

## Beyond the Walls: Redefining the Museum as an Educational New Media Publisher

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As museums continue to adopt new media technologies, their role in national education has expanded from traditional research, collection, and exhibition to include original educational publishing using every flavor of new technology. These new publishing initiatives extend the museum's influence beyond its walls and generate fresh production challenges. As publishers, museums have a tremendous opportunity to make a valuable contribution to the available media at a time when raising the standard of science and mathematics education is a national imperative. Though many museums are not seasoned new-media publishers, they do have a natural wealth of content resources waiting to be sculpted. How will museums become important educational publishers? How will they use the most current technologies to deliver their products to reach a significant audience? What technologies are most suitable for crafting learning tools?

In 1997, the American Museum of Natural History in New York began to tackle these questions with the launch of its National Center for Science Literacy, Education, and Technology. This panel presents specific examples of the National Center's current developments in new media education publishing: the Ology Web site and Science Bulletins. Panelists outline the unique technology base that supports each project and discuss practical production challenges. The panel demonstrates that the most effective uses of technology in development of editorial content are not necessarily in costly innovation and infrastructure, but rather in reinterpretation of traditional museum roles in education and the community that support long-term institutional goals. Panelists address how each publishing project exemplifies one of the following production goals:

- Promote experiential, life-long learning (the Ology Web site: [www.ology.amnh.org](http://www.ology.amnh.org)).
- Use dynamic current events as a focal point for introducing and reinforcing major concepts in science curriculum and curatorial content: Science Bulletins

### PATTY ABT TOURS THE OLOGY WEB SITE

A virtual museum visit can never replicate the awe a child feels the first time she stands in front of a T-Rex skeleton or wanders through a hall and stumbles upon a model of a Sioux Indian teepee. On the other hand, a Web site can invite visitors into places they could never go before and introduce them to the scientists who explore there. For 130 years, the American Museum of Natural History has been a place of wonder for kids, where, around every corner, they can bump into something mysterious that inspires them to look at their world in a new way. Ology, the Museum's new Web site for kids, is created to extend this relationship beyond the walls of the physical museum to kids across the country.

The underlying premise for Ology is that kids are naturally motivated by a desire to solve mysteries and acquire knowledge. Using a conventional Web site format with additional features like "virtual collecting," the Ology site capitalizes on this innate desire to engage kids in science. The Ology Web site's frequently updated interviews, feature stories, and games are organized around -ologies such as arachnology or paleontology, topics that kids love to dig into. Ology is responsive to kids' interests and desire to participate. It includes clubs to join, polls, interaction with scientists, and a place to help build future -ologies for the Web site.

As kids explore Ology, they collect Ology cards about ideas, people, places, or events that they want to put aside in their own personal area to remember. This innovative technology also allows kids to organize and display cards on the Ology site. Instead of simply sifting through content, as kids do on most Web sites, the Ology cards put kids in the driver's seat, allowing them to choose what topics to explore, create original interpretations, and share them with others. Many kids feel that science is out of their reach, abstract, scary, or boring. The Ology cards give kids an opportunity to be successful in science, to feel that they have mastery over the content because they can interact with it.

GRETCHEN SCHWARZ OUTLINES  
THE SCIENCE BULLETINS INITIATIVE

There is no question that the Internet and new technology have broadened access to current events information to 24 hours a day and seven days a week. Museums that collaborate with educators and curriculum to develop educational tools now must add the immediacy of current events. More and more, museum digital tools are being seen on television, the Web, DVD, and interactive productions alongside news, and entertainment programming. There is enormous opportunity for museums to grab visitor imagination by bringing regularly updated news into the exhibition space and to explain "the rest of the story" (the science and history behind the news) using dynamic combinations of images, animations, text, and research links. Interpretations that make vital connections to curatorial goals and curriculum form the Museum's unique editorial voice.

The Science Bulletins production team at the American Museum of Natural History began integrating current events into exhibition halls in 1999. Science Bulletins produces interactively linked articles for touch-screen kiosks, high-definition television graphics, animations, short video documentaries, and linked Web sites for installations in three of the new permanent exhibition halls. The subjects are biodiversity, earth science, and astrophysical science.

New technologies make presentation of frequently updated current events material sustainable with a relatively small production staff. A team of eight, plus consulting scientists and researchers, steer the editorial and technical production of daily programming. Resources and production process include:

- Partnerships with news organizations that provide video feeds over fiber-optic lines.
- Graphic animation templates created with Everest, a real-time render authoring tool.
- Networked touch-screen kiosks with customizable template structures.

In 1997, The American Museum of Natural History, in an initiative with NASA, launched its National Center for Science, Literacy, Education, and Technology to create original science educational publishing for expanded audiences. Using the World Wide Web, interactive television, books, classroom curricula, and more, The National Center creates programs and materials that connect people of all ages nationwide to the unparalleled resources of the museum collections of 32 million specimens and artifacts, 43 exhibition halls, more than 200 research scientists, and 128 years of expertise in educational programming. In 1998, the National Center added the Science Bulletins team to provide dynamic current-events science reporting of "the science behind the news."



Breaking news on the Science Bulletins Astro Bulletin wall.