

INQUIRY IN ACTION

Building the Washington State Historical Society's History Lab Learning Center

By Stephanie Lile

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Twenty-five fifth-graders sit on carpeted stairs in a small theater space on the fifth floor of the Washington State History Museum. A video program fuzzes to life on the big screen in front of them. "How am I coming through?" asks a smart-sounding woman wearing a royal-blue bowling shirt and cat-eye glasses. She adjusts the camera focus. "I've been researching a new collection of artifacts, and I think we definitely have a history mystery on our hands."

The woman is *Inspecta Detecta*, the History Lab's virtual character. Appearing on video and in computer software, *Inspecta Detecta* encourages visitors to think like detectives and search for evidence. "In fact," she says, as if sharing a little-known secret, "when it comes to making sense out of the past, you have to look, you have to listen, you have to make connections." This inquiry approach lies at the very heart of the History Lab Project.

Painting the Big Picture

The History Lab is a big-picture project. Designed to teach the concepts and tools of historical study, the History Lab Project encompasses a learning center in the Washington State History Museum, a dynamic web site (www.historylab.org), and teacher training programs based on historical thinking concepts. The project was inspired by art and science where "universal" elements and concepts are applied. But what exactly are the concepts and tools of historical study? This question was the topic of discussion for a group of history and education scholars convened in the summer of 1996 to help define the method behind the History Lab Project.

What was identified in this brainstorming session and refined over time were seven concepts and seven tools of historical study. From there, we set out to build exhibits that used examples from Pacific Northwest history to teach these important historical thinking concepts while introducing users to the ways in which the Tools of the History Trade—artifacts, ephemera, books and periodicals, images, maps and electronic media—are used. This may sound complicated, but it is actually very simple, especially when you move away from thinking about history as something that is told and approach it as an action—something you do.

Detectives in Training

Think of the History Lab learning center, scheduled to open in early June 2001, as a training ground for history detectives. Here, visitors young and old develop skills in historical inquiry while using the exhibits found in the learning center's three galleries—the Time Gallery, the Place Gallery, and Tools of the History Trade. Based on the premise that each exhibit is both an

inquiry activity and a model for student projects, the learning center aims to explain the concepts and tools of history in fun, challenging and interactive ways.

In the Time Gallery, where a life-sized chronology of bicycles illustrates change through the years, visitors will also find the "Decameter," "Instant Replay," "Transportation Time," "Time Connector," and the "Timeline of Timepieces."

Using the "Decameter," visitors test their skill at identifying and matching the styles of different decades. The goal of the Decameter is to teach users to make comparisons between decades based on their stylistic indicators. Users create composite images using chronological menus of clothing, vehicles, street scenes, and posters unique to each of the past ten decades. The program also allows the visitor to place his or her face in the decade collage and print a keepsake copy.

Resembling a mini editing studio, "Instant Replay" helps visitors discover the historic secrets held within moving images. Software for this exhibit includes ten different video clips relating to Northwest events. Users may select from ten options, each one posing a challenging question that can only be answered by viewing the historic clip. This method of question and discovery helps users learn to focus on various details in moving footage so as to collect information.

The "Time Connector" challenges users to either sequence images in chronological order or find links between a person, place, object and year. Visitors spin giant cylinders in order to match the images. When a successful match has been made, an audio program tells the story.

On the east and west walls of the learning center are 15-foot arches. Suggesting the cyclical nature of time and the spherical shape of the earth as a place, these arch walls will be home to the "Timeline of Timepieces" and "Products of Place," both of which allow access to a specially designed "Artifact Finder" database. This resource lets users research various artifacts while also seeing them in real life.

The "Timeline of Timepieces" uses a variety of devices to explore three kinds of time: biological, geological and mechanical/physical. These aspects of time represent the primary ways humans have measured existence.

In the Place Gallery, "Products of Place" encourages visitors to make connections between various locales in Washington and the products used or manufactured there. Like the "Timeline of Timepieces," each artifact in "Products of Place" has an electronic label that can be accessed through the database computer. The goal is to help users identify the origins and applications of various products that were important to the shaping of Washington.

For anyone who has ever wondered how places change over time, "Postcard Place" provides an answer. Here visitors try to match 20 historical postcards to their present-day scenes. It's not as easy as it sounds—some places have changed drastically over time. Others seem almost unchanged.

Also in the Place Gallery is "Viewpoint." This exhibit presents the perspectives of six different people in relation to the Hanford B Reactor site. Included are a World War II Hanford

construction worker, a historian, a Hanford farmer, a Nez Perce elder, a United States president, and a Japanese bombing survivor. Each person shares his or her unique view of the place and the memories it inspires.

Some of the questions posed in the "Exploration" exhibit in the Place Gallery include, "Why do we explore?" "What kinds of information do exploring expeditions collect and why?" "How does contemporary exploration differ from past exploring expeditions?" Depicting the 1838-1842 United States Exploring Expedition and the 1997 Mars Pathfinder mission, this exhibit offers an opportunity to compare and contrast the goals and discoveries of these two ventures.

"Mapomania" invites visitors to examine how the history museum's neighborhood has changed over time, as well as to find Washington within the world. Designed especially for visual and kinesthetic learners, these hands-on map puzzles provide a fun medium for comparing places and times.

The Tools of the History Trade stations are located in the "Electronic Schoolhouse." These stations encourage visitors to gather and apply information from the main sources of historical evidence—artifacts, ephemera, maps, books and periodicals, people, and images. Some stations use computer software to model methods of historical inquiry, while others use hands-on manipulatives. Learning to use these tools is essential to recognizing important clues about the past.

Near the Tools of the History Trade are the "Daily Planet Theater" and the "History Mystery" information stations. In the theater, carpeted risers provide casual seating for visitors as they examine the "Three Faces of Time." This eye-opening video program describes the three primary kinds of time and their cultural significance.

The "Daily Planet Theater" will also be used to orient school groups to the "History Mystery" program. Four "History Mystery" stations, located throughout the learning center, are accessed by special codes found on the identification tags issued to each student and general public visitor. Designed to help students learn and apply needed historical inquiry skills in the context of solving a mystery, the "History Mystery" program essentially replicates the inquiry actions historians practice every day.

The Method Behind the Mystery

The methodology of the History Lab Project grew out of past WSHS museum-school programs in which it was obvious that students needed training in historical inquiry. Students just didn't have the ability to research topics or conceptualize exhibits without having solid methods to follow and examples on which to base their work. To help solve this problem, the software and print materials developed for the History Lab learning center will provide students with inquiry models that can be applied to a range of historical subjects. This approach is solidly based in educational theory, with the application of Howard Gardner's theory of multiple intelligences influencing the Lab's constructivist methodology.

In his book, *Frames of Mind* (1983), Gardner, a renowned Harvard educational psychologist, challenged the idea that humans have a single, quantifiable intelligence. He originally identified

seven different intelligences and explained that, "Intelligence refers to the human ability to solve problems or to make something that is valued in one or more cultures."

Gardner now recognizes eight intelligences and identifies them as linguistic, logical-mathematical, visual-spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal and naturalist.

In the book, *Unschooled Minds* (1993), Howard Gardner quoted Frank Oppenheimer, founder of San Francisco's Exploratorium, who said, "No one flunks museum." In fact, although we frequently describe museums as educational institutions, educators often fail to utilize museums and their resources to fullest advantage. Gardner paints this scene:

Imagine an educational environment in which youngsters at the age of seven or eight, in addition to—or perhaps instead of—attending a formal school, have the opportunity to enroll in a children's museum, a science museum, or some kind of discovery center or exploratorium. As part of this educational scene, adults are present who actually practice the disciplines or crafts represented by the various exhibitions.... A reader's first thought on the possibility of youngsters attending such an intensive museum program rather than or in addition to the public school may be disbelief. The connotations of the two types of institution could scarcely be more different. "Museum" means an occasional, casual, entertaining, enjoyable outing.... "School," in contrast, connotes a serious, regular, formal, deliberately decontextualized institution. Would we not be consigning students to ruination if we enrolled them in museums instead of schools?

I believe we would be doing precisely the opposite.

Gardner goes on to state that:

Certainly there are exemplary schools, and just as certainly there are poorly designed and run museums. Yet as institutions, schools have become increasingly anachronistic, while museums have retained the potential to engage students, to teach them, to stimulate their understanding, and, most important, to help them assume responsibility for their own future learning....

If we are to configure an education for understanding, suited for the students of today and for the world of tomorrow, we need to take the lessons of the museum and the apprenticeship extremely seriously. Not, perhaps, to convert each school into a museum, nor each teacher into a master, but rather to think of the ways in which the strengths of a museum atmosphere, of apprenticeship learning, and of engaging projects can pervade all educational environments from home to school to workplace. The evocativeness and open-endedness of the children's museum needs to be wedded to the structure, rigor, and discipline of an apprenticeship.

Gardner is suggesting something museum educators have observed for years—students learn more about a historical subject if they *do* the research and conceptualize an exhibit rather than simply *look* at one. The learning models provided by the History Lab help teachers and students infuse the classroom with the methodology of the museum. These learning models are delivered in a variety of forms—from three-dimensional exhibits to outreach mediums such as CD-ROM, print and Internet.

From Idea to Reality

It has taken many people several years to move the History Lab Project from idea to reality. Scholar and teacher advisory groups, representing universities and schools throughout the state, have helped shape the Lab's educational goals. The project is also indebted to WSHS board members, community representatives and staff who helped raise the capital funds to build the learning center and create its corresponding outreach kit. In addition to these individuals, a number of talented contractors have been hard at work on the History Lab learning center exhibit, video and software components.

EXHIBIT DESIGN: Building upon a schematic design plan developed by Herb Rosenthal and Associates, West Office Exhibition Design, based in Oakland, California, is overseeing the History Lab's final design and fabrication phases. Familiar with the goals and layout of the Washington State History Museum through their work on the "Great Hall of Washington History," West Office specializes in the design of interactive museums, cultural centers and corporate exhibits. West Office's clients have included the California Science Center in Los Angeles, the Museum of Science and Industry in Chicago, the Plains Indian Museum in Wyoming and Seattle's Odyssey: The Maritime Discovery Center.

EXHIBIT FABRICATION: Academy Studios of Novato, California, was selected to construct the exhibits for the learning center. With work under way since October 2000, actual installation begins in March. Academy Studios is known for designing and fabricating high-quality exhibit experiences that engage and educate audiences worldwide. This company created the human sculptures and dioramas in the "Great Hall of Washington History" and works with museums, aquariums, zoos, visitor centers and corporations. Their client list includes the Smithsonian Institution's Museum of Natural History, the Burke Museum at the University of Washington, and the Monterey Bay Aquarium in California.

VIDEO PRODUCTION: *(in)incorporated*, of Seattle, is noted for its Emmy award-winning writing for the *Bill Nye the Science Guy* television show. Innovative in their approach to script writing and video production, *(in)incorporated* is producing the History Lab's main video feature, "The Three Faces of Time." They are also creating the video introduction for the learning center's "History Mystery" program, featuring the virtual History Lab character *Inspecta Detecta*. *(in)incorporated*'s prior clients include the American Museum of Natural History, PBS and ABC television, the Discovery Health Channel, the Carnegie Science Center and Disney's EPCOT Center.

SOFTWARE DESIGN AND PRODUCTION: Chedd-Angier Production Company, based in Watertown, Massachusetts, has produced more than 1,000 multimedia exhibits for museums. Their clients have included the American Museum of Natural History, the Museum of Science and Industry in Chicago, the Tech Museum of Innovation in San Jose and Odyssey: The Maritime Discovery Center in Seattle.

ILLUSTRATION: Tony Morse, of Oakland, California, has drawn a series of images for the History Lab learning center that range from maps to landscapes to bicycles. The landscape and bicycle images are being reproduced in large format and mounted along the tops of huge arches, forming a visual fanfare for the Time and Place galleries. Tony's detailed and color-rich style has made his work popular with many museums, software companies and publishing firms. He has

created illustrations for such companies and organizations as Banana Republic, Purple Moon Multimedia, Chronicle Books, The Learning Company, Time/Life Books, and Odyssey: The Maritime Discovery Center.

POTOGRAPHY: Rod Slemmons, from Seattle, has worked with the Washington State History Museum on a number of projects, including the recent exhibit "Sunrise to Paradise: The Story of Mount Rainier National Park." His photographs of History Lab artifacts and ephemera will be used in a variety of ways—on exhibit panels, in the Artifact Finder database, and in the History Lab outreach kit. Revealing the beauty and history of even the simplest artifacts, Slemmons's photographs have appeared in such exhibit-related publications as *Through The Eyes of Chief Seattle* and *Sunrise to Paradise: The Story of Mount Rainier National Park*. Previously the curator of photography for the Seattle Art Museum, Slemmons now teaches in the museum studies program at the University of Washington.

HARDWARE INTEGRATION: BBI Engineering, of San Francisco, is an electronics integration and audio services company that designs hardware and software for audiovisual systems. The mastermind behind the automation of the Washington State History Museum's "Great Hall of Washington History," BBI has done work for numerous museums, theaters, architectural firms, professional audio and theatrical equipment manufacturers and schools throughout the country.

Reaching Beyond the Walls

The History Lab Project reaches beyond the boundaries of the physical learning center via a dynamic web site, a book/CD-ROM outreach kit, inquiry-based curriculum units, and professional development programs for teachers. Distributed to schools throughout the state, the outreach kit is essentially the two-dimensional, traveling version of the History Lab learning center. Intended to help students identify and build an understanding of the concepts of history, the kit contains descriptions and examples of each historical thinking concept and tool as well as suggested activities that help students apply skills learned through software and print to objects and subjects of their own interest.

The software and book content of the kit originates in the History Lab learning center. Many of the complex software components developed for the learning center will be slightly reverted and placed on a CD-ROM or DVD for classroom outreach. Packaged with a book that explains the seven historical thinking concepts and seven "Tools of the History Trade," the outreach kit will allow students and at-home learners to develop skills in historical thinking even if they are unable to travel to the museum.

The History Lab's web site (www.historylab.org) features activities for students and classroom groups as well as curricula for teachers. The pilot individual challenge, "What is that Thing?" models the inquiry process used to identify a mystery artifact. More inquiries, such as "What Happened Here?" and "Who is That Person?" are scheduled to be added in late 2001. Accessible to all via the Internet, these challenges are designed to be used both as homework assignments for third through tenth grade students and as a fun, thinking activity for anyone who may be surfing the net.

With the generosity of our campaign contributors and the operating support of the state legislature, the History Lab Project is helping to move history education away from what Washington State Superintendent of Public Instruction Terry Bergeson calls "content a mile wide and an inch deep." The History Lab Project aims to produce thinking people who have the depth of knowledge to apply processes of historical inquiry to everyday life and decision-making for the future.

Stephanie Lile was a WSHS education curator from 1993 to 2002. Serving as the History Lab project manager, she was a driving force in every phase of the History Lab Project, from conceptualization and content development to construction and installation. She is now working for the National Museum of American History in Washington, D.C.