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Archaeology Goes to School: A Cooperative Approach to Teaching History Through Archaeology

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ARCHAEOLOGY GOES TO SCHOOL:

A COOPERATIVE APPROACH TO TEACHING HISTORY THROUGH ARCHAEOLOGY

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A Thesis

Presented to

The Faculty of the Department of Anthropology

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree of

Master of Arts

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by

Paul Schuster

1996

APPROVAL SHEET

This thesis is submitted in partial fulfillment of
the requirements for the degree of

Master of Arts

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ABSTRACT

Both archaeology and history education are currently benefiting from critical self-scrutiny, and an examination of each shows that there are potential benefits to both fields in forging closer cooperative links.

"Archaeology Goes to School" attempts to present the issues involved in education of the public about our past, to discover potential benefits of programs linking archaeologists, teachers, and students, to examine recent programs and projects in this emerging area of cooperation, and finally to set forth guidelines for producing affordable, useful, and mutually beneficial programs for use in the classroom.

This paper also details a case study of this type of program production, presenting the history and development of an outreach program to be implemented by Historic Saint Mary's City, Maryland. Based on the widely publicized "Project Lead Coffins: The Search for America's Founders," the educational module seeks to incorporate equally the objectives and concerns of the archaeologists and of the teachers in the surrounding community and state of Maryland to produce an activity which fulfills the scientists' desire to inform the public about the archaeological project while providing teachers with ready-made lesson plans. Through the use of this program, seventh grade students will now have the opportunity to fulfill nationally- and state-mandated requirements in math, science, social studies, and language arts while gaining an understanding of local history and the process of archaeology; materials loaned from Historic St. Mary's City will help to make the lessons interesting and memorable and will encourage curiosity about archaeology in general.

It is hoped that other archaeologists will find this model useful in producing their own educational outreach programs more quickly, effectively, and economically.

ARCHAEOLOGY GOES TO SCHOOL:

A COOPERATIVE APPROACH TO TEACHING HISTORY

THROUGH ARCHAEOLOGY

INTRODUCTION

I never cared much for history class. My recollections of history lessons before college include pages of notes, lots of lectures, and lots of chewing on pencils while trying to recall whether John Smith was the fellow who went to Plymouth or to Roanoke. That I could today identify him as the founder of Jamestown and summarize the colony's place in history and the colonists' way of life as illustrated by modern research would probably astonish a number of teachers in whose classes I was a perpetual "B" student.

The difference in my abilities and in my enthusiasm for the study of the past I credit to my study of archaeology and anthropology as a college student. Artifacts and other historical traces with which I could become personally involved stirred curiosity and eagerness that had slumbered through years of books and speeches. Five years as a camp director and camp counselor provided an opportunity for me to experiment with adding "educational" history to the "entertainment" environment of an outdoor program for adolescents. The interest shown by my campers in historic sites like Harper's Ferry, West Virginia and the C&O Canal sold me on the idea of bringing a more personalized version of history to the traditionally mundane educational environment of school.

Upon hearing of my interest in writing an educational program, the staff at Historic Saint Mary's City, Maryland (hereafter referred to as HSMC), a

state museum in the Maryland Department of Housing and Community Development, responded that they were seeking to develop an interpretation of "Project Lead Coffins" as a supplement or addition to their educational outreach activities already in place. Carried out between 1990 and 1994, "Project Lead Coffins: The Search for Maryland's Founders," received international attention as archaeologists discovered and excavated three lead coffins which proved to contain the remains of members of Maryland's foremost founding family, the Calverts (see Adams 1994; Papier 1992; HSMC 1993a; NMNH 1993).

Why create educational programs? What has been done to educate non-archaeologists about the past prior to this project? What difficulties need to be overcome in order to attract the interest and enthusiasm of teachers and students, the proposed target audience? These three questions required a body of research summarized in Chapters I, II, and III of the following pages.

In order to discover the purpose behind the creation of public education and interpretation efforts, there are a number of factors that demand attention. In Chapter I, we must briefly explore the interrelationships of the disciplines of history, archaeology, and anthropology as they relate to one another and to what is taught in our schools. By understanding the concerns of these disciplines, we gain understanding of the messages they seek to present. Archaeological theory as developed in the last three decades reflects more specifically the types of information that today's archaeologists are concerned with developing and presenting; the science of new archaeology and the inference and the criticisms of post-processualists shed light on the essential messages the discipline has to share through public education.

Critical theory has had an impact not just on archaeology, but on

schools and museums as well. This impact has led to a recognition of the need for changes in the way both types of institutions present the past to their audiences. In fact, major changes are continuing not only in methods of teaching and presenting, but also in the subject matter of history- "the past" as taught today is considerably different from that taught by our parents' teachers. A broader understanding of a more complete past is the common task of both of museums and public schools in the modern United States.

Educational aims change due to changes in theory and new discoveries, but there exist numerous other reasons for both archaeologists and museum curators to seek public audiences. Archaeologists desire to correct the common misunderstandings of archaeology held by much of the general public; few people outside the discipline itself understand what goes on in archaeology today. The development of Cultural Resource Management programs which perform most modern North American archaeology also merits a glance. As the major employment branch in the field and a primary source of new archaeological data, we must be conscious of the impact this growing industry may potentially have on our students.

Having justified the decision to create educational programs involving archaeological data and material culture, we must ask how these programs are to be constructed. Chapter II presents a summary of ways in which tourism, the National Park Service, museums, living history sites, archaeological tours and site visits, field trips, guest speakers, and school curriculum changes have tried to present the past. Each of these methods has positive effects in the promotion of history, yet the drawbacks and shortcomings of these presentations demonstrate the need for new types of activities to fill in the gaps in audience, background, and breadth of understanding. A brief evaluation of the most popular classroom activities

and lessons involving archaeology is presented against the background of the theoretical concerns raised in Chapter I. In addition, it is clear that an alternative method of instruction must be made available to those who are unable to have access to all or some of the aforementioned resources.

Chapter III details the specifics of the cooperative program format as created for Saint Mary's City archaeologists and interpreters. A discussion of the project's development illuminates both the exciting potential for such lessons and the difficulties encountered in this approach. The final project proposal attempts to address the educational objectives of both the archaeologists and of the teachers within a framework that is practical and cost-effective. An explanation and walk-through of the final product as proposed to HSMC for implementation serves as an example of how a cooperative approach would work in the classroom; although compromises were necessary on both sides of the partnership, the end product satisfies all the essential goals of both parties. A brief checklist of methods and summary of techniques useful to others designing such a program concludes the presentation.

CHAPTER I

WHY SHOULD ARCHAEOLOGISTS CREATE EDUCATIONAL
PROGRAMS?

BACKGROUND: ANTHROPOLOGY,
ARCHAEOLOGY, AND HISTORY

As the celebrated historical archaeologist James Deetz notes in "Invitation to Archaeology," "archaeology is the special concern of a certain type of anthropologist" (Deetz 1992:215). Defining archaeology as a subdiscipline of anthropology (see Binford 1972), "the study of man in the broadest sense, including his physical, cultural and psychological aspects, and their interrelationships" (Deetz 1992:215), he hints at the necessity of a broad knowledge base to inform the process of recovering meaning from the material remains of the past. Archaeologists aren't easily tied down to working within well-defined subject areas. Deetz has previously written that "We anthropologists fancy ourselves scientists... My heart lies with the humanities, however; indeed, I have been accused of being a closet folklorist... and I will probably own up to it in a year or so," and goes on to note that he also has museum experience in his background (Deetz 1981:24). In listing subjects that comprise the Humanities, he includes such items as art, music, architecture, drama, pageantry, and ritual. This spectrum of subjects encompasses many traditional areas of specialized study, and Deetz's

assertion that "archaeology concerns itself with man in the past; it has been called the anthropology of extinct peoples" (Deetz 1992:215) adds a new dimension, that of time, to what may appear an already daunting jumble of subjects. Science, history, and the humanities all inform archaeology, a fact which becomes instrumental in helping to answer the question of why educational programs should be created around archaeological themes. Rather than a separate subject, archaeology may be more appropriately seen as a conglomeration of the subjects currently being taught in schools.

In recent decades, the lines demarcating (anthropological) archaeology and history have become blurred. Although most members of both fields today recognize the need for a sharing of ideas and information between anthropology and history, the precise distinction between the two academic disciplines is difficult to articulate. Indeed, Plakans (Kertzer et al. 1986:126) declares that "...the question of whether the two disciplines are in some sense complimentary has already been answered. They undoubtedly are." Kertzer, alternatively, believes that "there is much progress to be made in the interweaving of anthropology and history" (ibid:120), attributing to anthropologists the goal of understanding culture, a consideration he feels is left out of many historians' writings. Rutman (ibid:121) states that the domain of history is "anything and everything about the human animal in the past," a definition that comes remarkably close to Deetz's "study of man in his broadest sense" especially with his (Deetz's) addition of archaeology as the "study of man in the past." Rutman sees a lack of explicit theories in history as the distinguishing factor between the disciplines. He urges historians to let "the fundamentals [of anthropology] affect their doing of history" (ibid:123). Silverman (ibid:123) separates the subjects by declaring that "anthropology contributes the topics and concepts (above all, culture...)

while history contributes the evidence and methods for extracting it."

It is obvious, therefore, that the study of historical events and their causation is linked with the study of humans and culture in significant ways. Whether viewed as a "handmaiden to history" (Fish, Russell, and Harrington in Schuyler 1978a:2) or as "a sister discipline to" history (Davis 1981:274), historical archaeology may actually be the field of study which is recognizable as a nearly complete hybrid of the two.

This particular attempt to link education to archaeology might be more correctly defined by noting that it is an attempt to combine *United States* history with *Historical* Archaeology, or even with the more specific category *Historic Sites* Archaeology. Although the basic ideas of the educational program to be developed may be translatable to prehistoric archaeology, the use of the term "archaeology" in this paper should be presumed to indicate historical archaeology unless specifically noted otherwise. Historical archaeology is "the study of remains from any historic period," (Schuyler 1978b:27) in which "historic period" denotes "a period in which the cultures in question have a documentary record and that writing is having a full impact both on the cultures being studied and on the scholarship of the investigation" (ibid:27). Borrowing from definitions by Harrington and Fontana, Schuyler makes an even finer distinction, defining "Historic Sites Archaeology" as "the material manifestation of the expansion of European culture into the non-European world starting in the fifteenth century and ending with industrialization or the present..." (ibid:28). Therefore, the program created herein represents not archaeology in general, but the archaeology of a specific culture and period in the United States.

Archaeology, a "consumer of ideas from other disciplines" (Leone and Potter 1988:2) communicates about a variety of subject matter which is of

interest in the classroom. Within Maryland's public schools, as in many school systems throughout the country, pre-high school education (grades 1-8) focuses on a subject known as "social studies," a conglomeration of more specific subjects intended to inform students about the world that is distant from their personal experience both in space and/or in time. "Social studies is an effort to assimilate essential concepts from the social sciences, including history, geography, economics, political science, anthropology, psychology, and sociology" (Maryland Department of Education 1992:35); this definition calls to mind once again those of Deetz and Binford about the anthropological basis of archaeology. The archaeologist possesses unique qualifications and impressive credentials as an educator in social studies, practicing on a daily basis the skills Maryland has outlined for its students in the combined "study of history and the social sciences," namely those of "critical thinking, problem solving, and a commitment to human dignity" (Maryland Department of Education 1992:36).

RECENT DEVELOPMENTS IN ARCHAEOLOGICAL PRACTICE AND THEORY

Archaeology as anthropology continually generates new questions and new theories regarding past human behavior. These theoretical frameworks are then applied to the material culture remains unearthed by archaeologists in order to provide insight into aspects of life in the past. The archaeologist is essentially a detective, attempting to observe the evidence left behind and reconstruct a more complete picture of the circumstances which caused the formation of a site; circumstances which tell about the lives of a site's

creators. "For in the seemingly little and insignificant things that accumulate to create a lifetime, the essence of our existence is captured" (Deetz 1977:161). Just as detectives may discover that their initial interpretation of the evidence proved to be incorrect, so archaeologists have, over time, approached their evidence in new ways, thus revising "the past" as we know it today. By examining recent approaches archaeologists have taken to the interpretation of their artifactual "clues, " we are able to understand the types of information archaeology may have to share with students.

The New Archaeology

The paradigm which revolutionized archaeology in the late 1960's, known as the new archaeology, provides the foundations for all modern North American archaeology. In his seminal work, "Archaeology as Anthropology," Binford (1972) provides one of the earliest comprehensive glimpses of the processual and scientific goals of this theoretical framework. Reacting against the "culture historical" paradigm which reigned throughout much of the 1950's, new archaeology asserted that "the archaeological record should be viewed as the product of human interaction, both among people and between people and the environment," (Dunnell 1970:38). In addition, there was a "demand for theory and the discovering of laws [governing human behavior patterns]" as well as a "concern for culture change and its causes" (Jennings 1986:59).

The new archaeology espoused an evolutionary approach to the study of culture, and its positivistic philosophical position led to the application of ideas from the so-called "hard sciences" in order to scientifically reconstruct the process of this evolution. This resulted in increased attention to sampling techniques, the use of a scientific approach to archaeological

investigation, an attempted standardization of methods, and problem-oriented research strategies, all of which became the building blocks of the Cultural Resource Management archaeology still practiced today. Inquiry into the role of the environment in shaping culture expanded the realm of archaeological inquiry, as did the use of analogy between living peoples and archaeological remains (Binford 1967; Ascher 1961), and the application of techniques from outside disciplines. In addition, useful tools were created which are still consulted as means of producing informative local interpretations from more general data. Miller's Ceramic Price Index (1980) and the artifact patterns of South (1977) are examples of ways in which this period sought to unify and standardize archaeological interpretation. In summarizing the accomplishments of the new archaeology, Watson (1991:275) writes that it "has focused attention on the fact that archaeology is grounded in common sense and the principles of such basic sciences as geology and biology... [it] has made all archaeologists recognize the need for explicit statements of how interpretations are derived from the data."

According to New Archaeologists, the past, or some of its elements, is knowable if the proper methods and avenues of inquiry are applied to the archaeological data. The application of technology and scientific analysis to archaeological data today stems directly from the new archaeology, although the idea that science alone will illuminate the past has faded.

Cultural Resource Management

Abbreviated CRM, Cultural Resource Management developed during the new archaeology regime of the 1960's and 1970's. The field continues to expand; most archaeology in North America today is done under its auspices.

The passage by the federal government of the Historic Sites

Preservation Act of 1966 required that historic-preservation specialists be consulted before any construction projects involving federal funds were allowed to proceed. The establishment of the Advisory Council on Historic Preservation and the National Register of Historic Places helped stem what Wallace describes as "historicide" (Wallace 1986:165), the destruction of sites containing historically significant structures or remains. Further legislation, notably the National Environmental Policy Act of 1969, Executive Order 11593, the Archaeological and Historical Conservation Act of 1979, and the Shipwreck Act of 1988 has also played a role in protecting these sites which are now referred to under the blanket term "Cultural Resources." The field of CRM developed in order to satisfy the requirements of these pieces of legislation; private or academically-affiliated corporations employ archaeologists to survey, report on, and excavate or protect sites in advance of construction projects. These third-party contractors are paid by the government or by developers to assess and mitigate damage to sites threatened by modern encroachment.

In 1991, it was estimated that federal spending on CRM archaeology totaled nearly one hundred million dollars as compared to a five million dollar expenditure (through the National Science Foundation and National Endowment of the Humanities grant programs) on academic or "pure" archaeology (Murphy 1991:28). CRM supported 6000 professional archaeologists, and government itself employed nearly four hundred more in various agencies such as the National Park Service (ibid:28). Every state now has a historic preservation office; most also employ archaeologists of their own.

Many academic archaeologists are critical of CRM. Developing as part of the new archaeology, the practice and requirements for CRM work are

legislated and strictly enforced; "cookie-cutter" reports following a basic
model are common, making it difficult for archaeologists to apply newer
theories that rely less on quantifiable types of data. CRM work is frequently
done under time pressures dictated by construction crews or developers, so its
emphasis is generally on recording as much as possible in a short time rather
than on squeezing every drop of potential information from a site.
Allegations occasionally surface of corruption and shoddy work in the CRM
field, as do complaints that the locally published reports are inaccessible and
of little use to archaeologists outside a given region, but it would appear that
CRM is here to stay, regardless of academic critics like Jennings who decry it
as having "generally harmed our discipline" (Jennings 1986:60). Attempts to
improve the quality and usefulness of CRM archaeology are underway, and
Little notes that "innovative and important research" may be done "under
these conditions" (Little 1994:6). Until we run out of sites to rescue from the
bulldozers, CRM firms will be major actors in archaeology.

In *Archaeology for Money*, a guide to entering the CRM field,
Meighan notes that "Directly or indirectly the public pays the bills... you are
being paid to do Public Archaeology, which implies that the public is going to
gain some benefit from what you do in your research activities..." (Meighan
1986:55). The support of archaeology with tax dollars demands that the
significance of the site be made obvious to those who are financing the work.
Better communication of the benefits of archaeology to the public helps
secure support for future archaeology as well as helps to alleviate the
previously mentioned concerns that CRM reports are of little practical use.
Many CRM projects even have a mandate for providing educational or
explanatory programs to the public. Davis (1992) notes, however, that this
presents difficulties to archaeologists who may have to explain the

significance of a visually uninteresting site; she further recognizes the difficulties archaeologists frequently have in explaining archaeology without the use of jargon unintelligible to the uninitiated. Educational programs that enable professional teachers to do the communication may ease the translation difficulty, and they will certainly provide students with the vocabulary and understanding to facilitate future interaction with the discipline of archaeology.

In-school programs might solve other problems related to CRM as well. It is not always possible to do more than invite the public to a site for a brief presentation within the allotted time of a contract, and the often small budgets of contracts point to the need for economical ways to share archaeological information with the community. Some CRM sites, as well as many academically excavated sites, are not suited for public visitation due to the difficulty of gaining access to the area; these sites must find ways other than visitation to satisfy their public-relations requirements. By developing new types of easily produced and inexpensive programs for use in public schools, we may help link archaeological dig sites with a previously distant audience.

Post-Processual Theory

When the discovery of universal laws governing human culture failed to occur after many years of applying the scientific method under the new archaeology, many archaeologists began to turn to a new conception of archaeology. Not a science, they declared, archaeology would be understood in the context of human thought, where the interpretation was not an absolute right or wrong explanation for an artifact or site, but rather was informed by both past and present biases which must be exposed to be

understood. Under the general heading of post-processualism, there are numerous subgroups who apply this basic idea in varying ways; one of these, critical archaeology, will be further explored in the next chapter. It is important to note that many professionals still subscribe to the basic tenets of the new archaeology, and that post-processualism and other branches represent what Earle and Preucel, in their 1987 article "Post-Processual Archaeology and the Radical Critique," call "radical archaeology."

Ian Hodder, often characterized as the leader of the post-processual movement, emphasizes what he calls "part-whole" relations as a means of understanding the archaeological record "not by testing universal, general knowledge against data using universal, independent instruments of measurement but by interpreting general understanding of foreknowledge in relation to our understanding of particular contexts" (Hodder 1991:8). He declares that it is necessary to emphasize "multivocality, metaphor, and fragmentation" (ibid:9).

Hodder distances himself from the idea of seeking culture universals and looks instead for the details of individual and sub-group experience in the past. In so doing, he enters into the archaeology versus history debate discussed previously, stating that post-processual archaeology is renewing the effort to "capture the traditional links between archaeology and history." He agrees with the denial by "Trigger of the need for a split between history and archaeology," advocating "an interest in, and a questioning of, history... archaeology provides additional data for the study of historical processes" (Hodder 1987:vii). The complexities and details of post-processualism are not relevant to the present study; however, the idea that contextual meaning is important in the presentation as well as in the doing of archaeology may be seen as central to our effort to educate. "Less educated, lower income groups

tend to be more interested in their local past, in archaeology as history, and in the immediacy of the experience of the past through archaeological artifacts" (Hodder 1986:173). This does not indicate that more educated people are less interested in the local past; Hodder merely means that people in general are more interested in those parts of the past about which they have personal knowledge or to which they can relate more personally. Education about the national past is generally the domain of our schools; the less schooling one has, the less likely one may be to have an extensive knowledge base of information of that national past. The realization that personalization of the historical experience attracts the interest of learners is a concept that we can apply directly to the creation of lessons and the selection of their subject matter in order to achieve our goal of informing non-archaeologists.

Critical Archaeology

The recent branch of archaeological theory most relevant to the creation of better educational programs is critical archaeology. Considered by many to be a specialized branch of post-processualism, critical theory, on which critical archaeology is based, is rooted in the work of Habermas and Lukacs (Leone 1970:427) and is associated most often with the work of scholars such as Leone, Wylie, Potter, and Gero.

In "Symbolic, Structural, and Critical Archaeology," Leone states that "Archaeology may be more than a neutral or objective science" (Leone 1970:427). This expresses the essence of the critical perspective, namely that to consider archaeological data, one must draw on a broad variety of subjects, sources, and perspectives. Critical archaeologists believe that the past is never objectively knowable due to the fact that we are unable to see the world we excavate through the eyes of those who inhabited it. More simply put, the

attitudes, intentions, and motivations (what sociologists often refer to as "worldview") of the depositors of the archaeological record do not remain in the ground in an easily understandable form for us to find. We must, therefore, attempt to identify and abandon our own prejudices while seeking to understand factors that motivated the inhabitants of the past (Leone et al. 1987). Informed by the theory of Marxism, which states that society is composed of classes and class interests, critical archaeologists attempt to seek not a single past, but rather the pasts of such groups as African or Asian-Americans, women, and/or workers along with the past of those already recorded in the history books, generally the wealthy, white, and influential. A concern for the past of ideology is also central to this paradigm (Leone 1978). These ideas were not originated as part of critical theory, but were borrowed from the paradigm of social history.

The term "Marxism" as used in archaeological writing is notoriously variable in its meanings. While some scholars adhere rigidly to Marx's ideas in seeking systems of exchange and a dialectic element to the societies about which they write, others are more liberal with the term. As used in this work, Marxism refers primarily to the consideration of society as a composition of class structures and nothing more.

Critical of the present as well as the past, Leone and company want to reverse what they see as a trend in which historical archaeology has become "one of the least reflective branches of [North] American archaeology" (Potter 1994:15). In order to do so, they declare that those informed by archaeology, not simply the archaeologists themselves, must be taught to question the methods used by archaeologists and the validity of archaeological findings. An example of an experiment in bringing this "reflection" to the attention of site visitors may be found in Chapter II.

CRITICAL REFLECTION AND HISTORY EDUCATION:

RECENT DEVELOPMENTS IN OUR SCHOOLS

Remarkable changes in the way history is viewed and taught in schools are underway at present; these changes show the influence of critical theory outside of archaeology and demonstrate the similarities in thinking that make archaeology and history/social studies such excellent candidates for partnership. In order to make effective changes in our history programs, we must understand the problems inherent in the traditional system as well as the solutions being proposed.

A Subject in Trouble

In the fall of 1995, the alarming results of a national survey testing students on their understanding of history were broadcast to the world (Associated Press 1995). Many students in the United States scored below even a basic level of historical understanding about their own country as defined by the survey. Why is this? The key to understanding poor student responses may be found in an analysis of how history is taught in many U.S. schools. In *Lies My Teacher Told Me: Everything Your American History Textbook Got Wrong*, James Loewen makes a detailed study of the difficulties the subject encounters in the school environment.

Students, Loewen asserts, "consider history 'the most irrelevant' of twenty-one subjects commonly taught in high school" (Loewen 1995:1). History, he claims, should be the most fascinating of all subjects, as it includes true tales of drama about people with whom we have a relationship in time and space. After examining several authors' comments about the teaching of history in the classroom, it becomes apparent that there are four problems

commonly identified as the root causes of this student apathy towards history: a lack of understanding of the subject material among teachers, the continued emphasis of a "national myth" in the teaching of history, poor textbooks, and the exclusion of vitally interesting aspects of the past in the curriculum.

Teachers

A 1990 survey of 257 teachers across the United States indicated that very few had any formal training in historically related disciplines. Only 40 per cent majored in a college discipline which included "some history;" 13 per cent had never taken a college level history course at all (Crabtree and O'Shea 1991). Ucko agrees, describing a "huge gap" between the knowledge level of teachers instructing in colleges and those in pre-college programs (Ucko 1990:xvii). Few teachers keep current in new developments in the field, and "a group of high school teachers at a recent conference... gasped aloud to learn that people before Columbus knew the world to be round... Of course, teachers cannot teach that which they do not know" (Loewen 1995:280).

Loewen further notes that teachers dislike controversy in their classrooms, preferring to be the omniscient disseminators of information. Statistics cited show that most (92 percent) teachers do not attempt to bring controversial issues up for discussion, 89 percent deter students from asking questions about controversial subjects, and 79 percent believe controversial questions were not appropriate for discussion (Loewen 1995). Little wonder, then, that students find history boring. If there is nothing to question or think about, the subject truly becomes "endless years of repeating names, dates, and events" (Delgado-Ceron and Mz-Recaman 1994:148). Teachers

must become better grounded in history as taught today; they will do so only by breaking out of the traditional mindset they developed as students themselves. Loewen calls for them to act less as narrators and more as "informed reference librarians" (Loewen 1995: 310).

National Myth as the Backbone of History

The history with which most modern adults were presented in U.S. public schools involved moralistic accounts of pilgrims and Indians, the heroism of our Founding Fathers, and other such tales which were designed to instill nationalistic pride. As many Native Americans would probably inform us (see Blancke and Slow Turtle 1994), this history is not palatable or even true in the eyes of some upon whom the "greatness" of European colonists resulted in destruction which receives little attention. This "national myth" is central to textbooks (Loewen 1995) and is perpetuated as a common understanding of history throughout the country. Humorist Dave Barry, a sociologist by training, wryly noted that on a trip to Disney World, there were displays showing white settlers battling Indians, then a band of "good Indians" which he suspected were "installed after the evil Indians, when the Disneyland executives decided they should present a more balanced picture. We never saw any evil white settlers" (Barry 1985:250).

Kehoe confirms the "primacy of the national myth in the US school" (Kehoe 1990:201). She is able to trace the perpetuation of this myth in the form of history books as far back as 1789, and calls for the rejection of traditional history. The purpose of the myth, she says, is to produce ideal citizens as defined by those in power, thus reinforcing the right of the ruling class to continue ruling.

Loewen decries what he sees as a "degenerative" (Loewen 1995:9)

process of hero-making in North American history. The creation of myth, he believes, makes historical figures so much larger than life that they become fairy tale characters instead of persons students can relate to. These were people with human faults and failings; often the "greatest" textbook characters had personal quirks or negative characteristics we ignore as we polish their images to the point of deification.

George (1986) agrees with this, yet he offers a cautionary note. In *The Perils of Public History: an Imaginary Excursion into the Real World,* he creates a tale in which Jeremy Belknap, founder of the Massachusetts Historical Society (our nation's first) appears to a despondent graduate student of the twentieth century and encourages him to seek a career as a museum director. The student undergoes all the necessary formal training and lands a job directing a small town museum. He immediately applies his training to create exhibits which are politically correct, multivocal, and locally (instead of nationally) significant. In response to this makeover of history, the townspeople curse him for unmaking their heroes, eventually taking a shot at him with a musket in the museum. George's point: the prevalence of the "national myth" is such that it has a tremendous weight of tradition behind it; that weight will require fundamental changes in the way we approach history education before the public will accept a greatly revised presentation of the past.

Myth, while not necessarily objective history, has an important place in our lives. Our national myth creates a common background among students that results in a common general approach to the understanding of history in North American culture. To unmake the myth entirely may not be the answer; we do however, need to strive to teach that it exists. Just as one can appreciate a folktale without believing it to be fact, one can

understand that historical tales may be embellished or told from a certain point of view.

The "Excluded Past"

"There are vast areas of the past which are totally ignored in school curricula" (MacKenzie and Stone 1990:2). Advocates of the term "excluded past," MacKenzie and Stone are leaders in the movement to reform teaching of history by placing it under the auspices of critical theory. Applying the Marxist perspective Leone has detailed as essential to the paradigm, they define their term as it relates to the class structure of societies. "The suppressed or denied past of many indigenous, minority, or oppressed groups," including prehistoric peoples in many cases, composes the subject matter relevant to the "excluded past" (ibid:2).

As reasons for the existence of an excluded past, the writers cite overcrowded school curricula which allow no time for this "new" study, ignorance of teachers about the details of alternative conceptions of the past (as mentioned previously) the perceived lack of relevance this type of learning has in the modern world, and political or ideological reasons similar to the concept of national myth. These political influences, they note, may be more overt in various places, particularly outside the United States (ibid:3). Just as we blindly perpetuate the legends of history which we have created, we deny the existence of events which and persons who are not part of the myth structure.

The exclusion of groups and individuals from the "official history" of a nation distances students who identify closely with these groups from taking a personal interest in the study of the past in school by making it "the story of *someone else's* past" (Wheeler and Becker 1986:viii, emphasis in original).

Throughout the world, excluded pasts are being identified and rewritten; the results support the theory that people will pay more attention to a history which includes them (Holland 1990; Gawe and Meli 1990; Hinz 1990; Blancke and Slow Turtle 1990; Witz and Hamilton 1994). Nasaw (1979) notes that the traditional history which has become the national myth previously discussed may relate to the fact that until recently, schools also had an excluded present; only for two generations (less in some cases) have all classes of children been guaranteed and required to obtain an education. Innovative solutions to the problem of excluded histories abound; the interested teacher has not far to look in order to discover resources which will help him or her present a more complete past. This issue is currently a hot topic among educators from the college level to kindergarten.

Textbooks

Dull, unimaginative, exclusionary, and inaccurate textbooks receive a large helping of blame for the current state of history in schools (Kehoe 1994; Loewen 1995; Wheeler and Becker 1986). Wheeler and Becker find problems with textbooks in general, declaring that they make students "observers of the historical process" who "only watch the historians' minds at work" (ibid:ix). This is undoubtedly true, but deeper problems related to the topics discussed above linger at the heart of the textbook controversy.

The process by which a text is adopted, purchased, and used by a school is a complex one, but is worth looking into to understand why so few books respond to the deficiencies of history teaching mentioned above. Although state guidelines for textbook adoption vary, many require several phases of approval by diverse groups before the textbook is purchased. These groups may include evaluators selected by a state or school system, parents who are

invited to express their views at public hearings, special interest groups or ethnic organizations in the community, and teachers and administrators themselves.

Large textbook companies are businesses looking to turn a profit. Because some states purchase only one textbook for all their schools in a bid for uniformity in education, getting these contracts is a tremendous financial windfall for the company fortunate enough to be selected. The more books they desire to sell, the more people the companies have to please, and the contest becomes not unlike that of Presidential politics; the books are written to win the approval of as many influential voters as possible, and therefore avoid issues which may be overly emotional or controversial to any particular segment of society.

Controversial issues are avoided and all discord is kept to a minimum: history books should know what they are talking about, hence the prevalence of a positivist approach. Professional raters must read numerous of books which average 888 pages in length in a short time, then grade these books on as many as seventy-three different criteria (Loewen 1995). By making the pages visually flashy and sending publisher's representatives to promote these books, the companies (at times) attend less to content than to appearance in order to influence the hurried readers. Furthermore, activist groups of many types read potential texts and lobby for their inclusion or exclusion based on narrowly-defined ideological interests. To further continue the national myth which excludes elements of the past, many texts which have been adopted issue second, third, and even more editions of essentially the same material in order to increase profits from schools that have already made an investment in a particular book. Schools may believe they are using the most up-to-date information in cases where

they may simply be using the most recently printed copies of old material. The historians who often author the original texts are rarely instrumental in producing the later revisions and therefore have little opportunity to make major changes once the original has been published for the first time (Loewen 1995).

Short of reforming the textbook industry and long-established procurement procedures, there seems to be little that can be done to ameliorate the deficiencies of major issue textbooks. Loewen feels that fundamental changes may be in the works, and he makes some suggestions for a new approach to textbook writing, including narrowing the breadth of time studied in each course, inclusion of primary-source material, and elimination of unnecessary masses of factual data which are of little importance. In his research, he analyzed commonly-used books over a ten-year period and found only one acceptable (according to his criteria); in order to get a non-approved book which contained a large amount of black history on the approved list in one school system, he was forced to enter into a lawsuit (*Loewen vs. Turnipseed, et al.*) (Loewen 1995). While change may be coming, the fact that legal action is necessary to bring alternate histories to some locations in this country illustrates the magnitude of obstacles that must be overcome in order to bring better textbooks to our schools.

Addressing the Problems of History in Education

Solutions to all the above problems in history education at the pre-college level exist today. While not currently widespread, these alternatives continue to take hold and flourish. The increasing use of methods to educate teachers, dispel the national myth, promote a multivocal history, and reform or eliminate textbooks will eventually produce a public which comprehends

a broader and more colorful concept of the events which shaped the modern United States. Following are examples of reforms taking place in the categories mentioned above.

Teachers. In some areas, such as in many counties of Maryland, the site of the forthcoming case study, teachers are being allowed to specialize in particular subject areas at lower grade levels than might have been possible two decades ago; it is normal for students to have teachers who are specially trained or assigned to a single subject area by sixth grade. In addition, these teachers draw on broader subject categories, particularly where the humanities are concerned, and new guidelines for student performance encourage the development of multidisciplinary lessons. Teachers are now trained with an eye towards presenting a multivocal past.

In addition to the revisions which have taken place in the classroom, outside sites have been courting teachers who desire supplementary programs to make history more interesting. Old Sturbridge Village living history museum in Massachusetts has developed a teacher-training program which not only permits teachers to be expert guides for class visits to the site but also requires participants to design lesson plans which utilize the first-hand resources of the museum (Sebolt 1981). As a pre-made lesson plan may give a teacher extra time to accomplish other tasks during the school year instead of having to formulate yet another lesson, this approach almost ensures that the experience of the participants will be passed on to their students. A similar program focusing on Historical Archaeology gives Virginia educators the chance to get a feel for the process of excavation and also requires a lesson plan to be created (Strutt 1996).

National Myth. In line with the recommendations by Loewen for the shortening of historical periods taught during a school year, Wheeler and

Becker have created a series of lesson plans about historical events which allow students to consult a variety of references in order to more completely evaluate various specific historical events such as the Boston Massacre. The lessons are organized by Problem, Method, Events, Questions to consider, and Epilogue. Successful completion of the activity allows students to draw conclusions guided by a variety of sources from which they have some freedom in interpretation. These lessons also deal intentionally with skills, such as chart reading, that teachers must promote as part of their general curriculum. Such lessons decrease the dependence on traditional textbooks and their inherent problems as well. Collections of such mini-texts or individual lessons which use primary and secondary sources may even supplant the all-encompassing textbook at some point in the future.

The Excluded Past. Museums (Stone 1994) and historic sites (Planel 1994) are making increased efforts to document the past of excluded groups; a further discussion of this follows in Chapter II. When practicable, field trips to these types of venues as well as to local archaeological digs are likely to introduce students to new historical environments and figures. Because the primary issue to be considered under the heading of "excluded past" is that of multivocality, the latter term will be the heading under which the issue is addressed in the rest of this paper.

In the classroom, teachers must rely on lessons such as Wheeler and Becker's or create their own to supplement history texts. In the movement towards creating relevant lessons that will give students a sense of connection with the past, a trend towards encouraging the use of local history and community resources has emerged. Guides to community history information sources such as Lord (1964) are widely available and include a variety of suggestions for places which may permit field trips, supply

documentary data, or send speakers into the classroom to help contextualize a period in history by discussing its effect on the local area. Metcalf and Downey (1982) provide an even more up-to-date guide which details the ways in which local history can be used within the classroom environment and includes a section on the use of material culture. As archaeology draws greatly on a material culture database, its potential for use to inform this type of educational experience is clearly evident.

Textbooks. While it seems difficult to bring about change in such a giant industry as the textbook producing companies, school systems are providing more leeway for teachers to select outside sources as supplements. Howard County, Maryland, utilizes a high school program called Humanities which combines the usual English and History curricula into a double-length class period which is supplemented by occasional lessons in art, music, and related subjects. Students have traditional texts, but are encouraged to use them as jumping-off points in the writing of papers and projects which draw from several disciplines, thereby forming connections between subjects. More programs of this type, in which the textbook is not the ultimate authority, may be useful until such time as the texts themselves are more suitable to a critical perspective on a multivocal history curriculum.

Schools with the appropriate budget may soon opt for the high-technology solution. The expansion in popularity of multimedia CD-ROM computer systems has created a market for educational software now being produced which allows the user to select from audio, video, multiple texts, and stored images in the process of learning about a historical period or event (Webster 1994; Price and Gebauer 1990).

Misconceptions of Archaeology:

Myths to Dispel Among Non-Archaeologists

Archaeology enjoys a great popularity among members of the public; however, the public often conceives of archaeology in an overly romantic or otherwise incorrect way. We must preserve the attachment that has been formed for the discipline while removing the misconceptions which prevent the public, particularly students, from understanding the true contributions of modern archaeology to our understanding of the past.

The Romance of Old-time Archaeology. The most famous archaeologist in the world would have to be the fictional Indiana Jones, whose exploits are particularly well-known to young students who might think Howard Carter to have been the brother of that President with the big teeth. The fascination with archaeologists who traveled the world as collectors is not a Spielberg creation, but was alive and well as far back as the 1930's. R.V.D. Magoffin was espousing the thrills of archaeological discovery in such works as the 1930 *The Lure and Lore of Archaeology* and the 1929 volume *Magic Spades: The Romance of Archaeology* (with Emily Davis). Charles Lindbergh's adventures and travels in search of ancient ruins were front-page news during the same period. That these types of images have defined the public's image of the "ideal" archeologist may be reflected by that paragon of the modern popular media, the television, which is currently airing a commercial in which a famous basketball star "discovers" a brand of deodorant inside an Egyptian temple while dressed in 1920's style tweeds and wearing a pith helmet.

Acceptance of Fraud and Unorthodox Theory. A public which identifies with archaeologists only in Egypt may not be expected to be discerning about the proof required to support a theory or discovery. Many

types of exotic conclusions presented to the public as being based on archaeological data often go largely unquestioned.

Among the disinformation proffered and occasionally believed to be supported by archaeological evidence are some extremely unusual non-events as well as some possible, although fantastic ones. VonDaniken (1969) explains every unusual inscription or technological marvel from the past as the result of alien visitation. Critical Theorists would have a field day pointing out that the assumption central to his arguments presumes a primitive and rude lifestyle for prehistoric cultures and that this presumption has been proven wrong although it is perpetuated by the national myth. The supposed "fact" that Vikings inhabited Minnesota is among the "Voyages of Imagination" reviewed by Frost (1993). Thor Heyerdahl's (1950) rafting expedition across the Pacific aboard a balsa log raft helped bolster his theory that the South Sea islands were peopled from Peru, but was far from the conclusive proof many readers of Kon-Tiki imagine it to be (despite his somewhat weak disclaimers in the text). Even the publication of a detailed history of archeological fraud (Williams 1991) has failed to turn the public into informed spectators of archaeological research.

Beauvais Lyons attempts to bring the public to question that which is discovered archaeologically by staging fake exhibitions from invented archaeological cultures (Lyons 1994). Despite the fact that she deliberately makes ridiculous claims, such as that ancient inscriptions were translated under the influence of self-hypnosis, and despite her many clues that the exhibits are fanciful, such as storing her data in the "Hokes Archives," people still believe on a regular basis. Indeed, Lyons has come under fire from real archaeologists who claim that the exhibits are too tongue-in-cheek and that the public will accept them as fact unless an explicit notice that the artifacts

and interpretations are false is given them.

Public acceptance of archaeological interpretation as fact is high, yet is based on little or no true knowledge about how this information comes into being. Educating students by preparing schools to appreciate, accept, and utilize the types of illustrative, multidisciplinary lessons archaeologists are uniquely equipped to provide must become a priority if archaeology is to have any influence outside the ivy-covered walls of academia.

SUMMARY

There exists a need for cooperative programs which combine archaeology and classroom education. Recent trends in both the disciplines of archaeology and the teaching of history demonstrate their complementary nature as well as shared theoretical approaches; the combination of these two disciplines can be mutually beneficial, solving problems faced by both parties.

Over the past thirty years, the rise of anthropological archaeology has made a great impact on the sources of information available for understanding the past. When combined with a history informed by anthropology, the boundaries which have traditionally existed between the two disciplines have been blurred. The development of a critically-informed historical archaeology has almost entirely erased the distinction between the subjects of archaeology and history, a fact which must be communicated to students.

The development of the new archaeology made archaeology a truly multidisciplinary field. By borrowing from the sciences and humanities, archaeologists began to seek new keys to understanding the significance of

their data in an attempt to discover laws governing cultural change. The chief contributions of the new archaeology lie in the expansion of topics and methods for the study of the past and the increase in preservation and archaeological study, in the form of CRM, which occurred under this paradigm.

When the positivistic goal of discovering cultural archetypes failed to materialize, post-processualism expanded once again the scope of archaeological and historical inquiry. Concluding that the "true" past as it actually existed is unknowable in its totality from the perspective of the present, post-processualists have adopted various techniques and approaches designed to help give significance and context to the knowledge of the past as we see it today.

Critical archaeology, a branch of post-processualism, has greatly affected the way in which we consider history today. The Marxist perspective of this paradigm allows history to examine the condition of groups previously bypassed as insignificant, and the emphasis of critical theory on questioning the past and our sources of knowledge about historical events demands that we reconsider the "knowledge" we have so long take for granted.

The application of a critical, Marxist perspective to the traditional teaching of precollege history has revealed numerous deficiencies in traditional methods which have been perpetuated into the present decade. These deficiencies, now identified, are beginning to be addressed by new teaching techniques. While the critical approach is by no means the only approach and does not have all the answers, its insistence on reconsidering the ways in which we understand the past leaves the door open for other perspectives to be applied.

The shortcomings of modern history teaching are attributable to

poorly- or indifferently-educated teachers who perpetuate a misconception of history due to the way they were schooled, the continuance of a national myth which makes history a process of ideal-building and hero worship, the exclusion of whole classes of people from the history being taught, and poor textbooks which are viewed as authorities in the continuance of the previously mentioned practices. The trend towards fixing these problems has begun, but must be continued.

Teachers are being better educated in both the ideas and methods of critical history, and lesson plans created by outside sources are bringing new methods of learning to the classroom from the minds of researchers and historians. These outside or supplementary perspectives are helping dispel the national myth. Histories of previously excluded groups are being promoted, particularly on a local level, by a variety of sources, and textbooks are being increasingly supplemented or challenged by the inclusion of such new approaches to understanding.

The multidisciplinary historical archaeologist has a great deal to bring to the classroom in terms of supplying alternatives to learning about the past. What makes such a partnership even more ideal is fact that the archaeologists benefit along with the teachers. Public outreach requirements may be satisfied, and misconceptions commonly held about the nature of archaeological learning may be dispelled when archaeologists participate in classroom learning. The question now at hand is how to implement such partnerships.

CHAPTER II

TOWARD AN ARCHAEOLOGY/ HISTORY PARTNERSHIP:

EVALUATION OF CURRENT STRATEGIES AND PROGRAMS

INTRODUCTION

Many teachers, historians, and archaeologists would agree that the teaching of history in schools today needs improvement. Supplements to traditional educational activities are constantly emerging, but each has its limitations which must be understood in order to effectively use these supplements to balance the presentation of history to students. What issues arise when creating archaeologically-informed programs to instruct the public? This chapter will attempt to answer this question and provide case studies of some of the more prevalent types of programs currently in use. The critical discovery of the shortcomings of these methods is of primary importance in discovering what needs may be filled by new types of programs in the future. The teaching situations to be considered will be addressed in two broad groups; those of remote-site or out-of-classroom experiences as well as those which take place within the classroom or school environment itself. Each will be evaluated in terms of its utility in supplementing traditional teaching methods as described in the previous chapter. The significance of each to archeology, not simply to history teaching, will be

central to the discussion and analysis of each.

Outside of school, we are dealing with "field trips" to a variety of sites which offer a glimpse of history in firsthand form. These include museums, living history sites, archaeology sites, and tourist sites and attractions. Within the classroom there are guest speakers, educational packages prepared by and rented from off-campus sites, and, occasionally, elements of archeology built into the curriculum as requirements to be researched and taught to students by their history or social studies teachers. All of these programs have something to offer; what do they leave out?

Issues in Archaeological Interpretation for Students

The growing field of archaeological interpretation is far too complex to be dealt with in depth in this paper. Two sessions comprising a total of sixteen papers were devoted to the problems of archaeological presentation for the public at the most recent conference of the Society for Historical Archaeology alone; the issues they dealt with specifically were addressed by many others whose papers included some mention of the topic. From this, it is evident that the body of work is growing rapidly. Just as archaeology itself borrows ceaselessly from other disciplines, an "expert" in the field of preparing archaeological programs needs to borrow from the fields of education, communications, and museum science; the task of comprehensively assimilating all of these broad areas is the work of another paper. For those interested in overviews of relevant issues, the following titles are recommended: *Public History* (Leffler and Brent, eds. 1992), *Public History Readings* (Howe and Kemp, eds. 1986), *Heritage Interpretation* (Uzzel, ed. 1989), *The Excluded Past* (Stone and MacKenzie, eds. 1990) , and *The Presented Past* (Stone and Molyneaux, eds., 1994).

Criteria for Evaluation

"Students will start learning history when they see the point of doing so, when it seems interesting and important to them, and when they believe history might relate to their lives and futures" (Loewen 1995:305). "It is certain that nothing of importance can be taught if one has not the ability to first cause amazement" (Sabato, in Delgado-Ceron and Mz-Recaman 1994). Statements like these are *de rigeur* in accounts relating both to historic preservation and to teaching. Hart (1983), in *Human Brain and Human Learning,* supports the idea of making students active inquisitors by using new situations and materials. Our first evaluative criterion, therefore, will be to ask how a method of presentation arouses students' interest.

Because these methods preclude the direct reliance on textbooks, which they complement or replace, the textbook deficiency issue has no relevance to the analysis of alternative learning situations. We shall, however, examine the role teachers play in each context, as well as the effort each makes to address the problems, discussed in Chapter I, of dispelling the national myth by promoting an inclusive picture of the past.

Lastly, each situation will be answerable to Critical Theory in terms of its utility in encouraging students to question their experiences of history. Educators (Hart 1983), interpreters such as Craig, (who refers to this as "provocation") (Craig 1989:207), museum experts (Miles et al. 1988), and archaeologists (Leone et al. 1987; Potter 1994) all agree on the necessity of having the participant critically evaluate what they see. This results in a personal connection to the activity as well as in the establishment of an immediacy of knowledge; the student who questions seeks an answer from his surroundings right away.

While these criteria are not reflective of the total battery of goals any

museum or program may have for its exhibits, this analysis should be illustrative enough for the present project. How well do the popular programs available today meet these goals in bringing archaeology to the public?

FIELD TRIPS:
HISTORY AWAY FROM SCHOOL

"Static" Museums

A tremendous variety of museums are available to the modern visitor, and nearly all are open to school groups. For the purposes of this analysis, "museum" without a modifier will refer only to collections of exhibits which are primarily static, allowing visitors to inform themselves by observation and occasional interaction. "Childrens'" and "hands-on" museums are popular (Educational Facilities Laboratories 1975), although these tend to be oriented primarily towards science instead of history. Museums of natural history and American history are the most likely to include exhibits which deal with archaeological materials. In the main, these venues deal little with the process of archaeology, but emphasize the material culture that is central to the way in which archaeologists derive information.

A notable exception to this format is the Winthrop Rockefeller Archaeology Museum run by Colonial Williamsburg. Museums of this type, though rare, provide a firsthand look at the process of archaeology and the results of that process: Noël Hume (1992) has deliberately designed his exhibition to tell the story of the Indian massacre at Wolstenhome Towne in 1622 as it was learned from the archaeological record. His efforts to do so

have won praise from many critics (Wertime 1992).

In general, museums are characterized by static displays in or near which the visitor moves, gathering information. Visitors are usually responsible for choosing the objects or depictions to observe on their own, so museum organizers use a number of techniques to attract attention. These techniques include the use of multimedia presentation formats (films, audio recordings, and even interactive computer technology), arrangement of galleries, and the choosing of particularly remarkable objects for display (Miles et al. 1988). The mission of the modern museum is threefold: to preserve the materials in its collections for the future, to study those materials in search of greater understanding, and to communicate with its visitors about the results of the studies- to relate the significance of its collections (Weil 1990).

Student Interest. Museums generally cater to a cross-section of the population, that is, they must interpret to a general, rather than a specific, audience. Attempts to draw attention, therefore, sometimes have more to do with the method employed than the object or concept to be learned.

On a visit to the National Museum of American History in Washington D.C., I observed nearly thirty persons waiting in line to try the interactive computer exhibit (there were no other lines in the exhibit, which was primarily traditional objects-behind-glass) which allows visitors to redecorate the White House, although most of those attracted to the computer were children or adults with children.

Many visitors hurried through or ignored the objects displayed in the presentation to get to the computer; others skipped the computer portion due to the line. Interest was definitely aroused, although the interesting computer activity tended to distract people from one part of the exhibit, and

hence, the overall message (see also Stone 1994). Important as well is the fact that many people seemed to assume that the interactive element was for children, while the rest was for adults.

Static museums do attract the interest of the student in many ways. Unfortunately, when no guide is present, this interest may become focused on tasks other than learning about history. In this way, museums are frequently inefficient. Guided tours usually deny students the opportunity to utilize interactive exhibits (because a guide's time is too valuable to allow every interested member of a tour group to try an activity individually) and allow students no choice whatsoever in choosing what to examine; this is a bad situation in that the student is simply receiving another lecture while getting a bit of exercise by walking about. At higher levels of education, museums become more accessible to students through internships and innovative courses (Chernichowski 1982), but the precollege student must generally confine his or her interest to the displays presented. E. M. de Giraldo (1994) discusses the piloting of a project designed to bring museum collections and studies into schools; the expense and difficulty of this novel approach makes it difficult to imagine this type of cooperation becoming commonly available.

Teachers. Many museums now provide training for teachers to enable them to act as docents or guides for their classes, thus allowing the selection of material in accordance with specific educational objectives. Those which do not, however, run into the problems mentioned above when students are turned loose to learn on their own. Although many teachers require students to seek answers to specific questions and write them down in a sort of academic scavenger hunt, this type of strategy towards directing the museum experience tends to diminish the interest of the students in the

inherent qualities of the objects or exhibits (see Hart 1983). Although museums allow learning about types of things not familiar to teachers or mentioned in textbooks, structuring a visit with a specific goal is difficult, especially with the teacher largely out of the picture.

Multivocality. Multivocality is the hottest new issue among historically oriented museums (Bunch 1995; Weil 1992; Applebaum 1993; Ames 1994; Craig 1989). It is now possible to gain perspectives from all manner of historical figures through new exhibit strategies. The problem of national myth is a bit stickier- museums attempt to "invest artifacts with excitement, awe, and reverence" (Craig 1989:63). This reveals the dependence of such institutions on making things larger than life; a dependence which results in the lingering of traditional heroic, nationalistic views of history. Even Noël Hume is accused of the same by Wertime (1992) when he reminds visitors (in a recorded message segment) how glad they should be that Indian massacres did not expel early European settlers from the continent. Schools with access to a museum housing recently updated exhibits on historical themes are, however, almost guaranteed of learning about peoples not included in their textbooks.

Encouraging Critical Thought. While many museums are trying to demonstrate the existence of multiple histories, they succeed in providing little learning through having students question their exhibits. A questioning process allows the students to participate in the learning experience, thereby personalizing it. The development of more presentations like that of the Alexander Keiller Museum in Avebury, England (Stone 1994), which are aimed at illustrating what history does not tell us as well as what it does, will help forward the development of critical thinking among student visitors. Efforts are being made to come up with changes in the non-

interactive nature of static exhibits, but because there are rarely authorities on hand to answer questions immediately, students tend to accept expensive presentations in large traditional museums as fact, distanced as they are from the objects by glass and the interpreting authority of the guide or museum label.

Strengths and Weaknesses Summary. Static museums are revising their exhibits to appeal to a variety of interests and age groups as well as to include multivocality. There is a lot available to learn, although as far as archaeology is concerned, only the end products are on display: visitors rarely are informed as to the process of artifact acquisition. The chief weakness of this method of presentation revolves around the lack of control, and thus of direction, of the learning process. Museums vary; the size and content may make them more or less attractive to teachers, and the availability of such exhibit centers may also affect their usefulness. Students may have access to amazingly preserved artifacts which help contextualize their prior knowledge, yet they are unable to have an interactive learning experience with such objects. Because their ability to ask questions is severely restricted in the absence of a knowledgeable authority to comment on what they are seeing, students frequently fail to learn all that they might from museum exhibits.

Living History and Outdoor Museums

Living history centers and other outdoor museums are critiqued separately from static museums due to the many differences in the experience of student visitors. Indoor museums tend to provide the objects, outdoor ones provide the context (Perrin n.d.). The outdoor museum is generally a collection of buildings and other non-portable artifacts designed to re-create

the environment of past peoples; museums such as this have been produced as long as there are buildings people believe are worthy of preservation- the earliest use of the format dates to the late nineteenth century (ibid n.d.).

In most cases, outdoor museums are combined with some degree of living history, which usually means actor/interpreters who demonstrate the activities and lifestyle of the period on display. This may be done on a large scale, as at Colonial Williamsburg or Old Sturbridge Village, or in a more selective context such as St. Mary's City's Godiah Spray tobacco plantation or the selected craftsperson demonstrations of Mystic Seaport (see Brownell 1985). Living history leaves little to the imagination, yet promotes a much more contextual learning experience.

Reenactments, particularly of Civil War battles (Barth 1996) are a form of living history which is available in many areas of the Eastern United States where outdoor museums are scarce or not related to a particular topic, and these activities should be considered along with permanent outdoor museums, for they are aimed primarily at re-creating historical context and landscapes.

Student Interest. Once placed in the outdoor museum environment, it becomes very difficult for students not to be captivated by curiosity; even if they do not feel particularly inclined to be curious about the past, the activities and unfamiliar surroundings encourage them to explore. If a variety of environments and structures are available for visitation, students will likely visit them. Good interpreters are, however, essential in order to give meaning to the various surroundings.

Teachers. On most field trips, teachers serve primarily as chaperones, just as they do in static museums. If students are "turned loose," the teacher loses control over the individual educational experience each has, yet the

effects are somewhat mitigated as compared to the static museum because students cannot escape the overriding context established by the landscape and environment. Certain programs, just as in static museums, allow teachers to become guides for their students in order to direct their experience at the site (Sebolt 1981).

Multivocality. Unlike static museums, outdoor living history sites may not have the resources to address this issue. The expense involved in including live people in an exhibit setting prohibits the smaller museums from giving alternate histories more than lip service; slaves, laborers, craftspeople, children, etc. will not all be represented in a museum whose budget includes a staff of two. Modern child labor laws also affect the ability of a museum to present a truly authentic population of interpreters. All of the larger outdoor museums with living history will attempt to address this issue, often with controversial results, such as when Colonial Williamsburg presented a slave auction reenactment (Phillip 1994). A particular case study which emphasizes multivocality may be found in Planel's (1994) "Privacy and Community Through Medieval Culture," which details activities surrounding a castle tour which encourage students to understand the differing concept of privacy both among the varying classes of original castle inhabitants and as compared to modern life. An adaptation of this strategy to the presentation of early colonial social life in North America is presented in lesson 4 of Chapter III.

The prevalence of elements of the national myth cannot be denied, however. Sites which are rebuilt or preserved in detail develop over a period of years and may retain influences of the modern period exclusion of selected pasts; certain types of buildings may be preserved or selected for display over others which tell different stories. This problem, however, is relatively

minimal at most sites in this category at the present time.

Encouraging Critical Thought. Opportunities to question what is observed are omnipresent in the form of knowledgeable interpreters at many of these sites and reenactments. Good interpretive programs will challenge students to question the reconstructed environment of the site itself (Handsman and Leone 1989), but even in the absence of this type of philosophical debate, students are apt to discover conflicts and motives, as well as facts, that they will not have been encouraged to consider after a reading selection or a lecture.

Strengths and Weaknesses Summary. Outdoor living history museums, although they vary in the quality of their various attributes, generally engage the interest of student learners well. Teacher involvement is much the same as in static museums, and again, no specialized training is usually necessary for the instructors, a fact which may decrease the likelihood of follow-up activities in which an authority on the experience would be needed. Institutions such as Historic Saint Mary's City are now attempting to provide pre- and post-tour materials to educational groups in order to give the overall experience a broader context, although use of these materials is at the discretion of individual teachers. The presentation of multivocality and the use of historical myth varies depending on the museum or activity, but interpreters are usually dedicated to accuracy and will respond to these concerns whenever possible. Students may not learn to be critical of history as a whole, but the opportunity to critically examine the presentation of the site truly promotes learning. Most importantly, the experience teaches students that the past involves the stories of real people similar in many ways to those around us today.

Archaeological Site Visits

Although they may be combined with outdoor museums (Miller, Wenzel, and Bodeman, personal communication 1995), visits to archaeological sites provide opportunities for students to understand the process of learning about the past instead of receiving a more or less ready-made interpretation. These types of trips, however, are rare in the real world, since ongoing investigations do not have enough material or available workers to entertain schoolchildren for an entire day (see "problems," below). Archaeology days for the public or for the schools (see Zimmerman et al. 1994) are probably the most frequent type of activity that takes place under the general rubric of site visits. (Leone, et al. 1987; Potter 1994)

Student Interest. Much as in the outdoor museum environment, students are drawn into the activity around them. The opportunity to watch discoveries up close captures interest, and programs which permit the handling of artifacts get their full attention. Although some day-long programs do not provide enough interesting elements, others go far out of their way to provide relevant hands-on activities (Zimmerman et al. 1994) .

Teachers. Teachers know little more than their students in the majority of these situations. Few are schooled in archaeology, and ongoing investigations usually have not yet provided teachers with materials describing the site being presented. The fact that teachers know little more than their pupils, coupled with the fact that archaeologists tend to present their own agenda as opposed to one relative to in-school lessons, leads many teachers to become disinterested in extended programs such as Zimmerman's (which required as much as a week's time commitment). In Historic St. Mary's City, to which seventh graders studying Maryland history are required to make an annual one-day pilgrimage, the presentation of archaeology in

progress and of archaeological methods overcomes this obstacle in some ways and interests teachers of history. Teachers of other disciplines called on to be chaperones still seem to view the trip as irrelevant, however (Wenzel and Bodeman, personal communication 1995).

Multivocality. At a site such as historic Annapolis, where numerous projects contributing to a research design geared towards understanding varying class histories are present, multivocality is central to the presentation. The nature of the presentation, however, depends completely on the site or sites being excavated. Slave cabin sites tell about black history, other types of sites reflect those who lived or worked on them in the past. The issue of multivocality will be addressed differently by each researcher, and only a single voice (although not necessarily the same one as that predominates in the national myth) may be expected from a small site while a larger one which has been dug for many years (such as a plantation) may be expected to provide details about the lives of multiple classes of people.

Encouraging Critical Thought. Again, the site presentation will vary according to the researcher and presenter. Annapolis would be at the positive end of the spectrum, with the presentation geared towards making students consider the reasons for creating history through artifact interpretation, while other sites could go any way at all. While the Annapolis program encourages visitors in general to question historical interpretations, it has a major shortcoming in that it fails to address multiple audiences. Because the presenters of Archaeology in Annapolis use the same routine for all visitors, they do not *attract* a new audience; they simply do something nontraditional with the usual curious onlookers. In order to reach young students in particular, it is necessary to relate the presentation to facts with which they are familiar in order to connect them to the information presented. Leone,

Potter and Shackel's contribution is primarily that they call for critical reflection from their audience. Other archaeologists' creative efforts to address various audiences at other sites may take this idea forward and make it even more effective as a component of site presentation.

Strengths and Weaknesses Summary. Very generally speaking, site visits offer students a chance to understand the work of the archaeologist and the process of recovering historical data from the archaeological record. Site visits are rarely tied directly to classroom learning, and the interpretation received by site visitors will be totally contingent on the presenter. While each site will have unique attributes to be related to visitors, the quality of presentations will be affected by the care archaeologists take to address goals such as those described here.

Tourism

Educational tours of archaeological sites, both for recreation and for learning purposes (usually for a combination of the two) are increasingly popular and deserving of mention. A recent issue of *Archaeology* magazine (*Archaeology* 47(6) 1994) listed sixty-five such opportunities among its ninety-six pages. These tours are rarely utilized by public schools due to expense, and will not be evaluated here due to the widely varying nature of their content. Depending on the nature of the expedition, archaeology may be taught by professionals and participated in by the tourists or archaeology may be used as an advertising gimmick to attract people who desire to visit the ruins of what they imagine to be a romantic past.

The National Park Service maintains a LEAP (Listing of Education in Archaeological Programs) clearinghouse of information about archaeology which is available to schools, but more people are probably familiar with the

NPS's interpretive programs at historic sites. Not as elaborate as living history museums and usually without extensively reconstructed environments, these areas are popular places for student, family, and community group tours which discuss the historical significance of protected battlefields and sites (McManamon 1994; O'Riordan et al. 1989).

The Problems of Field Trips

There are drawbacks to off-campus trips in general, particularly among public schools. The first consideration is financial; as schools have their funding cut back, more of the cost of the trip devolves on the students. As all the teachers consulted noted, the expense of transportation, entrance fees (where applicable), and other costs severely limit the number of trips which can be taken. The benefits of the trip must be such that the expense and the possible cancellation of another (usually traditional and established) field trip is justifiable.

Another factor which limits field trip frequency is the fact that students study a number of subjects on a daily basis. For every social studies trip, science, math, and language arts teachers have one less day to achieve the objectives required of them.

A final teacher complaint is that field trips of the sort described above have little direct relationship to the curriculum. With assessment, or testing, of students becoming the measure of a teacher's effectiveness (see Herman et al. 1992), activities which provide general context or simple corollary data do not achieve the goals which the teacher herself or himself finds important-namely, the success of the students as defined by their performance on assessment activities. Archaeologists and museum supervisors would do well to concern themselves with understanding and addressing these types of

goals along with those considered already.

ARCHAEOLOGY LESSONS IN THE SCHOOLS:
COMPLEMENTING TRADITIONAL CLASSROOM EDUCATION

Traveling Trunks

The concept of the traveling trunk method of bringing historical materials to the classroom was first related to me by HSMC personnel. An excellent case study of this type of program may be found in Delgado-Ceron and Mz-Recaman's article concerning the use of this type of package in Colombian schools. Museum artifacts are packaged along with descriptive materials and suggestions for using them in the classroom. Teachers request the packages when needed to supplement portions of their yearly program, and students get hands-on experience in learning from genuine artifacts or museum quality replicas.

Student Interest. Students' interest in the objects is reported as high- the spread and expansion of the "Museum Comes to Your School" project testifies to its popularity in the classroom. The students reportedly love to be able to touch and manipulate real artifacts. An interesting reversal of the process is seen in Gray (1993), an article discussing a program in which the public brings found objects- usually natural, not man-made- to the museum for scientists to identify, thus showing that the interest in artifacts themselves is high enough that people will even adjust themselves to the museum's schedule. Such artifact days have been used with varying degrees of success by archaeologists in order to communicate with the public and to learn about local sites which may not have been previously identified.

Teachers. Each kit includes a teaching pack of objects, posters, and information which the teacher can use to become an authority on the lesson. As noted above, the kits had been made available in ten cities, and used by 200,000 students and 1000 educational groups in 1986 (Delgado-Ceron and Mz-Recaman 1994). By enabling the teachers to be authorities and answer questions about the objects in the kits, the sponsoring institution helps the instructors to feel that they are in control of the lesson as much as they are with their usual presentations.

Multivocality. This issue is not substantively addressed, although the wide variety of potential traveling kit topics would indicate that kits could be assembled with almost any sort of theoretical approach. The contribution of a kit to this subject will be totally contingent on the subject of and creator of the package. See the social studies lesson in Chapter III for an attempt to introduce multivocality into a kit form.

Encouraging Critical Thought. The kits in the case study were designed to inspire student to reconsider their role as historical beings active in understanding and creating the past. As mentioned above, this type of approach could be used to further these ends or not, depending on the mental template of the producer.

Strengths and Weaknesses Summary. The striking advantage of these kits lies in their ability to bring almost any type of outside material or subject into the learning environment of the classroom, where teachers will have control over the lesson and place it in context with what students already know. Additionally, the hands-on nature of the programs arouse the curiosity and enthusiasm of the students. Disadvantages would be noticeable on a kit-by-kit basis; shortcomings would likely have to do with the relevance (or irrelevance) of the subject matter to curriculum objectives.

<u>Guest Speakers</u>

As an occasional guest speaker in Maryland's schools, I have been called on to talk about archaeology in general, specific projects of interest, and about archaeology as a career. These sessions usually last about an hour, with the exceptions of career day talks, which average five to ten minutes. Teachers sometimes schedule talks for a single class, yet they also request presentations for an entire grade *en masse*.

My general program consists of lecture, slides, and a question period, during all of which I attempt to address a few specific goals. With the use of artifact and tool props, I attempt to inform students that modern archaeologists dig to recover information, not treasure, from the past, that we are precise and methodical in our methods, and that historic sites must be preserved. My message has been received clearly by many in these audiences, although a few have creatively reinterpreted parts of the presentation in their thank-you letters.

It is important to note that other types of authorities than human archaeologists may be brought to school for presentation. Films, books, and displays might also be considered "guest speakers," although their content cannot be analyzed here due to the potential degree of variability. NPS LEAP materials are the most accessible examples of these types of materials to teachers.

Student Interest. Students tend to snooze when the speaker lectures, but they watch attentively whenever props are being waved, shaken, passed, or shown. I frequently use restless audience members to demonstrate shaker screens or carry tools and artifacts around for viewing as a means of involving them in the presentation. The guest speaker who uses props frequently is bound to find them illustrated and included along with thank-

you letters from the attendees. Although they remember what they've seen, students sometimes forget the narrative that accompanies them- the backhoe in the background of a CRM site slide showing an archaeologist digging in advance of construction was illustrated for me by a student in a thank-you letter with an archaeologist sitting at the controls using the scoop to find a projectile point. It is not hard to interest the students, but the short duration of these talks makes it hard to be sure everyone learns what's intended. As a means of reaching students who may desire to learn more, I try to donate a copy of an excellent elementary/middle school level reader entitled *Archaeology for Young Explorers* (Samford and Ribblett 1995) to each class or school media center in hopes that it will be consulted.

Teachers. As with museums, teachers are out of the picture. This is unfortunate, because a single talk in which they are spectators only is not likely to generate any follow-up activity (other than writing letters) to reinforce the information presented.

Multivocality. In explaining why archaeology is done, its use as a discovery tool of alternative pasts for people not included in the documentary record is usually discussed. I find that it is not usually possible to cover the issue in-depth unless I am presenting about the archaeology of a slave quarter or other class-related site with which I have done some work.

Encouraging Critical Thought. My presentations are short and largely factual. Although the need to be critical is not emphasized in depth, I never leave without stating at least twice that archaeologists interpret the data like detectives and are sometimes wrong. I usually discuss possible alternative uses or interpretations of artifacts with the students ("what do you think this strange object might have been used for?"), emphasizing that the students' guessed interpretations could be correct, even if they seem unlikely.

Strengths and Weaknesses Summary. Speakers in general will vary. The educational activity usually proves interesting to students although it may be somewhat irrelevant in terms of establishing links to everyday lessons unless the speaker and teacher(s) coordinate carefully in advance. The content and theoretical perspective of any speaker will be different in some ways from any other. In all, a speaker often amounts to a nice break from class that will rarely be applied to a lesson plan or assessment activity and will therefore seem of little importance to students.

Individual Lessons

Teachers themselves will create lessons using archaeological references and apply them to their curricular goals. These lessons range from current events specials about local digs to in-depth studies of anthropological archaeology.

The more in-depth or technically detailed a lesson is, the more likely it is that a teacher purchased the program pre-made or clipped it from a teaching magazine. Ready-made lessons are increasingly available to allow teachers to present material they would otherwise have to do to much research to bring into the classroom- the research is done for them in the form of background notes.

Themes for these lessons come from all aspects of archaeology. "Dig 1" and "Dig 2" (Lipetzky 1982) teach the concepts of anthropological archaeology by having students create a culture, bury artifacts relating to this culture to create an archaeological site, then dig a "site" created by a different group and attempt to interpret it (see also Masson and Guillot 1994). More advanced courses intended for college students incorporate the basic framework of interactive lesson plans and may be useful as models for precollege

instructors (Daniels and David 1982). The entry of computer technology into schools has created interactive learning systems relative not only to history, as mentioned earlier, but also to anthropological archaeology. *Adventures in Fugawiland!*, prepared by Doug Price and Gitte Gebauer (1990) is a package combining an instructional booklet (complete with activity and assessment materials) and computer disk that permit student to explore archaeological concepts, process, and methods of analysis through a guided virtual excavation of the mythical Fugawiland.

Strengths and Weaknesses Summary. Because the possibilities for subject matter in any pre-made lesson plan are virtually limitless, this form of presentation will be evaluated here only in general terms. Advantages are similar to those of traveling trunks: materials come into the classroom for firsthand use under the supervision and guidance of a professional educator who can contextualize them in terms of the students' prior knowledge, no special research on the part of the teachers is required, and activities are already planned out at the students' grade level. The disadvantages lie in the limiting factors surrounding the lessons' authors. These lessons are prepared by teachers primarily; practical experience never informs the database. Programs such as *Fugawiland* are ideal, but are rare at the present time-additionally, the purchase of books in quantity is difficult unless the teacher has a high degree of commitment to dedicating classroom time to an excellent but very time-consuming series of lessons. This fact, coupled with the inability of teachers (usually) to provide real artifacts with which to capture student imaginations, demonstrates the existence of areas for potential improvement of in-class archaeology lessons.

<u>Curriculum Changes</u>

Around the world, archaeology appears in more texts as part of a formal, required curriculum every year. India (Monmin and Pratap 1994; Dahiya 1994), Britain (Corbishley and Stone 1994), Canada (Devine 1990; Smardz 1990), Kenya (Wandibba 1994) and Cameroon (Mbunwe-Samba et al. 1994) are among the countries who have given or are considering giving the discipline a place in everyday education. The United Nations Educational, Scientific and Cultural Organization has been instrumental in implementing laws and international agreements which have heightened the awareness of the value of archaeological resources in these and other countries (UNESCO 1970). Although this curriculum inclusion is not yet the case on a national scale in the United States, the latest revisions in national and state curriculum guidelines create conditions which practically beg for archeology to be used as a complement to traditional sources of information. Some states, such as Colorado, have adopted requirements for the teaching of archaeological concepts in public schools as a part of outdoor and environmental education instead of as part of history (Bequette 1996; Project Learning Tree 1994).

<u>The National Standards for United States History</u>

As part of the effort to improve the competitiveness in the global market of students graduating from schools in the United States, President Clinton signed the "Goals 2000: Educate America Act" in 1994. In so doing, he called for schools to develop new instructional frameworks to improve student performance (National Center for History in the Schools 1994:iii). In accordance with the National Education Goals adopted by the governors of the fifty states in 1989 which requested new and challenging national goals

for history and four other subjects, and in response to the results of *Raising Standards for American Education,* the report to Congress of the results of a nationwide assessment of student comprehension of history, the National Center for History in the Schools at UCLA has produced a set of guidelines for the teaching of United States history. Although states are not required to adhere rigorously to these curriculum guidelines, *United States History: Exploring the American Experience* (NCHS 1994) represents the most recent thinking of a number of professional historians, educators, and interest groups about the structure of a comprehensive history progression.

It is important to note, however, that the Standards are not universally embraced. The details of the controversies are not relevant to understanding how the standards function, and will not be discussed here. Disagreement tends to center on the Standards' individual choices of topics rather than on how these topics are dealt with.

At the core of the new Standards is an emphasis on critical history. In addressing major objectives in various eras designated by the guide, students will fulfill requirements in "Historical Understanding" (causes, ideas, and events in history) and in "Historical Thinking" (research, analysis, interpretation). The integration of "Thinking and Understanding" results in the creation of a "Standard" for students to achieve; Standards explain what the students should be able to discuss and what skills they should be able to use in such discussion (i.e. explaining, comparing, analyzing, reconstructing chronology and arguments). Multiple perspectives are essential to this process, allowing students to explore multiple histories. State and local curricula tend to follow the national model, although they may not take their goals directly from the *National Standards*; an example of this situation may be seen in the case study to follow.

Unfortunately, among the hundreds of contributors to the National Standards, there are no professionals listed explicitly as archaeologists or anthropologists, and archaeology is not mentioned among the listings of potential sources of supplementary classroom activities. If, as has been argued above, archaeology may be an essential part of the process of learning about history, we must consider ways in which we may make its presence felt in schools.

CONCLUSIONS

Archaeology and material culture play a part in a number of traditionally utilized resources for students. Museums, living history, archaeological site visits, and tourism all address the topic of history in ways which meet some of the goals of interesting students, involving teachers, presenting a multivocal past, and encouraging critical reflection. Each of these activities has strengths and weaknesses in its meeting of these goals, and almost all off-campus field trips are difficult to relate directly to classroom goals.

By bringing archaeology into the classroom, goals more directly related to the school curriculum may be met, although many of the attempts made so far to do so fall short of this objective. In an era when economic and other factors may keep schools from utilizing a variety of off-campus sites and resources, it seems wise to concentrate on improving methods which will be of use in the classroom. Following is a guide and case study outlining a method by which archaeology may be brought to students and teachers in accordance with the critical history now recommended by educators.

CHAPTER III

INTERDISCIPLINARY IN-SCHOOL ARCHAEOLOGY LESSONS:

A COOPERATIVE APPROACH WITH AN EXAMPLE FROM

SAINT MARY'S CITY, MARYLAND

INTRODUCTION

Having demonstrated that archaeology and the teaching of history or social studies share both theory and subject matter and after critically examining some of the major ways in which archaeological information may be used as a learning resource for teachers, we come to the final step in linking the two disciplines directly, that of producing useful cooperative educational experiences which address the needs and goals common to archaeologists and history teachers.

Historic Saint Mary's City plans to consider funding and implementing a program of this type; the design of this model is directly linked to their desire to produce beneficial contacts with Maryland's schools. The story of the development of this pilot program to date provides an illustrative backbone to this chapter. Although the project has not yet been produced and evaluated, the present concern is with the method and form of this interpretive style, and the proposed lessons are to serve as models only. The beauty of the approach lies in its ability to adapt to almost any site, budget, or school system; its potential and success depends almost entirely on the

creativity of a designer who has learned to address the proper issues in dealing with a school audience.

Following a brief history of Saint Mary's City and background on the investigation of "Project Lead Coffins," the story of the educational program under development about the excavation and analysis of these coffins will be told. The reasons for producing the program will be discussed, then the steps followed and pitfalls discovered will be related and assimilated into a general framework for the production of cooperative lessons. A discussion of the structure of a lesson plan allows us as archaeologists to learn about organizing the ideas we present in ways which will be most easily adopted by our target audience; this structure will be a new means of communication for most of us. The proposed activities for "Project Lead Coffins Goes to School" (which links archaeology with history and then both of these with other subjects) will then be enumerated as an illustration of the method's application. In just a few more pages, we will have successfully linked two community resources to their mutual benefit as a model for increasing future cooperative learning between schools and archaeological sites in the United States.

THE "CITTY OF SAINT MAIRIES"

History

March 25, 1634 marks the true beginning of an enterprise which was to bring about a colony, a state, (and eventually an educational project). On that day, three Jesuit priests offered mass on the shores of the Potomac River in thanks for the successful establishment of the Colony of Maryland by

Governor Leonard Calvert, son of Cecilius Calvert, the Lord Baltimore. Two days later, Calvert bargained with local Native Americans, the Yaocomicos, to secure half of their established village structures as homes for the newly-arrived English. Thus was founded the Citty of Saint Maries, today known as Saint Mary's City, which was to serve as the colonial capital of Maryland for sixty-one years.

The colonists immediately went to work constructing a defensive fort in which they placed small cottages and a more elegant dwelling for Governor Calvert. No significant conflict with the Native Americans ever took place, and the fort was later abandoned and taken down because it proved unnecessary. Relatively peaceful relations with the local Native Americans led increasing colonists took up residence in the countryside surrounding the new town. Even in its heyday during the 1690s, Saint Mary's City had a population of only about two hundred permanent residents. This population doubled during times when those in the surrounding lands came to town to conduct business at various times of the year, but the town was never a densely concentrated population center. The legislature voted to move the capital to Annapolis in 1694, and as governmental functions moved away, the town shrank to a population of about one hundred persons.

During the mid-nineteenth century, Saint Mary's Female Seminary was established on part of the original town site, while the rest was purchased by Dr. John M. Brome. Brome built a large house near the original site of the Town Center, and he and his descendants farmed the land for much of the time that elapsed until its eventual purchase by the Saint Mary's City Commission in modern times. Thanks largely to Brome's consistent agricultural operation, much of the original town has survived beneath the fields for modern archaeologists to investigate. The lack of commercial

development on the site of Saint Mary's City over the years has made possible
a fuller and more complete program of investigation of the original town by
preserving the archaeological remains.

Religion in Early Maryland

A fact which makes the study of Maryland history highly amenable to
a critical perspective is that it was founded on the basis of multivocality. The
Calverts were Catholics, a legacy carried on from George Calvert, the first
Lord Baltimore. Catholics were a persecuted minority in England at the time
because they claimed allegiance to a divine authority higher than the
Protestant ruler (and head of the church) of England. George Calvert and
Cecil Calvert (Lords Baltimore I and II, respectively) saw the founding of a
colony in the New World as the answer to a search for greater religious
freedom. After a failed attempt by George Calvert to found such a colony in
frigid Newfoundland, the territory to become Maryland was granted to the
Calverts by Charles I.

Religion in Maryland at the beginning was an experiment in
toleration. Although most of the investors in and leaders of the colony were
Catholic, the population at large was mostly Protestant. Maryland therefore
practiced a relatively strict separation of church and state in order to maintain
harmony in the early years. The first Catholic church in the colonies was
established at St. Mary's; the "Great Brick Chapel" was soon built and was the
largest and most impressive building at the town site for some time.
Although events largely related to politics in the mother country unbalanced
the stability of the colony for brief periods, legislation such as the Toleration
Act of 1649 helped restore the peace and St. Mary's City acted as the urban
capitol of what was largely a tobacco-farming countryside until political

changes resulted in a vote to move the capital to Annapolis in 1694. (The transfer of government was actually made in 1695.)

St. Mary's was a varied community of nobles and commoners, indentured servants and, later, slaves, which also had social relations with local Native American groups. The significance of the site, its people, and its ideological reason for being place it on a level with the other major sites of this period, such as Plymouth and Jamestown, in terms of what information it may yield about the earliest European lifeways in the New World (for a more complete overview, see Carr et al. 1984).

Philip Calvert

A prominent member of Maryland's founding family, Philip Calvert's life deserves a brief mention here inasmuch as he is central to Project Lead Coffins both literally and figuratively. Calvert (1626-1682) was the youngest (and hence of the least importance in terms of inheritance) son of George Calvert. According to the biography assembled by Carr (n. d.), Calvert served the colony as a councillor, member of the upper house of the assembly, judge of the chancery courts, governor (briefly), mayor of St. Mary's City, and Chancellor at various times and was a central figure in the colonial government until his death. A great diplomat, Philip Calvert was instrumental in maintaining the borders of the colony, enforcing religious toleration, and dealing with Native American groups. Although renowned for his ability to peaceably settle disputes, Calvert was frequently at odds with the most important Calvert family member to live in Maryland, Charles, son of his half-brother Cecilius. Despite the fact that he was a lesser member within the family hierarchy, Philip's contributions to the developing colony make him important as one of Maryland's first influential leaders.

History of Archaeology in Saint Mary's City

Archaeology in Maryland's first capital was first performed in the 1937, when architectural historian Dr. Henry Chandlee Forman staged the first digs on the property. Forman's projects continued through the 1960s and included the location of structures in the Town Center and the Chapel Field where the lead coffins would be discovered in 1989. Forman summarized his research in a volume entitled *Jamestown and St. Mary's: Buried Cities of Romance* (1938).

When the Saint Mary's City Commission was formed by the state of Maryland in 1966 to preserve, study and interpret the remains of the city, the first full-time professional historians and archaeologists began work at the site. The first academically trained archaeologist to work officially at Saint Mary's City was Garry Wheeler Stone, who was hired by the Saint Mary's City Commission in 1971. Stone helped initiate the archaeological work to investigate the long-term research goal of describing the evolution of a new civilization in the New World, and he led excavations at several notable Saint Mary's sites including the State House, Van Sweringen inn, and the Saint John's site during the 1970s.

The modern period of archaeological investigation at St. Mary's City begins essentially with the survey carried out under Dr. Henry Miller to precisely locate the town buildings in 1981. The lands encompassing the remains of the Town Center were officially purchased by the Saint Mary's City Commission in 1979, and the survey was intended primarily to locate and identify structures in this area. This and subsequent surveys located many of the principal buildings in the archaeological record and revealed the town plan. Since the advent of excavations, work has continued almost year-round to the present. Ongoing goals include the research and exhibition of

the major sites identified within the town. (For more information on Saint Mary's City Archaeology, see Miller 1986 and Miller 1983.)

Chapel Field Archaeology

A 1989 GPR (ground-penetrating radar) study of the area in which the Great Brick Chapel previously mentioned was located revealed an underground anomaly in the chapel's left transept. Subsequent excavation revealed three lead coffins. The lead coverings of these coffins and their placement within the church demonstrated that the occupants were persons of some means; excitement was heightened by the fact that lead coffins previously known in a nearby cemetery had been probed by medical students in 1799 and had revealed excellently preserved remains. As the excavation of the chapel to answer questions about religion in early Maryland proceeded, the coffins were reburied to await one of the most comprehensive excavation and investigation efforts ever attempted anywhere.

Project Lead Coffins: The Search For Maryland's Founders

Under the direction of Dr. Henry M. Miller and Dr. Timothy B. Riordan, an interdisciplinary team was formed to excavate the site in such a way as to extract the maximum amount of information possible with modern technology. Teams were assembled for archaeology, historical research, archaeological conservation, geological analysis, palynology, religious and ethical issues, technical services, gamma ray imaging, air sampling and analysis, non-destructive evaluative sciences, forensic sciences, forensic entomology, radiology, special forensic analyses, dendrochronology, special analyses, photographic documentation, public information, security, administrative support, and technical and logistical support.

Following months of preparation and excavation, the coffins were. again uncovered and subjected to gamma ray imaging experiments to determine the probable condition of their contents. At the same time, an attempt was made to sample the atmosphere within the coffins for possible comparison with modern air- a good seal on a coffin could have preserved air from 300 years earlier. (Unfortunately, the conclusion of NASA scientists who examined the sampled air was that it contained chlorofluorocarbons, indicating that air had infiltrated the container after the 1940s.) The coffins were later subjected to in situ fiberscope investigation and then raised, opened, and their contents analyzed.

Although the final comprehensive report on this project is not yet available as analyses continue, archaeologists and other scientists recovered wood, textile samples, hair samples, pollen, and insect remains which provide a good first look at the people who were buried in the chapel field.

The biggest coffin, identified as that of Philip Calvert, contained a large man whose bones indicated that he had been heavy- he probably led a sedentary lifestyle. Osteological analysis also revealed that he was right-handed, and reddish hair found in the coffin hints at his appearance. The bones of the upper body were poorly preserved; the conclusion reached is that this was caused by an attempt to embalm the remains. Lack of pollen and few insects in the coffin indicated a fall or winter burial.

The middle coffin contained the remains of Anne Wolsey Calvert, Philip's first wife. She died in her sixties around 1679, and analysis of her remains indicates that she suffered from a poorly-healed broken leg and nutritional stress. The condition of her skull allowed a dramatic facial reconstruction to be carried out. Branches of rosemary found in her coffin attested to the practice of using this herb as a sign of remembrance in Anne's

day, and the silk ribbons which bound her wrists, knees, and ankles indicate a relatively lavish burial ceremony, or at least careful preparation of the body.

The small coffin contained the remains of an infant (approximately six month old) girl believed to be the only child of Philip Calvert and his second wife, Jane Sewell. The infant suffered from severe malnutrition, rickets, and anemia; soil and pollen analysis from materials in the coffin showed that the child had been buried once, probably in April, and then reinterred in the lead coffin around the month of May.

Further results of analysis of the coffins' contents will be released by Historic Saint Mary's City upon the assimilation of all data from the various project teams. Upon reconstruction of the brick chapel, the remains will then be reburied with the proper ceremonies and a prominent marker commemorating these people, some of Maryland's earliest leading citizens.

CREATING AN EDUCATIONAL PROGRAM
FOR THE SCHOOLS

Project History: Steps Taken in Planning

When this thesis was originally conceived in the Fall of 1995, it was to be about archaeology and public education. In order to narrow down this broad (see Chapter II) field, letters of inquiry were sent to several local sites asking about their current public education projects and needs. Historic Saint Mary's City responded that a new program was needed to teach about Project Lead Coffins, and the ongoing process of creating this program was taken up at that time. Historic Saint Mary's City was chosen from three possible sites (the other two being King's Castle, Bermuda and the Patuxent Female

Institute in Ellicott City, Maryland), due to the interesting nature of the archaeological work and because of its year-round programs of archaeology and its organized educational department. This department, staffed by professionals in the field of education and interpretation, proved to be a splendid resource.

The first problem to be overcome was to understand the reasons of the archaeologists and HSMC education staff for wanting to create this program, and these proved to be twofold: Dr. Henry Miller, Director of Archaeology, wished to use the program to promote archaeology education in general, and the lead coffin project in particular. The project was large and internationally recognized, and was thereby an important illustration of modern methods and processes in archaeological investigation. Moreover, it was interdisciplinary to the extreme, with 43 organizations donating services and equipment (HSMC 1993b) and including twenty-one clearly defined work teams whose leaders and related support staff numbered into the hundreds. It was a significant project both for its historical data as well as for its implications concerning the nature of archaeological investigation in the present.

Interviews with Miller, Dorothy Wenzel, and Dorsey Bodeman helped clarify the central theme to be addressed by the final package. The tremendous interdisciplinary nature of the artifact and data recovery process was the chief topic they hoped to present using the interest bound to be stirred by the dramatic story of the excavation. As Masson and Guillot (1994), among others, have noted, human remains take hold of the imagination more readily than any other type of archaeological evidence, and the feeling was that the remains of the Calverts could be counted on to make an excellent attention-getting device for a discussion of the secrets they have

revealed through many types of specialized analysis. The encouragement of the critical perspective towards history discussed earlier is also implicit in Miller's desire to teach students that there are many ways to learn about the past.

During this phase of the educational project development, we fulfilled the first step necessary to develop a cooperative educational program. That step is best articulated as follows: **Identify a primary message to be taught and a vehicle for the presentation of this message.** In this case, our message is best summarized by saying that the program would provide students with an understanding that archaeology is a method of learning about the past which borrows from many subjects in order to reconstruct the story told by the recovered artifacts.

The definition of a central theme creates a framework within which other sub-themes and goals can be used. The scope of this particular project allowed from a choice of many possible themes. A plethora of possible activities and subject links were brainstormed, but a final product would prove impossible without the direction provided by a thematic framework.

Our next step was to determine the audience we wanted to reach. The initial goal was to keep this audience as broad as possible in an attempt to maximize the ability of a large number of persons and groups who might have an interest in the project to use the finished materials. It was decided to concentrate on local and, if possible, out-of-county state schools, since these groups contain most of Maryland's children and concern themselves with Maryland history.

Saint Mary's County Public Schools as a particular target audience were important because they are required to visit the reconstructed city and its museum. They experience archaeology in the form of demonstrations and

by participating in "digs" whose sites are created by HSMC staff and then reburied for the next group to find. This program is well liked by social studies teachers in the area (Norris and Bachner, personal communication 1996), but is subject to may of the pitfalls mentioned in Chapter II regarding field trips. Archaeologists present what they want the students to learn- what they think is important- and students take little of the experience back to the classroom with them.

Miller, Wenzel, and Bodeman were interested in possibly reaching students in grades other than four and seven, the two in which the curriculum currently includes Maryland history components. The final selection of a body of students towards whom to direct the project would not come until later due to the nature of establishing a cooperative program, although we had narrowed ourselves sufficiently to move ahead by determining that Saint Mary's County Schools would be our primary audience, while the rest of Maryland's schools would serve as a secondary target group. Because my previous experience in interacting with children (as a camp director) was primarily with middle and high school aged children (grades six through twelve in the Maryland School system), and due to the relatively complex nature of some of the techniques applied to the lead coffins investigation, we decided that our presentation would be best suited to students with some amount of basic science and history experience. We were thus able to omit elementary school students from our potential base of participants as not having the background to deal with some of the interesting, yet advanced, concepts we wished to present. Step two in preparing a cooperative educational program, therefore, is: **Narrow your target audience**.

The idea was now in place, our next task would be to ask questions

about how the project could be carried out most successfully. At this point, traditional single-subject-centered scholarship methods kicked in and briefly prevented us from asking the most important questions of all.

Developing a program about archaeology is an exciting exercise for most of us, since we get to share our knowledge with an appreciative (we hope) audience. I succumbed at this point to the desire to go straight into the planning of possible activities for students to perform based on the message we as archaeologists wanted to present. Drawing on my memories of middle school, I began to have visions of a school-wide program in which each teacher would be able to present an aspect of Project Lead Coffins that related to their particular subject- math, English, social studies, reading, science, and specialized classes such as art, music, and French, a language with which Philip Calvert was intimately familiar. Why not, I imagined, cap it off with a field trip in which students got to visit the actual site, see the laboratory, etc.?

This three-ring circus approach was, thankfully, short-circuited by the results of cautionary tales encountered in my research (Zimmerman et al. 1994) and by the HSMC educational department. Because the department includes a professional (retired) teacher, they were able to inform me that a program that so perfectly related the archaeological objective we had identified would be almost impossible to use more than once (if at all), requiring as it did the cooperation of many teachers and also financial obligations, in the form of field trip costs, for the participating school. We were able to identify that problems would exist in using many subjects, since students may take different classes at different times of the year and because individual teachers might choose not to use the program if they had other objectives to meet.

We could have gone on inventing ideas and poking holes in them for

years. This was a confusing time in the project's developmental history, because we wanted to have a nearly-finished idea ready to present to teachers for final modifications before we approached the schools. We had been thinking in terms of archaeologists relating to students- as with so many of the projects described earlier, archaeologists tend to interact directly with schoolchildren as a borrowed or rented audience, and they do this on the terms of the archaeologists. Schools make tremendous sacrifices and changes to their procedures in order to have field trips or invite guest speakers, and archaeology lessons for the classroom require individual teachers, *if* they have the interest, *if* they have the time, and *if* they have an understanding of the discipline and are able to see the relevance of archaeology to their subject, to seek information themselves. Our next step, therefore, was to **research the school(s) to be involved by communicating with teachers** .

The need, therefore, was for a *truly* cooperative project. Cooperation, which had been the idea all along, needed to be conceived of in terms of planning and implementation as well as in terms of sharing an audience. Instead of taking a program to the teachers to fulfill their needs as I had seen them based on my student memories, we needed to take the idea to the teachers and combine their expertise in the act of teaching with archaeology's expertise in the area of reference material. With this discovery, the project was able to begin progressing once again. This point is the heart of the type of program presented here, and cannot be overemphasized; in order to teach an audience effectively, we must understand them and structure our presentation around their needs.

The HSMC education department was able to put me in touch with Mrs. Debbie Norris, a social studies instructor at Margaret Brent Middle School near Saint Mary's City. Mrs. Norris is an archaeology buff as well as a

teacher, and the look on her face when I described the original project idea spoke volumes about its inadequacies. After outlining some of the difficulties a project like that would have to overcome, she explained how social studies teachers work within the state guidelines and how her school applied the curriculum in the classroom. She was able to fully illustrate the MSPAP (Maryland School Performance Assessment Program) objectives that govern the planning and structure of lessons in the state's schools. All examples below were written by the Maryland Department of Education (1992).

The MSPAP is a framework for evaluating students' learning in each of the core subject areas they are taught. In middle school, these areas are language arts, social studies, math, and science. A MSPAP program has been designed for each of these areas, and each program consists of "Outcomes" and "Indicators."

An Outcome is a subheading within a subject in which knowledge is to be demonstrated; these are structured not only in terms of the subjects students will study, but also the skills they will learn through that study. social studies Outcomes, for example, include Valuing Self and Others, Geography, Economics, Political Systems, Understandings and Attitudes, Peoples of the Nation and World, and Skills and Processes. The Outcome statement for each of these describes the goal which students will achieve, such as "demonstrate an understanding of geographic concepts and processes as needed to examine the role of culture, technology, and the environment in the location and distribution of human activities" in Geography (Maryland Department of Education 1992).

An Indicator, of which there are several for each Outcome, is the evidence teachers will use to assess the achievement of the students in each

area. Again under Geography, one Indicator for grades 6-8 reads, "Analyze patterns of population growth and settlement in different times, cultures and environments" (ibid 1992).

The use of Indicators as benchmarks for achieving Outcomes is now the foundation for the way in which teachers teach in Maryland. They are required to inform the students, usually by writing them on the board, of the Outcomes and Indicators being used in each lesson so that the students may understand the goals of each activity. In dealing with schools, it is helpful to understand that modern educators use new and positivistically-stated terms to describe everything they do- "testing" is now "assessment" in most of the United States, for example.

A great many other changes have taken place in the schools recently, and we (archaeologists) were generally surprised to discover that methods differ not only between states, but in the curriculum of each county and sometimes within the schools themselves. Mrs. Norris described a special program her school used that enabled her to bring her interest in archaeology to her students- they scheduled an extra period into some days in which teachers are free to teach interdisciplinary lessons (usually ten weeks in duration) on any subject they choose. (For an in-depth study of an application of this method at a Detroit magnet school, see Lipsitz 1991). The availability of these lessons in teaching journals and sources specially designed for them was mentioned briefly in Chapter II. Such periods would provide an opportunity to present an intensive program about the lead coffins, but a later meeting forced the cancellation of this idea.

At Mrs. Norris' suggestion, a meeting was scheduled with Lisa Bachner. As the structure of the school day and lessons changed with MSPAP, so, too, did the role of teachers. Under the MSPAP program, Mrs.

Bachner is a "MSPAP Resource Teacher" who spends varying amounts of time at different county middle schools helping teachers achieve MSPAP objectives. Essentially, her function is to assist in providing resources for schools to improve their achievement of the various Outcomes.

Due to her experience in understanding the needs of all county schools and her role as a more administrative member of the faculty, Mrs. Bachner was able to tell us that the "activity period" program at Margaret Brent Middle was unique to that school and would be subject to cancellation after the end of the current school year. In addition, she was able to provide information on MSPAP Outcomes and Indicators for all subjects and to provide a comprehensive look at the structure of a typical day in a Saint Mary's County Middle School.

Students now stay within their peer groups at grade level, also known as their "pod," at all times, and during each day, they are instructed in each of the four core groups mentioned above by teachers who specialize in those areas. Art, music, physical education, and other activities complement these core studies, of which the students have approximately one hour each day. Would it be possible, we asked, to have lessons on a single theme taught in the same day by each core teacher (but not by theater, music, band, foreign language, and other teachers students might see in a typical day)? Not only did she respond in the affirmative, she was able to tell of a lesson recently carried out along those lines about the Gold Rush. We had, it seemed, discovered a format for our program.

By entering into a dialogue with the schools themselves, we had accomplished the next two steps towards developing a cooperative program. The results of these interviews allowed us to **finalize the selection of an audience** and to **understand the specific needs the teachers and students**

selected. A high school program (where students are not organized by grade level and take very specialized classes) was dismissed as too complex (for a multi-period program, although the individual lessons developed may be made available to high schools as single-subject lessons) to allow effective presentation of our multidisciplinary theme, and within the middle schools, we were able to select the seventh grade in particular for the same reasons the state had when it assigned the county schools to visit Saint Mary's City during this year.

Seventh grade curriculum in Saint Mary's County not only includes early [North] American history in social studies, but also focuses on anatomy and life sciences in science (to go with our skeletons), encourages reading of informational (as opposed to story) sources in language arts, and has a sufficiently high level of advancement in math that links can be made to the work done in Project Lead Coffins.

Use of Margaret Brent Middle School's "Activity" period was rejected as being too specific as well as because it is being phased out at the end of the current school year. A focus on the county as primary audience was essentially required; although all Maryland schools share MSPAP Outcomes and Indicators, the subjects presented and the Outcomes and Indicators assigned to each vary in their progression from county to county. It would be possible to make a program highly relevant to a single county's objectives, but a general statewide program in Maryland would be vague and of far less relevance. A general program, in short, would be minimally attractive to all teachers, whereas a county-specific program would be very attractive to one audience (which already utilizes HSMC resources) while at the same time not becoming any less attractive than a general program to other county teachers, where individual lessons could be applied at the grade level

appropriate.

The next steps in the process of completing a cooperative, in-school educational program are listed below. This part of our project is being developed at present for a Fall trial; delays caused by winter weather and the necessity of preparing a completed kit by manufacturing or purchasing materials would not permit a trial in time for the present work. Fortunately, however, the variances in subject matter and lesson formula for a project of this type do not require an example to follow; they will be site specific and their success or failure will be dependent on the application of the most general ideas presented here. Creativity and cooperation will be the keys to making individual lessons useful.

These steps will be outlined here before sample lessons are presented in order to complete the discussion of process. First, we must **determine the practical considerations to be addressed,** then **design the lessons in accordance with knowledge of audience needs already developed.** Following this, **feedback** will be sought from teachers and we can **prepare the lessons** in final form **and package them with supporting materials.** In order to assist in the use of the packages, the final step will be to **publicize** the packages; in the case of our program, this will be at a "Fair Day" held annually as a teacher in-service workshop each September.

Review: Steps in Planning a Cooperative Program

Step 1: **Identify a message to be taught and a vehicle for teaching the message.** In our case, the message is that archaeology is a scientific process which draws from many sources of data to reach conclusions about the past as represented through material remains, and this will be taught against the background of "Project Lead Coffins." A related major objective is to show

that archaeology has relevance in all of the students' school subject areas. Minor objectives will be to teach about the importance of preserving archaeological remains, to personalize the study of history, and to develop the ability to think critically about the significance of various information sources.

Step 2: **Narrow your audience**. Using broad criteria such as the complexity and relevance of the message to various age groups, begin to narrow the target population down to a level where the project being created will have maximum applicability. We were able to eliminate elementary schools from our target group and move on to the research stage.

Step 3: **Research the school(s) to be involved by communication with educators**. The education department of HSMC and teacher interviews provided background on previous projects, clarified the process and goals of education at various levels in Saint Mary's County, and helped determine what skills, activities, and formats would make the program attractive to local teachers. Programs might be designed for a single school, such as the middle school with an "activity period" in some cases or might be more broadly designed (as a high school level history class, for example) depending on the message to be given.

Step 4: **Finalize audience selection**. Using the information gathered in Step 2, determine the basic format and specific audience for whom the program will be crafted. "Project Lead Coffins" as a school program will be specifically created as a single-day, four-lesson unit for seventh-grade students in Saint Mary's County. The combined middle schools of Maryland will be a secondary audience.

Step 5: **Understand the specific needs of the students and teachers targeted**. Conducting more in-depth research of the school structure and

function at this time enable the lesson to be tailored precisely to the chosen audience. This step allowed us to understand the curricular objectives of each teacher; objectives which we will incorporate in our lessons to add relevance.

Step 6: **Determine the practical considerations to be addressed.** Budget and funding issues for both the presenting agency and the school audience should be carefully considered at this point in order to aid in lesson design. Other, site-specific decisions related to materials and equipment should be considered.

Step 7: **Design the lessons in accordance with knowledge of audience needs.** Details of the application of this step in the sample project follow.

Step 8: **Feedback.** Present the lessons to teachers and curricular specialists for possible revision. Their greater experience in lesson planning will help to polish and amend the activities proposed for classroom use.

Step 9: **Prepare the lessons in final form and package them with supporting materials.** In this way, a kit minimizing the efforts a teacher will have to make becomes ready for use.

Step 10: **Publicize.** Whether through fliers, mailings, personal interviews, or professional fairs such as the one in Saint Mary's County, promote the lesson and give details on how to acquire the kit or lesson plan. Following this, an educational outreach program is available and attractive to schools without requiring anything further of the archaeologist, whose work is publicized with every use of the program.

THE PROPOSED PROGRAM

General Format

The Project Lead Coffins in-school archaeological learning program under development will run according to the following format. Teachers, having selected the program for classroom use, will make arrangements to pick up (or have shipped) the kit containing plans and materials several days in advance of the planned program. In addition to photocopy-ready student packets, paperwork included will advise the teacher of the purpose and uses of materials and provide them with sufficient background information (an expanded, though still general, version of the information included in this chapter) to confidently answer questions about Historic Saint Mary's City and Project Lead Coffins. Similar, more specific background sheets will be provided as they relate to each lesson.

The teachers will review the background material, become familiar with the lesson format, and have the opportunity to consult HSMC staff regarding any questions they may have prior to presenting the information to their classes. This question period will take place through the use of the telephone or Internet computer network by means of electronic mail, enabling educators to have their questions answered directly by interpretive staff. Although Saint Mary's County schools all have computers and Internet access, students do not yet have sufficient terminals to allow any of the lessons themselves to be done effectively on the computer, and telephone contact may prove to be a more personal alternative.

A day or more before the program is to be held, all seventh grade students will be given a background packet of information about archaeology and Saint Mary's City. Assigning this packet and requiring students to

preform an assessment activity on its contents will be entirely up to the teachers, who may not have time to do background at all or may choose to give such information in the classroom based on their own preparation.

At the beginning of the program day, a video presentation of approximately ten minutes' duration will be broadcast to all classrooms via the media center (county schools have this capability). The video will briefly tell about the significance of the discovery of the lead coffins in 1989/90 and describe the objectives of the program without revealing details of the archaeologists' findings.

All seventh graders participating will be given a packet which includes reference materials and worksheets to be used in the completion of the various activities required by the lessons. Students will be asked to respond in a written or oral form of some sort for each lesson. After being allowed to finish any incomplete work as homework, the packets will be circulated among the teachers for assessment purposes.

At the close of the school day, a second video of approximately ten minutes' duration will be aired. This video will again emphasize the interdisciplinary approach used by archaeologists and will briefly summarize the results of Project Lead Coffins. After completion of their assignments, students will have an opportunity to ask any specific questions they might have of the archaeologists through the Internet connection or by phone, either of which will provide a quicker response than regular mail and emphasize that archeologists use modern technology in their work.

Upon returning the kit, teachers will have an opportunity to complete an evaluation and comment sheet which will be of use in amending the project or creating new ones on the same model. In addition, the option of making a special field trip or inviting a guest speaker will be offered. At the

least, students will be able to draw upon their experience from the county-mandated excursion to Saint Mary's City or to apply their knowledge from these activities to the field trip, depending on whether they do the program before or after taking the required tour. If successful, other lessons based on more specific aspects of the coffin project may be made available; these would be in the form of individual lessons for specific classes or in the form of week-long units to be carried out in a single subject area.

Practical Considerations/
Limiting Factors

Several considerations have been taken into account in the structuring of this program. Historic Saint Mary's City prefers not to send a staff interpreter to every school that may request this lesson, particularly if several out-of-county schools show interest. Staff interpreters are needed on-site for field trip and tourist groups. In an effort to keep costs down, no elaborate, valuable, or high technology materials will be included in this experimental design. The project materials will be self-contained and require little maintenance in order to save on resources as well.

Lessons will be built around the four school core periods that always take place in a single day. Teachers are reluctant to devote more than this amount of time unless the lesson is planned not only within their yearly curriculum, but also in line with the progression each uses (the order in which the curricular objectives are addressed). Because this progression may vary not only between schools but between individual teachers, such a task is not possible within the identified target audience. The result of these considerations will be a project which is somewhat less elaborate than the schemes we initially conceived, but the ability to produce optional lessons or

to provide materials to teachers for the construction of in-depth study programs makes up for this while still allowing the program as designed to achieve its thematic goal.

About Developing Lesson Plans

A number of lesson plan formats are available to presenters, but all encompass the same basic objectives. Consultation with graduating education majors at both the bachelor's and Master's levels (J. Schuster, Koehler-Pfotenhauer, personal communication 1996) and with professional educators (Bachner, Norris, personal communication 1996; Keene, K. Schuster, personal communication 1995) has produced the very general format followed here. Before following any format in an actual project, it is wise to ask local teachers what elements they consider essential; all should agree on the ones presented here, but some may require more specifics. Our lesson plans will be structured as follows:

Objectives. This includes a statement of the curriculum guidelines to be addressed as well as the central purpose of the archaeologists in creating the lesson. These objectives will be stated for the students before the lesson begins.

Motivation. For teacher use, this section outlines the techniques used to arouse the interest and excitement of the learners.

Procedure. This section lists, in order, the steps to be followed by the teacher and students to successfully carry out the activity.

Summary. Following the completion of the suggested activities, the summary is the process by which students have the completed lesson reinforced and brought to a close.

Evaluation. Also known as assessment, this section describes how a teacher will evaluate the learning of the students during and after the lesson. Aside from specifying what to look for in written work, evaluation activities can include listening to responses and observing students interacting.

Follow-up. Although the package presented here lasts only a single day, follow-up activities such as homework and a field trip, should the teacher desire one, will be suggested.

Lessons Proposed for the Program

National Standards addressed by this program for Era 2: Colonization and Settlement (1585-1783), into which this project falls, are as follows:

Standard 1: The early arrival of Europeans and Africans in the Americas, and how these people interacted with Native Americans (Lesson 4).

Standard 2: How political institutions and religious freedom emerged in the North American colonies (Lesson 4).

Standard 3: How the values and institutions of European economic life took root in the colonies (Lesson 3, Lesson 4).

Several MSPAP Outcomes are encompassed by each of the following lessons; because a number of Outcomes are applicable to almost any lesson, it will be up to the teachers to assign them to individual lessons. Teachers will be able to select Outcomes which they need to cover and emphasize them by emphasizing various points of the following lessons. This strategy is particularly advantageous in that it increases the appeal of the program for teachers by enabling them to vary the objectives covered in accordance with the experience of their students at any point during the school year. The program is, therefore, adaptable to the particular schedules of schools which may organize their yearly curricula somewhat differently.

Lesson 1: Math

Teacher background will be in the areas of artifact distribution analysis, artifact types, and artifact dating. Introduction to the lesson should include definition of vocabulary terms and the necessity for maintaining careful field procedures and records in order to extract information from artifacts. A prompt and charts or photos will be provided to allow the teacher to present a ten minute overview of these concepts. Vocabulary concepts to be introduced include: artifact, feature, context, and provenience. A particular discussion of white clay tobacco pipes and their use will be carried out.

Objectives. To introduce students to the process of data-gathering through artifacts by the application of mathematical concepts. Students will learn that artifacts differ in style, that artifacts and their stylistic differences may be used to determine when a site was occupied, that artifacts are significant for their location as well as for their form, and that artifacts yield interpretations which are educated guesses rather than absolute truths.

Motivation. Students will work with genuine artifacts and analytical techniques as used in an archaeology laboratory. The information they produce will be the same as revealed by actual studies.

Procedure. The teacher will present the introductory information and concepts, then demonstrate the procedures to be followed by students. Following a question period, students will divide into cooperative groups of five to six and be assigned an artifact assemblage.

Using their assemblage (approximately thirty) of white clay pipestems, each group will measure and record the bore diameters of their assemblage by using a supplied tool. Students will determine the percentage of each diameter-bore type in the overall assemblage and refer to a chart (supplied in their packets) to date their assemblage.

Using the gridded diagram (in packets) of the chapel field site, students will plot the distribution of their assemblage. By observing the relation of the distribution in space and time (by using the generated date), students will write a statement interpreting the distribution of their pipestem assemblage based on marked and dated features on the gridded map.

Summary. Each group will report on its finding to the class (three different assemblages will be provided, some may be duplicated for two cooperative groups in a large class). The teacher will then respond to questions and go over the process as it relates to artifacts other than pipestems.

Evaluation. Students' use of math will be evaluated through the responses written in their packet. The teacher will observe students interacting with their groups and assess their learning of archaeological concepts through oral responses in class as well.

Follow-Up. Additional materials will be suggested for the composition of other lessons, and homework problems in which the students use given data to perform the same mathematical procedures as reinforcement will be provided.

Lesson 2: Language Arts

This lesson is designed to teach students the importance of sharing the results of archaeological finds with the outside world. It will be emphasized that archaeologists record and publish their data in order to prevent its being lost after a site is dug. Teacher background will include newspaper articles and press releases from Project Lead Coffins.

Objectives. Students will understand the significance of publication as a requisite element of an archaeological investigation. They will sort facts

and use tables to make critical distinctions about what information has significance, OR they will use provided information, charts, and photos in a writing format which will inform a target audience about an archaeological discovery, OR they will prepare a field record based on maps, tables, and historical references provided.

Motivation: Facts and conclusions will be authentic Project Lead Coffins data; students will select from a number of provided sources to compose a work according to their personal assessment of the issues. Students will also have the opportunity to select the format their exercise takes from three options.

Procedure. Teachers will discuss the role of writing in archaeology as means of recording data and communication with the public. Students will work independently with their packets to produce a written response to one of the following problems:

1. Produce a press release based on a large number of supplied facts and photographs. Students will communicate about their reasons for choosing photos, tables, and facts from the sources provided (packet), OR

2. Using a press release, students will select a target audience from among several choices (national paper, local paper, science magazine, history magazine). Following the example of one of the selections provided, the students will write a short article to inform the selected audience about the significant aspects of the press release. The students will choose and caption a photograph and a table from the included sample collection and explain why they chose each to accompany their article, OR

3. The students will write an archaeological log entry following the model provided. Interpreting the maps, artifact lists, and tables provided, the students will write a summary of an excavation unit that has been destroyed

(excavated). Students will explain why excluded material was irrelevant to the log entry.

Summary. Teachers will review the use of writing in archaeology and discuss with students ways in which facts are chosen and manipulated to help authors inform their audience.

Evaluation. Teachers will observe and interact with students during the writing process and evaluate their written responses based on accuracy, critical thought, and inclusiveness.

Follow-Up. Additional topics and materials will be suggested for the composition of other lessons. Unfinished work (above) will be completed at home.

Lesson 3: Science

A brief overview of the human skeletal system and the physical characteristics of the Calverts will be presented by the teacher. Students will apply this information to an analysis of the actual bones recovered by utilizing large size (not life-size) photographs of the actual skeletal remains. Teacher background will include materials related to the ethics and legislation pertaining to the disinterment of human remains as well as a summary of the information it is possible to derive from such remains.

Objectives. The students will identify and locate the major bones of the human skeleton by following a (paper) model. They will record the bones they find on provided tables and make statements about the physical characteristics of the persons represented by referring to a chart listing facts that may be learned from bones. The students will understand the ethical and legal issues involved in excavating human burials. The students will also discuss the concept of "differential preservation" as it relates to

archaeology.

Motivation. Students will work with the nearest reasonable facsimile of actual human remains and interpret them just as archeologists interpreted the authentic specimens.

Procedure. Students will be divided into cooperative groups of five to eight, each group receiving a coffin-shaped box containing photographs of the skeletal remains from the middle coffin (Anne Wolsey Calvert). By referring to a human skeleton (available to all county teachers), the students will locate and lay out their "bones" in anatomical reference. The names of each bone will be written on the worksheet provided in accordance with the code numbers on each photo. Students will refer to a chart listing possible data to be derived by observing bones and determine if any of these characteristics (*i.e.* deformity representing injury or disease) are present in their assemblage. Using a cast of an actual femur, students will estimate the height of the individual by measuring the cast and applying a provided mathematical formula. Each group will write a one-paragraph summary of their conclusions and share this summary with the class. Following these activities and using archaeological photos provided, the teacher will present the summarized conclusions of archaeologists about the occupants of each coffin.

Summary. Summary will take place in the group presentations and teacher-led discussion during the final third of class.

Evaluation. Teachers will evaluate students' group work behavior and oral responses in discussion. Evaluation of the written homework (if assigned) will center on the students' writing style (writing to inform) and use of factual information presented.

Follow-Up. Additional materials will be suggested for the composition of other lessons. Students may be asked to write a response to a writing prompt which gives additional historical and analytical data (to be added to that determined in class) and asks them to write a brief life history of Anne Wolsey Calvert. Another possible prompt could ask students to explain why they do or do not believe a fictional ancestor of theirs should be disinterred by archaeologists (this option could help fulfill a MSPAP "writing to persuade" requirement).

Lesson 4: Social Studies

Teacher background will include information about the church and religious toleration in early Maryland as well as class histories of early Maryland society. The anthropological aspects of humans' use of space and structures will also be addressed.

Objectives. Students will gain an understanding of the class distinctions of society in early Maryland, a sense of differences in the use of space between the seventeenth century and modern times, and will gain a critical appreciation of the use of space to show power and status both in life and in death. Students will also understand the role of the church in early Marylanders' lives. Vocabulary presented will include terms such as class, status, and elements of ecclesiastical architecture.

Motivation: Students will role-play the elements of class interaction in a full-size layout of the space encompassed by the Great Brick Chapel.

Procedure. The teacher will present a brief history of the church and of class roles in seventeenth-century Maryland life. The class will relocate (if they have not done so already) to a space large enough to encompass the Great Brick Chapel foundation. the foundation will be represented by a

prepared rope outline of the exact dimensions found in the archaeological record. Each student will be given a card identifying them as a historically known member of early St. Mary's City. Information on the card will inform them of their role and condition in life (these characters will include Native Americans, slaves, servants, craftsmen, laborers, elite public servants, Jews, Catholics, Protestants, and members of the clergy). Following a presentation by the instructor about the basic architectural elements of a Catholic church and their significance for parishioners, students will arrange themselves in the "chapel" (or out of the chapel if their character would not have attended church there) according to the data of their historical alter ego in order to understand the meanings associated with movement through space. "Class" will be defined as a basic upper, middle, or lower, and students will participate as they believe appropriate based on their data card; this will illustrate the fact that the idea of class is not absolute and that people interact based on data other than simple socioeconomic status (religion, for example). Alternate situations will also be provided for acting out should time permit in order to allow students to see how interaction varies. These could include grouping themselves according to where they might be buried, who they would trade with, etc.

Follow-up discussion will include a teacher presentation on the movement between class stations that was possible in early Saint Mary's City and a careful contextualization of the material presented above. Because it will not be possible to proportionally represent all the elements of early Maryland society, careful explanation of the exact percentage each basic class would have composed in the historic population will be necessary.

Summary. The teacher will lead a discussion of the above topics and allow students to share with one another the data on their cards.

Evaluation. The teacher will evaluate learning by observing students in the role-playing activity and by listening to their responses in group discussion. A written evaluative exercise is proposed as a take-home assignment.

Follow-Up. Additional materials will be suggested for the composition of other lessons. Homework will be for students to diagram and explain a space familiar to them in terms of how power and class are related to the use of or movement through space.

Evaluation of the Program

Although it has not been piloted in order to obtain real-world results, the program may be analyzed in terms of its achievement of the basic goals of critical history as outlined and used in Chapter II of this paper. Although each activity is lacking in some areas, the overall effect of the program designed is to enable the students to fulfill all the objectives in some fashion without ever leaving their school. Evaluative categories, again, are the ability to raise student interest, involvement of teachers in the learning process, the encouragement of a multivocal history that dispels the national myth, and the encouragement of critical thinking about history. By making the lessons outside social studies relate to the other subjects' MSPAP Outcomes, the program additionally relates historical and archaeological knowledge to other disciplines.

Student Interest. All activities use authentic primary source data. Some materials, such as skeletal photographs, have a known popularity that is quite high. Lesson 2 (Language Arts) may be the least inspiring in terms of exciting artifacts, but it emphasizes the interpretive duties of an archaeologist and the combination of individual and group work that goes into an

archaeological report.

Teachers. If the provided background materials are effectively used, teachers will become sufficiently educated in the subject matter presented to deal with any questions with confidence. The electronic or telephone availability of an outside authority to respond to otherwise unanswerable class questions will increase this confidence. Teachers are involved in the administration, observation, and evaluation of each exercise and may modify the procedural elements of each lesson plan to accommodate personal or curricular preferences. Teachers also help modify the kit through their use of the evaluative survey included, and they may be given access to further materials which allow them to design their own follow-up lessons if the package proves successful.

Multivocality. Lesson 4 in particular deals with this issue, especially as it relates to class and gender concerns. Lesson 3 also brings in elements of class difference in interpreting the burial style and practices of this family versus others buried in the chapel field. Elements of this concern also will be found in Lesson 2 data for inclusion by students in their writing. The identification of different status levels through archaeological remains also helps students understand that not all colonists considered themselves equals.

Encouraging Critical Thought. A particular effort has been made to include a critical thinking aspect in each exercise. Students will form opinions based on the data they interpret *before* being told of the archaeologists' interpretations. In this way and by the manipulation of data in their various written exercise, students learn to question the nature of their sources and the quality of interpretations provided to them.

A Note About Educational Goals in the Program

It is important to note before concluding that the application of all national and "critical history" goals to Lesson 4 (Social Studies) and not to other lessons stems from the fact that these goals and objectives were created for the study of history, a subject subsumed in the social studies curriculum. Some historical matter is included in each lesson, although the specific goals are best met in the proposed social studies component. The relevance of all lessons to MSPAP Outcomes in various subject areas will ensure that similar goals to those achieved in social studies will be met in other subject areas.

CONCLUSIONS

This paper has demonstrated that the theoretical bases of archaeology and history are similar in ways which give the two disciplines greater connections than in the past; the questions and answers of archaeologists draw on and borrow from those of historians. The recent history of archaeology indicates that the investigation and preservation of the past is becoming a more prominent issue now than at any time previously in our national existence. Additionally, the current approach to historical education through teaching in United States schools incorporates elements of post-processual and critical theory in an attempt to arouse the interest of students, increase the knowledge of teachers about history, dispel the traditional "myth" of a single history of a power elite composed mainly of white males, promote multivocality in the teaching of history, and encourage critical thinking about historical events and figures.

We have examined the most popular existing supplements to traditional history education in the classroom which involve a contribution by archaeology in terms of the criteria listed above. While these traditional interpretations are largely successful, they vary in quality and accessibility. A niche exists for a type of program that answers all of the requirements of the new approach to history teaching by combining the discoveries of historical archaeologists with the teaching of the North American past. Such an approach would be most valuable if it allowed for flexibility in its topics, the inclusion of local history, and satisfied the goals of teachers in ways which

encouraged its use.

An attempt has been made to create such a program, and the case study is presented here. The project history defines steps for design and considerations to be addressed in utilizing this model for linking curricular objectives with archaeological data. This project satisfies the goals set and meets the needs of archaeologists to teach about their work while drawing on the experience of teachers to facilitate learning. This type of a program may be useful in linking archaeologists and local schools at different grade levels, regardless of the scope or budget of the archaeological investigation used as a basis for the activity. It is hoped that this programming model will be emulated increasingly by archaeologists and educators interested in popularizing a more accurate and complete past.

APPENDIX 1:
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BIBLIOGRAPHY

Adams, Eric
  1994 Calvert Family Identified. *Archaeology* 47(5):23.

Ames, Kenneth L.
  1994 Anonymous Heroes. *Museum News* 73(5):32-35, 39.

Applebaum, Ralph
  1993 Multicultural by Design. *Museum News* 72(2):52-55, 58, 60.

Ascher, Robert
  1961 Analogy in Archaeological Interpretation. *Southwestern Journal of Anthropology* 17:317-325.

Associated Press
  1995 America's Students Know Little About U.S. History, Survey Finds. *The New York Times* November 2:A22.

Barry, Dave
  1985 *Dave Barry's Bad Habits.* Henry Holt and Company, New York.

Barth, Jack
  1996 The Red Badge of Make-Believe Courage. *Outside* 21(3):86-92.

Bequette, Kathryn E.
  1996 *Archaeology in Outdoor Education.* Paper delivered at the 29th Annual Meeting of the Society for Historical Archaeology Conference on Historical and Underwater Archaeology, Cincinnati, Ohio.

Binford, Lewis R.
  1967 Smudge Pits and Hide Smoking: The Use of Analogy in Archaeological Reasoning. *American Antiquity* 32(1):1-12.

  1972 Archaeology as Anthropology. In *Contemporary Archaeology: A Guide to Theory and Contributions,* edited by Mark Leone, pp. 93-101. Southern Illinois University Press, Carbondale.

Blancke, S. and Cjigkitoonuppa J.P. Slow Turtle
  1994 Traditional American Indian Education as a Palliative to Western Education. In *The Presented Past: Heritage, Museums, and Education,* edited by Peter G. Stone and Brian L. Molyneaux, pp. 438-452. One World Archaeology, vol. 25. Routledge, New York.

Brownell, Lisa
n.d. *Mystic Seaport*. Mystic Seaport Museum Stores, Mystic, Connecticut.

Bunch, Lonnie G.
1995 Fighting the Good Fight. *Museum News* 74(2):32-35,58,62.

Carr, Lois Green
n.d. *Report on Philip Calvert*. Unpublished manuscript on file, Historic St. Mary's City, St. Mary's City, Maryland.

Carr, Lois Green, Russell R. Menard, and Louis Peddicord
1984 *Maryland... at the Beginning*. Hall of Records Commission, Annapolis, Maryland.

Chernichowski, Beth-Anne
1982 *Experiments in Material Culture*. Mount Holyoke College, Massachusetts.

Corbishley, M. and Stone, Peter G.
1994 The Teaching of the Past in Formal School Curricula in England. In *The Presented Past: Heritage, Museums, and Education*, edited by Peter G. Stone and Brian L. Molyneaux, pp. 383-397. One World Archaeology, vol. 25. Routledge, New York.

Crabtree, Charlotte and David O'Shea
1991 Teachers' Academic Preparation in History. *National Center for History in the Schools Newsletter* 1(3):4,10.

Craig, Tracey Linton
1989 "Reinterpreting" the Past. *Museum News* 68(1):61-63.

Dahiya, Neelima
1994 A Case for Archaeology in Formal School Curricula in India. In *The Presented Past: Heritage, Museums, and Education*, edited by Peter G. Stone and Brian L. Molyneaux, pp. 299-314. One World Archaeology, vol. 25. Routledge, New York.

Daniels, Steve and Nicholas David
1982 *The Archaeology Workbook*. University of Pennsylvania Press, Philadelphia.

Davis, Hester
1989 Archaeological Sites: Important to Science or to the Public, and is There a Difference? In *Heritage Interpretation*, vol.1, edited by David Uzzell, pp. 96-99. Belhaven Press, New York.

Davis, Natalie Z.
    1981   Anthropology and History in the 1980s. *Journal of Interdisciplinary History* 12(2):267-275.

de Giraldo, Emilia Moreno
    1994   The Colegio Nueva Granada Archaeological Museum, Colombia: A Proposal for the Development of Educational Museums in Schools. In *The Presented Past: Heritage, Museums, and Education,* edited by Peter G. Stone and Brian L. Molyneaux, pp. 159-171. One World Archaeology, vol. 25. Routledge, New York.

Deetz, James
    1977   *In Small Things Forgotten: The Archaeology of Early American Life .* Doubleday, New York.

    1981   The Link From Object to Person to Concept. In *Museums, Adults, and the Humanities: A Guide for Educational Planning,* edited by Z. W. Collins, pp. 24-34. American Association of Museums, Washington, D.C.

    1992   Invitation to Archaeology. In *Public History Readings,* edited by Phyllis Leffler and Joseph Brent, pp. 215-221. Krieger Publishing Company, Malabar, Florida.

Delgado-Ceron, Ivonne and Clara Isabel Mz-Recaman
    1994   The Museum Comes to School In Colombia: Teaching Packages as a Method of Learning. In *The Presented Past: Heritage, Museums, and Education,* edited by Peter G. Stone and Brian L. Molyneaux, pp. 148-158. One World Archaeology, vol. 25. Routledge, New York.

Devine, Heather
    1990   Archaeology in the Alberta curriculum: An overview. In *The Excluded Past: Archaeology in Education,* edited by Peter Stone and Robert MacKenzie, pp. 190-200. One World Archaeology, vol. 17. Unwin Hyman, London.

Dunnell, Robert C.
    1970   Five Decades of American Archaeology. In *American Archaeology Past and Future,* edited by David J. Meltzer, Don D. Fowler, and Jeremy A. Sabloff, pp. 23-49. Washington, D.C., Smithsonian Institution Press.

Earle, Timothy K., and Robert W. Preucel
    1987   Processual Archaeology and the Radical Critique. *Current Anthropology* 28(4):501-538.

Educational Facilities Laboratories
    1975   *Hands-On Museums: Partners in Learning.* EFL, New York.

Forman, Henry Chandlee
    1938   *Jamestown and St. Mary's: Buried Cities of Romance.* The Johns
           Hopkins Press, Baltimore.

Frost, Frank J.
    1993   Voyages of Imagination. *Archaeology* 46(2):44-51.

Gawe, Stephen and Francis Meli
    1990   The Missing Past in South African History. In *The Excluded
           Past: Archaeology in Education,* edited by Peter Stone and
           Robert MacKenzie, pp. 98-108. Unwin Hyman, London.

George, Gerald
    1986   The Perils of Public History: An Imaginary Excursion Into the
           Real World. In *Public History: An Introduction,* edited by
           Barbara Howe and Emory Kemp, pp. 20-30. Robert E. Krieger
           Publishing Company, Malabar, Florida.

Gray, Carolyn
    1993   Identi-days Turn Treasure to Junk, Junk to Treasure. *Quest*
           2(3):7.

Handsman, Russell G. and Mark P. Leone
    1989   Living History and Critical Archaeology in the Reconstruction of
           Past. In *Critical Traditions in Contemporary Archaeology,* edited
           by Valerie Pinsky and Alison Wylie, pp. 117-135. Cambridge
           University Press, Cambridge.

Hart, Leslie A.
    1983   *Human Brain and Human Learning.* Longman, Inc., New
           York.

Herman, Joan L., Pamela R. Aschenbacher, Lynn Winters
    1992   *A Practical Guide to Alternative Assessment.* Association for
           Supervision and Curriculum Development, Alexandria,
           Virginia.

Heyerdahl, Thor
    1950   *Kon-Tiki: Across the Pacific by Raft,* translated by F. H. Lyon.
           Rand McNally and Company, Chicago.

100

Hinz, Manfred O.
1990   The Right to a Past: Namibian History and the Struggle for National Liberation. In *The Excluded Past: Archaeology in Education*, edited by Peter Stone and Robert MacKenzie, pp. 61-67. One World Archaeology, vol. 17. Unwin Hyman, London.

Historic Saint Mary's City
1993a   An Update to the Friends on Project Lead Coffins. *A Briefe Relation* 15(1):1-3.

1993b   *Project Lead Coffins: The Search for Maryland's Founders: Project Participants and Work Teams.* Historic St. Mary's City Foundation, St. Mary's City, Maryland.

Hodder, Ian
1986   *Reading the Past: Current Approaches to Interpretation in Archaeology,* second edition. Cambridge University Press, Cambridge.

1987   The Contribution of the Long Term. *Archaeology as Long-term History,* edited by Ian Hodder, pp. 1-8. University Press, Cambridge.

1991   Interpretive Archaeology and Its Role. *American Antiquity* 56:7-18.

Holland, Luke
1990   Whispers in the Forest: The Excluded Past of the Ache Indians of Paraguay. In *The Excluded Past: Archaeology in Education,* edited by Peter Stone and Robert MacKenzie, pp. 134-151. One World Archaeology, vol. 17. Unwin Hyman, London.

Jennings, Jesse D.
1986   American Archaeology, 1930-1985. In *American Archaeology Past and Future,* edited by David J. Meltzer, Don D. Fowler, and Jeremy A. Sabloff, pp.53-62. Washington, D.C., Smithsonian Institution Press.

Kehoe, Alice B.
1990   "In Fourteen Hundred and Ninety-two, Columbus Sailed..." The Primacy of the National Myth in the U.S. School. In *The Excluded Past: Archaeology in Education,* edited by Peter Stone and Robert MacKenzie, pp. 201-216. One World Archaeology, vol. 17. Unwin Hyman, London.

Kertzer, David I., Sydel Silverman, Darrett Rutman, and Andrejs Plakans.
  1986   History and Anthropology: A Dialogue. *Historical Methods*
        19(3):119-128.

Leone, Mark P.
  1978   Archaeology as the Science of Technology: Mormon Town Plans
        and Fences. In *Historical Archaeology: A Guide to Substantive
        and Theoretical Contributions,* edited by Robert L. Schuyler, pp.
        191-200. Baywood Publishing, New York.

  1970   Symbolic, Structural, and Critical Archaeology. In *American
        Archaeology Past and Future,* edited by David J. Meltzer, Don D.
        Fowler, and Jeremy A. Sabloff, pp. 415-438. Smithsonian
        Institution Press, Washington, D.C.

Leone, Mark P. and Parker B. Potter, Jr.
  1988   Issues in Historical Archaeology. In *The Recovery of Meaning,*
        edited by Mark P. Leone and Parker B. Potter, pp. 1-22.
        Smithsonian Institution Press, Washington, D.C.

Leone, Mark P., Parker B. Potter, and Paul A. Shackel
  1987   Toward a Critical Archaeology. *Current Anthropology* 28(3):
        283-302.

Lipetzkey, Jerry
  1982   *Dig 2.* Interaction Publishers, California.

Lipsitz, Joan
  1991   *Successful Schools for Young Adolescents.* Transaction
        Publishers, New Brunswick.

Little, Barbara J.
  1994   People With History: An Update on Historical Archaeology in
        the United States. *Journal of Archaeological Method and
        Theory* 1(1):5-40.

Loewen, James W.
  1995   *Lies My Teacher Told Me: Everything Your American History
        Textbook Got Wrong.* The New Press, New York.

Lord, Clifford L.
  1964   *Teaching History with Community Resources.* Teachers College
        Press, New York.

Lyons, Beauvais
  1994   Art of the Trickster. *Archaeology* 47(2):72.

MacKenzie, Robert, and Peter Stone
    1994   Introduction: The Concept of the Excluded Past. In *The Excluded Past: Archaeology in Education*, edited by Peter Stone and Robert MacKenzie, pp. 1-14. One World Archaeology, vol. 17. Unwin Hyman, London.

Magoffin, Ralph Van Deman
    1930   *The Lure and Lore of Archaeology*. The Williams and Wilkins Company, Baltimore.

Magoffin, R. V. D. and Emily Davis
    1929   *Magic Spades: The Romance of Archaeology*. Henry Holt and Company, New York.

Mbunwe-Samba, Patrick, Matthias L. Niba, and Ndambi I. Akenji
    1994   Archaeology in the Schools and Museums of Cameroon. In *The Presented Past: Heritage, Museums and Education*, edited by Peter G. Stone and Brian L. Molyneaux, pp. 326-337. One World Archaeology, vol. 25. Routledge, New York.

Maryland Department of Education
    1992   The Maryland School Performance Assessment Program. Maryland Department of Education, Maryland.

Masson, Pierre and H. Guillot
    1994   Archaeofiction With Upper Primary-School Children 1988-1989. In *The Presented Past: Heritage, Museums, and Education*, edited by Peter G. Stone and Brian L. Molyneaux, pp. 375-382. One World Archaeology, vol. 25. Routledge, New York.

McManamon, Francis P.
    1994   Presenting Archaeology to the Public in the USA. In *The Presented Past: Heritage, Museums, and Education*, edited by Peter G. Stone and Brian L. Molyneaux, pp. 61-81. One World Archaeology, vol. 25. Routledge, New York.

Meighan, Clement W.
    1986   *Archaeology for Money*. Wormwood Press, California.

Metcalf, Fay D., and Matthew T. Downey
    1982   *Using Local History in the Classroom*. The American Association for State and Local History, Nashville, Tennessee.

Miles, R. S., with M. B. Alt, D. C. Gosling, B. N. Lewis, and A. F. Tout
    1988   *The Design of Educational Exhibits*, second edition. British Museum (Natural History), London.

Miller, George L.
       1980   Classification and Economic Scaling of 19th Century Ceramics.
              Historical Archaeology 14:1-40.

Miller, Henry M.
       1983   *A Search for the Citty of Saint Maries: Report on the 1981
              Excavations in Saint Mary's City, Maryland.* St. Mary's City
              Archaeology Series No. 1, Saint Mary's City, Maryland.

       1986   *Discovering Maryland's First City: A Summary Report on the
              1981-1984 Archaeological Excavations In St. Mary's City,
              Maryland.* St. Mary's Archaeology Series No. 2, Saint Mary's
              City, Maryland.

Monmin, K. N., and Pratap, A.
       1994   Indian Museums and the Public. In *The Presented Past:
              Heritage, Museums, and Education,* edited by Peter G. Stone and
              Brian L. Molyneaux, pp. 290-298. One World Archaeology, vol.
              25. Routledge. New York.

Murphy, Cullen
       1991   *Pay Dirt: Most Archaeology in the United States is Now
              Mandated by Law and Done for Profit.* Atlantic 270(3):26-30,39,
              42.

Nasaw, David
       1979   *Schooled to Order: A Social History of Public Schooling in the
              United States.* Oxford University Press, New York.

National Center for History in the Schools
       1994   *National Standards for United States History: Exploring the
              American Experience (Grades 5-12 Expanded Edition).*
              University of California, Los Angeles.

National Museum of Natural History
       1993   Colonial Bones Provide Record of American History. *Quest*
              2(3):4-6.

Noël Hume, Ivor
       1992   *Martin's Hundred.* University Press of Virginia, Charlottesville,
              Virginia.

O'Riordan, Timothy, Ann Shadrake, and Christpher Wood
       1989   Interpretation, Participation, and National Park Planning. In
              Heritage Interpretation, vol. 1, edited by David Uzzell, pp. 179-
              189. Belhaven Press, New York.
                                    104

Papier, Deborah
    1992   Tales From the Crypt. *Mid-Atlantic Country* 13(9):30-35.

Perrin, Richard W.E.
    n.d.   *Outdoor Museums.* Milwaukee Public Museum Publications in Museology No. 4, Milwaukee.

Phillip, Mary-Christine
    1994   To Reenact or not to Reenact? *Black Issues in Higher Education* 11(18):24-27.

Planel, Philippe G.
    1994   Privacy and Community Through Medieval Material Culture. In *The Presented Past: Heritage, Museums, and Education,* edited by Peter G. Stone and Brian L. Molyneaux, pp. 206-215. One World Archaeology, vol. 25. Routledge, New York.

Potter, Parker B., Jr.
    1994   *Public Archaeology in Annapolis: A Critical Approach to History in Maryland's Ancient City.* Smithsonian Institution Press, Washington, D.C.

Price, Doug and Gitte Gebauer
    1990   *Adventures in Fugawiland! A Computer Simulation in Archaeology.* Mayfield Publishing Company, Mountain View, California.

Project Learning Tree
    1994   *Project Learning Tree Environmental Education Activity Guide: Pre K-8.* American Forest Foundation, Washington, D.C.

Samford, Patricia, and David L. Ribblett
    1995   *Archaeology for Young Explorers.* The Colonial Williamsburg Foundation, Williamsburg, Virginia.

Schuyler, Robert L.
    1978a   Emergence and Definition of a New Discipline: Introduction to Part 1. In *Historical Archaeology: A Guide to Substantive and Theoretical Contributions,* edited by Robert L. Schuyler, pp. 1-2. Baywood Publishing, New York.

    1978b   Historical and Historic Sites Archaeology as Anthropology: Basic Definitions and Relationships. In *Historical Archaeology: A Guide to Substantive and Theoretical Contributions,* edited by Robert L. Schuyler, pp. 27-31. Baywood Publishing, New York.

Sebolt, Alberta
    1981   Old Sturbridge Village Teacher-Training Program. In *Museums,*
            Adults, and the Humanities: A Guide for Educational
            Programming, edited by Zipporah Collins, pp. 313-337.
            American Association of Museums, Washington, D. C.

Smardz, Karolyn
    1990   Archaeology in the Toronto School System: The Archaeological
            Resource Centre. In *The Excluded Past: Archaeology in*
            Education, edited by Peter Stone and Robert MacKenzie, pp. 293-
            307. One World Archaeology, vol. 17. Unwin Hyman, London.

South, Stanley
    1977   *Method and Theory in Historical Archaeology.* Academic Press,
            New York.

Stone, Peter G.
    1994   The Re-display of the Alexander Keiller Museum, Avebury, and
            the National Curriculum in England. In *The Presented Past:*
            Heritage, Museums, and Education, edited by Peter G. Stone and
            Brian L. Molyneaux, pp. 190-205. One World Archaeology, vol.
            25. Routledge, New York.

Strutt, Michael
    1996   *Educating the Future for our Past at Poplar Forest.* Paper
            delivered at the 29th Annual Meeting of the Society for
            Historical Archaeology Conference on Historical and
            Underwater Archaeology, Cincinnati, Ohio.

Ucko, P. J.
    1990   Foreword. In *The Excluded Past: Archaeology in Education,*
            edited by Peter Stone and Robert MacKenzie, pp. ix-xxx. One
            World Archaeology, vol. 17. Unwin Hyman, London.

UNESCO
    1970   *Protection of Mankind's Cultural Heritage: Sites and*
            Monuments. UNESCO, Paris.

VonDaniken, Erich
    1969   *Chariots of the Gods? Unsolved Mysteries of the Past,* translated
            by M. Heron. G.W. Putnam's Sons, New York.

Wallace, Michael
    1986   Reflections on the History of Historic Preservation. In *Presenting the Past: Essays on History and the Public,* edited by Benson, Brier, and Rosenzweig, pp. 164-199. Temple University Press, Philadelphia.

Wandibba, Simiyu
    1994   Archaeology and Education in Kenya: The Present and the Future. In *The Presented Past: Heritage, Museums, and Education,* edited by Peter G. Stone and Brian L. Molyneaux, pp. 349-358. One World Archaeology, vol. 25. Routledge, New York.

Watson, Richard A.
    1991   What the New Archaeology has Accomplished. *Current Anthropology* 32(3):275-292.

Webster, Matthew
    1994   The Relief of General MacArthur: A Multimedia Exploration. Unpublished Honors Thesis, Saint Mary's College of Maryland, Saint Mary's City, Maryland.

Weil, Stephen E.
    1990   Rethinking the Museum. *Museum News* 69(2):57-61.

Wertime, Richard A.
    1992   Inference and Whimsy at Carter's Grove. *Archaeology* 45(1):66-68.

Wheeler, William Bruce and Susan D. Becker
    1986   *Discovering the American Past: A Look at the Evidence, Vol. I To 1877.* Houghton Mifflin Company, New Jersey.

Williams, Stephen
    1991   *Fantastic Archaeology: The Wild Side of North American Prehistory.* University of Pennsylvania Press, Philadelphia.

Witz, Leslie and Carolyn Hamilton
    1994   Reaping the Whirlwind: The Reader's Digest Illustrated History of South Africa and Changing Popular Perceptions of History. In *The Presented Past: Heritage, Museums, and Education,* edited by Peter G. Stone and Brian L. Molyneaux, pp. 29-45. One World Archaeology, vol. 25. Routledge, New York.

Zimmerman, L.J., S. Dasovich, M. Engstrom, and L.E. Bradley
1994 Listening to the Teachers: Warnings About the Use of Archaeological Agendas in Classrooms in the United States. In *The Presented Past: Heritage, Museums, and Education,* edited by Peter G. Stone and Brian L. Molyneaux, pp. 359-374. One World Archaeology, vol. 25. Routledge, New York.

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