of what will be seen at the museum are more effective than those with no visuals and it is even better when this preparation occurs one day prior to the students' visit.

Also from Melton (1935) we learn that in an art museum, the number of pieces displayed within a single room does not affect the total time the typical viewer spends in that room. Fewer paintings on display encouraged viewers to spend more time viewing each piece, and more paintings on display lessened the amount of time viewers spent with each piece. However,

regardless of how many pieces are available to view, the typical museum visitor will spend no more than 20 minutes viewing the contents of a particular space.

Melton also tells us that an introductory lesson of no more than 15 minutes in duration, delivered before students experience a science exhibit enhances learning, especially when this lesson is done by lecture rather than by discussion. We know that the younger the visitor is, the shorter that lecture should be; and that a lecture following the interaction with the exhibit has no significant effect on science learning. The influence of this introductory lesson, according to Melton, is heavily dependent upon the teaching ability of the museum docent who delivers the lesson. Melton reports that the interaction between the docent and the students is one of the most important factors in the amount of information students will learn from science museums (Melton, et.al.,1936).

In a summary of the results of visitor studies and surveys offered by Falk and Dierking (1992), we learn the following. Most people visit museums in groups, with their children or other adults. Most visitors are between 35 and 50 years of age and gender seems to influence the types of museums they visit. More males than females visit science museums, and more females than males visit art museums. The types of museums visited most frequently are children's museums, with children visitors most often ranging from 8 to 12 years of age. Education seems to be the most influential factor in why people visit museums. People of higher socioeconomic status visit all types of museums, while people of lower socioeconomic status mostly visit the museums that are well-known.

Falk and Dierking (2000) offer the following summary of various visitor behavior studies. Most people go to museums both to learn and to have fun. Learning occurs both on a large scale and a small scale, but most people exhibit improved understanding of topics after they

view museum exhibits. The museum staff seems to have a positive influence on the visitor's experience, as does a good design that draws visitors' attention and then compels them to investigate further. A good design also enables the visitor to navigate through the exhibits without a guide.

Hein (1998) offers a summary of visitor behavior information that informs us that visitors spend on the average of less than 1 minute viewing individual components of an exhibit, that they stop at less than half of the components which make up an exhibit, and that attention to one exhibit declines sharply after 30 minutes. Hein's summary tells us that visitors seldom read labels and that, when encountering an interactive exhibit, visitors tend to use trial and error before reading the instructions that explain how the exhibit is to be manipulated.

Summary of Literature Review Part II

Museum learning is informal learning. However, there are aspects of museum learning that set it apart from what most informal learning research describes. For example, most informal learning research concerns the work place, while the museum is a place where people spend leisure time. Also, the museum environment allows for more choices to be made by the learner. This is particularly true regarding the learning content. During the course of a museum visit, viewers may choose to attend to some learning content and ignore others as they wish. This is opposed to informal learning that arises out of the need to learn for purposes connected to the job. This is why Falk and Dierking (1992, 2000, 2002) refer to museum learning as *free choice learning*.

Falk and Dierking (2000, 2002) have developed a model that considers three aspects of learning which work together in the making of meaning from museum exhibits. They call it the Contextual Model of Learning. This model will be used to analyze the data that emerges as the

phenomenon of museum learning is investigated through the lens of NLS. It brings together museology and literacy research in a way that increases the body of knowledge in both areas and creates an inter-disciplinary examination of the process of making meaning from museum exhibits.

This review of the literature did not include a discussion of the research available in museum visitor demographics, nor of the research that evaluates the level to which specific museum exhibits have reached their educational goals. Findings from demographic research are not critical to this project, and evaluative research is not transferable to other exhibits and, therefore, did not impact this study.

The research that was reviewed considered some of the important factors that influence museum learning. These factors included variables within the exhibit, such as labels and the number of paintings in an art display, and factors outside of the exhibit, such as introductory lectures and various kinds of guiding devices. However, the fact that even the exhibits used as contexts of these studies are singular and unique educational environments does not allow the results of these studies to impact the results of the study completed here.

In addition, none of the research presented here exemplified designs that allowed the investigation of the process of learning as it occurs in museums. The proposed study, therefore, is exploratory, base-line research that uses the paradigm of New Literacy Studies and a model of museum learning to explain the experiences of selected learners as they construct meaning through their interaction with the contents of a specified museum exhibit. There are no available studies that can serve as adequate models for an investigation of this nature. This section ended with a discussion of the current research on visitor behavior. This was reported by citing several summaries of studies offered by scholars in the field of museology.

CHAPTER 3: METHODOLOGY

Introduction

This phenomenological study investigates the nature of museum learning by describing and analyzing the experiences of selected museum visitors who have viewed a specified exhibit. The research completed for this project is exploratory research in the area of New Literacy Studies (NLS) and was designed to create a baseline upon which to further examine museum learning through the lens of NLS. This study utilizes the Contextual Model of Learning (Falk & Dierking, 2000), which explains museum learning as the interaction of three contexts, the Physical Context, the Personal Context, and the Socio-cultural Context. No studies known to this author have investigated museum learning in this way. Therefore, two pilot studies were conducted to determine what kind of data could be expected to emerge under these conditions.

This chapter offers a brief discussion of the pilot studies and presents the rationale for the project that eventually was completed for this dissertation. The method used to choose the subjects is presented, along with a discussion of the interview questions that were the basis for gathering the data. Finally, an explanation of the analysis procedures for the Physical, Personal and Socio-cultural Contexts completes the chapter.

Purpose and Research Question

The purpose of this phenomenological study is to investigate museum learning by describing and analyzing the responses to questions answered by subjects who have viewed a specified museum exhibit. This study describes the museum learning phenomenon through the lens of contemporary literacy research, using the paradigm of NLS. The premise is that viewing a museum exhibit is a literacy event. This study also uses an existing museum learning model,

the Contextual Model of Learning (Falk & Dierking, 2000, 2002) as a basis for analyzing the data emerging from the literacy event.

The Contextual Model of Learning considers three contexts of the museum learning experience: the Socio-cultural Context, the Personal Context, and the Physical Context. The paradigm of NLS forms the conceptual framework of this study and the Contextual Model of Learning yields a basis for analyzing the data, which joins together three areas of study. They are material culture studies, museology, and literacy. The research question for the proposed project is: How does a museum exhibit function as a literacy event for viewers?

Rationale for Procedures

The purpose of the project is to describe the experience of the two subjects as they gathered information from the museum exhibit The Home Front at The National D-Day Museum. This research is exploratory in nature and was preceded by two pilot studies conducted by this investigator. The need for the pilot studies was warranted because The National D-Day Museum granted permission to use the museum as a context for this study on the condition that the presence of the investigator and the subjects would not be intrusive to their regular visitors nor disturb the daily routine of the museum, itself. The pilot studies affirmed that such a study was not only feasible, but that a situation existed within the museum context where the data could be collected successfully without compromising the investigator's ability to address the research question. Also, the two pilot studies allowed the investigator to test two sample questionnaires that were used to develop the set of 7 target questions that constituted the final data collection instrument. The data from these questionnaires were also used to formulate the plan of analysis that was applied to what emerged from the final project.

Current literature in learning in museums falls into four broad categories. The first two are descriptive studies about museum visitors and studies that describe the behavior of museum visitors (Crawford, Patten, & Lockett, 1993; Melton, 1935, 1936; Hooper Greenhill, 1994; LeHay, 2000). A third kind of research evaluates the extent to which the goals for a specific exhibit are met (Allen, 2004; Anderson & Lucas, 2000; Gilbert & Priest, 1997; Stevens & Hall, 1997; Thomson & Diem, 1994). The fourth type of research addresses museum learning (Dow, 1993; Falk, 1997; Falk & Dierking, 1992, 2000, 2002; Gould, 2002; Silliprandi, 1997; Silverman, 1995; Styles, 2002) and considers the external factors that affect the experience of visitors (Donald, 1991). None of the research provides qualitative data that sheds light on the internal process experienced by viewers as they gather information presented through the mediated content of an exhibit. None of the current museum research approaches museum learning from the perspective that viewing a museum exhibit is a literacy event. Therefore, in order to enhance the opportunity for the subjects to gather information from this literacy event and to report their experiences sufficiently, the study was organized as though the subjects were “reading” the exhibit. Therefore, the procedures of this project were developed to mimic silent reading in several important ways.

First, The National D-Day Museum was chosen because it is located in the same city where the investigator resides and because of its narrative qualities. It relates what happened before, during, and after the occurrence of an historical event. Also, the museum as a whole, and The Home Front exhibit specifically, convey concepts and ideas from history and other social studies, which are language-based content areas. This means the subjects’ experiences would more closely approximate silent reading than one taking place, for example, in an art museum or in a science museum.

Another way this project simulated the reading experience was that it required the subjects to spend a minimum period of time viewing the exhibit, thereby creating a situation that encouraged a slow examination of the multiple parts of the exhibit, not just a cursory viewing. Therefore, the amount of time spent viewing the exhibit was not left up to the subjects. Both subjects were required to spend at least 15 minutes “reading” this exhibit with the purpose of gathering information in the same way as a reader gathers information from written text.

The decision to ask the subjects to view *The Home Front* for a minimum of 15 minutes was influenced by three factors. First, information obtained from visitor behavior research indicates that visitors spend less than one minute observing any individual component of the exhibit (Hein, 1998), but no more than 20 minutes viewing the contents of an entire exhibit (Melton, 1935). Second, the investigator did a personal timing of how long it took to view all the parts of this exhibit. Care was taken to read all of the text and to view each item. The length of time needed for this researcher to complete an in depth and careful viewing of *The Home Front* was 55 minutes. Third, an informal observation of ten random exhibit viewers was made by the investigator. These visitors were timed unobtrusively as they viewed the exhibit. The results of this informal observation are presented in Table 1.

The average time these visitors spent viewing *The Home Front* was 6.9 minutes. However, two visitors, who viewed the exhibit alone, took much longer. Using the time needed for the investigator to view all the items, the average time ten viewers spent in the exhibit, the time two lone visitors spent viewing all the items, and the information in the research, the investigator decided to use the longest time taken by a lone viewer in the informal observation. This time rounds to 15 minutes.

Table 1

Time Spent Viewing The Home Front

Visitor	Time	Notes
1	8:13	Crowded room; could not see some displays
2	11:43	Alone; viewed for 3:20; left and returned
3	3:38	With one other
4	6:22	With one other
5	6:47	Group totaled 4
6	14:49	Empty room; was alone
7	3:42	Group totaled 4
8	3:12	Was alone
9	7:11	With at least one other; perhaps more
10	4:45	Group led by docent

Also, the subjects were asked to refrain from speaking to others as they “read” the museum exhibit, which is another way the conditions of the project were more similar to reading than the typical museum viewing. Solitary visitors to museums are rare. Museum visiting is a social activity and a leisure activity during which families and friends enjoy learning together (Hein, 1998; Falk & Dierking, 1992; Melton, 1935). This project altered the social context of museum learning as it is described in the Contextual Model of Learning (Falk & Dierking, 2000) and created an activity that reflected the more solitary nature of silent reading. The design of this project, therefore, altered the traditional conditions of a typical museum visit in order to shed light on how a museum exhibit functions as a literacy event for the subjects.

Finally, this project implemented the idea that making meaning from material culture is as valid as making meaning from written text. This is supported by Cope and Kalantzis (2000), who contend that literacy is the process of making meaning in multiple symbol systems, a condition they refer to as “multiliteracies.” The study carried out here expressed this concept by operating under the assumption that each component of The Home Front, whether object or written word, was of equal value in the meaning that was constructed by the subjects. It is for all of these reasons that the procedures explained below were implemented.

Project Procedures

The subjects completed the process along with the investigator during separate visits to the museum. Both subjects met the investigator at the museum. The signing of permission slips took place and all instructions were given in a seating area in the lobby of the museum, which was the same place where the interviews were later tape recorded.

Upon arrival at the museum, each subject was given a permission form, which was read aloud to him/her by the investigator. As the paperwork was completed, the investigator asked basic questions about the subjects’ background knowledge and interest in history. These 2 questions were asked in a conversational mode and consisted of the following: 1) Do you like history as a subject in school? 2) Have you taken an American History course in school?

After obtaining the required signatures and contact information, instructions as how to complete the project were given orally by the investigator. The instructions are summarized as follows:

Now that you have completed the permission form, we are going to go upstairs to view the exhibit, The Home Front. We must walk through two other exhibits before we get there, so I will go up with you to show you the way. When we reach The Home Front, I

would like you to look at all the parts of the exhibit and learn whatever you can. You may have as much time as you like to view The Home Front but please take at least 15 minutes to look at everything and continue to view the exhibit until I notify you that the 15 minutes has elapsed. At that time, you may ask for more time. Please do not discuss what you see with anyone while you view the exhibit. I will wait at the end of the exhibit so you'll be able to tell exactly where to stop. I will tape record your comments from the time you meet me at the end of the exhibit until the time you have answered the 7 questions I have to ask you. You may make any comments you like about what you see, but your goal is to view the exhibit for at least 15 minutes and to learn as much from the exhibit as you can. Do you have any questions?

After instructions were given, the subject was escorted through two exhibit rooms and into The Home Front. The investigator described where the exhibit began and ended and indicated where the subject would meet the investigator at the end of the viewing period. The investigator then walked through the exhibit to the specified location and started a stopwatch, which was used to accurately time the viewing period. When the viewing was complete, the subject and the investigator returned to the lobby of the museum and the oral interview was conducted. In the case of Dan, a follow-up interview was conducted for the purpose of clarifying remarks that were determined as ambiguous during the analyses.

Subjects

The subjects of this study are one male and one female, both of whom are 18 year-old high school seniors. The subjects are the children of acquaintances, but are not relatives or close associates, of the investigator. They were chosen by referral through their parents and were individually approached by the investigator to arrange the dates and times of the museum visits.

The rationale for choosing the subjects included the following factors:

1. The subjects were old enough and had received enough formal classroom education to adequately process information presented to them in a multi-modal, mediated fashion.
2. The subjects were mature enough to spend the time required to view the entire exhibit without becoming distracted or fatigued.
3. One male and one female were chosen in order to balance gender-specific viewpoints.
4. The subjects had completed a high school level American History course, which gave them a minimum of background knowledge to understand the concepts presented in the exhibit.
5. Research in material culture studies suggests that, once an object is viewed, the interaction between that object and the viewer is forever changed, and that each viewing of an object influences future interactions with that object (Pearce, 2003). Therefore, the subjects were first time visitors to The National D-Day Museum.
6. The implications of the research findings for secondary level educators are an issue discussed in this dissertation. Therefore, the investigator chose to use high school students as the subjects of the study.
7. These particular two subjects yielded the most data from a total of three subjects of the same age and educational background.

The subjects of this study viewed a museum exhibit in which the messages being conveyed were about a past era in time, the early 1940's. The modes in which the information was presented, however, were representative of the world they know, and, being members of 21st

century American culture, these subjects were familiar with the technology used to present this information. They included photographs, works of art, graphics, replications, audio, and video.

Also, being members of 21st century American culture, their exposure to the structure of American society and the values that emerge from that structure is assumed. These include traditional hierarchal structures of authority and government, and traditional values of American society, which include the home and family, patriotism, national pride, productivity, capitalism, and many others. They have also been exposed to more contemporary values connected to such things as technology, media, and entertainment. It is inappropriate to draw conclusions about the extent to which these values have been internalized by the subjects, since the data gathered for this project is not of that nature. However, the subjects have grown up in the global village and appear to be members of the dominant culture in America. Therefore, it is appropriate to assume that the understanding of their world has been influenced, in some way, by all of the factors discussed above.

Subject #1, who will be referred to as Dan, attends a local all-boys parochial school, his race is Caucasian, and his socio-economic status is middle class or above. Dan has taken a high school American History course, but states that he remembers more from his seventh grade American History studies than he does from his most recent experiences with that subject content. He watches history programs on television fairly regularly and prefers programs of more recent American history, such as World War II, than those based on other periods of time. He has not visited The National D-Day Museum before.

Subject #2, who will be referred to as Meg, attends an all-girls parochial high school. Her race is Caucasian and her socio-economic status is middle class or above. Meg enjoys watching history programs on television, watching mainly with her father or grandfather. Meg's

grandfather is a World War II veteran who fought overseas, which is the reason for Meg's interest in participating in the project. She has not visited The National D-Day Museum, however, because her grandfather finds the memories of the war very painful. Meg's grandfather was one of only four men from his Army platoon to return safely from the war. She also prefers watching programs about recent history more than watching those about other historical eras. Both subjects answered all questions enthusiastically and were able to express their thoughts adequately.

Data Collection and Instrumentation

Procedure

Both Dan and Meg took more than the allotted time to view the exhibit. With regards to Dan, the investigator observed that, at the end of the 15 minutes, he had almost completed the viewing, and decided not to approach the subject. With regards to Meg, the subject was informed that the required time had elapsed, and she requested more time to complete the viewing. In all, Dan spent 16 minutes and 32 seconds viewing all the components of the exhibit. Meg spent a total of 17 minutes and 53 seconds viewing the exhibit.

In order to capture both the immediate responses of the subjects regarding The Home Front as well as the more thoughtful and prompted responses, data collection began as soon as the viewing was completed and ended only after the investigator determined that the 7 target questions had adequately been addressed. Therefore, the investigator approached the subjects with an active tape recorder. However, neither subject chose to comment on the exhibit until after the interview began.

Among the materials used for the interview was a binder of 114 photographs of the exhibit. These photographs were taken by the investigator prior to conducting the study, and

they depicted the various individual components of The Home Front exhibit. These photographs were used to prompt the subjects to speak more fully and in more detail about specific items they remembered from their museum experience. As the interviews progressed, if the subject commented on a specific exhibit component, the investigator found and displayed the appropriate photographs of the objects or artifacts that were described by the subjects.

The photographs were shown to the subjects only to prompt further conversation about something they, themselves, remembered and chose to discuss. The photographs were not intended to be used to prompt the subjects' recall of what they had seen or to initiate conversation in any way. In other words, the topics of discussion in the interview, and what was said about those topics, are representations of the subjects' experiences, which were not primarily influenced by these photographs.

The Instrument

The interview consisted of 5 open-ended target questions, and 2 questions that simply elicited a confirmation of what the subjects saw and did as they viewed the exhibit. The questions were written by the investigator and various forms of these questions were used in the pilot studies that were completed before this study. Questions were revised and edited, resulting in the final form of the interview questions that can be found in Appendix A on page 186.

The investigator used a typed set of these target questions printed on separate pages and identified by subject number to guide the interview. Also, hand-written notes were kept on these pages to indicate any important observations. These notes were kept out of the view of the subjects as they were being interviewed.

Question #1 and Question #2 listed the 8 components of the exhibit, which included photographs, written text, replications, artifacts, posters, video, audio, and charts or tables of

information. The first 2 questions asked the subjects if they saw those components and if they chose to interact with them. By asking this question the investigator determined how complete the viewers' experiences were, and if they were at least aware of every component in the exhibit.

Question #3 asks, "What do you think was the overall purpose of the exhibit?" This question was included to determine if the subjects formulated a general concept about the entirety of the exhibit.

Question #4 asks, "What part of the exhibit stands out in your mind?" This question is probative of Question #3, allowing the subjects to give more information about the concept they may have formed by encouraging their attention toward specific exhibit components or ideas.

Question #5 asks, "What did the exhibit make you think about?" This question is probative of Question #4 and prompts the subjects to make abstract observations about ideas or concepts that are not necessarily portrayed explicitly by the exhibit.

Question #6 asks, "Which of the following describes what the exhibit was mostly about: Change, Togetherness, Separation, Government Control." This question was more guided in its intent. Its purpose was to determine which salient points presented in the exhibit were understood by the subjects, and to determine the ways in which those ideas may emerge. The subject was allowed to comment on one or on each of the descriptive words.

Question #7 asks, "The title of this exhibit was "The Home Front." If you could create a different name for this exhibit, what would it be?" This question prompts the subjects to summarize by choosing a title, but also to think abstractly, perhaps creatively, in their summation.

Data Analysis

A phenomenological study describes the “lived experiences for several individuals about a concept” (Creswell, 1998, p. 51). Phenomenological studies are open-ended and emerging. They search for themes of meaning in the lives of subjects, and they rely on the words of the subjects as the data (Rossman & Rallis, 2003). The purpose of this phenomenological study was to describe the phenomenon of the literacy event of museum learning for the two subjects of the study. Their responses to questions and their prompted and unprompted comments regarding their interaction with the museum exhibit, The Home Front, were analyzed to properly situate and explain their experiences. The spoken discourse that serves as the data for this study can be approached for analysis in more than one way. These methods are described below.

First, this project was not a vehicle for grounded theory analysis. Grounded theory uses discourse to facilitate the development of a theory regarding what emerges from the data. According to Strauss and Corbin (1998), two types of coding are used to develop theories about discourse. The first is *open coding*, which is used to reduce the data and to identify patterns in the data that are used to describe the nature of the subjects’ experience. The second type of coding used in grounded theory analysis is *axial coding*. According to Strauss and Corbin (1998), the purpose of axial coding is, “to begin the process of reassembling data that were fractured during open coding. In axial coding, categories are related to their subcategories to “form more precise and complete explanations about phenomena” (p. 124).

The purpose of the present study, however, was to describe the phenomenon of museum viewing as a literacy event, not to use the emergent data to develop a theory or to prove a hypothesis. The research question addressed how the particular situation of a museum exhibit

functioned for these subjects within these three aspects of learning. No relationships to causal factors or to how this phenomenon would be the same for viewers other than the two subjects of this study were considered important to answering this research question. Therefore, using grounded theory as the analysis method for this project was rejected.

On the other hand, the purpose of this dissertation is to investigate the phenomenon of museum learning as a literacy event. Within the literacy event, the three-pronged Contextual Model of Learning is used as a basis for the investigation. Analysis must, therefore, take place on three levels. First, an analysis must occur at the level of the Physical Context, which is the material culture found in the exhibit. Second, analysis must occur at the level of the Personal Context. This analysis addresses the information the subjects gathered from the text as well as the processes they used to gather it. Third, analysis must occur at the level of the Socio-cultural Context. This analysis deals with the connections between the information the subjects gathered from the text and what that information may indicate about museum learning as a phenomenon. For these reasons, the investigator used three different types of analysis.

Analysis Procedure for the Physical Context

The analysis of the Physical Context for this literacy event consists of narrative description written by the investigator that describes the basic plan of the exhibit and offers a broad view of the exhibit contents. Photographs of the main walls of the exhibit are included in Appendix B (pgs. 204-209) to help the reader of this dissertation visualize the exhibit layout and design. It is important to note that the description of The Home Front is one that depicts the exhibit as seen through the eyes of this investigator and no one else. The narrative description does not reference or rely upon the opinions or consensus of written or spoken discourse from any other source and is, therefore, singularly subjective in nature.

Furthermore, The Home Front consists of more than 100 individual components. A detailed account of the text would be extensive. Therefore, it was the subjective decision of this investigator to forego the equal treatment of each component and only provide detailed analyses of those components specifically mentioned by the subjects during their interviews. In addition, the photographs of the exhibit, provided in Appendices B and C were taken by this investigator.

Finally, the analysis of the Physical Context includes a summary of the main ideas presented by the exhibit and a statement of its purpose. It also addresses the ideologies that serve as the foundation of those ideas. Therefore, all summaries and statements about the perceived purpose, motivation, ideologies, premises, presuppositions, etc., of this exhibit are the perceptions of this investigator, who is also personally and socio-culturally influenced by the institutions and ideologies of the same American culture that is described in this analysis. Although the investigator may have made conscious efforts to maintain a sense of analytical objectivity, the interdependent nature of the Personal and Socio-Cultural Contexts of the investigator explains the difficulty of doing so consistently and successfully. These are the types of subjectivities that were exhibited during the analysis of the Physical Context.

Analysis Procedure for the Personal Context

The Personal Context of the literacy event was analyzed using the data from the subjects' responses to the 7 target questions asked by the investigator. The purpose of the analysis was to determine how the subjects used information presented in the exhibit to construct a personal literacy experience and then how they expressed the nature of that experience to the investigator. This process of analysis, therefore, describes how The Home Front functioned as a unique literacy event for these specified learners.

The analysis began with what Fairclough (1995) terms as “descriptive” analysis. The goal of the descriptive analysis is, as he explains, to be “explanatory within local limits” (p. 43). The explanations, in other words, were looked for within the immediate situation, “not at the higher levels of the social institution and the social formation, which would figure in critical explanation” (Fairclough, 1995, p.43). This descriptive analysis was appropriate for this part of the study because no causes or connections were sought beyond the situation of the museum experience.

The data were analyzed using the three-step process of content analysis presented by Miles and Huberman (1994): data reduction, data display, and conclusion drawing. The data reduction took place through microanalysis, a technique proposed by Strauss and Corbin (1998). Microanalysis is “the detailed line-by-line analysis necessary at the beginning of a study to generate initial categories and to suggest relationships among categories” (p. 57). From the process of microanalysis, patterns in the data were identified and codes were developed to characterize the essence of the data.

The data display is in the form of a matrix, which joins together related items and organizes them according to the codes developed through the microanalysis (Miles & Huberman, 1994). Codes were developed through an open coding process (Creswell, 1998; Strauss & Corbin, 1998) and placed within the matrix for display. The third step, conclusion drawing, completed the analysis. The reduced data was tied together again to make a textual description of what was experienced and a structural description of how it was experienced by these two subjects (Creswell, 1998).

The effects of personal bias and subjectivity influencing the analysis of the Personal Context begin with the development of the interview questions. Once again, the questions were

developed by this investigator relying upon no other source than the investigator's own viewing of The Home Front and the knowledge and training developed through study and experience. Therefore, the theories of museum learning, which include concepts such as the influence of prior knowledge and socio-cultural background, also applied to this investigator as the initial viewing, and all subsequent viewings, of this museum exhibit took place.

It is also important to note that, in the course of developing this study, the investigator did not view this exhibit one time, but numerous times. Accordingly, Pearce's (2003) contention that material culture is never viewed the same way twice also applies to this investigator. It follows, then, that the interpretation of The Home Front had evolved and changed by the time the questions were written and the responses to the question were analyzed.

Therefore, the development of the interview questions was a subjective process. The conducting of the interviews with the subjects was a subjective process. The analysis of the subjects' responses was a subjective process, and all of these processes undertaken by the investigator were influenced by the same factors that shaped the experience for the subjects. These are the researcher biases that influenced the analysis of the Personal Context.

Analysis Procedure for Socio-cultural Context

Literacy practices are social practices that involve texts. Gee (1999) stated, "After all, we never just read or write; rather we always read or write something in some way" (p.14), indicating that there is motive and purpose behind every form of text. The literacy practice of preserving and displaying artifacts (which are multiliteracied texts) for public consumption in museums, therefore, presupposes the existence of motives and purposes, which are those owned by the persons or institutions that collect the artifacts and make decisions about which ones are meaningful and which ones are not. The existence of motives and purposes connected to the act

of collecting and displaying artifacts implies the existence of ideologies and, because museums convey ideas driven by ideologies, they are in and of themselves institutions.

The analysis of the Socio-cultural Context, therefore, discerns the connection, or lack thereof, between the ideologies supported by the text and those reported by the subjects through their responses to the 7 target questions. Critical Discourse Analysis, referred to as CDA (Fairclough, 1995) is, therefore, the most appropriate analysis tool for this part of the project. The purpose of CDA is to determine through the examination of spoken or written discourse the relationship between language and the social structures of those who use it (Meyer, 2001). Fairclough (1995) views Critical Discourse Analysis as an integration of three factors: text analysis; analysis of the processes of text production, consumption, and distribution; and an analysis of the socio-cultural factors that impact a discourse.

Van Dijk (2001) indicates that CDA considers discourse in terms of its ability to produce and reproduce social power structures of abuse or domination (Van Dijk, 2001). Wodak (2001) concurs by stating, “A defining feature of CDA is its concern with power as a central condition in social life, and its efforts to develop a theory of language which incorporates this as a major premise” (p. 11). This description of CDA analysis is reminiscent of Freire’s contention that the skill of literacy serves to fragment society and that the social practice of schooling serves to perpetuate the dominance of one social group over another.

Visiting museums is seen in this study as a literacy practice that has a socio-cultural base and the relationship between the subjects and their cultural backgrounds, or their situations within the social strata, is an important issue. The Contextual Model of Learning includes the Socio-cultural Context as having an equal amount of influence in the explanation of making

meaning by viewing museum exhibits. CDA, therefore, is the proper method of analysis to best describe the Socio-cultural Context of the phenomenon.

However, this investigator is subject to the same influences of pre-set ideologies that arise from existing within a social environment. The connections drawn between the statements made by the subjects of this study and the ideologies these statements were deemed to support were drawn under these influences as well. The influences of the social environment and cultural ideologies are inextricably bound to the experience as a whole for the investigator and the two subjects, and are among the biases that affected the analysis of this aspect of the literacy event.

Summary

This chapter contains a description of the methodology and data analyses used for the study. The study is a phenomenological description of the experiences of 2 subjects interacting with a museum exhibit. The data were collected through oral interviews that prompted the subjects to describe what they did as they viewed the exhibit and what they remembered about their experience as viewers. The responses given by the subjects to 7 target questions helped to answer the question, “How does a museum exhibit function as a literacy event for viewers?”

Three analysis procedures were used to address the three aspects of the viewing process: the Physical Context, the Personal Context, and the Socio-cultural Context. First, a narrative written by the investigator which describes the exhibit serves as the analysis of the Physical Context. This analysis includes photographs of the main walls of the exhibit and photographs of the specific exhibit components discussed by the subjects as they completed the interviews. It also includes a summary of the main concepts of the exhibit and a discussion of the informational content.

Second, a line-by-line microanalysis of the interview responses yielded information about the process the individual subjects entered into as they constructed meaning from what they viewed. This served as the analysis of the Personal Context. Finally, a Critical Discourse Analysis of the same responses served as the analysis of the Socio-cultural Context by connecting the ideologies supported by the institution of the museum and those portrayed by the subjects of the study through their responses to the interview questions. The results of these analysis procedures follows in Chapter Four.

CHAPTER 4: RESULTS

Introduction

The research question proposed is, “How does a museum exhibit function as a literacy event for viewers?” Two subjects, one male and one female, separately viewed the exhibit, The Home Front, at The National D-Day Museum and provided answers to 7 target questions in an oral interview. The data were analyzed through the use of three analysis procedures, each appropriate to the respective aspect of the Contextual Model of Learning, which is the model being used to explain the literacy event. A narrative description was used to analyze the Physical Context. Microanalysis (Strauss & Corbin, 1998) was used to analyze the Personal Context. Critical Discourse Analysis (Fairclough, 1995; Meyer, 2001; Van Dijk, 2001) was used to analyze the Socio-cultural Context. Then, a description of the interaction of the three contexts was developed by the investigator. The results of analyses constitute the remainder of this chapter.

Analysis of the Physical Context

Introduction

The Physical Context, which is considered the text of this literacy event, is the museum exhibit, The Home Front. To begin the analysis of the Physical Context, it is important to understand the situational aspects of the text that forms the basis for any literacy practice or event. Fairclough (1995) states the following with regard to the crucial connection between texts and social structures,

Texts in their ideational functioning constitute systems of knowledge and beliefs, and in their interpersonal functioning they constitute social subjects and social relations between

subjects. Any part of any text can fruitfully be examined in terms of the copresence and interaction of these constitutive practices (p. 6).

The Home Front, which is the text for this project, is housed in The National D-Day Museum in New Orleans, Louisiana. Funding for this museum was partially provided by the United States government and the State of Louisiana with the remaining portion raised privately. The National D-Day Museum as a whole, and the exhibit The Home Front, tells the American story of World War II. It focuses on what happened to Americans as the war unfolded. The choice of material culture to be displayed and the way it is displayed was, therefore, influenced by American culture and ideology.

Information included in The Home Front covered the experiences of soldiers (male, female, African-American and Caucasian) who were drafted into or joined the armed services. Also, the experiences of the American citizens who remained in the United States during that time, including Caucasians, members of the African-American community, and members of the Japanese-American community, were addressed in terms of the many government initiatives developed for the purpose of mobilizing the entire populace to become involved in the war effort, while, at the same time, attempting to maintain some of the established social institutions that already existed before the war.

Display of Material Culture

The Physical Context used for this project is the multiliteracied contents of two small exhibits that are connected in an L-shape. The first exhibit is called Citizen Soldier, and includes information about the process of populating the armed forces with the massive number of soldiers needed to fight World War II. The second part of the exhibit is called The Home Front and includes details of how Americans who were not members of the armed forces participated

in the war effort. The two exhibits flow into one another so as to make it difficult for the viewer to easily detect where one ends and the other begins, so both exhibits were used as the Physical Context. On the map of the museum, the two exhibits are collectively called The Home Front, and the same is done for the purpose of this dissertation.

Both of the exhibits convey messages in many modes. Written text provides background information and also explanations of the various items the visitor sees. The content of the written text is reinforced in numerous bar and line graphs and tables of information. However, the main focus of the viewers' attention is on authentic artifacts and replications of the period, or visual images in the form of period photographs, representative works of art, video, and audio.

When the subjects entered The Home Front, they first viewed a replication of an army barracks containing bunks, footlockers, uniforms, and other articles that would have been found in the living quarters of the servicemen. At waist level along the expanse of the barracks replication are authentic World War II photographs of soldiers in their barracks and carrying out the typical tasks of their day. Photographs show mess hall menus, servicemen lining up at mealtime and sitting at mess hall tables. Photographs also show servicemen socializing and taking care of their personal needs. Each photograph, as all the photographs throughout The Home Front, is accompanied by a caption. For instance, one picture was accompanied with this caption: "School children stand on a pile of scrap gathered during a salvage campaign in Butte, Montana, October 1942." A display of coins saved from this period in time was explained by this caption: "To conserve copper, steel pennies were minted in 1943."

Information about racial segregation in the armed forces is depicted through photographs of soldiers at mealtime and during training where viewers see African-American male soldiers eating together and an African-American women's troop being inspected by an African-

American female officer. Written texts concerning segregation help call attention to and explain this social practice. Texts include this example of a caption beneath one of the photographs:

Some of the famed “Tuskegee Airmen” at an Italian air base. Nearly 1000 African-American pilots trained at Alabama’s Tuskegee Institute. Almost 500 served in Europe, flying more than 15,000 sorties. Their distinguished record includes never losing a bomber they escorted.

The introductory panel of text for the exhibit is on the wall to the right of the replication of the barracks. This panel explains the need for the United States to join the war effort and it gives the rationale behind the institution of the draft, which was put in place by the government to swell the number of men serving in the armed forces. Alongside this panel of text is a small display called “Gold Star Mother.” This includes a photograph of a woman sitting on the porch outside of her home. This picture is next to a small flag embroidered with one star in a frame. The practice of placing flags in the window of the homes to indicate the absence of family members is explained in the accompanying written text. The photograph shows that this mother has three flags in her window, indicating that three sons were fighting in the war.

On the wall facing the replica of the barracks is a row of photographs, charts, and other items relating the procedures involved in drafting male citizens into the armed forces. These include authentic photographs of both the men who were drafted and the women who joined the armed services. They also show members of an all-male draft board and include charts and graphs giving information about the increase in the numbers of servicemen and women. Most of the subjects in the photographs are white males, although photographs of white females going through the same induction process are also shown. Some photographs on this wall depict the training of the soldiers, both male and female. On this wall, more evidence of segregation is

apparent through photographs that clearly portray segregated platoons and the written text that explains them.

The far wall of The Home Front contains an array of recruiting posters for both the men's, and women's armed services. Amidst the posters is a small video screen. The video shown on this screen is an 8-minute film about the military lifestyle and the changes that were made in the lifestyle of others to compensate for the large numbers of male citizens who left home to fight overseas. This video consists of newsreels of soldiers in training as well as information about how women took over the jobs of men in the factories and manufacturing plants of America. The tone of the narrator is lively and upbeat and the music is in a rousing military style. The video is played regularly with a 2- minute gap between screenings. The music and audio can be heard throughout the exhibit.

At the juncture of the two rooms is a panel of written text that is the formal introduction to The Home Front. This text describes the government's role in eliciting the participation of the citizenry in domestic programs instituted to finance and supply the war overseas. This panel signals a change in content which moves away from the soldiers who left to fight and toward the experience of those who remained home. Beyond this panel, and in what is a continuation of the recruiting posters is an array of the posters that were made for the citizens who stayed home to encourage their participation in these federally mandated programs. These programs consisted of various initiatives instituted by the government to focus all resources on the military. These programs can be grouped into three types: those in which citizens were encouraged to save and collect certain items, those in which the citizens were required to sacrifice certain items, and those in which domestic industries were required to devote their activities to producing for the war.

Programs which encouraged participation included recycling and the collection of vital materials such as metal, rubber, and household items. The texts, bar graphs and photographs explain how participation in the programs affected what the government was able to supply for the war. For instance, scrap metal was collected to make military canteens, cooking grease to make gun powder, and silk stockings to make parachutes.

Programs that required the citizens to make sacrifices for the war consisted of government controlled practices such as food rationing, gasoline rationing, and the removal of copper from coins. Artifacts such as ration stamps, photographs, and posters accompanied written text that explained the initiatives. Bar graphs and other graphics supported the information.

Finally, there are photographs and various graphs depicting the role of America's industries in providing, not only the United States, but the other allies with equipment needed to fight the war. Photographs and other visuals showed how industries were asked to focus all their resources on producing military equipment. Automobile manufacturers began making jeeps and cargo vehicles. Airplane manufacturers began to produce only military aircraft, and so on. The changing role of women in industry is portrayed here, and the re-direction of farm workers away from the farmlands and into the cities for factory jobs is depicted in maps, graphs, and posters.

Among these photographs, posters, and other modes of information are replicas of coils of wire, boxes of rations, canteens, mortar shells and medical supplies. These replications show what was produced with the various items collected and recycled by the American populace. Among these articles are photographs and information about segregation within the industries at home and also about the internment of the American Japanese.

Additionally, an audio booth (pictured in Appendix B on page 210) includes the stories of 4 American citizens. These are first-person oral accounts of the experiences of these four individuals during this time. These personal accounts are 2 minutes each in length and include two men who fought overseas and two women who worked for the war effort at home. One male and one female were African-American. The African-American male spoke about how his wishes to become a pilot were thwarted when he was informed that no African-Americans were allowed to fly military planes. The white male spoke about his experiences in training for combat. The African-American female spoke about her job in a factory and the white female spoke about how working at a job affected her life at home.

Significance of the Display

In its entirety, viewers of this exhibit experience a learning environment offering information in a variety of media forms and portraying what this investigator perceives as the inception of the profound social change brought to America because of World War II. This cause and effect relationship is important to the display because some of these changes still carry an influence our society today and so, therefore, have influenced the investigator as well as the subjects of this study. For instance, viewers see women going to work on a massive scale, something that continued after the war and is now an accepted aspect of American society.

Also, viewers see change in the agricultural industry as farmers migrate to the cities to work in factories restructured by federal mandate to produce military materials for the United States and her allies. None of these wide-reaching changes could have happened without a change occurring in the everyday lives of the people living through World War II. Thus, the concept of change was on the micro and macro levels.

The concepts of production for the general good and production in massive amounts is another over-arching feature of The Home Front. The benefits of productivity, therefore, is a recurring theme of the exhibit, and evidence of the participation of American citizens in contributing to the common cause of achieving massive productivity is a feature that supports that theme. The value placed upon American productivity in human resources as well as material goods is evident throughout the exhibit. These concepts are supported in the written, visual, and aural texts.

For instance, the photographs of factory workers producing military equipment, such as jeeps and airplanes, do not simply show them producing single pieces, but multiple pieces. One photograph shows rows and rows of identical aircraft nosecones laid out in long lines, and others show shipbuilding and car assembly lines. A photograph of this is included in Appendix B on page 214. The creators, therefore, saw the rise in American productivity as a positive aspect of this era in history.

The exhibit uses other visual aids to support a positive view of American productivity. Information is given through charts and graphs that numerically support this ideology. The bar graphs, line graphs, and charts deal with increased production of aircraft, watercraft, canteens, jeeps, hand grenades, and other military-related goods. This theme is repeated again by replicas that consist of stacks of crates, mortar shells, and spools of wire that extend almost to the height of the viewer. An example of this can be found in Appendix B on page 215.

Also, the increase in the number of men and women who entered the armed forces was shown, through the portrayal of ever-increasing numbers through tables and bar graphs. The art posters in the exhibit serve as a backdrop for the increased consumption of human resources. Viewing the propaganda of the period offers the viewer a window through which they can

evaluate the reasoning and the motivation of the people of the time for complying with government mandates. They serve as the emotional connection to what was manifested by the rise in numbers. Examples can be seen in photographs in Appendix B on pages 207-209.

Overall, the viewer is given a sense of overwhelming success as the numbers in the charts and the lines prove the people's compliance with government requests, and nothing about anyone's failure to comply. No reference is made to citizens who may have rebuffed the wishes of the government. No statistics are given and no information is given about sanctions that may have been opposed on citizens who did not behave as required.

Therefore, the feeling of national pride and complete unity is unmistakable as the viewer interacts with the Physical Context. The general tone of success and unity is supported by the video, which is upbeat and positive, with rousing music and sensationalized narration. The result is the creation of a learning environment where viewers are able to construct the concept that the ability of Americans to efficiently produce material things, and their ability to find personal gratification in doing so, is highly valued and extremely positive.

Also, viewers are encouraged to construct the idea that joining together to accomplish a common goal is an American quality, and that this unity was important to the outcome of the history of the United States. The display of material culture, and the manner in which it was displayed, are statements of The National D-Day Museum about what grew out of the American experience with World War II. They are statements about the inception of the social change that occurred because of the war, and about how the members of a society helped bring about that change.

The totality of the exhibit, therefore, is the portrayal of the triumph of good over evil as the qualities of participation, determination, and sacrifice are portrayed as important parts of the

American experience. The American World War II experience redefined American culture and the American ideology embodied here is foundational to the contemporary American identity. It is a reflection of the way many Americans view themselves and to the way the outside world views Americans.

Presuppositions and Ideology

A byproduct of the themes discussed above is that World War II is viewed as a positive human endeavor. Written discourse such as the following text taken from one of the reading passages exemplifies this ideology: “The efforts of civilians on the home front didn’t end at the factory gate. There were many other ways in which Americans participated in the war effort.” Texts such as this one presuppose a view of World War II as a worthy effort and they support the values of forming alliances and working toward unified goals. The evil nature of the enemy is presupposed to support this view.

The following presuppositions are also present in the text. First, that America’s participation in the war was not only justified, but that the needs of government superseded the rights of individuals during wartime. This is prevalent in many components of the text. For example, the replication that introduces the exhibit is an army barracks, which continues into a representation of the process of drafting male citizens into the armed forces. The photographs, bar graphs, and video serve as a visual discourse explaining and justifying the process, and the written discourse supports the visual story. The following excerpt from the written text shows a presupposition that the actions of the United States were righteous through its references that the United States “had to” complete certain tasks.

The United States faced a mammoth job in December 1941. Ill-equipped and wounded, the nation was at war with three formidable adversaries. It had to prepare to fight on two distant

and very different fronts – Europe and the Pacific. America needed to quickly raise, train, and outfit a vast military force. At the same time, it had to find a way to provide material aid to its hard-pressed allies in Great Britain and the Soviet Union.

Also, the presupposition that the needs of the United States superseded the rights of the individual American citizen is seen in the statement that America’s “primary task” was raising a military force through the military draft. The text states:

The primary task facing America in 1941 was raising and training a credible military force. Concerned over the threat of war had spurred President Roosevelt and Congress to approve the nation’s first peacetime military draft in September 1940. By December 1941 the United States military had grown to nearly 2.2 million soldiers, sailors, airmen, and Marines.

Included here is another example of the written discourse that supported the same presupposition that the needs of the government superseded the needs of the individual:

Meeting these challenges would require massive government spending, conversion of existing industries to wartime production, construction of huge new factories, changes in consumption, and restrictions on many aspects of American life. Contributions from all Americans, young and old, and men and women, would be necessary to build up what President Roosevelt called the “Arsenal of Democracy.”

Conclusion

This learning environment affords viewers the opportunity to choose from a multiliteracied array of sources with which to interact in order to pull together for themselves the facts and ideas about this aspect of American history using the information that is most important to them. The conditions of the project, which are that they take at least 15 minutes to view the exhibit and that

they view the exhibit without discussing their experience until they are interviewed, mimic the reading process more closely than does the typical museum visit. In other words, the activities of the subjects as they gathered whatever information they chose in whatever mode they chose can be described as “reading” a multiliteracied text.

The exhibit used several forms of media and several modes of presentation to offer information that supported its main purpose. This purpose was to create an environment where viewers constructed a favorable picture of American society during World War II. This picture included the position that American citizens willingly joined together under the direction of the United States government to participate in the war effort on many levels, thus presenting a unified America to the viewing public. The increased productivity and the union of the American populace were presented as integral to the outcome of World War II.

Analysis of the Personal Context

Introduction

The analysis of the Personal Context of the literacy event is an investigation of the interaction between the subjects and the text. This analysis will examine the process in which the subjects engaged as they viewed the exhibit, and how that experience is expressed through their language. According to the Contextual Model of Learning (Falk & Dierking, 2000), the Personal Context consists of those individual qualities and characteristics that reside within the learner. These include the physiological factors that affect the abilities of learners to interpret what they see, such as eyesight, attention span, and general intelligence. The Personal Context also includes the viewers’ motivation to view the exhibit, their expectations about the exhibit, and their personal interests.

However, the Personal Context also includes the viewers' prior knowledge of museums as a whole, their experience with the topics presented by the exhibits they view, and their familiarity with the individual objects they may view in the exhibits. These factors are affected by the social background of the viewers, which is, in turn, influenced by socio-cultural dynamics such as race, gender, age, income, general socio-economic status, etc. Heath (1983), Street (1984), and Gee (1996) uphold the concept that every person is a product of the integration of personal abilities and characteristics as they are mediated by what has been lived and experienced as a member of social cultures and sub-cultures. In other words, the Personal Context and the Socio-cultural Context, as discussed through the Contextual Model of Learning, are highly related and deeply intertwined.

Therefore, as stated earlier in this dissertation, the Personal Context and the Socio-Cultural Context will often be discussed as though they were one and the same. This is what occurs in the section titled "The Analysis of the Socio-cultural Context." There are, however, aspects of the Personal Context that are discussed in this section without reference to socio-cultural influences. This part of the investigation used micro-analysis (Miles & Huberman, 1994) to identify patterns in the subjects' responses to the interview questions. The patterns discerned through micro-analysis gave evidence of the process these two subjects had undergone as they made meaning from the exhibit. Even though it cannot be assumed that the behaviors exemplified by these two subjects would be the same for other viewers, the patterns of statements that emerged from the data have particular interest for educators who use museums in their teaching. The patterns exemplify what is possible for viewers of museum exhibits to achieve, and knowledge of the patterns can help educators to determine realistic expectations concerning the outcomes of visits to museums.

Therefore, the analysis of the Personal Context will consist of two sections. The first section is a short treatment of the aspects of the Personal Context as they pertain to these subjects. The second is the micro-analysis of the responses the subjects gave to the interview questions. The micro-analysis was done in three steps. These include: data reduction, data display, and conclusions.

Aspects of the Personal Context

The aspects of the Personal Context include the physiological factors that affect the viewer's ability to interpret museum exhibits. Neither subject displayed any disability with regards to being physically able to view the exhibit, nor did they have problems with attention span, since both subjects took longer than the required 15 minutes to view the exhibit. The subjects were both 18 years of age and educated to the level of high school senior. Both had taken the American history course required by the state of Louisiana. Therefore, their general intelligence, for the purposes of this dissertation, is considered at least average.

Other aspects of the Personal Context include the subjects' motivation for visiting the museum and their expectations about what they will find there. At least one factor in the motivation of these subjects to view *The Home Front* was specifically to participate in this research project. These subjects were personally recruited by this investigator for the purpose of gathering data. The subjects were not questioned about any other possible motivations. Neither were the subjects questioned about any expectations they may have had about what they would view. Therefore, no data was collected concerning this factor due to poor planning.

Regarding personal interests, both subjects said they enjoyed watching television programs about historical events. Their personal interest in history may have been important in their motivation to volunteer to participate in this project. Their personal interest may have also

affected their expectations about what they would find at the museum. However, no data was collected that would support this hypothesis.

Regarding their prior knowledge of museums in general, statements made by both subjects indicate they both understand the role of museums in society. Dan stated, “And also a sense like the museum itself can bring people together to learn.” Meg stated, “Yes, museums. You can learn about our history, and who America is.” These statements indicate that both subjects had an understanding that the museum was an institution of learning. It can be assumed through their membership in the dominant American culture that they developed this understanding through past experience with museums, although no data was collected to confirm this assumption.

Regarding their past experience with the various topics presented by the museum, both subjects completed an American history course and both had a personal interest in history. It is assumed that both Dan and Meg had at least basic knowledge of World War II. Meg, however, had a deeper knowledge through her grandfather, who is an American World War II veteran. Meg’s remark regarding her grandfather being one of only four members of his platoon to return from the war indicates she has more prior knowledge about the war than Dan, who made no such remarks. Meg’s remark about her grandfather sleeping in a barracks similar to the replication she saw in the exhibit indicate that she also had prior knowledge about specific items that were a part of the visual text. Dan made no such remarks.

Therefore, the subjects of this study were capable viewers with enough background knowledge to make meaning from new information found in the exhibit. Meg had more background knowledge and personal experience with World War II than Dan through her connection to a family member who experienced the war. These factors affected the viewing

phenomenon for Dan and Meg. However, the collection of data to determine more about how these factors affected the overall experience was not completed.

Microanalysis of Responses to Interview Questions

What follows is a micro-analysis (Miles & Huberman, 1994) that identifies patterns in the subjects' responses to the interview questions. The patterns give evidence of the process these two subjects undergo as they make meaning from the exhibit. It cannot be assumed that the behaviors exemplified by these two subjects are the same for other viewers. However, the identification of the types of statements they made during their recall of the exhibit is of interest to educators who use museums as a part of the school curriculum. A more complete understanding of how the subjects made meaning as they viewed *The Home Front* may help educators to maximize the potential of using museums as teaching tools. The analysis occurs in three parts: Data Reduction, Data Display, and Drawing Conclusions.

Data Reduction for the Personal Context

The question at hand is: How does *The Home Front* function as a literacy event for the two subjects who participated in this study? In order to address this question, the investigator asked the subjects 7 questions after they separately viewed the exhibit, *The Home Front*, and tape-recorded their answers. The answers to the questions were then analyzed using the process of microanalysis (Strauss & Corbin, 1998). The process of analysis was completed using the data from the male subject and the female subject separately so as to describe the viewing experience as a literacy event for that individual with regard to how they expressed their own experience. The patterns that emerged from each data set were then combined to form a description of the Personal Context for both subjects. This process involved the following steps:

- 1) The investigator transcribed the oral interviews, the transcripts of which are included in Appendix A on pages 188-202.
- 2) The investigator reduced the data by writing each statement separately on an index card. In that way the statements were taken out of context and examined individually to identify patterns that emerged from the discourse (Miles & Huberman, 1994; Strauss & Corbin, 1998). A statement was defined by the investigator as a sentence or phrases that formed a complete thought. Therefore, run-on sentences and some sentence fragments could be considered a statement.
- 3) Open coding was used to identify the types of statements given by the subjects and the statements were assigned descriptive labels (Creswell, 1998; Miles & Huberman, 1994). This process took several days as each statement was read numerous times with stretches of time, sometimes of a day or more, between readings so that the investigator could avoid being influenced by any transient feelings or attitudes that would have biased assigning classifications. Adjustments were made as seen fit.
- 4) The investigator identified 9 codes, but still could not confidently classify every statement. It was decided that broader categories were needed and some codes then were combined and the number of codes was reduced to 3 codes: General Statements, Explicit Statements, and Relational Statements. It was then that each statement was coded with confidence and with what the investigator considered accuracy.
- 5) After the codes were developed, each data set was divided separately into three stacks of index cards according to the three codes. The stacks were read and re-read, again leaving periods of time between readings. Adjustments were made as seen fit.

- 6) The investigator then returned to the written transcript for the final classifications. Each statement was read, and the investigator, without consulting the cards, once again assigned a code. The card was then found and used as a final check. At this time, less than 5 codes were changed, and the investigator accepted the final codes for the statements.
- 7) The coded data in its finalized form was organized into a matrix (Miles & Huberman, 1994).
- 8) The matrix was summarized and conclusions were then drawn to describe the process through which these two subjects made meaning as they viewed *The Home Front* (Creswell, 1998; Miles & Huberman, 1994; Strauss & Corbin, 1998).

It is appropriate to reiterate prior to the identification of the codes and classifications of statements made by the subjects, that a basic assumption of the NLS paradigm is that literacy is a function of literacy practices, literacy events, and text; and that the socio-cultural elements of literacy practices cannot be extracted from the literacy event. The assumption that follows, then, is that every statement given by a subject is an ideological statement. The term *ideological* is used here in the same sense as Street (1984) and Gee (1996). It refers to the fundamental belief systems and perspectives developed by every human being during the course of living, some of which are so deeply ingrained in our personal makeup that they are not recognized as statements of belief.

Therefore, the NLS paradigm suggests that all statements made by the subjects would be considered ideological in nature. As explained in the section “Analysis Procedure for the Socio-Cultural Context,” ideology is best analyzed through the use of Critical Discourse Analysis (Fairclough, 1995). Therefore, the analysis of the Socio-cultural Context will include those

aspects of the Personal Context that could not be isolated from the life experiences of the subjects and, therefore, must be analyzed through Critical Discourse Analysis (Fairclough, 1995). This analysis takes place in the section called “Analysis of the Socio-cultural Context.”

Coding

Dan made a total of 60 separate responses to the interview questions. Meg made a total of 91 separate responses to the interview questions. The resulting 151 responses were each assigned a code. However, a report on every statement and its code would result in a data display that would be repetitive and cumbersome. Therefore, the matrix provided to display the data includes representative examples of each type of statement from both of the subjects. The full transcripts are provided in their entirety in Appendix A on pages 188-202 along with the assigned codes.

An analysis of the responses made by Dan and Meg shows three different kinds of statements, each serving a distinct purpose. First, statements were made about the exhibit as a whole. In other words, the subjects formed general concepts about their experience and expressed those ideas in broad statements with no specific details. When the subjects spoke about the entire exhibit or when they spoke abstractly without a definite connection to the exhibit, those statements were classified as *General Statements (GEN)*.

However, statements that included a reference to a specific component of the exhibit or a specific concept or idea that the exhibit contained were classified as *Explicit Statements*. These statements may have been in the form of an example supporting a General Statement or one which clarified an earlier statement. Explicit Statements also included any reference to a specific idea or concept regarding the subjects’ interaction with the exhibit (EXP).

The third type of statement was a *Relational Statement (REL)*. These statements included two different types: those that showed a relationship between cause and effect and those that showed some kind of comparison. In those that expressed a cause and effect, the subjects determined that one thing caused another to come about, or that one thing could not have come about without the other thing. Relational Statements of comparison included those that compared things both within and outside of the exhibit, those in which the subjects related the past to the present, and those that showed the subject saw a relationship between their own lives and the lives of the people portrayed in *The Home Front*. Finally, Relational Statements could be positive or negative. In other words the subject could have recognized that a relationship existed or that it did not exist. For instance, a statement saying that one event was caused by another event was considered a Relational Statement, but a statement saying that one event had nothing to do with another event was also considered relational.

Data Display for the Personal Context

In interview questions 1 and 2, Dan stated that he saw and interacted with every component of the exhibit. These include the reading passages, the replications and artifacts, the photographs, the video, the audio booth, the bar graphs and tables, and the posters. He did not view the entire video, and he listened to only 2 of the 4 personal accounts in the audio booth. Meg also saw and interacted with every component of the exhibit. Meg did not watch the entire video, but did listen to all of the personal accounts in the audio booth. In other words, Dan and Meg interacted with all components of the exhibit, but not with equal levels of intensity.

Dan then made 60 statements in response to the remaining 5 interview questions. Meg made 91 statements. Table 2 depicts the number of coded statements made by each subject and the percentage of each statement.

Table 2

Number of Statements for Subjects

Code	GEN	EXP	REL	Total
Dan	8	18	34	60
	13%	30%	57%	
Meg	19	25	47	91
	21%	27%	52%	

As stated above, the examples given in Tables 3, 4, and 5 are only representative of the 151 total statements given by the subjects. The investigator chose ten examples of each code that clearly represent the codes that were developed according to the operational definitions that were assigned to them. Examples were used from each of the subjects for each of the codes. The transcripts can be found in Appendix A on pages 188-202. These transcripts are in their entirety and each of the statements has been identified with the codes that were assigned by the investigator. In the matrix displaying the data, the investigator has included the code, the example statement, and a brief rationale to explain to the reader the reasons behind assigning the specific code to the sample statements.

Drawing Conclusions for the Personal Context

The data indicate that each subject formed conceptual ideas about the exhibit and expressed those ideas using broad statements, which showed that a global interaction with the text as a whole did occur (Statements 1, 2, 3, 5, 6, 8, 9 of Table 3). The data also indicate that both subjects applied global concepts which were already formed within them to the multiliterated text with which they interacted (Statements 4, 7, 10 of Table 3).

Table 3

Examples of General Statements (GEN)

STATEMENT	RATIONALE
1) Just to realize that it was an overall effort.	Statement about the entire exhibit
2) I guess what I can say . . . “Unity.”	Statement about the entire exhibit
3) So it was just the unity of America.	Statement about the entire exhibit
4) People thinking individually and things like that.	No specific example was given about individual thinking
5) I can definitely say that it was about all America together.	Statement about the entire exhibit
6) It was like all of it, you know?	Statement about the entire exhibit
7) And they start complaining and saying it’s the president’s fault.	No specific example was given about the complaining
8) It was cool.	Statement about the entire exhibit
9) I don’t think the main part was about government control.	Statement about the entire exhibit
10) They had such a strong faith.	No specific example was given about faith

Table 4

Examples of Explicit Statements (EXP)

STATEMENT	RATIONALE
11) The rationing . . . the sacrifices they made.	Clarification to support a broad statement
12) And I saw a poster. It had a flag.	Specific example of a poster
13) And when you walk in, you see the barracks.	Specific example of a replication
14) They were saying how this lady was good with her hands.	Specific example from a personal account
15) Things like 1/3 of gunpowder came from grease.	Specific example of a chart or table
16) And how they saved all the pennies.	Support of a broader statement
17) The readings were good to me.	Specifies a portion of the exhibit
18) That's something that I really never thought about.	"That" referring to a specific component of the exhibit
19) Segregation comes into mind when you think of separation.	Refers to a specific concept in the exhibit
20) I'm sure there is another exhibit here in the museum that would tell you more about government and how the government had control.	Speculation of something specific that may be found in elsewhere in the museum.

Table 5

Examples of Relational Statements (REL)

STATEMENT	RATIONALE
21) The country changed because of the war effort.	Cause and Effect/War caused change
22) This would have never happened if the war wouldn't have happened.	Cause and Effect/Future would have been different without the war
23) It's kind of like September 11 th	Relates specific event in the present to the past
24) Our war is different, but people seemed to have lost focus quicker than they did in World War II	Compares two wars and two attitudes toward war
25) But my generation is not like the generation of our elders, and it's unfortunate.	Compares two eras of time
26) And even the war was important to the whole world, in our country, segregation was more important	Relates two different ideologies
27) I could never imagine my family going to war, missing the people you love, and the fact that so many Americans left, and the lonely nights they spent over there.	Shows empathy/Relates these people to self

(table 5 continued)

28) And also, a sense like the museum itself can bring people together to learn.	Relates museums to learning and learning to togetherness
29) It boils down to, yes, the government was very controlling with these people – what they got, what rations, and things they got, and decisions that would have been made over the war.	Shows understanding of the relationship between government and people of this time
30) The used those posters to get into the minds of people	Shows understanding of the relationship between government, people, and mass media

The data also indicate that each subject recalled specific components of the exhibit and were able to describe those components (Statements 12, 13, 14, 15, 17 of Table 4). They were also able to use specific information from the exhibit to support and clarify statements that were broader in nature (Statement 11, 16 of Table 4). The data indicate that each subject, in addition to recalling specific physical components of the exhibit, also recalled specific ideas and ideologies and were able to include them in their discussion of the interview questions (Statement 19 of Table 4). The subjects also indicated through the use of specific language that they acquired new knowledge (Statement 18 of Table 4) and that they could speculate about what could be included in other portions of the museum.

However, for Dan and Meg, viewing *The Home Front* was, above all, an experience of examining the relationships between the multiliteracied text and information, ideas, ideologies, personal attitudes, and prior knowledge. In both cases the relational statements out-numbered the other types of statements. The forming of relationships was, therefore, the most frequent process through which the subjects gathered information, and the relationships were formed in many ways.

For example, the data indicate that both subjects, through their viewing of the multiliteracied text, saw relationships of cause and effect, both when an event impacted society as a whole (Statement 21 of Table 5) and when an event determined the future course of history (Statement 22 of Table 5). The data indicate that the subjects related events that occurred in the past to specific events that occurred during their own lifetimes (Statement 23 of Table 5), but also observed relationships between entire eras of the past and of today (Statement 25 of Table 5). The subjects also discerned relationships between two historical events (World War II and the war in Iraq) in terms of the people's different attitudes toward the respective events (Statement 24 of Table 5), and also between ideologies that existed at one time in the past (Statement 26 of Table 5).

Furthermore, subjects demonstrated that they related information gathered from the exhibit to their own lives and feelings (Statement 27 of Table 5), and also related what they were viewing at the moment to the larger purpose of the literacy practice as a whole, which was learning from museum exhibits in general (Statement 28 of Table 5). Finally, the data indicate that, by viewing the exhibit, the subjects perceived that a relationship existed between the government and the people of the time (Statement 29 of Table 5), but also the relationship between the government, the people, and mass media (Statement 30 of Table 5).

Conclusion

The analysis of the Personal Context involved subjects who were 18 years old, had at least average intelligence, and were educated to the level of twelfth grade. The subjects had no apparent disabilities that would have affected the outcome of their experience. The prior experience of the subjects in reference to their knowledge about World War II and past interaction with material culture was different. Meg had more prior knowledge than Dan because of a family member who is a veteran of the war. However, both subjects had an interest in history and an understanding of the nature of museums in general. None of these factors were measured nor was their influence considered in the analysis of the Personal Context.

Nevertheless, assumptions can be made about the nature of the viewing experience. The making of meaning in the Personal Context for these two subjects can be described as a complex process in which both concrete and abstract components of The Home Front had an impact upon the recall of information. It is also a process in which information from various sources (the text, past experience, prior knowledge, etc.) as well as various modes and media forms (the posters, the audio booth, the bars graphs, etc.) were used to construct meaning and to form the ideas and concepts that were recalled by the subjects. The viewing experience facilitated the construction of statements that were broad in nature, yet also statements that gave reference to specific items or ideas. These statements were termed “General Statements” and “Explicit Statements.” General Statements (GEN) were directed at the exhibit as a whole, while Explicit Statements (EXP) were used to give examples that supported the General Statements.

Above all, relating pieces of information, abstract ideas, and concepts was the process used most often to make meaning. These statements were termed “Relational Statements” and they showed evidence that the subjects’ interaction with the Physical Context allowed them to

construct cause and effect relationships as well as relationships of comparison. The subjects related the past to the present, past historical events with current events, attitudes of the past with attitudes of today, and the lives of the people then with their own. Therefore, the making of meaning in the Personal Context for these two subjects can be described as a complex process in which the subjects used elements of their own past experience in tandem with the material culture on display to formulate relationships between new information and information they already possessed. In addition, the subjects also constructed meaningful relationships with the ideas they perceived about the material culture and with ideas that were already a part of their world view, indicating that abstract thinking was vital to the meaning-making experience.

Analysis of the Socio-cultural Context

Introduction

In this study, the Contextual Model of Learning (Falk & Dierking, 2000) was used as a basis to describe the phenomenon of making meaning from a museum exhibit. The Physical Context of the model is represented by the contents of the museum exhibit, The Home Front. Due to the interdependency of the Socio-Cultural and Personal Contexts, much of what constitutes the Socio-Cultural Contexts of these subjects is also reflected in their Personal Contexts and vice versa. Thus, in the section “Analysis of the Personal Context,” the Personal Context is only partially represented through the classification of the types of statements made by the subjects as they related their experiences. The analysis of the Socio-cultural Context, as it is situated within this model, includes various aspects of the Personal Context that are affected by the subjects’ experiences as members of American society and products of American culture. Thus, references made to the Socio-cultural Context in this section also refer to aspects of the Personal Context.

The interaction of all three Contexts is happening within this particular literacy event. Therefore, a description of culturally based ideologies that contribute to the making of meaning by these subjects is achieved through the use of Critical Discourse Analysis, heretofore referred to as CDA (Fairclough, 1995; Meyer, 2001). The purpose of CDA is to determine the relationship between language and the social structures of those who use it (Meyer, 2001). Through the use of CDA, an understanding of the broader basis from which the subjects made assumptions and drew conclusions emerged, and a clearer picture of how this museum exhibit functioned as a literacy event for these viewers was achieved.

Through their responses, the subjects showed an ability to form global concepts by viewing the exhibit (referred to as General Statements in the “Analysis of the Personal Context”) and also to recall specific elements of the exhibit that supported the concepts they constructed (referred to as Explicit Statements). It is in the statements of relationship, however, that the influences of the Socio-cultural Context can be better understood. In these statements of relationship (referred to as Relational Statements) the subjects make connections between themselves and the meaning they make as they interact with the Physical Context.

There were two general types of Relational Statements found in the data. The first was relationships of cause and effect. In those statements, the subjects determined that one thing caused another to come about, or that one thing could not have come about without the other thing. The second type of Relational Statements were statements of comparison and included the following: statements that compared things inside or outside of the exhibit, statements in which the subjects related the past to the present, and statements that showed the subject saw a relationship between their personal lives and the lives of the people portrayed in The Home Front.

Finally, CDA techniques provided a deeper understanding of relationships that were not addressed in the micro-analysis. These Relational Statements included Hierarchical Relationships, in which the subjects used their Socio-cultural Contexts to define the roles of various institutions that were a part of the phenomenon. They also included Personal Relationships in which the subjects placed themselves in the world of the people in The Home Front and saw themselves as experiencing the events along with them. An analysis of these Relational Statements follows.

Cause and Effect Relationships

One of the important themes presented by The Home Front was that World War II brought many changes to American society. Both subjects commented on this theme. Dan's comment, which was clear and unambiguous, was "The country changed because of the war effort." He then goes on to explain, "You know, things like rationing and saving things and changing peoples' mindsets on what they see their country like." Dan, therefore, perceived a cause and effect relationship between the war and the change in the lifestyles, as well as the perspectives and attitudes, of the people of the 1940's.

Meg's comments about cause and effect relationships were more extensive. First of all, Meg reported a definite cause and effect relationship between the individuals who experienced the war and the ultimate success of America. Meg stated,

If one person would not have cared and would have been a traitor, the war would not have been won . . . and so many more lives would have been killed by Hitler. Now I know it can really actually take just one person.

Meg was able to access and evaluate her Socio-cultural Context and to see World War II as causing changes in American culture with lasting effects that, in turn, have become part of her

own cultural makeup. Meg connected with the basic themes of the exhibit (productivity, teamwork, sacrifice, determination, good against evil) as values she recognized as a part of her own Personal and Socio-cultural Contexts, and then constructed a cause and effect relationship between those values and World War II. Meg stated,

The way I see it is that it made America what it is today. . . I mean, if the war wouldn't have happened, it's scary to think of what America would be like today . . . What would we be like if the war hadn't happened? America would be horrible! Like, we wouldn't have any values!

Meg has clearly constructed a strong connection with the Physical Context that has allowed her to make a judgment about the validity of the values she perceives in the exhibit. She indicates that, if the war had not happened, America would be different from the one she knows today in a very negative respect. The development of these values, according to Meg, was a direct result of the American World War II experience.

Meg continues to construct cause and effect relationships between her own experiences and the events of the war when she says that the war caused the people "to get closer to God." She attributes this to her belief that they had to "pray every night that their husbands and loved ones would come home, or their child." An examination of the Physical Context will show that prayer and/or religion was not an element addressed through the material culture of the exhibit. This is a cause and effect relationship that Meg constructs using her personal estimation of what she believes these people must have thought and what they must have done in response to those thoughts.

In constructing this relationship, Meg recalls a popular film and brings that film into her interpretation of the exhibit. Meg uses an example from the exhibit of a photograph of a woman

sitting outside her Louisiana home with three small flags in her window. The flags were each embellished with a star, indicating that the woman's three sons were all overseas fighting in the war. A photograph of that display can be found in Appendix B on page 205.

Meg stated that she saw the same flag symbols in the movie "Saving Private Ryan." She said, "The beginning of that was bad. But they had a mother with the stars in the window like that and they came and told her her sons died." Meg connects the photograph from the exhibit, the popular film, and her own conception of prayer when she says,

I know this is like a hyperbole and whatever, but this is just what it was probably like everyday. They had to be praying and hoping to God that all of their brothers would be coming home. And it was just like, well you know, they had such a strong faith, like.

How something like that can make you that holy. And the war can make someone be like that probably every day. That kind of thing would make you so holy and make you that close to God.

There is no evidence in the Physical Context to support the idea that the people of the 1940's prayed, had a strong faith, or that prayer brought these people closer to God. Meg relied heavily upon her Socio-cultural Context to mentally connect the photograph, the film, and prayer to the emotions that she thought the people may have felt. Then she made assumptions about how their perceived situations may have affected their lives. Meg used the material culture as the initial source for these perceptions, but then applied her own experiences to construct a more complete picture of the lives of the people in the exhibit. Therefore, The Home Front functioned as a way for Meg to construct a strong cause and effect relationship between the past and the present.

Comparative Relationships

Relational Statements of comparison were given by the subjects in different ways. They compared events of the past and the present as well as the attitudes of the people who experienced those events. The subjects compared the different mindsets of the cultures of then and now and they also compared their own lives with the lives of those who lived during World War II. The basis for these types of comparisons was the subjects' Personal and Socio-cultural Contexts. They relied upon their prior experience and the ideologies they held as a part of their worldview to make connections with the Physical Context and to construct comparative relationships between themselves and the material culture.

Dan constructed a comparison between two historical events when he singled out the poster (Appendix B, page 212) about December 7th and recognized similarities in what he has seen in his own experiences with September 11th. He also commented on how the government during this era used that poster and others like them for purposes similar to what the government does today. He said, "They [the government] make us try to remember it, too." He then goes on to say that the posters got into the minds of the people," and later states, ". . . they do that today, too." Dan made meaning from the posters in the exhibit by constructing a comparative relationship between what he saw in the Physical Context and what was already a part of his Personal and Socio-cultural Contexts.

However, similar to what Meg did with the cause and effect relationships she constructed, Dan proceeds to formulate a personal opinion that has, at best, an untenable connection to the text. For instance, he says, "September 11th taught us a lesson that could be compared to the older generation of this war. Our war is different but people seem to have lost focus quicker than they did in World War II." In this statement, Dan obviously has used his

Personal and Socio-cultural Contexts to make a negative statement about his own generation losing focus on the war. Yet it is unclear as to what he used to form the opinion that the people today lost focus *quicker* than the people then. No such information was included in the Physical Context. Through his comparative statements, Dan first formed a logical connection between the past and the present, but then expanded his meaning by drawing a conclusion that was based upon unclear sources.

Meg's view of her own generation coincides with Dan's, and is seen through the comparative relationships she forms. She remarked on the lack of unity in contemporary America when she stated, "Back then, it was a totally different mindset . . . And today everyone is so divided, and we have the mindset that we think about me and no one cares about anyone else and it's really horrible." In order to construct this idea, Meg first evaluated what she perceives to be the mindset of her own generation. This perception is rooted in her Socio-cultural Context. Then Meg compared that perception to what she interpreted to be the more favorable mindset of the people in the exhibit.

However, the purpose of the exhibit, The Home Front, was to teach about the past, not the present. The material culture was about the past, not the present. Yet, Dan and Meg used their experiences in the present to make meaning from the exhibit and then to make comparisons between both eras. The information about the present is what Dan and Meg brought with them into the literacy event. The Physical Context provided the other information Dan and Meg needed to construct comparative relationships. This phenomenon stands as a clear example of how important the Socio-cultural Context is to the making meaning from museum exhibits, and it helps to explain how the exhibit itself functions as a literacy event for viewers.

Hierarchical Relationships

The subjects of this study were 18-year-olds who were born, raised, and schooled in 20th century America. They are members of the majority race and the fact that they attend parochial school indicates that their family is at a socio-economic level that is at least average. They have experienced life as contemporary Americans and, therefore, have been shaped by modern media as well as the values and ideologies of institutions such as the family, the home, the school, the government, the economy, etc. The statements given by the subjects about the meaning they made from the Physical Context of the exhibit indicate that they are both strongly influenced by social and institutional hierarchies. Through their apparent acceptance of the hierarchies, they situate themselves within the social order and give a sense of how they perceive themselves as American citizens.

According to statements made by both Dan and Meg, the Physical Context supported what they perceived as the existence of four separate entities. One of these entities was “the government” and a second was “the people.” However, a third entity was identified as “the country,” or “America,” which served as the abstract concept of an ideal held by both subjects. In this relationship, “the people” followed the bidding of “the government” in order to fulfill the needs of “the country.”

Finally, a fourth entity was that of the museum, itself. The museum was recognized by both Dan and Meg as having the purpose of teaching “the people” about “the country.” However, the connection of the museum to the government was not mentioned by either subject. The museum was accepted as the knowledgeable authority in the totality of the hierarchy; as the entity that dispensed truthful information about the topics presented in the exhibit.

The existence of these hierarchical relationships may seem innocuous on the surface. However, the significance is not seen in the fact that these two adolescents constructed these relationships, but in the strength of the influence of the relationships on how the subjects made meaning from the text. The strength of this influence and how it, in turn, affects the Contextual Model of Learning is discussed at length later in this dissertation. What immediately follows, however, is an analysis of the statements made by Dan and Meg that established the institutional hierarchies they perceived.

The Country/Government/People Hierarchy

The statements discussed below are examples of how Dan and Meg accessed their Personal and Socio-cultural Contexts to interpret the Physical Context of The Home Front. In other words, in this literacy event, the museum exhibit functioned as a catalyst with which Dan and Meg made manifest a fundamental belief about the relationship of “the government,” “the people,” and “the country,” and then used it to make meaning from the text. The connection to Dan and Meg’s Socio-cultural Context was discerned through a CDA analysis of the language they used as they reported their experiences.

For instance, Dan expressed his view of the relationship between people and government by using the word “they” in multiple ways. In fact, Dan used the pronoun nine times, and it was often unclear as to whom he was referring when he alluded to “they.” Therefore, the investigator found it necessary to contact Dan again in order to clarify the various meanings of “they.” This follow-up interview occurred in the form of a telephone conversation which was not recorded. A summary of the interview is provided in Appendix A on pages 194-195.

During this conversation Dan explained how he used the pronoun “they” by delineating the appropriate referents for each of the statements for which a referent was not clear. Dan used

the word “they” in three ways: to refer to the government, to refer to the people, and to refer to the institution of the museum. These referents are included in brackets in the following exchange between the investigator (I) and Dan (D) as he identified a particular poster he remembered from the exhibit. A photograph of the poster Dan is discussing is included in Appendix B on page 212 of this dissertation.

I: What part of the exhibit stands out in your mind?

D: To me it was the information – like the readings and the posters. And how *they [the government]* tried to grasp peoples’ minds was important. And that *they [the people]* couldn’t forget. It’s kind of like September 11th. *They [the government]* help us . . . *they [the government]* make us try to remember it, too. And I saw a poster. It had “Remember December 7th.” It had a flag. And *they [the government]* want *them [the people]* to remember the purpose of the war. And *they [the government]* do that today, too.

I: I think I have a picture of that.

D: That’s it. *They [the museum]* had things like that to tell you why you were in this war - posters. And I think back in those days, it was more distinguished. *They [the government]* had it so that people would not lose sight of what it was all really about. *They [the government]* used those posters to get into the minds of the people.

Dan’s reference to the “government-they” as the Agent (doer) and the “people-they” as Patients (the entity to which the action is being done) indicates he perceives a hierarchy between government and people where government is in the position of authority. His use of the phrase,

“they help us . . . they make us” indicates his view that he, through the use of the pronoun “us,” plays the role of the Patient rather than the Agent.

Furthermore, Dan’s statements indicate that, for him, the existing hierarchy impacts society on multiple levels. In a later exchange, Dan states, “They [the government] had to do a lot of passing of the laws to make sure that things went like they [the government] want them to go.” This statement indicates an understanding of the traditional function of government within the hierarchy.

However, his preceding statements that “they [the government] tried to grasp peoples’ minds,” “they [the government] make us try to remember,” “they [the government] used posters to get into the minds of people,” indicate that he also believes that a function of government exists in which it operates as a shaper of thoughts and memories, and, therefore, a shaper of ideologies. In this relationship, the government is once again the Agent, while the people are the Patients.

Dan offered the following statements regarding another poster he remembered in the exhibit; a photograph of which is also included in Appendix B on page 213. With regards to this poster, Dan’s comments become more personal as he begins to identify more with the content of what he viewed. He stated:

And they [the government] had one with cans rolling into a gun. It’s like *you* see what *you’re* doing and then what it turns into. The readings were good to me, but the posters showed you what *your* contribution could really do.

The point of view expressed here is that the “government-they” is in the position of agency in soliciting contributions and turning them into ammunition. The “people-they” are, once again, in the position of the Patient as they carry out their instructions. However the change from the third

person of the “people-they” from the prior exchange to the second person of the “people-you” in this response indicates that Dan includes himself among those who could see “what your contribution could really do.” In other words, Dan sees himself as the Patient once again and even more so, as he mentally connects with the people of the time as though he was one of them.

In the hierarchy, therefore, Dan places himself below the government, which is in line with the presuppositions of the text. These presuppositions were discussed in the “Analysis of the Physical Context” and include the ideas that the actions of the government were righteous and that the needs of the government superseded the rights of the individual. The idea that the government represents the greater good and that the people are duty-bound to respond to the government’s needs is foundational to the workings of a republic such as the United States. This is a concept that is present in the school, the home, and the mass media, and one to which Dan has experienced life-long exposure. The influence of the Socio-cultural Context, therefore, was a factor in Dan’s perception of hierarchical relationships in the text and also in his acceptance of those relationships.

The data indicate that Dan perceived the third entity of “the country” as he continued to discuss the relationship between government and people. In his comments below, Dan introduces the abstract concept of “country” and adds that concept to his discourse naming the people as separate from the country, which is separate from “they” as the government. He says, “I don’t think, as far as helping this country out, I don’t think that people were doing what they did . . . I think they were doing it for their country and not because the government was telling them to do it.” Here, Dan seems to place the people as Agents, but the context of the discourse maintains that the people are in the act of Agent at the bidding of the true Agent, which is the government.

In addition, although the data indicate that Dan sees the country, the people, and the government as three separate entities, he also indicates that the overall concept conveyed by the exhibit was that of “unity.” When asked to create a new title for the exhibit, he clearly maintains a difference between people and country, yet the concept of the exhibit as a whole overrides the separation he sees. He states, “I think the exhibit focused more on the unity of the people during the war on this side to help our country. I felt more a sense that things were together. So – Unity.” In other words, Dan sees this separation concurrently with the perception of a strong relationship between each entity.

The data indicate that Meg also held a conception of the hierarchical relationship between people, government, and country. Meg referred to “America,” which the data show is the equivalent to Dan’s “country.” She also referred to “people” as distinct from America. This view is exemplified in the statements below.

“I think the overall purpose was to teach us about the unity of America.”

“The bar graphs showed how much people saved and how much people gave of themselves to help America.”

Meg identifies with America and includes herself in the makeup of America, as exemplified by her use of the first person plural in the following response. Also, in the passage below, she sees her future children as part of the America she describes and she sees the generation that preceded hers as serving the same role indicating that this relationship is one that lasts over time. Here, Meg is the Agent in that she is carrying on the information to her future children. She states,

I hope we can carry on what we see from that generation and what they learned from their fathers. I just hope I can be able to tell my children about World War II and help them come together as America and keep helping to be a great country.

Meg does not include the third entity of government until she is asked explicitly whether this exhibit portrayed elements of government control. She does not initiate this perspective, but clearly displays an understanding of and collusion with the perspective that government is a different entity from people, who are a separate entity from America. She does so in the following response.

I don't think the main part of it was about government control. I am sure there is another exhibit here in the museum that would tell you more about government and how the government had control. It boils down to – yes – the government was very controlling with these people . . . what they got, what rations, and things they got and decisions that would have been made over the war. And they were getting the message out to let them know what we need. People need to save the rations to help the people out in unifying America to do that. But I didn't think the main part of the exhibit was about government control.

Meg distinctly refers in this passage to the government as separate from America as well as separate from the people. The government, in this case, takes the role of agency. However, Meg also indicates the existence of two different groups of people. For instance, she says at the beginning that the government was controlling with “these people,” referring to the people portrayed in *The Home Front*. Later Meg says that the government was getting the message out to let “them” [the people portrayed in the exhibit] know what we [reference unclear] need.” This indicates that, while Meg does not include herself as a member of the people in *The Home*

Front, she does consider herself a member of the unspecified group that is serving in the role of Patient by getting what they need.

The Place of the Museum in the Hierarchy

Both Dan and Meg comment on the literacy practice of museum visiting and the role the museum plays in teaching and learning. When asked about the word “togetherness” and how it applied to “The Home Front,” Dan replied,

I think that the difference between the people . . . people coming together for the country to make the war effort. And also a sense like the museum itself can bring people together to learn. Learning about our country and about how it used to be and how it can get people thinking about how it should be. And I think the country is individual now.

Meg’s comment on the role of the museum occurred as she discussed her feelings about how she hoped to tell her children about World War II. The following exchange between the investigator (I) and Meg (M) includes those remarks.

M: And our freedom. That’s what our forefathers fought for, and we don’t want to give that up to another country.

I: Are you saying that it is important to study history?

M: Oh, yes! Without history, you lose a sense of who you are.

I: And what about places like museums?

M: Yes, museums. You can learn about our history, and who America is.

In Dan’s remarks, the museum is the Agent and people are the Patients. The museum is what brings people together to learn. In Meg’s remarks, the people who are learning are the Agents. However, both subjects show a view that museums are institutions of authority in learning and both see museums in a favorable light because of what can be learned about “our

country” or about “America.” Their feelings echo those of Stephen Ambrose, who was an important figure in the development of The National D-Day Museum. Ambrose states,

One of the things I like most about the museum is its ability to reach out to the young and inform them of who went before them, and what they owe to them. Museums that commemorate events of a half-century or less ago pull the generations together (p. 210).

Finally, Dan and Meg presumed that the meaning they constructed in the process of viewing the exhibit was factual, and that bias in the ideas conveyed in the exhibit did not exist. This is a presupposition represented in Dan’s statement about learning in museums. When he states, “Learning about our country and about how it used to be and how it can get people thinking about how it should be,” he indicates that the exhibit portrayed the truth about the society of that time and that the society portrayed by the museum was preferable to the society of today.

Meg states that a museum “brings people together on a common ground of history. History is always going to be common because you can’t change it, and I just think that’s great.” Her presupposition is that there exists an irrefutable truth which is “history” and which cannot be different for different people. She also presumes that the museum is the authority that possesses this truth and presents this truth to those who visit the museum. Also, a presupposition exists in both Dan’s and Meg’s remarks that museums teach not only about facts and history, but about values. Therefore, the role of the museum in their view is to carry on the values and beliefs of the past.

Neither Dan nor Meg indicate that they perceive a connection between the museum and “the government,” “the people,” or “the country,” except in that the museum’s role is to teach “the people” the truth. As it stands for this particular literacy event, Dan and Meg have a view of

the museum as the dispenser of “the truth,” and they do not question the source of the truth. Therefore, in the totality of the hierarchical relationships they constructed for this literacy event, “the country” was an abstract that represented the ideal shared by “the government” and “the people.” “The government” was the Agent that directed “the people” to act for the good of “the country.” “The people” were the Patients who received direction from “the government,” but also from “the museum,” which served as the teacher. Finally, as perceived by these subjects, “the museum” was the Agent that dispensed the truth to “the people,” but the role of “the museum” as the Patient of “the government” who created it was not perceived. Therefore, the creator of what Dan and Meg alleged to be “the truth” was not identified.

In conclusion, the influence of the Socio-cultural Context can be seen in the language used by Dan and Meg. This language reveals pre-established notions about social and cultural institutions that are a part of their lives outside the exhibit. Dan and Meg brought these preconceptions with them into the literacy event and used them to construct meaning from the text.

Personal Relationships

Relational Statements were given by both Dan and Meg that revealed how they used their Personal and Socio-cultural Contexts to identify with the material culture on a personal level. In these connections, Dan and Meg went beyond a basic comparison of their own lives with those of the people portrayed in the exhibit. The Relational Statements in this section indicate that both subjects were able to shift their own semantic roles from a sympathetic commiseration with the people as Patients to an empathetic connection where they, themselves, became the experiencers alongside the people of this era.

As stated in the previous section, the use of the pronouns “they,” indicated how the various semantic roles between people, government, country, and museum were viewed by the subjects. A shift in the semantic roles, however, can be seen by examining the subjects’ use of other personal pronouns. The shift is from being the Patient (receiver of action) to the Experiencer, one who is a part of a phenomenon and living through the event. The data also indicate that this shift occurred freely and without the subjects explaining or defending the occurrence. In other words, both subjects assumed that the investigator shared the world view represented in their language and that there was, therefore, no need to explain why a shift in semantic roles occurred.

For example, when remarking about the posters, Dan stated, “They had things like that to tell *you* why *you* were in this war . . . posters.” According to Dan’s follow-up interview, “they” is the “museum-they” who used the posters to relate information to the museum visitors. The information the museum related to the visitors was about how the government explained to the people of the 1940’s why they were in the war. However, when referring to the people who were “in the war,” Dan used the second person “you,” and not the third person “they.” This shows that he included himself and the investigator in the group who was viewing the posters during World War II.

Dan shifted his semantic role from the Patient who was being taught by the Agent (the museum) to the Experiencer. He placed himself and the investigator within the era the poster was created. Furthermore, he also operated in that time frame when he later stated, “It’s like you see what you’re doing and then what it turns into.” In addition, his statement, “But, the posters showed you, like, what your contribution could really do,” is another example of a seamless and effortless semantic shift that goes unnoticed by the subject.

In these statements, Dan used his Personal and Socio-cultural Contexts to conjure up the emotions that he may have felt had he seen those posters at the time they were created. Also, he used a specific artifact that he saw in the exhibit to motivate the semantic shift. However, Dan shows the same phenomenon in a reference to the entire exhibit, without relying on a specific component. He states,

People did what they could over here for the people over there, but here you can understand what they actually were going through, because . . . I could never imagine my family going to war, missing the people you love, and the fact that so many Americans left and the lonely nights they spent over there.

In this statement, Dan easily shifts from “they” (the people) to “you” (the people, himself, and the investigator) to express his understanding of the overall emotional toll taken on the Americans who experienced World War II.

Dan also places himself within the time of the war when he speaks about segregation. His statement that “segregation came between us,” implies that Dan identifies with “the people” of that era, seeing himself as the Experiencer of the separation. The use of the pronoun “us” is representative of the semantic shift.

There is evidence of semantic shift from Patient to Experiencer in Meg’s language, also. Meg, however, demonstrated this shift with the use of the first person pronoun “I.” While commenting on the participation of the American citizens at home during World War II, Meg states,

And how they saved all the pennies. And they changed them from copper to . . . I don’t know what it was, but that really stood out because they needed to think of every little thing that they had to save. And they thought, “I’ll save pennies!”

Meg shifts from viewing herself as being outside the experience to becoming the Experiencer, as she relates the words she believes someone from that era may have said. Her language indicates that, like Dan, she has used a specific artifact (the display steel pennies in the photograph in Appendix B on page 211) to connect with her Personal and Socio-cultural Contexts to conjure up the emotions that she believes the people of the time were feeling.

Therefore, an examination of semantic roles indicates the following with respect to the relationship between the Physical, Personal, and Socio-cultural Contexts. This literacy event created an environment in which the subjects had the opportunity to observe, identify and assume various semantic roles. They interacted with the text from a position in which they perceived relationships between Agents and Patients and sometimes included themselves in these relationships. They identify these Agents and Patients and make judgments about them. Furthermore, these roles are dynamic in nature. The subjects fluently shifted from Patient to Experiencer and they also considered other viewers, such as the investigator of this study, as an Experiencer as well. These subjects, therefore, used the Physical Context as a catalyst to access their Personal and Socio-cultural Contexts and to connect on an emotional level with the people of a bygone era.

The Influence of the Personal and Socio-Cultural Contexts on the Contextual Model of Learning

As stated in previous sections of this analysis, the influence of the Personal and Socio-cultural Contexts on the outcome of the literacy event is very strong. The data indicate that these subjects used these Contexts to form relationships of cause and effect and relationships of comparison that accounted for more than half of the statements made about the literacy event.

The data indicate that, at times, both subjects relied heavily upon the Socio-cultural Context to construct ideas about the behavior of the people portrayed in the exhibit, and to form opinions about their lives that may or may not have found support in the Physical Context. In fact, for both Dan and Meg, the Socio-cultural Context was strong enough to sway their interpretation of the text in favor of a belief that was held prior to viewing the exhibit.

For instance, Dan's answers to the interview questions show that he did interact with text in *The Home Front* that presented information about the Jim Crow Laws that were still in effect during the 1940's. These were government-imposed laws that maintained oppressive social and political policies of segregation and discrimination against African-American citizens. The connection between the government and Jim Crow Laws was clear in *The Home Front* text. For example, images of segregation appeared throughout the exhibit. These images were supported by written discourse that stated "segregation remained a rule in America's military." Spoken discourse in the audio booth from the personal account of an African-American soldier also supported the government's complicity in the imposition of segregation.

However, although Dan previously observed that the government played an agentive role as "they tried to grasp people minds" through the use of propaganda, when Dan speaks of segregation, he makes the abstract concept of segregation the Agent, not the government. In fact, he doesn't mention "the government" and speaks, instead, about "the country." He says, "It's a shame that . . . [segregation] in our country would come between us." He also says, "Even when it mattered most, segregation came between us."

Dan shifted the semantic role of the government so that preset ideologies in his mind about the integrity of the government were superimposed upon the text and mediated Dan's interpretation of what he viewed. Dan clearly adapted his language to more closely fit an

ideology that was established prior to his interaction with the exhibit. He did so in spite of the clarity of the text, which connected Jim Crow Laws to federally imposed policies. In this instance, Dan's interpretation did not coincide with that of The Home Front, but Dan's placement of "segregation" as the Agent, instead of the government or the museum, allowed him to avoid perceiving either symbol of authority in a negative light.

Meg's interpretation of the concept of segregation presented in The Home Front also shows a clear reluctance to accept the government's agentive position in the oppression of its own people even though it was presented as such in the Physical Context. Her remarks indicate that she interacted with the text regarding this issue, however, her interpretation of the text was that the people of this era were "starting to get over" the problems of racial discrimination. The investigator believes that Meg's own view of what the world should be like drastically mediated her interpretation of The Home Front text, resulting in a misinterpretation of the concepts presented in the exhibit. Her perspective allowed her to disavow the government's compliance with Jim Crow Laws and also to avoid a conflict of ideologies between herself and the museum.

The investigator suggests that Dan and Meg entered the interaction with strong pre-conceived notions about the integrity of the American government and with a low level of tolerance for criticism of those notions. These pre-established ideas ultimately shaped the outcome of the literacy event for Dan and Meg. For this reason, the investigator believes that the Contextual Model of Learning should be altered to consider the strength of the influence of the Personal and Socio-cultural Contexts on the Physical Context. In other words, investigators of museum learning should not automatically assume that the three Contexts exert equal influence on the outcome of the phenomenon.

Conclusion

The Socio-cultural Context played an important role in the process these subjects experienced as they made meaning from Physical Context. The subjects accessed their background knowledge, their prior experiences, and their preset ideologies as they constructed relationships between themselves and the material culture in a variety of ways. These connections were revealed in the various types of Relational Statements given by Dan and Meg as they responded to the interview questions.

The subjects made statements that established cause and effect relationships and relationships of comparison. They compared their own lives with the lives of the people in The Home Front and commented on similarities between events of the past and the present. Their responses also indicated that the subjects held pre-established concepts of the relationships that existed between institutions such as “the government,” “the people,” “the country,” and “the museum.” The subjects placed themselves within these hierarchical relationships and also easily shifted from recalling the literacy event as museum visitors to recalling the literacy event as though they, themselves, had experienced this era in history.

The Personal and Socio-cultural Contexts were the basis from which information from outside the exhibit was brought into the process of making meaning. The Physical Context was the catalyst that facilitated the construction of relationships. However, at times, the subjects accepted the validity of information from their Socio-cultural Contexts in such a way that information apparent in the Physical Context was either ignored or misinterpreted. Thus, in order to accurately represent the literacy event for these two subjects, the Contextual Model of Learning needs to be adjusted. The model should not show the three Contexts as having equal influence on the literacy event. The model should show the relative strength of the Personal and

Socio-cultural Contexts over the Physical Context, at least for this phenomenon as it happened to Dan and Meg.

Summary of the Analyses

Three types of analysis were used to describe the phenomenon of museum learning for the two subjects of this study. Descriptive analysis of the Physical Context yielded a picture of a learning environment which conveyed messages on various aspects of what went on in the United States while World War II was happening in Europe and the Pacific. This information concerned political as well as social issues, such as the military draft and training of American males, the redirection of American industries from domestic production to military production, the initiatives that promoted the participation of American civilians in supporting the war, and the issues of the oppressive social institutions of racism and discrimination against African and Japanese-American citizens.

The descriptive analysis also offers a picture of a learning environment in which the information on these topics was conveyed in multiple forms, allowing the subjects of the study to make meaning in a variety of ways. The two subjects had the opportunity to gather data from photographs, artifacts, film, spoken and written discourse, charts and graphs, and replications. In other words, the exhibit appealed to Multiple Intelligences (Gardner, 1993, 1999) and the simultaneous presentation of words and images allowed for recall through Dual Coding (Paivio, 1990).

The multiple modes in which the information was presented were integrated throughout the exhibit. Therefore, the subjects of this study had the opportunity to make choices as to which forms of information to attend to and which ones to ignore. The data indicate that each of the subjects interacted with each learning component, although not equally. They freely exercised

their opportunity to choose the mode in which they gathered information. This is called Free Choice Learning and it is what makes the museum learning experience unique (Falk and Dierking, 2002).

The second analysis was an analysis of the Personal Context. The procedure for this analysis involved microanalysis, which was used to categorize the ways in which the subjects reported their experiences and to, therefore, formulate a representation of the literacy event for each subject. The data indicate that the viewing process provided subjects an opportunity to gather explicit information from the exhibit, but also to develop abstract concepts using their prior knowledge and past experience as well. Subject recall was classified into three types of statements.

General Statements were made about the overall exhibit. General Statements were those in which no specific detail was offered by the subjects. These statements were global in nature, some referring to the exhibit itself and some seen as an opinion about something outside the exhibit. When a specific example was given by the subjects, the statement was classified as an Explicit Statement. These included statements that were made to clarify or support a General Statement.

At times, however, the subjects made statements that indicated their construction of a relationship between multiple concepts. These statements were classified as Relational Statements. Some Relational Statements were in the form of a cause and effect in which the subjects reported that one event caused another event to happen, or that one event had nothing to do with another event. Other Relational Statements were in the form of a comparison in which subjects reported that one thing was similar to or different from another thing. Relational

Statements also included those in which the subjects drew comparisons between something they viewed in the exhibit and something about their own personal experiences.

The third analysis, the analysis of the Socio-cultural Context yielded a description of an interaction between the subjects and the text that allowed for the processing of information on the level of relationships. Subjects combined information from inside and outside the Physical Context to transform a multiliteracied text into a multifaceted learning experience. This indicates that museum learning for these subjects was a complex phenomenon during which they integrated multiple intelligences in order to gather information and then recalled information in ways that were also integrated and complex.

In order to accomplish this, the subjects relied upon aspects of their worldview which had already been developed through prior experiences as members of their socio-cultural group. The investigator used techniques of Critical Discourse Analysis (Fairclough, 1995) to determine how these socio-cultural influences were manifested in the language of the subjects and how these influences shaped the totality of the museum visit. This is the analysis of the Socio-cultural Context.

The data indicated that both subjects used aspects of their Socio-cultural Contexts to form the cause and effect relationships as well as the comparative relationships identified in the “Analysis of the Personal Context.” In addition, they also constructed hierarchical relationships between four institutions; that of “government,” “people,” “country,” and the “museum.” In the hierarchy, the people and the country were the Patients and received actions from the Agents of the government and the museum. The subjects accepted the authoritative position of the museum as an institution of learning and presupposed the correctness of the information they

gathered. The subjects bought into the presuppositions of the text that the government acted righteously toward the people and that the people had an obligation to obey the government.

Also, both subjects indicated the capacity to share semantic roles, and therefore identities, with the people about whom they learned. By using the personal pronouns “you” and “I,” the subjects placed themselves in the era of the 1940’s and identified with the entity of “the people” of a time gone by. In other words, the hierarchical relationship between the government and the people was maintained as the subjects recalled the images and material culture which facilitated the sharing of semantic roles. Thus, the socio-cultural ideology that is the basis for these relationships influenced how the subjects interpreted and constructed meaning from what they viewed.

In the case of Dan and Meg, the influence proved to be a strong one. The data indicate that both subjects entered into the museum learning experience with firm ideas about what the reality was like for them. Both subjects held fast to these ideas and, instead of allowing the Physical Context of the exhibit to alter their ideas, they adjusted the form in which they expressed their ideas so that their pre-set ideologies, which included institutional integrity (the institution of the government and the institution of the museum), remained intact. It is clear, therefore, that making meaning from museum exhibits is a function of multiple factors that together exert influence on the meaning making process and the eventual learning outcome.

Therefore, the three-pronged Contextual Model of Learning, which suggests that museum learning is a function of the interaction between the Socio-cultural, Personal, and Physical Contexts, is useful in describing the complex process of learning from museum exhibits, although it should be altered to accurately describe the literacy event for these two subjects. The model should show that the Personal and Socio-culture Contexts may have stronger influences

on the outcome of the event than that of the Physical Context. A discussion of how the results of the data analyses contribute to the body of museum learning research and of what the results of the analyses mean to literacy research and classroom instruction is provided in the final chapter of this dissertation.

CHAPTER 5: DISCUSSION

Introduction

This study addresses the following research question: How does a museum exhibit function as a literacy event for viewers? Part of the answer to this question can be found by examining the literature that implies that viewing a museum exhibit is, in fact, a literacy event. Research that broadens our view of literacy by including events other than what takes place in a formal classroom is the first step to understanding the literacy/museology/material culture connection. Research studies that examine literacy events in the home (Heath, 1983), in prisons (Wilson, 2000), in the agricultural industry (Jones, 2000), on the internet (De Pourbaix, 2000) and in other arenas (Cowan, 2004; Gee, 2003; Trainor, 2004, Tusting, 2000) help to establish museum learning as a situated literacy (Barton, Hamilton & Ivanič, 2000), a chronologically new literacy (Lankshear & Knobel, 2003) and a multiliteracy (Cope & Kalantzis, 2000). This body of research validates the idea that literacy events and practices often occur within formal and informal contexts (Allen, 2004; Anderson and Luca, 2000; Bennett & Thompson, 1990; Cox-Peterson, et.al., 2003; Fox, 1993; Frenette, 1990; Gerber, et.al, 2001; Kelly, 2000; Podhurst, 2001; Ramsey-Gassert & Walberg, 1994; Salmi, 1993; Taylor, 2002; Thomas, 2000; Thomson & Diem, 1994; Watts, 2003; Wolff, 1999; Zeller, 1987).

Thus, museum exhibits function as literacy events for viewers the same way other literacy events function for all learners. Just as in other literacy events, visitors use the contents of museum exhibits to construct meaning within already established socio-cultural parameters and sets of ideologies. Also, they integrate new knowledge brought about through museum viewing with other knowledge that is already a part of their world views (Gee, 1996; Heath, 1983; Street, 1984).

Therefore, the application of the Contextual Model of Learning, which addresses the multi-faceted nature of learning in museums, helps to explain that making meaning involves not only the text, but the personal backgrounds of the meaning-makers as they are shaped by the socio-cultural milieu from which they emerged. Thus, the three-pronged model of the Contextual Model of Learning is appropriate to help describe the literacy event of viewing a museum exhibit in that it includes in its depiction of the learning process all three factors (the text, the meaning-maker, and the outside world).

However, the data emerging from the subjects of this project indicated that the experiences of these particular subjects in this particular literacy event did not totally fit with this model as it stands in the literature. With respect to the learning that took place in this study, the investigator believes that the Contextual Model of Learning requires a slight adjustment if it is to clearly depict the museum learning phenomenon as experienced by the two subjects.

This chapter will begin with a discussion of the implications the data have concerning the accuracy of the Contextual Model of Learning in representing the phenomenon as experienced by the two subjects of this project. Then the investigator will discuss the impact of the data on the three components of the learning model. These are the Physical Context, the Personal Context, and the Socio-cultural Context. The implications for instruction will not be written in a separate section, but will be included along with the discussion of each component. Following these discussions, the investigator will suggest future avenues of research in literacy that could enhance our understanding of the museum learning phenomenon and add to the body of research that exists today.

Refining the Museum Learning Model

Roberts (1997) and Hein (1998) have stated that the focus of earlier museums was on collecting, which was usually a sign of a person's wealth and social position. However, they state that the role museums play in our society has undergone a metamorphosis in which museums now have developed a position of authority in their capacity to convey information and edify the general public. Now, educators are participating in the design of museum exhibits that are constructed solely for the purpose of education, a byproduct of which is the preservation and creation of cultural identities and ideologies (Roberts, 1997). The National D-Day Museum which houses the exhibit *The Home Front* is an example of just such a museum. The information contained in *The Home Front* presents the American point of view of what happened in the United States during World War II, and presents this information in a positive light. *The Home Front*, therefore, perpetuates American ideologies and cultural values.

With this in mind, the analysis of the Socio-cultural Context of the literacy event through the use of Critical Discourse Analysis indicates a need to adjust the learning model to more accurately describe the phenomenon experienced by these particular subjects in this particular situation. As it stands today, the Contextual Model of Learning gives relative equal emphasis to the interaction of the text, the learner, and the learner's socio-cultural background in the making of meaning. The model does not, however, address the relative level of influence the three contexts may have on the learning outcome. The investigator asserts that, with regard to this museum learning experience, the influences were not equal and the model should be slightly adjusted. The need to adjust the model was manifested in the subjects' language as they shifted the semantic roles of the people, the country, and the government in order to more accurately represent ideologies that were formed before they visited the museum. Dan, for instance,

observed information indicating that the government of the United States was complicit in maintaining oppressive laws of discrimination in the military. However, he did not acknowledge this in his interpretation of the information. Instead, he took the government out of the role of Agent and placed the word “segregation” in the Agent position, thereby neutralizing the role of the government.

Meg interpreted the information about segregation differently. Like Dan, she did not acknowledge the role of the government in their complicity of discrimination, but Meg interpreted what she viewed as the beginning of change in society. She said that the people of the 1940’s were “beginning to get over” racial discrimination, which is clearly not in line with the information at hand. Both Dan and Meg interacted with the same text and, disregarding information that was explicit in the text of *The Home Front*, altered their language, which allowed the government to remain in a favorable light.

Therefore, the investigator believes that a more perfect model of the phenomenon experienced by Dan and Meg would describe the Socio-cultural Context and the Personal Context of the Contextual Model of Learning as having greater influence upon learning than the Physical Context. The model of learning, therefore, should be adjusted to represent the dominance of the subjects’ ideologies over the text.

It is important to note that the adjustment of the model to show that two of the factors had more influence than the other only apply for Meg and Dan as they viewed *The Home Front*. Viewers from other cultural groups may experience *The Home Front* in a different way and require different changes to the model. It is also possible that for other subjects, the model would be adequate as presented by Falk & Dierking (2000). Also, Dan and Meg may view a different exhibit and not manifest this behavior. However, to more accurately portray the

functioning of The Home Front as a literacy event for Dan and Meg, the Contextual Model of Learning should be adjusted to reflect that the Personal and Socio-cultural Contexts exerted a stronger influence on the learning outcome than did the Physical Context.

Discussion of the Physical Context

When speaking of the effects of the technology of written language on society, McLuhan (1994) referred to what he called “acoustical space.” This refers to the everyday physical world, where learners use all of their senses to gather information in order to create their realities.

McLuhan stated that, prior to the development of the written word, people learned in acoustical space. They did so by integrating what they saw, smelled, touched, heard, tasted and felt into a meaningful whole.

The Home Front used many modes and various media to convey messages about one particular aspect of World War II. This was done in an integrated fashion and the informality of the learning environment allowed the subjects to engage in Free Choice Learning (Falk & Dierking, 2002). Therefore, The Home Front offered to the subjects a learning environment that is more like acoustical space than the traditional classroom. The subjects decided what to learn and how to learn it. However, regardless of the informality of the experience, learning did occur.

Multiple Intelligences (MI) theory (Gardner, 1993, 1999) implies that all learners use a combination of ways to process information, and viewers of museum exhibits, therefore, have a better opportunity to learn via their preferred modes than learners who are isolated from their acoustical space by the walls of a classroom. This study is in line with Multiple Intelligence Theory because the data indicate that the subjects interacted with each component of the exhibit unequally, showing preference for one form of media over another. Dan expressed his preference for the posters and chose to comment specifically on two individual posters in his

interview. Meg showed preference for material culture by choosing to comment on the replica of the barracks and the artifacts which consisted of authentic steel pennies from World War II. It can be argued, then, that MI theory informs our understanding of the museum learning phenomenon and of how making meaning from a multiliteracied text is manifested in viewer recall.

Furthermore, the role of the museum as an institution of learning serves to perpetuate the ideology of those who created the museum and to preserve those aspects of culture that coincide with that ideology. The position of the museum as an entity of authority adds to the ability of the museum creators to develop a presentation that is favorable to the concepts and beliefs that are already a part of their own makeup. The result is a very complex network of influences that brings together the socio-cultural experiences of the museum creators and that of the viewers into an interaction that facilitates learning. The Physical Context is the ideology of the museum creator made manifest in visual form and is also the catalyst that brings about the interaction. Viewers then use the Physical Context as an aid to access prior knowledge and past experience and to make connections between new information and information that is already known.

However, the process of Free Choice Learning (Falk & Dierking, 2002) allows for viewers to make many decisions as they collect information along the way. In fact, the literature indicates that most viewers choose to interact for only short periods of time with the components of any museum exhibit (Hein, 1998; Melton, 1935), which indicates that, in most circumstances, viewers choose to ignore much of the information presented in any museum exhibit.

Nevertheless, the results of this study indicate that the acceptance of the museum as an authority that dispenses “the truth” is very strong, yet not strong enough to overcome the influence of the Personal and Socio-cultural Context of viewers. It is the belief of the investigator that the

Physical Context is more of a catalyst than a shaper of concepts and that it is the weakest of the three Contexts in the phenomenon of museum learning.

Implications for Instruction

Pearce (2003) stated that the information viewers gather about an object is directly related to the prior knowledge they have about the object or to their past experiences with the object. Museum exhibits, therefore, can make viable contributions to school curriculums in two ways. Museum exhibits can be used to reinforce knowledge that has already been presented in the traditional classroom and to further strengthen the acculturation of learners into the schooling process. However, well-planned museum trips that are integrated into the curriculum could also present new knowledge to learners in an environment that is away from traditional settings.

The subjects of this study had never visited The National D-Day Museum before, and both implied that new ideas had been opened to them through viewing the exhibit. For instance, Dan discussed segregation and how discriminatory practices continued throughout the war. He said, "That's something that I've never really thought about." Meg indicated that she had gained a new understanding of how important the individual was to the success of the war when she said, "Now, I know it really can actually take just one person." Therefore, the data imply that the interaction with a multi-modal, multi-mediated and multiliteracied text could also be helpful in introducing new concepts to learners as well as serving as a resource to enhance already acquired knowledge.

Discussion of the Personal Context

The data describing the Personal Context is meaningful in the study of material culture, museology, and literacy in that the subjects responded to the interview questions by giving three kinds of statements. First, the subjects responded with broad statements about the exhibit as a

whole. Second, they gave statements that supported a broad statement with an example. Finally, they gave statements that showed the construction of relationships of cause and effect and comparison that were created via the Physical Context of the exhibit. These relationships involved events of the past and events of the present as well as ideas the subjects constructed about the past as compared to ideas they already possessed. The statements were termed General Statements, Explicit Statements, and Relational Statements, respectively.

The data indicate that these two subjects, under these testing conditions, most often demonstrated what they learned by combining information. First, they combined information by viewing separate exhibit components, unifying them, and expressing that information in the form of larger concepts. For instance, Dan viewed the components of the exhibit and said that its purpose was to show that the war was “an overall effort.” Meg stated that the purpose of the exhibit was to teach about the “unity of America.” Both subjects, therefore, formed global concepts from detailed information.

Furthermore, the General Statements about America being unified and working together were summaries that the subjects supported with Explicit Statements. Dan supported his General Statement with the examples of the rationing of food and gasoline. Meg supported her General Statement with Explicit Statements about how women, children, older people, and all races had to come together to help.

Therefore, the Explicit Statements consisted of information taken from the exhibit that was used to support a General Statement; much like the topic sentence of a written paragraph is supported by details. These statements indicate that conveying messages through material culture, multi-media, and written discourse offer opportunities for viewers of museum exhibits to

analyze information and then blend together knowledge from many sources in order to create an integrated conception of the whole.

Also, the subjects combined information in other ways. The subjects formed relationships by using examples or ideas from the museum text and from their own prior knowledge. This synthesis of information included the construction of cause and effect relationships and the making of comparative relationships.

For instance, Dan saw the actions of the government of the two eras as similar in how they related to the people, yet saw a difference in the reactions of the people of then and now. The government, he said, reminds us of September 11th in the same way the government reminded the people of the 1940's of December 7th. But he indicated that the people of today reacted differently because "our war is different" and people have "lost focus quicker." Meg said that World War II made America what it is today and that, without World War II, today's society would have "no values." She said that today we live in a society where "nothing is appreciated" and that in the 1940's there was a "totally different mindset."

These comments show an ability to take one or more components from the exhibit, place them in relational configurations, and form abstract ideas about what was viewed. Therefore, Meg and Dan viewed concrete objects (the contents of the exhibit), but drew abstract conclusions from them. They gathered the information and manipulated it to make meaningful interpretations about how the components of the exhibit related to each other and how they related to situations outside the exhibit, including the personal lives of the subjects and the conditions of society as a whole.

Therefore, during this literacy event the subjects formed global concepts, recalled specific details, made judgments, drew conclusions, made comparisons, and formed opinions by

interacting with the multiliteracied text. They were not passive receptacles of information, but active participants in the phenomenon. They completed these tasks within a 15 minute period and with no help from an instructor. An environment that resembles acoustical space, therefore, can facilitate learning in many ways that could be important to the education of our children.

Implications for Instruction

Freire (2000) wrote about how the specialized skill of literacy can cause fragmentation of societies and oppression of social groups as dominant cultures attempt to control who acquires the skill and how they use it. According to Freire, dominant cultures control information in order to maintain their positions of authority over others. McLuhan (1994) wrote about the “global village,” and about how the advent of electronic communication changed our reliance on literacy and our conception that authority is held by the dominant culture. The students we find in our schools today, such as the subjects of this study, have grown up in the global village and are, therefore, more in command of deciding what they learn and how they learn it.

The concept of traditional education that continues to exercise control over how our children are schooled is very different from the concept that the children, themselves, have about learning. The world of electronic communication and information gathering now more closely mimics how people learn from acoustical space. It involves the simultaneous use of a number of symbol systems and allows learners to utilize various methods of making meaning. Museum exhibits also mimic acoustical space, and to include learning from museums in the curriculum is a way for teachers to instruct children in a way that is similar to how they have been learning from birth.

The results of the data analyses indicate that these subjects did not report what they recalled from their experience by rote memorization. They displayed learning in ways which

required complex interaction with the content. This is a phenomenon that teachers spend numerous hours trying to re-create within the sterile walls of their classrooms. Therefore, the integration of well-planned museum visits into a traditional curriculum can help teachers to teach in a way that the contemporary student has already learned to learn.

More specifically, the comprehension skills of drawing conclusions, summarizing, determining cause and effect, comparing and contrasting, etc. are skills that apply across the disciplines and that are valued more highly than memorization and repetition. The three types of statements given by the subjects are representative of desirable learning outcomes in almost every content area taught in our schools today. If viewing museum exhibits does, indeed, reinforce content that has already been taught, then viewing museum exhibits can be helpful in furthering the development of these skills. In addition, if viewing museum exhibits can teach new information, as is shown in the behavior of the subjects of this study, then viewing museum exhibits may be helpful in the active development of these kinds of skills.

For instance, if educators agree that Multiple Intelligences Theory (Gardner, 1993, 1999) informs our understanding of learning behavior, and that Dual Coding (Paivio, 1990) effectively describes the process of remembering, visually oriented learners would greatly benefit from viewing museum exhibits. In fact, it may be shown that viewing museum exhibits are an effective way to teach visual learners about drawing conclusions, summarizing, determining cause and effect, comparing and contrasting and other desirable learning behaviors. In other words, museum exhibits could be an interaction of theory and practice.

Discussion of the Socio-cultural Context

It is important to note in the discussion of museum learning as a literacy event that, although learners in a museum exhibit exercise free choice, and although learning in a museum

does not totally rely on the specialized skill of literacy, the fragmentation of society that is described by Freire (2000) cannot be mended by having students learn in museums instead of traditional classrooms. Freire's social fragmentation was a result of dominant cultures imposing their ideologies upon the whole of society and using literacy to maintain control over less powerful groups. Learning in museums does not address this issue, because the museum, itself, is an institution of authority and viewers in museums are being exposed to ideas that come from within this institution.

Therefore, viewers may, indeed, engage in Free Choice Learning (Falk & Dierking, 2002), but their choice is made within the parameters set by the creators of the museum. In the case of The National D-Day Museum, the presentation of information in The Home Front is sympathetic toward the American point of view. It is not the purpose of this portion of the discussion, however, to put a value judgment on that bias. This discussion is limited to what the subjects reported and to the ways in which the ideologies of the subjects (whatever they may be) were manifested in their language.

It is interesting to note that, in their responses, both subjects indicated a clear distinction between the government, the people, the country, and the museum. In the minds of these two subjects, the government had authority over the people in all cases and the subjects did not question the presence of this hierarchy. This characteristic of their ideologies allowed them to see the government in a benevolent light even when the information in the exhibit suggested otherwise. Thus, the museum exhibit encouraged complex thinking in terms of analyzing and combining information, but did not elicit critical thinking from these subjects. Dan and Meg did show the capacity to put themselves in the place of the people of this time, to shift their

perspectives from Patient to Experiencer, but they did not make critical judgments about the agency of the government over the people.

For instance, Dan talked about the government getting “into the minds” of the people, but insisted that the people were doing everything “for their country and not because the government was telling them to do it.” Meg conceded that the government was “very controlling of these people,” but she did not believe that the exhibit was mostly about government control. She believed it was mostly about the people doing these things “to save America.” These statements imply that both subjects seemed to possess an idealistic image that consisted of a third entity of “country” and “America.”

The fact that the subjects held of four separate, but strongly connected, institutions (government, people, country, and museum) is indicative of two important aspects of the museum viewing phenomenon. One is that the subjects held and balanced more than one concept in their minds as they viewed *The Home Front*. The mixture of media and the presence of messages presented as a multiliteracied text in an integrated fashion did not prompt these viewers to construct knowledge about one concept, but about all of them.

The other aspect is that the concepts held by the subjects were concepts they brought with them from their life experiences as members of the socio-culture groups to which they belonged. This behavior supports the contention that the socio-cultural background of learners cannot be omitted from the analysis of any literacy practice or event in which they engage (Gee, 1996; Street, 1984). This is the basis of the New Literacy Studies paradigm.

Also, the presentation of information in *The Home Front* was integrated. There were no specific divisions that showed separations in the material culture among government, people, country and museum. Yet, the subjects projected this view onto the text. Furthermore, as they

gathered information from this integrated learning environment, they categorized what they learned and used that information to continue to support their pre-established conceptions of reality.

Both subjects also showed the tendency to shift semantic roles and to include themselves as one of the people portrayed in the Home Front. Dan connected with the people through the artwork of the posters, commenting that their purpose was to remind “you of why you were in this war.” Meg identified with the people when she commented about how they must have thought, “I’ll save pennies.” These comments, and others of similar character, indicate an emotional investment in the making of meaning using these texts. There was no evidence gathered in this study that would serve in developing theories as to why this occurred with these two subjects. It is important to note, however, that the subjects had common ground with a majority of the images shown in *The Home Front*. Photographs were mainly of Caucasians who were also young in age. The subjects of the posters in most all cases were also young Caucasians. There were images and written text about African-American citizens and one photograph, including a caption about Japanese-American citizens.

Implications for Instruction

The evidence showed these two subjects emotionally invested in making meaning from this text by placing themselves in the role of the Experiencer and reporting on what their feelings would have been had they lived during this time. This is a behavior that teachers spend numerous hours trying to create and recreate across the curriculum. Instructional activities that include visits to museums would, therefore, be beneficial in enhancing the traditional curriculum and fostering non-literal thinking skills. However, the evidence did not show examples of how these subjects may have engaged in critical evaluation. This would indicate that museum visits

should be well-planned by teachers who create activities to compensate for behaviors that students do not automatically adopt as they view the exhibits.

Otherwise, museum exhibits such as *The Home Front* can strongly impact the nature of the dialogue between students and teachers about such things as perceptions of authority, leadership, citizenship and other abstract concepts. In fact, the material culture in museum exhibits can provide a concrete base upon which to discuss and develop abstract ideas as well as the capacity to organize and support them. Sharing ideas through dialogue is important to improving cognitive development (Rogoff, 1990; Vygotsky, 1986).

The data in this study indicate that these subjects held and balanced several concepts in their minds simultaneously as they gathered information in a variety of modes. The data indicate the subjects used information to support ideas that were formed before they viewed *The Home Front*. However, the nature of the museum as an institution of learning allows viewers to presuppose that the museum correctly portrays the information it presents. Therefore, teachers should design instructional activities that go beyond the museum experience. In other words, a museum visit should be followed by investigations into other points of view about what was portrayed in the museum exhibit text. Teachers can use museum exhibits to broaden the capacity of learners to understand and balance several viewpoints and to critically evaluate the validity of their sources of information.

Future Research

This project involved two subjects of similar backgrounds who viewed a museum exhibit for a minimum of 15 minutes and then responded to a set of seven interview questions as they recalled their experience. The most important way for future research to add to the body of knowledge about how museum exhibits function as a literacy event for viewers is to replicate the

conditions of this study with members of different socio-cultural groups. This is particularly significant considering the kind of influence the Socio-cultural Context had on the way the subjects interpreted the content of the exhibit. The population of replicated studies should specifically include African-Americans and Japanese-Americans, since both groups are included in *The Home Front*. The change in population will help determine the need to adjust the Contextual Model of Learning to more closely represent the experience for those who may not hold the views of the museum in as high regard as the two subjects of this project apparently did. Also, future studies similar to this one, but with varying populations, would help to specify the possible fluidity of the learning models. They may determine whether the models need adjustment with every individual or if they become stable at some point.

Another way in which the population should be changed for future studies is to use subjects who do not enjoy studying history. Due to the way the subjects of this study were recruited, which was by referral from acquaintances of the investigator, it is possible that these subjects volunteered because they were already interested in history and World War II. Both subjects indicated they enjoyed watching the history programs on television and Dan said he liked the programs about recent history more than ancient history. Meg said her grandfather was a World War II veteran. It is possible that the subjects' predisposition toward learning about history was the root of the kinds of statements they made in their interviews. Viewers who are more interested in sports, the arts, or the sciences may produce very different responses.

A third way a replicated study could vary the population is to use subjects who have no prior connection to the information in *The Home Front*, such as subjects from foreign countries. A fourth is to use subjects who have even more reason to find connections with the text, such as World War II veterans or people who lived through the war. A replication of the conditions of

this study with different populations would add to the body of research in museum learning as well as literacy, and help us to better understand the intricacies of making meaning from museum exhibits.

Furthermore, this project altered the conditions under which most visitors learn from museums. The requirement to view the exhibit for a minimum of 15 minutes so as to mimic the silent reading process was different from the kind of viewing about which the Contextual Model of Learning was developed. Also, the subjects were asked not to speak to other visitors about what they viewed. Experimentation with the time spent viewing the exhibit and allowing subjects to visit in groups and share their experience as it unfolds may produce different results. This avenue of investigation should be pursued.

Similarly, the project should be replicated using other museum exhibits as the context. The subjects of this study responded in complex ways to the multiliteracied text of a history museum. Replicated studies in other museums could show differences in the way subjects recall information that is not narrative in nature or not quite as rich in media forms. Natural history museums, science museums, and art museums would be good contexts in which to conduct studies using the same procedures as the study conducted for this dissertation.

With regards to how future studies could impact classroom instruction, the investigator suggests that, in light of what emerged from the data of this study, research should be pursued that use museums exhibits to introduce new content material to learners as opposed to reinforcing information already taught. The subjects of this study had never viewed The Home Front before, yet exhibited the acquisition of new understandings. Research about using museums to introduce new information would be helpful in addressing special needs of predominantly visual learners and, perhaps, auditory learners as well.

In addition, using museum exhibits to teach writing skills would add interesting data to the body of literacy research. The subjects of this exhibit made General Statements that were supported by Explicit Statements much in the same way that a written paragraph consists of a topic sentence supported by detailed sentences. Viewing museum exhibits may be a way of visually adding this concept to the repertoire of visual learners who are developing as writers.

Finally, the results of this project add to the bodies of literature of three areas of study: material culture, museology, and literacy. Research that furthers the examination of the connections between these areas must be completed, not only because educators are now becoming involved with museum design, but because museums are becoming more and more involved in the area of education (Roberts, 1997). The inherent authority carried by the fact that museums are institutions requires the continued investigation of how visitors learn in museums and of how the knowledge they gain from museum visiting impacts future literacy events and practices. Such investigations will ultimately increase our knowledge of literacy as a function of the text, the meaning-maker, and culture as it deepens our understanding of New Literacy Studies.

Conclusion

In work originally published in 1915, Dewey (2001) suggested that every school should house a museum. Museums located in schools, however, are not a common occurrence. In the 1980's, educators first began to be employed in the museum industry in order to consult on the design and construction of museum exhibits (Roberts, 1997). However, educators employed by our school systems continue to see the museum as a place for students to visit one time during the school year (Hein, 1998).

This project, however, alters what would be the common experience for students who visit museums. First, the subjects were required to view just one exhibit and not the numerous exhibits that constitute an entire museum. Second, the subjects were required to view that exhibit for a minimum period of time. Third, the subjects visited the museum alone and were asked to not speak to other visitors as they viewed the exhibit. The changes in the kind of viewing undertaken by the subjects were imposed so that the viewing experience would more closely resemble the reading experience.

As a result, a portrait has emerged of how a museum exhibit functions as a literacy event for viewers. The results of this study show that these two viewers used this museum exhibit to construct meaning from multiple media simultaneously as they balanced multiple concepts formed through their information gathering. This museum exhibit served as an opportunity for viewers to summarize, specify, and form relationships of many kinds, including a relationship between themselves and the people portrayed in *The Home Front*.

Finally, the museum exhibit, *The Home Front*, also functioned as a way for these subjects to validate previously held perceptions about society. The subjects responded in ways that revealed their trust in authority and their willingness to presume benevolence on the part of authority. *The Home Front* provided a way for the subjects to empathize with people from a time gone by and make connections between the past and the present.

As a literacy event, this museum exhibit was a source for these viewers to use complex cognitive processing that engaged them in ways that cannot be duplicated in the traditional school environment. This study, therefore, offers a vision of the potential value of museums in the education of people of all ages, which implies a hope that one day museums will become a recurring component of curricula across the nation. The results of this study, therefore,

contribute unique information to the body of literature that already exists in material culture, museology, and New Literacy Studies.

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APPENDIX A

The Interview Questions

These are the final 7 interview questions that were developed from the pilot studies.

Which of the following did you see at the exhibit?

Reading Material	Yes	No
Still Photographs	Yes	No
Replications and Artifacts	Yes	No
Posters	Yes	No
Video	Yes	No
Audio Booth	Yes	No
Bar Graphs	Yes	No
Tables of Facts and Info	Yes	No

1. Which of the following did you do at the exhibit?

Reading Material	Yes	No
Still Photographs	Yes	No
Replications and Artifacts	Yes	No
Posters	Yes	No
Video	Yes	No
Audio Booth	Yes	No
Bar Graphs	Yes	No
Tables of Facts and Info	Yes	No

2. What do you think was the overall purpose of the exhibit?

3. What part of the exhibit stands out in your mind?

4. What did the exhibit make you think about?

5. Which of the following words describe what the exhibit was mostly about?

- Change
- Togetherness
- Separation
- Government Control

7. The title of this exhibit was “The Home Front.” If you could create a different name for this exhibit, what would it be?

Transcripts

Included here are the transcripts from the interviews of Dan and Meg, including a summary of the follow-up interview with Dan.

Transcript of Subject #2 – Dan

I: OK, Let me make sure the recorder is working right si that we can get everything.

D: OK

I: I think this will do fine right here and let's start.

D: OK

I: OK. I have a number of questions to ask you and at the end you will be able to add whatever you want about the exhibit or this process, or whatever.

D: That's fine.

I: first of all, which of the following did you see at the exhibit? I mean, that you saw was included in the exhibit. Did you see reading material?

D: Yes.

I: Did you see still photographs?

D: Yes.

I: Did you see posters?

D: Yes.

I: Did you see a video?

D: Yes.

I: Did you see bar graphs?

D: Yes.

I: And did you see tables of facts and information?

D: Yes.

I: OK. Now tell me, which of the following did you do when you viewed the exhibit? Did you read some of the material?

D: Yes.

I: Did you see – did you view the replications and the artifacts?

D: Yes.

I: How about the posters? Did you look at them?

D: Yes.

I: Did you view the video?

D: Yes.

I: Did you watch the whole video? I mean, it was pretty long.

D: Yeah – I watched part of it.

I: OK. Did you go into the audio booth?

D: That's where you sent inside and you listen?

I: Yes.

D: Where we heard people talking?

I: Yes, that's it.

D: Yes.

I: Did you hear them all . . . all of them?

D: No, I did two.

I: OK. What about the bar graphs? Did you read those bar graphs? At least some of them?

D: Yes.

I: And the tables of facts and information?

D: Yes, most of them.

I: Good. OK. This question is just a little different from the first ones. So . . . OK. Here it is.

What do you think was the overall purpose of the exhibit?

D: Um . . . Just so that the people that come through here would know that the war just wasn't about the soldiers, but uh . . . It was a lot to do with the people on this side . . . their contributions. (REL) The . . . uh . . . rationing . . . the sacrifices they made. (EXP) You know, the gasoline for their vehicles. (EXP) You know, just to realize that it was an overall effort. (GEN)

I: OK. Good. Now. What part of the exhibit stands out in your mind?

(pause)

I: I mean when you think of the entire exhibit, what part stands out to you the most?

D: Uh, I would have to say all . . . It was like all of it, you know? (GEN) To me it was the information – like the readings and the posters.(EXP) And, you know, how they tried to grasp peoples' minds was important. (EXP) And that they couldn't forget. (GEN) It's kind of like, well, September 11th, you know? (REL) They help us . . . they make us try to remember it, too. (REL) And I saw a poster. (EXP) It had "Remember December 7th." (EXP) It had a flag. (EXP) And like, they want them to remember the purpose of the war. (REL) And they do that today, too. (REL)

I: I think I have a picture of that. It was a flag.

(shows picture)

D: Yeah, right. That's it. (EXP)

I: Wow! (laughs) I found it right away. That's the one you remember most?

D: Yeah. You know, they had things like that to tell you why you were in this war . . . posters. (REL) And I think back in those days, it was more distinguished. (REL) They had it so that people would not lose sight of what it was all really about. (REL) They used those posters to get into the minds of people. (REL) And they had one with cans rolling into a gun. (EXP)

I: Let me find that one for you.

D: Yes, that's it. (EXP) It's like you see what you're doing and then what it turns into. (REL)

I: So the posters stood out to you more than the still photographs, for instance?

D: Um, yeah. But though – the readings were good to me. (EXP) But the posters showed you, like, what your contributions could really do. (REL)

I: OK. Great. Now, what did the exhibit make you think about?

(pause)

I: For instance, if you think beyond just what you saw at the exhibit? What do you think about?

D: Um. It pretty much made me think about society today. (REL) People came together then. And now (REL) . . . It made me really think about stuff like segregation. (REL) It's just like, even when it mattered the most, segregation came between people. (REL) That's something that I've never really thought about, coming back then. (EXP) It's a shame that that kind of thing could do that, especially when our country . . . like, that's something in our country that would come between us. (REL) And even when something like that mattered to the whole world, segregation was actually more important. (REL)

I: More important?

D: Yeah, like . . . even though the war was important to the whole world, in our country, segregation was still more important. (REL) So they did all those things to segregate people by their race even during the war. (REL)

I: That's a very interesting comment. I've never thought about it that way. OK. Now, I have a list of words here and I want you to comment on the one or ones that describe what you thought the exhibit was mostly about. You can choose one or comment on more than one, if you like.

They are “change,” “togetherness,” “separation,” and “government control.” Would you like to comment on the exhibit and how it was about “change?”

D: Well, I think , like I just said, the country changed because of the war effort. (REL) You know, things like rationing and saving things and changing peoples’ mindsets on how – what they see their country like. (EXP)

I: Togetherness?

D: Well like, I think that the differences between the people (REL) . . . people coming together for the country to make the war effort. (REL) And also, a sense like the museum itself can bring people together to learn. (REL) Learning about our country and about how it used to be and how it can get people thinking about what our country should be. (REL) And I don’t, I mean, I think our country is individual now. (REL) September 11th taught us a lesson that could be compared to the older generation of this war. (REL) Our war is different, but people seem to have lost focus quicker than they did in World War II. (REL)

I: Lost focus? How?

D: I think a lot of it has to do with the type of war we’re fighting and what our reason is for being there. (EXP) And they start complaining and saying it’s the president’s fault we are there. (GEN) And you see, instead of coming together like a country should, we are just parties. Republicans and Democrats. (REL) It’s not the same. (REL)

I: And what about the word “separation?”

D: Um . . . you know, like I said, segregation comes into mind when you think of separation. (EXP) But there was also separation between the people overseas and the people over here. (REL) You know, people did what they could over here for the people over there, but here, you can understand what they actually were going through, because, like . . . I could never imagine

my family going to war, missing the people you love, and the fact that so many Americans left . . . and the lonely nights they spent over there. (REL) So I mean, I think it was separation. (REL)

Not only separation from people here and over there but separation between the races. (REL)

I: Yes. And what about the last word, “government control?”

D: Well, they had to do a lot of passing of the laws to make sure that things went like they wanted them to go. (REL) You know, mostly it came with money and things. (EXP) I don’t think that . . . like. . . the government had control of everything that was going on. (REL) I don’t think, as far as helping this country out, I don’t think that people were doing what they did . . . I mean, I think they were doing it for their country and not because the government was telling them to do it. (REL)

I: Great. So we have one last question, which is: The title of this exhibit was “The Home Front.”

If you could create a different name for this exhibit, what would it be?

D: A tough one. I guess what I can say, “Unity.” (GEN) I mean I don’t want to use the same words about togetherness and separation, and I don’t want to stick to those words. (EXP) But, I think the exhibit focused more on the unity of the people during the war on this side to help our country. (GEN) I just felt a sense of, like things were together. So, “Unity.” (GEN)

I: Great. That was great. I’m finished now. Is there anything you want to add about what we’ve done here today?

D: No. That’s it.

I: Wonderful. Thank you so much for volunteering to do this with me.

D: Thank you. It was cool. I enjoyed it a lot. GEN

Summary of Follow-Up Interview with Dan

In a follow-up interview with Dan, the investigator asked for clarification of the way Dan used the pronoun “they” in some of the statements that had been analyzed and used for examples. This conversation happened over the telephone and was not recorded. The investigator does not have the proper equipment to record over the phone. Therefore, a summary is provided of that conversation.

First the investigator reminded Dan of what he had seen at The Home Front and explained that more information was needed to resolve issues in the way his statements had been interpreted. Dan was reminded of the posters and, when the investigator was satisfied that Dan clearly remembered the content of the exhibit and the question that he had been asked, the investigator read aloud the question again and then read Dan’s responses.

Each statement was read separately and at the end of the reading Dan was asked, “Who are “they” in this statement?” Sometimes the question came in the form of “Who are you referring to here?” Dan then gave the referent for each of the use’s of “they” that were in question.

At first Dan did not use the term “the government” in his answers. His first reference to the government was in the form of “the people who made the posters.” He was then asked, “Do you mean the artists?” He replied, “Not really.” He was then asked, “Who do you mean?” His answer was, “These are military recruiting posters. The government made them.”

At that point, the investigator felt comfortable using the term “the government” in the conversation and then went through each of the other statements until each of the pronouns “they” had a specified referent. At that time, the investigator read back Dan’s answers using both the pronouns and their referents and asked Dan if the resulting transcript accurately

portrayed what Dan had wanted to say about The Home Front. Dan said, “Yes.” The investigator then thanked Dan for his participation and ended the phone call.

Transcript Subject #3 - MEG

I: Let's test out to the recorder before we begin. I think this will do it. Is that OK, right there?

M: Yes, fine.

I: OK. Let's begin. I have a number of questions to ask you, and at the end you will be able to add anything you think about the exhibit or about this process, or anything.

M: OK. That's good.

I: We'll begin now. First of all, which of the following did you see at the exhibit? Did you see things to read?

M: Yes.

I: Did you see still photographs?

M: Yes.

I: Did you see replications and artifacts?

M: Yes. (laughs)

I: I know these are kind of silly questions, but I need to make sure that you saw everything, and all.

M: (laughs) Yeah, that's OK.

I: Did you see posters?

M: Yes.

I: Did you see a video?

M: Yes.

I: Did you see an audio booth?

A: Yes.

I: Did you see bar graphs?

M: Yes.

I: And did you see tables of facts and information?

M: Yes.

I: OK. Now I have to find out what you actually did as you viewed the exhibit. Did you read some of the material?

M: Yes

I: Did you look at the still photographs?

M: Yes.

I: Did you view the replications and the artifacts?

M: Yes.

I: Did you look at the posters?

M: Yes.

I: Did you look at the video?

M: There was two things. The video playing and then the one you listened to.

I: Right. The film that was playing. Did you watch that?

M: Yes. I didn't watch the whole video, but I did all of the people in the audio booth. I listened to all four of those. I like to see the stories about the people.

I: Great. And what about the bar graphs? Did you read those bar graphs - at least some of them?

M: Yes.

I: And did you read the tables of facts and information?

M: Yes.

I: OK, then, good. What do you think was the overall purpose of the exhibit?

M: Um, I think that the overall purpose was to teach us about the unity of America. (GEN) To show you how the divisions of blacks, women and, like, every race, and children and the older people - they had to come together to work for the war effort. (REL) And no individual section could have gotten it done. (REL) You know, like, if everyone didn't come together to do their part. (REL) And in the little . . . and in the little booth, or whatever, they were saying how this lady . . . this lady was good with her hands. (EXP) And it was a black woman. (EXP) And she was a person that made these indicators, and machinery and things. (EXP) And that would have never happened if the war wouldn't have happened, you know? (REL) Like you know, like women. (GEN) They were cooking and rationing the food and rationing the meals and saving the grease and stuff like that. (EXP) I thought that was really cool. You know, like that. (EXP) Things that you would never think about that they had to do. (REL) Things like one third of gunpowder came from this little bit of grease they saved from cooking, and things like that. (EXP) So it was just the unity of America. (GEN)

I: Yes. That was a good answer. What part of the exhibit, though, stands out most in your mind?

M: To me, to me, the big thing was what they did and what they saved. (EXP) And how they saved all the pennies. (EXP) And they changed them from copper to . . . I don't know what it was, but that really stood out because they needed to think of every little thing that they had to save. (EXP) Like, it really mattered. (EXP) Today, we live in a society where nothing is appreciated. (REL) And they thought, "I'll save the pennies." (REL) And saying that could save lives across the seas. (REL) And even in the war effort today, none of the kids think like that at all, "We should be saving pennies and helping out in the war." (REL) But back then, it was a totally different mindset. (REL) They knew they needed to save it, and they knew they needed to do all these things to help America. (REL) And today, everyone is so divided, and we

have the mindset that we think about me and no one cares about any one else and it's really horrible. (REL) So I guess that's what the main thing that stood out to me was that. (REL) The bar graphs showed how much people saved and how much people gave of themselves to help America. (EXP) Today, they don't really care. (REL)

I: Well, maybe you answered this question already, but the next question is: "What did the exhibit make you think about it?" I think we may have answered that, but do you have anything to add.

M: I found it was incredible that people all came together and played a big part or even a little part. (REL) It showed that. (EXP) They were starting to get over that to have a different color of your skin did not tell you that you were still a human being. (REL) Everyone was still a person and everyone had to help out, especially during the war. (REL) If one person would not have cared and would have been a traitor, the war would not have been won. (REL) You would not have won the war. (REL) And so many more lives would have been killed by Hitler. (REL)

I: That's an interesting answer, because it's actually true that one person, if it was the right person, could really have done something to make the effort unravel.

M: Right. Now, I know it really can actually take just one person. (REL)

I: That was an interesting answer. OK. So the next question is: "Which of the following most describes what the exhibit was about. If you want to talk about each word, it's perfectly fine. But if you want to choose one to comment on, that's OK. The words are: "change," "togetherness," "separation," and "government control." Do you want to talk about the word: "change?"

M: The way I see it is that it made America what it is today. (REL) But my generation is not like the generation of our elders, and I mean it's unfortunate. (REL) Hopefully we can carry on their

values. (GEN) I mean, if the war wouldn't have happened, it's scary to think of what America would be like to today. (REL) People thinking individually and things like that. (GEN) What we would be like if the war hadn't happened. (REL) America would be horrible! (REL) Like, we wouldn't have any values! (REL) I hope we can carry on, what we see from that generation and what they learned from their fathers. (GEN) I just hope I can be able to tell my children about World War II and help them come together as America and keep helping to be a great country. (REL) And our freedom. (GEN) That's what our forefathers fought for, and we don't want to give that up to another country. (REL)

I: Are you saying that it is important to study history?

M: Oh, yes! Without history, you lose a sense of who we are. (REL)

I: And what about places like this museum?

M: Yes, museums. You can learn about our history, and like who America is. (REL)

I: Now what about the word “togetherness?”

M: Well, I definitely thought it was about all America together. (GEN) But the exhibit itself was very well put together. (EXP) I mean, many people had to go and take and say, “OK. This is going to be this and where is this going to be taught and different types of sayings. (REL) And then you walk in and you see the barracks.” (REL) And it's like, Wow! (REL) My grandpa slept in one like that often, and it's kind of, like, everything! (REL) It's just like the war. (REL) Every little thing had to be put together. (REL) And that's what I thought about. (GEN) Great minds have to think about these things. (GEN) And it brings people together on a common ground of history. (REL) History is always going to be common because you can't change it, and I just think that's great. (GEN)

I: What about the word, “separation?”

M: Well, you know, we had a homeland and what was happening and it shows you how the people here were thinking about the people who were overseas and their loved ones they had overseas. (REL) Their boyfriends and husbands and how they knew not all of these guys were coming home. (EXP) They had to pray every night that their husbands and loved ones to come home, or their child. (EXP) It is really hard to think about the way they were separated, and it's like you know when you get so nervous and you would have someone overseas at the war and that caused people to get closer to God. (REL) You know, I mean, being closer to God is another one. (GEN) Like, it makes people so much better. (REL) I remember seeing about the old woman waiting. (EXP)

I: Yes. Wait a minute. I have a picture of that to show you.

M: Here. Here it is. Yes you can see the stars in the window and the colors of the stars meant different things. (EXP) That's incredible! (EXP) They had something like that in *Saving Private Ryan*. (REL) The beginning of that was bad. (EXP) But they had a mother with the stars in the window like that and they came and told her sons died. (REL)

I: I didn't see that movie. I don't usually like movies like that.

M: Uh huh.

I: OK. What about the last word "government control?"

M: I don't think the main part of it was about government control. (GEN) I'm sure there's another exhibit here in the museum that would tell you more about government and how the government had control. (EXP) Like, I mean, it boils down to - yes, the government was very controlling with these people . . . what they got, what rations, and things they got and decisions that would have been made over the war. (REL) And they were getting the message out to let them know that we need. (REL) People need to save the rations to help the people out in unifying America

to do that. (REL) But I don't think the main part of the exhibit was about government control.

(GEN)

I: OK. Last question. The title of this exhibit was “The Home Front.” If you could create a different name for this exhibit, what would it be?

M: I have to think it would be like America, women, children and blacks and whites. (GEN) I mean with dashes in between, and have it right there. (GEN) And it would be like . . . well I don't know. It would probably be, like, cool. (GEN)

I: Well we are finished. Is there anything else, you would like to say? Anything you would like to ask?

M: I would just like to say, like I said before, like, with praying and all. (GEN) I know my great-aunt. She just died. And we were, like, going to her house. (EXP) And it's the house that my grandpa grew up in and things like that. (EXP) And everywhere! It was statues of the saints and candles and, like, thousands! (EXP) I mean, I know that is like a hyperbole and whatever, but that is just what it was probably like everyday. (REL) They had to be praying and hoping to God that all of their brothers would be coming home. (EXP) And it was just like, well you know, they had such a strong faith, like. (GEN) How something like that can make you that holy. (REL) And the war can make someone be like that probably every day. (REL) That kind of thing could make you so holy and make you that close to God. (REL)

I: Thank you, M. It was a real pleasure and I am so glad you volunteered to help me.

M: Thank you, too. I really liked it. It was really good.

APPENDIX B

Photographs of The Home Front

Figure B1

Barracks as seen upon entering the exhibit



Figure B2

Right wall seen upon entering the exhibit



Figure B3

Wall opposite the barracks



Figure B4

Far wall with video screen



Figure B5

Section of poster wall



Figure B6

Long view of The Home Front



Figure B7

Inside of Audio Booth



Figure B8

Steel pennies described by Meg



Figure B9

Poster used as example by Dan – Remember December 7th



Figure B10

Poster mentioned by Dan – Save Your Cans



Figure B11

Photograph of Aircraft Nose Cones



Acrylic nose cones for B-29 bombers at the Douglas Aircraft plant in Long Beach, California.

Figure B12

Photograph of Stacks of Ammunition



APPENDIX C

Sample of Written Text From The Home Front

Sample of Long Written Text Panel

Citizen Soldiers

“. . . I was sent to Camp Fann in Texas outside the city of Tyler, where I received my infantry basic training. The early weeks of training on the dusty Texas plains in 100-degree temperatures were hell, but realizing that my life may be on the line one day, I adapted, accepted my duties, toughened up, and became a good infantryman.” (PFC. Harry Parley, 116th Infantry Regiment, US 29th Division.

The primary task facing America in 1941 was raising and training a credible military force. Concerned over the threat of war had spurred President Roosevelt and Congress to approve the nation’s first peacetime military draft in September 1940. By December 1941 the United States military had grown to nearly 2.2 million soldiers, sailors, airmen, and Marines.

Now that number had to increase dramatically. The Army, which numbered 1,657,157 at the time of Pearl Harbor expanded to over 8 million by 1945. Naval and Coast Guard personnel jumped from 364, 124 to almost 7.5 million. And the Marine Corps grew from a force of just 28, 364 to 485, 333. At its wartime peaks, the United States military included 16 million men and women.

America’s Armed Forces consisted largely of “citizen soldiers” – men and women drawn from civilian life. They came from every state in the nation and from all economic and social strata. Many were volunteers, but the majority – roughly 10 million – entered the military through the draft. Most draftees were assigned to the Army. The other services attracted enough volunteers at first, but eventually their ranks also included draftees.

Sample of Short Written Text

During World War II America's Armed Forces were stained by the Jim Crow segregation laws that pervaded American society. The world's greatest democracy fought the world's greatest racist with a segregated military. African-Americans who entered military service were placed in segregated units. Most served in supply and support jobs, because the military maintained they could not perform well in combat. Protests by black newspapers and civil rights groups – and the demands of war – led eventually to the use of black troops in combat. African-Americans distinguished themselves in battle in Europe and the Pacific. Yet, with few exceptions, segregation remained a rule in America's military. Even the blood in Red Cross blood banks were segregated by race.

Sample of Photograph with Caption

Figure C1



Some of the famed “Tuskegee Airmen: at an Italian air base. Nearly 1000 African-American pilots trained at Alabama’s Tuskegee Institute. Almost 500 served in Europe, flying more than 15,000 sorties. Their distinguished record includes never losing a bomber they escorted.

APPENDIX D

Letters of Permission to Conduct Research in the National D-Day Museum



**THE NATIONAL
D-DAY MUSEUM
NEW ORLEANS**

**The National D-Day Museum
Foundation, Inc.
Board of Trustees 2003-2004**

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Founder (1936-2002)

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Bruce H. Whitman
Peter B. Wilson

The National D-Day Museum
945 Magazine Street
New Orleans, LA 70130-3813
Phone 504.527.6012
Fax 504.527.6088
www.ddaymuseum.org

October 13, 2003

To Whom It May Concern:

Barbara Chauvin is using the exhibits of The National D-Day Museum in studies for her dissertation. Please contact me with any questions.

Sincerely,

Mary Antée Ballinger
Program Coordinator
504-527-6012, Ext. 229
504-527-6088 FAX

America's World War II Museum

Protection of Confidentiality

All data gathered during the research project will be held in confidence. No subject will be identified by name. The name National D-Day Museum will be used extensively through the written research project and will be named in any publication coming from the project. Photographs taken of the museum exhibit will become a part of the final written research project and will be submitted in written as well as electronic format to the University of New Orleans. Should any publication result from this project, all photographs will be cleared by the National D-Day Museum at the proper time. No photographs from the National D-Day Museum will be used for profit of any kind.

Signatures

I have been fully informed of the above-described procedure with its possible benefits and risks and, on behalf of the National D-Day Museum, I have given permission of participation in this study.

Name: Hany Antoi Ballinger Date: 10-13-2003

Title: Program Coordinator

Signature: 

Name of Researcher: Barbara Chauvin Date: 10/8/03

Signature of Researcher: 

Letters of Permission from the University for the Protection of Human Subjects in Research

University of New Orleans

UNIVERSITY OF NEW ORLEANS
COMMITTEE ON THE USE OF HUMAN SUBJECTS

Form Number: 9DEC03 (please refer to this number in all future correspondence concerning this protocol)

Principal Investigator: Barbara Chauvin Title: Graduate student

Department: Curriculum & Instruction College: Education & Human Development

Name of Faculty Supervisor: John Barnitz (if PI is a student)

Project Title: Exploring a museum exhibit as a language context for literacy

Date Reviewed: December 8, 2003

Dates of Proposed Project Period: From 12/03 to 12/04

*approval is for one year from approval date only and may be renewed yearly.

Note: Consent forms and related materials are to be kept by the PI for a period of three years following the completion of the study.

Full Committee Approval

Expedited Approval

Continuation

Rejected

The protocol will be approved following receipt of satisfactory response(s) to the following question(s) within 15 days:

Committee Signatures:



Scott C. Bauer, Ph.D. (Chair)

Gary Granata, Ph.D.

Betty Lo, M.D.

Hae-Seong Park, Ph.D.

Jayaraman Rao, M.D. (NBDL protocols only)

Laura Scaramella, Ph.D.

Richard B. Speaker, Ph.D.

Gary Talarchek, Ph.D.

*University Committee for the Protection
of Human Subjects in Research
University of New Orleans*

Campus Correspondence

To: Barbara Chauvin, graduate student
John Barnitz, faculty supervisor

From: Scott C. Bauer, Ph.D.
Associate Professor and Chair
University Committee for the Protection of Human Subjects in Research

Date: 11/21/2003

RE: Human subjects protocol ref.# 9DEC03
Exploring a museum exhibit as a language context for literacy

Status: Expedited approval of this project can be expected upon successful completion of the following:

Please indicate clearly in the protocol how subject numbers will be assigned, who will have access to and store the list of subject numbers and associated names, and how this list will be stored (or destroyed).

Also, please print the consent for on UNO letterhead, and include both your name, your faculty supervisor's name, and ONLY UNO phone contact numbers on this form.

**University Committee for the Protection
of Human Subjects in Research
University of New Orleans**

Campus Correspondence

Barbara Chauvin
Dr. John Barnitz, faculty advisor

2/25/2005

RE: Exploring and museum exhibit as a language context for learning

IRB#: 09DEC03

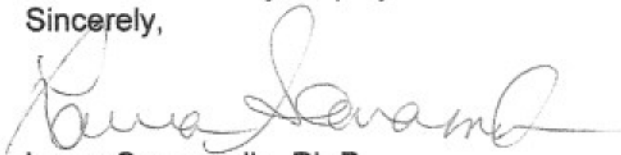
I reviewed your requested changes to your protocol and have approved your request.

Please remember that approval is only valid for one year from the approval date. Any changes to the procedures or protocols must be reviewed and approved by the IRB prior to implementation.

If an adverse, unforeseen event occurs (e.g., physical, social, or emotional harm), you are required to inform the IRB as soon as possible after the event.

Best of luck with your project!

Sincerely,



Laura Scaramella, Ph.D.

Chair, University Committee for the Protection of Human Subjects in Research

Vita

B.A. Chauvin was born in Arabi, Louisiana and enrolled at the University of New Orleans in 1970. Chauvin's Bachelor's Degree in secondary education and certification to teach Spanish and Social Studies were received in 1973. Chauvin returned to UNO to earn a Master's Degree in Curriculum and Instruction with a specialty in Language and Literacy in 1984. After a total of 27 years as an educator, Chauvin earned a PhD in Curriculum and Instruction in 2005.