

The Object of History: Teaching American History Through Artifacts **Narrative**

OVERVIEW

The strength of history museums lies in their collections, their objects. But students and teachers often lack the skills to make sense of historical objects, to analyze them closely and tease out their larger historical significance. Many students aren't even in a position to visit a museum, making it even more difficult for them to engage in close analysis of historical objects. *The Object of History*, which will be developed by the Center for History and New Media (CHNM) at George Mason University (GMU), responds to both of these problems, providing a new model for bringing museum objects and expertise to students in remote classrooms and for teaching them how to engage and analyze these artifacts to learn about key themes in American history. Through six web-based "object lessons"—organized chronologically and in alignment with the standard high school curriculum—*The Object of History* will teach important themes in U.S. History through virtual representations and interpretations of iconic objects in the Smithsonian's National Museum of American History (NMAH). In doing so, the project will not only provide a much-needed educational resource for students and teachers nationwide, it will also provide a cost-effective, innovative, and replicable model for history museums seeking new ways to educate audiences and disseminate collections.

1. ASSESSMENT OF NEED

The Challenge for Museums

In the early days of the web, cyber enthusiasts promoted the notion that the Internet would costlessly automate education. Heralding a new age of "disintermediation"—in which all middlemen, including teachers—would be eliminated, they asserted that putting students in direct contact with historical information and historical evidence would result in learning without the intervention of teachers and historians.¹ (See *Appendix A*.) They imagined that simply by digitizing museum collections and making them freely available online, students sitting in classrooms from Boise, Idaho to Bangor, Maine would remotely reap all the educational benefits of a vast, virtual "national museum of American history." At least in some respects that grand vision has been realized in barely a decade. Most museums now offer at least a selection of objects on the World Wide Web. A few even provide access to their entire collections, complete with images and label text.

But the larger dream of the cyber enthusiasts has not been met for two reasons. First, technology spending for museums, especially smaller history museums, remains very limited. Most offer little more than on-line brochures. Of the museums responding to the IMLS's 2002 survey on technology and digitization, fewer than 4 percent provided more sophisticated interfaces such as "virtual reality tours."² Even electronic catalogues, which are far from ubiquitous, are of limited utility for students for whom the meaning of artifacts is far from transparent. Making sense of historical artifacts requires a deep knowledge of the object's historical context as well as a set of historical procedures that trained historians and curators make part of their routine. Very few museums provide that sort of contextualization, and almost none have offered instruction in making sense of historical objects.

Second, web-based programs generally leave out the museum curator and educator, something curators have long recognized but have by and large been unable to address. Part of the engagement of a museum visit for students is contact with the "stuff" of the past. But an equal degree of excitement comes from contact with the museum curators and educators who bring enormous effort and energy working with school groups (as well as knowledge about the distinct needs of students at different

grade levels) and who carry around in their heads a vast library of knowledge about the museum's collections and their larger historical significance. A school museum visit without access to museum curators and educators can be like a classroom without teachers. By focusing on digitization at the expense of interpretation and interaction with museum expertise, museum professionals have democratized access to museum resources but not to the kind of instruction and energy that can give meaning to these resources.

The Challenge for Teachers and Students

These weaknesses in the ways that museums use the web correspond to similar weaknesses in history education. First, there is a clear need—especially at the high school level—for help in making sense of primary evidence, a need borne out by recent research in cognitive psychology and learning theory. For example, the National Research Council's important study of "How People Learn," shows that active participation in learning through the integration of primary material greatly improves student interest, ability to retain knowledge, and overall satisfaction with the learning process. Similarly the National Standards for United States History maintain that "perhaps no aspect of historical thinking is as exciting to students or as productive of their growth as historical thinkers as 'doing history'" by directly encountering "historical documents, eyewitness accounts, letters, diaries, artifacts, and photos." Further support for this approach is found in the work of cognitive psychologist Samuel Wineburg and his award-winning book, *Historical Thinking and Other Unnatural Acts*. With the College Board administering more than 263,000 Advanced Placement U.S. History exams during 2004 that included "Document Based Questions," these analytical skills have become a practical necessity for the academic success of high school students.³

History teachers are not always in a position to fill this gap because they often do not have adequate preparation in history themselves. The majority of middle and high school history teachers have no training in analyzing and interpreting historical documents: almost two-thirds of those currently teaching history in public schools have not majored in history, and more than one-sixth of those are not even certified to teach history.⁴ We cannot expect that most teachers, lacking advanced historical training themselves, will be able to deal effectively with historical documents—not to mention teach students to do so. Teachers themselves recognize that they need help in helping students closely examine and analyze primary sources. We have heard this plea often in the dozens of workshops we have run as part of the *Teaching Traditional American History* programs funded by the Department of Education.

Second, teachers are not only looking for ways to help their students make sense of evidence; they are also trying to find and to figure out ways to integrate reputable museum collections, objects, and expertise into their curricula without the time, expense, and worries associated with field trips.⁵ Though school visits to museums have always been constrained by time, geography, and expense, recently, these constraints have been tightened because the increased focus on standards-based education have made field trips seem like "frills." More than ever, teachers are looking for ways to interact directly with primary resources without visiting museums and libraries. That demand accounts for the success of primary source-based lesson plans offered online by the Library of Congress, National Archives, NEH's Edsitement, or our own *History Matters*.⁶ Similarly, when our partner in this project, the NMAH advertised a recent "virtual field trip" to its *Brown vs. Board of Education* exhibition, it received an unexpectedly large response from teachers around the country, with nearly four million students participating in the live event. Nevertheless, the high technology utilized in this experiment strained even the considerable financial and technical resources of NMAH. A lower-cost model is needed to fill this gap. (Note: the federally funded NMAH will receive no IMLS funds from

this proposal; to the contrary, it will make a major contribution to the project both from its public and privately funded employees.)

The Opportunity

CHNM, with assistance from NMAH, is well placed to meet these needs. For the past five years, CHNM has been developing guides, exercises, and resources on “making sense of evidence” as part of two major web-based projects funded by the National Endowment for the Humanities, *History Matters: The U.S. Survey Course on the Web* and *World History Matters*.⁷ Focused mainly on documents rather than artifacts, both projects provide guides for high school and early-college students on how to analyze primary evidence and present detailed examples of how “expert learners” make sense of primary sources. They also introduce students virtually to academic expertise they would otherwise be unable to access by showing them with audio and video how “scholars in action” read primary sources. In doing so, these projects demystify the process of analysis for students and other novice learners, who have greeted them with enthusiasm and interest. *History Matters*, for example, has established itself as one of the leading stops on the web for U.S. History students and teachers, receiving nearly one million visitors (and 19 million hits) per year. Its guides to making sense of evidence have been the subject of articles and discussion in such publications as the *History Teacher*, *Social Education*, and the *AHA Perspectives*, and it recently received the American Historical Association’s James Harvey Robinson Prize for its “outstanding contribution to the teaching and learning of history.”⁸

Though *History Matters* and *World History Matters* are meeting the need of teaching students how to analyze documents and introducing them to the documentary expertise of professional academics, for the most part they have been unable to do the same thing with objects, museum curators, and their material cultural expertise. *The Object of History* fills this gap by responding to the unfulfilled educational opportunities of digitized museum collections. It addresses both the problems posed by inadequate attention to teaching students how to read historical artifacts and those posed by the disappearance of the museum curator and educator from the virtual museum. As detailed below, *The Object of History* will do this by creating a series of low-cost, easily reproduced modules that teach students how to analyze museum objects and introduce them to curators and ways of thinking behind them.

2. NATIONAL IMPACT AND INTENDED RESULTS

We believe that *The Object of History* will have substantial impacts both on the history museum field and on the teaching and learning of American History.

Museums

Our immediate goal is to help history museums to reach and engage distant communities of students. There is a growing “digital divide” in the museum world. Large and well-funded museums—especially art and science museums—are mounting increasingly sophisticated and professional websites. But smaller museums—especially local history museums—do not have access to the technical resources and expertise to develop comparable resources. Most history museums use the web to advertise their hours and collections; few use it as a vehicle of museum education. Whereas one study finds that more than half of art museums offer activities or lessons online, only about 15 percent of history museums (in another study) provide comparable materials. In a close examination of online education offerings at a sample of eighty-five history museums, museum educator Sheila Brennan found only five provide in-class learning experiences.⁹ Those institutions—such as Colonial Williamsburg—that have attempted to extend the educational experience of a museum visit to students beyond their own walls have achieved this aim only at relatively high costs and often with sophisticated technology like closed circuit TV that is not readily available to most classrooms and

most museums. *The Object of History* will help narrow some of this digital divide by providing less well-funded museums, especially history museums, an easy to use and low-cost template (detailed below) for offering museum education programs and virtual field trips. These field trips will be easy to replicate because they will make significant use of museums strengths: artifacts and curator expertise, without requiring major investments in web design and programming expertise.

Teachers and Students

The educational and civic significance of the basic survey of American history is well established, and virtually every eleventh grade high school student in the United States—about 3 million in all—takes the course annually.¹⁰ Concerns about the level of history learning and about making history (rather than social studies) central to the curriculum led the Congress to create the *Teaching Traditional American History* (TTAH) program in 2001. Focused on teacher training, that program is currently funding many laudable professional development efforts, including three multi-year projects at CHNM.¹¹ But its narrow guidelines limit where and how federal funds may be spent, and as a result TTAH does not support the development of sophisticated teaching and curriculum materials. This creates an essential irony: by helping to improve teachers' historical content knowledge, the professional development activities funded by TTAH are actually making them more eager for the kinds of sophisticated teaching resources that TTAH cannot support. These are the resources we propose to develop in *The Object of History*.

3. PROJECT DESIGN AND EVALUATION

Design

The core of *The Object of History* will be six modules focusing on iconic objects from NMAH's unparalleled collections that illuminate key periods and topics in American History. Each module will have four major parts:

1. *The Object and its Context*: In this section, the student will find a basic, but comprehensive introduction to the iconic object—for example, the dress Mary Todd Lincoln wore for her husband's 1861 inauguration or the lunch counter from the Greensboro, North Carolina Woolworth. Most objects will be available with detailed blow-ups and in QuickTime VR, which allows the viewer to “turn” the object around and zoom in on “hot spots.” The featured object will be presented in juxtaposition to relevant associated objects and documents. For instance, a silver teapot from the 1750s (suggestive of gentility) will be juxtaposed with artisan images (suggestive of an emerging consumer marketplace) and with symbols of the tea boycott that were so central to the coming of the American Revolution. In addition, we will provide a brief essay that places the object in its broadest historical contexts—e.g., slavery, Civil War, Civil Rights, and the American Revolution. In this way students will come to understand that artifacts do not exist in isolation, but rather they only have historical significance when they are understood in connection with who created and used the objects and suspended in a web of meaning created through their relationships to other artifacts, documents, and historical circumstances. Finally, students will be presented with some provocative questions to get them thinking about what more they can learn from the object.

2. *The Curator and the Object*: Here, students will find a detailed dissection of the object, associated artifacts and documents, and their contexts by a leading NMAH curator—for example, Domestic Life curator Barbara Clark Smith on Mary Todd Lincoln's Dress or Political History curator Harry Rubenstein on the Greensboro Lunch Counter. The section will be structured as a series of four to six video clips (ca. 4 minutes each) set within an interactive Flash frame in which the curator answers basic questions such as: When and why was the object collected? Have the reasons for showing the object changed since then? Who created the object and who used it? What historical themes does the

object reveal? What does the object “conceal,” i.e., what collateral documents are needed to fully illuminate the object and its context? Organizing the curator section in this fashion has two advantages. First, it gives students the sense of being able to ask the curator specific questions. Second, it breaks the presentation into smaller segments that download more quickly and can be used flexibly in classrooms. For an example of this overall approach, see our online interview with Dana Leibsohn in *World History Matters*.¹²

3. *Chat with the Curator* offers students the opportunity to pose additional questions to the curator. There are a number of possible approaches to bringing students in direct contact with more distant experts. For example, the Smithsonian has experimented with live broadcast events that were available to schools through satellite uplink or cable. Such approaches provide a limited event based model for interaction with the curators, since they only allow for a one-time broadcast. These events have been successful but are also very costly—as much as \$50,000 for production and broadcast costs. They are not a sustainable model for small history museums; indeed, even the Smithsonian cannot afford these types of virtual field trips unless they find a generous donor interested in a particular high profile topic, such as the fiftieth anniversary of the *Brown v. Board of Education* decision. By contrast, our approach here is to use easy-to-develop, open source technology of the sort employed with great success by media companies to bring their readers in contact with their reporters. The *Washington Post*, for example, sponsors daily live chats with reporters, columnists, and experts, which regularly draw audiences of thousands. We would offer similar live chats with Smithsonian curators on a weekly basis. The chats will be timed to roughly coincide with the schedule of standard U.S. history surveys. Each of the six participating curators will be available for one hour on four Fridays in a single month. That would offer additional flexibility to teachers in terms of schedule. For example, Barbara Clark Smith would be available on four Friday afternoons in November 2006 to talk about Mary Todd Lincoln’s dress, slavery, women, and the Civil War. Students who arrive at this portion of the site in advance of the live chat will have the opportunity to pose their questions ahead of time. Those who arrive after the live chat is completed will be able to read the archive of the four discussions with that curator.

4. *Teaching the Object of History*: The final section of each object lesson will be directed at teachers, rather than students. It will contain a lesson plan (developed by an experienced high school teacher) on how to use the site’s resources in a class. It will also include supporting resources for this teaching, including at least three related primary source documents, annotated web links, and further contextual readings. Finally each module will link to a more general set of framing materials, collectively titled “How to Read Historical Objects.” These materials will provide guidance on how to teach with artifacts and a broader discussion of historical thinking in relation to material culture, and will borrow from, expand upon, and repurpose the excellent work already done in this area by CHNM for its *History Matters* “Making Sense of Evidence Guides” and by the Smithsonian Center for Education and Museum Studies’ Artifact and Analysis project.¹³

Production

The production of *The Object of History* will proceed in four phases over two years between October 2005 and September 2007:

Phase I: Planning and Content Development (October 2005- February 2006): Throughout its planning and implementation, *The Object of History* will draw on the expertise of a planning and advisory committee that will include curators, museum educators, historians, teachers, web designers, and programmers. This diverse group of advisors will be drawn from the staff of NMAH, CHNM, and school districts in the National Capitol area. Through a series of three planning meetings during the

first six months of the grant, the committee will oversee the project and make specific decisions about the historical, pedagogical, and material cultural content of the “object lessons.” Its first job in this phase will be to make the final selection of the six objects and topics from the following tentative list of ten: 1750s Silver teapot (American Revolution); Sunstone from the Mormon Temple at Nauvoo, Illinois (antebellum reform and religion); Mary Todd Lincoln dress made by ex-slave Elizabeth Keckley (slavery and Civil War); White/colored signs (Jim Crow and segregation); Buffalo Bill Wild West Show Poster and Theodore Roosevelt’s Chaps (Western settlement and mythology); Ballot Box (Progressivism and political reform); Model T Ford (industrialization and consumer culture); NRA eagles (New Deal State); first Barbie doll (women and gender in the 1950s); Woolworth lunch counter (civil rights). (*For further details on objects, see Appendix D.*) Following these decisions, the committee’s second job in this phase will be to help project staff (working with educators and curators) storyboard each object lesson and develop the teaching and contextual materials to be included in each Teaching the Object of History section. This phase will also include the writing and editing of “How to Read Historical Objects,” the more general set of materials that will accompany these object-specific lesson plans, documents, links, and readings.

Phase II: Web Production and Recruitment (March 2006-August 2006): The results of this first phase will inform the more hands-on work of phase two: web development and pre-launch publicity. This production phase will make use of the considerable design, multimedia, and web-database development experience and skill of the CHNM staff. In particular, this phase will see the development of the of the six object clusters. In addition to this web and multimedia work, Phase II will also include the design and building of the interactive technology that will be used for the live Curator Chats in Phase III. Finally, this second phase of the project will include a recruitment and publicity plan that will result in registering high school U.S. history teachers who plan to have their classes participate in the interactive phase of the project. Here we will rely on the extensive contacts of CHNM and NMAH in the educational community to insure broad and active participation in the project by students and teachers both in the National Capitol area and nationwide.

Phase III: Launch, Implementation, and Response (October 2006 - June 2007): The interactive elements of the project will take place in the third phase of the project, during the academic calendar of the second year of the grant. The results of this phase of the project will include twenty-four on-line chats (four for each of the “six object lessons”) in which NMAH curators will interact with high school students around the country. During this phase, the planning committee will reconvene three times to review and comment upon the effectiveness of the “object lessons.” And because the six interactive “object lessons” will be spread out over six months, we will be able to respond to these comments, address concerns in midstream, learn lessons from experience, and make changes accordingly to improve the quality and effectiveness of the project even while it continues.

Phase IV: Dissemination and Evaluation (July 2007 - September 2007): The results of this phase of the project will be twofold. First, we will embark upon a series of activities designed to disseminate our framework for interactive educational programming to smaller museums. These efforts will include developing a set of downloadable object lesson templates, publishing articles and advertisements about our experience, making conference presentations, and providing five free consultancies to other institutions (see also “Dissemination” below). Second, we will use quantitative and qualitative evaluation techniques to assess whether we have achieved our project goals.

Evaluation

We will use three strategies to assess the appropriateness of these methods for museums and the effectiveness of these materials for U.S. high school classrooms.

First, we will recruit four U.S. history teachers from the National Capital area to serve as a focus group during the project. We will select these teachers so that their students represent a diversity of demographic criteria (economic background, rural, urban, etc.) and variety of skill levels (special needs, mainstream, advanced placement). Throughout the course of the launch year these teachers will complete evaluation surveys as they use *The Object of History* materials in their classroom that will provide input to the project team and the advisory board.

Second, we will request that teachers register when they first visit the site so that we can collect some demographic information about the types of students who will participate in the object lessons. Then, we will make a quantitative assessment of the website traffic through out the second phase of the project. (CHNM maintains careful logs of its web traffic using Absolute Log Analyzer software.) We will document the usage of the teaching materials and preparation materials prior to the live events, the number of actual participants in the online chats with the curator, and the return traffic to the particular “object” site after the interactive events.

Third, after the completion of all of the interactive events, we will conduct a qualitative survey of the teachers and their students who register as users of the site that will question them about their experience with the fieldtrips and the teaching materials, and most importantly, their observations about if and how their students’ historical literacy improved through the course of the project. These qualitative surveys will supplement the information gathered from the focus group. The results of these surveys will inform the creation of the “Guide to Object Lessons,” which we will distribute to museums. (For more on evaluation on the use of these approaches for museums, see the Dissemination section.)

4. BUDGET, PERSONNEL AND MANAGEMENT PLAN

Budget

The total cost of *The Object of History* is \$421,178. Of this amount, \$173,130 or 41.11% is non-federal cost share. This figure includes contributions of staff time from CHNM and NMAH amounting to \$70,107 and \$103,023 respectively. The remaining amount of \$248,048 we are requesting from IMLS. This contribution will pay for non-permanent project staff at CHNM, research assistants, planning committee honoraria, software, travel and evaluation and dissemination costs. All IMLS funds will go to CHNM, which has a long track record of managing federal grant money and doing cost-efficient, high-quality online education and public history. *No IMLS funds will be paid to NMAH and the NMAH cost-share will come from non-federal, trust funds.*

Personnel

Senior Historian (Primary Investigator): Roy Rosenzweig, Director of CHNM, will serve as Senior Historian with overall responsibility for historical content.

Senior Museum Specialist: Judith Gradwohl, Associate Director of NMAH for Public Programs, will be Senior Museum Specialist with overall responsibility for coordinating curator involvement and other aspects of museum education and administration.

Project Manager: Sharon Leon of CHNM will serve as project manager and will coordinate content and technology development, program implementation, personnel management, outreach and evaluation, and oversight of the planning and advisory board.

Education Coordinator: Eleanor Greene of CHNM will serve as the project's primary liaison to the educational community and will oversee the production of educational content including lesson plans and other instructional materials.

Museum Coordinators: Matthew MacArthur, Benjamin Bloom, and Patrick Coleman of NMAH will coordinate curator involvement, museum education and outreach, development of QuickTime VR, dissemination efforts in the museum community, and interface with existing NMAH web programs.

Planning and Advisory Committee: A planning and advisory committee will be active in all phases of the project, meeting formally at least six times during the two years of the project funding. The membership of this committee will include the principal coordinators from CHNM and NMAH, two museum curators (Barbara Clark Smith and James Gardner), and two veteran high school teachers (David Kobrin and Elizabeth Butler).

(See included CVs and Appendix B for biographies.)

Management Plan

CHNM's extensive experience in producing educational materials for the Internet, as evidenced by the success of *History Matters*, *World History Matters* and our *Teaching American History* projects, means that we are especially well equipped to manage the planning, production, and dissemination of *The Object of History*. Additionally, CHNM has a proven record of working closely and productively with NMAH in the past. For example, in 2002-2003, CHNM and NMAH effectively partnered to produce the website and interactive gallery elements for NMAH's very successful "September 11: Bearing Witness to History" exhibition.¹⁴

CHNM's success results from combining the knowledge and skills of credentialed historians with the experience of our multimedia and technical staff and considerable technical and equipment resources. Together our project managers, Roy Rosenzweig, Judith Gradwohl, and Sharon Leon, have overseen work on numerous grant projects with budgets in the hundreds of thousands of dollars. They will manage the interaction of the education coordinator, Eleanor Greene, and the museum coordinators, Matt MacArthur, Benjamin Bloom, and Patrick Coleman. These coordinators will consult with the planning and advisory committee. As the project manager, Sharon Leon will organize the work of the research assistants, web designers, multi-media developers, lesson plan authors, and museum curators.

The day-to-day work of the project will proceed through weekly production team meetings, periodic consultations with advisory committee, and frequent communication via email, blog, and conference call. Open communication among the managers, coordinators and staff will ensure that we integrate the comments of the advisory committee into production, and that we meet all of our project deadlines. This system will result in project staffing that makes the best use of personnel expertise, while emphasizing communication and flexibility at every stage of the project.

5. DISSEMINATION

Students and Teachers

CHNM's reputation as a provider of educational content and NMAH's status as the country's largest history museum with an unsurpassed collection will assist greatly in recruiting teachers to use *The Object of History* in their classrooms. Both institutions have seen tremendous popular success in their online projects, with CHNM's website reaching more than 8 million visitors per year and NMAH's website more than 7 million. Leveraging our existing web presence and reputation, we will

follow a multifaceted plan for reaching instructors to participate in our project that involves direct mail, print advertising, and internet advertising. First, we will advertise in the National Council of Social Studies' newsletter, *The Social Studies Professional*, which has a circulation rate of 21,000, and the Organization of American Historian's bimonthly *Magazine of History*, which targets teachers of history and social studies. We will also reach out to those who home school their children by advertising in *Home Education* magazine. Second, to complement print advertising, we will make use of our extensive electronic resources to reach teachers through the Internet. Thus, we will contact the teachers who are registered users of our *History Matters* site, the 11,000 subscribers to the bi-weekly *History News Network* newsletter (sponsored by CHNM), and the recipients of a number of H-Net discussion lists. Additionally, we will advertise through the websites of the National Home Education Network and the American Homeschool Association.¹⁵ NMAH also has the capability to reach as many as 110,000 teachers through national database lists that are utilized in major outreach efforts. Together, this multifaceted approach will provide a substantial pool of teachers who will participate in the interactive phase of *The Object of History*.

Museums

The partners in this project are in a good position to disseminate the results to the history museum field. This will be done online, in print, and in person. First, we will disseminate *The Object of History* model online by providing a packet of free materials that smaller and lower-budget history museums and historical societies can download from *The Object of History* website. These packets will include templates (pre-made HTML files) that can be readily adapted by the user to produce an "object lesson." Additionally, we will provide recommendations on free and/or inexpensive "chat" software for conducting the live on-line sessions, as well as the open-source code for online chat that we develop ourselves during the project. Finally, these materials will be accompanied by a detailed "Guide to Object Lessons" that will assist museums both in organizing their own "object lessons," and in adapting our approach to their needs and technical resources. This guide will instruct museum educators on simple ways to reduce the level of skill involve in creating object lessons, such as replacing the Flash and QuickTime VR elements used in *The Object of History* with lower-tech alternatives such as static images, text scripts, and audio files.

Second, we will advertise *The Object of History* model and its templates and guide to the membership of the American Association of Museums (AAM), the American Association for State and Local History (AASLH), and to Smithsonian affiliate museums through published articles and print announcements. Among the publications we will target will be the AAM publications, *Aviso* and *Museum News*, and the AASLH publications, *Dispatch* and *History News*. We will also post regular project updates on those listservs frequented by history museum professionals, in particular H-Museum, H-Public, museum-ed and museum-L.

Finally, we will disseminate our results in-person to the museum profession. We will do this in two ways. First, we will make conference presentations, at such venues as the 2007 annual meetings of AAM, AASLH, the National Council for Public History, and the Archives and Museum Informatics conference, "Museums and the Web." Second, we will offer five free consultations for museum professionals interested in creating electronic fieldtrips or similar online interactive student activities. These consultations will assist participants in planning their object lessons and will address both technical and logistical issues such issues as producing supporting materials, monitoring site traffic, and creating effective partnerships with local educators. Any online exercises created by consultees and other museums will be linked directly from *The Object of History* website. Thus, we envision the site growing into a large-scale resource for museum professionals and teachers who want to teach history using objects.

In all of these cases, we will assess the impact of the project on the museum field using similar methods to those that we will use to assess the impact of the project on students' historical thinking skills. Thus, we will conduct evaluation surveys with all of the institutions that use the templates to construct their own object lessons and with the institutions that participate in our consultations.

6. SUSTAINABILITY

The Object of History will not end at the end of the grant period. The project's website will be hosted at the CHNM, which is committed to maintaining it as a long-term resource for students, teachers, and museums. CHNM's ability to meet this commitment is demonstrated by more than ten years of work in the field of digital history. Since 1994, CHNM has used digital media and computer technology to present and preserve the past, and it currently hosts more than a dozen online history projects. (See *organizational profile*.) Among these are several major history projects—such as the award-winning *DoHistory*—that have been given to CHNM because their creators believed they would find a more permanent home in CHNM's stable of leading digital history projects.

CHNM's stability stems from several sources. With the help of an NEH Challenge Grant, CHNM has raised a \$2 million endowment, which provides for CHNM's long-term viability as a unit of the George Mason University (GMU) Department of History and Art History. GMU also has a strong institutional commitment to CHNM, which has a \$1.3 million annual budget and a staff of more than twenty. The History Department has made "new media" a central focus of its new PhD program, which insures a steady stream of students (at least four of whom work as Graduate Assistants at CHNM) interested in sustaining existing projects and creating new ones. CHNM has also just received an Academic Excellence Equipment Award from Sun Microsystems. Housed in George Mason University's secure data facility, this state-of-the-art configuration will help meet CHNM's server technology needs for several years to come. Taken together, its substantial endowment, demonstrated fundraising success, strong institutional support, and solid technology allows CHNM to guarantee that *The Object of History* will be a permanent resource for teachers, students, museums, and the general public.

Appendix A: Notes

¹ See, for example, Lewis J. Perelman, "School's Out: The Hyperlearning Revolution Will Replace Public Education," *Wired Magazine* March-April 1993, <http://www.wired.com/wired/archive/1.01/hyperlearning.html>.

² Institute of Museum and Library Services, *Status of Technology and Digitization in the Nation's Museums and Libraries 2002 Report* (Washington, DC, 2002), http://www.imls.gov/reports/techreports/survey_museums02.htm.

³ John Bransford et al., *How People Learn: Brain, Mind, Experience, and School* (Washington, DC 2000); National Center for History in the Schools, *National Standards for United States History: Exploring the American Experience* (Los Angeles, 1994), 29; Samuel Wineburg, *Historical Thinking and Other Unnatural Acts: Charting the Future of Teaching the Past*. (Philadelphia, 2001) [Wineburg is currently collaborating with CHNM in another project in online learning and his research underlies much of our approach]; *2004 AP Program Summary Report* (New York, 2004), http://apcentral.collegeboard.com/repository/programsummaryreport_39028.pdf.

⁴ U.S. Department of Education, National Center for Education Statistics, *Qualifications of the Public School Teacher Workforce: Prevalence of Out-of-Field Teaching, 1987-88 to 1999-2000*, NCES 2002-603. Revised by Marilyn McMillen Seastrom, Kerry J. Gruber, Robin Henke, Daniel J. McGrath, and Benjamin A. Cohen (Washington, DC, 2004) Appendix B, Table B-5. (<http://nces.ed.gov/pubs2002/2002603.pdf>)

⁵ See NetDay Survey 2001, "The Internet, Technology and Teachers" (Executive Summary, May 2001) http://www.netday.org/anniversary_survey.htm.

⁶ See Library of Congress, "Learning Page," <http://memory.loc.gov/learn/>; National Archives and Records Administration, "Digital Classroom," http://www.archives.gov/digital_classroom/index.html; and National Endowment for the Humanities, "Edsitement," <http://edsitement.neh.gov/>.

⁷ <http://historymatters.gmu.edu/>; <http://chnm.gmu.edu/worldhistorymatters>.

⁸ See David Kobrin, "Using History Matters with a Ninth-Grade Class," *The History Teacher* 34:3 (May 2001), 339-344, <http://chnm.gmu.edu/assets/historyessays/usingmatters.html>; Kelly Schrum, "Making History on the Web Matter in the Classroom," *The History Teacher* 34:3 (May 2001), 327-338, <http://chnm.gmu.edu/assets/historyessays/makinghistory.html>; Kelly Schrum, "Surfing for the Past: How to Separate the Good from the Bad," *Perspectives* 41:5 (May 2003), <http://www.historians.org/perspectives/issues/2003/0305/0305for3.cfm>; and Kelly Schrum and Roy Rosenzweig, "History Matters: The U.S. Survey Course on the Web," *Social Education* (April 2001).

⁹ For art museums, see Scott Sayre and Kris Wetterlund, "ARTstor and the K-12 Education Community," unpublished report for ARTstor, <http://www.artstor.org/news/ARTstorK-12.pdf>. For Brennan's study, see "Online History Museums and Education," minor field statement for George Mason University PhD program, September 2004, copy in possession of authors.

¹⁰ National Center for Education Statistics Digest of Education Table and Figures, 2003

<http://nces.ed.gov/programs/digest/d03/tables/dt038.asp>. In 2001 there were 13,735,868 secondary students enrolled in public schools in the United States, 3,174,203 of whom were in the 11th grade when U.S. History is most frequently taught.

¹¹ <http://chnm.gmu.edu/tah/>.

¹² <http://chnm.gmu.edu/worldhistorysources/analyzing/mcimages/analyzingimgintro.html>.

¹³ <http://historymatters.gmu.edu/browse/makesense/>;
<http://www.smithsonianeducation.org/idealabs/ap/>.

¹⁴ <http://americanhistory.si.edu/september11/>.

¹⁵ <http://www.nhen.org/default.asp>; <http://www.americanhomeschoolassociation.org/aha.html>.