

Enhancing Education

A Producer's Guide



Case Studies

Africa 3

An eight-part series on Africa's cultures, traditions, lifestyles, and economic opportunities, told through the eyes and voices of African people

Budget: Large (\$250K-\$500K) *Formats:* Print, Web, Person-to-Person

Auschwitz: Inside the Nazi State 8

A 6-part series on the story of the Auschwitz Death Camp, site of the largest mass murder in history.

Budget: Large (\$250K-\$500K) *Formats:* Print, Web, Person-to-Person, Guides, Station Grants

Building Big 21

Each one-hour program in this five-part miniseries on megastructures focuses on a different type of structure: bridges, domes, skyscrapers, dams, and tunnels.

Budget: Very Large (over \$500K) *Formats:* Print, Web, Person-to-Person

Culture Shock 28

This four-part series explores themes central to debates about cultural values, freedom of expression, and the role of arts in society.

Budget: Large (\$250K-\$500K) *Formats:* Print, Web, Person-to-Person

Cyberchase 35

A new, daily, animated adventure series that engages 8- to 11-year-olds in the fun and challenge of mathematics

Budget: Large (\$250K-\$500K) *Formats:* Print, Web, Person-to-Person

Evolution 42

This seven-part series examines evolutionary science and its profound effect on our lives and our planet.

Budget: Very Large (over \$500K) *Formats:* Print, Web, Person-to-Person



Enhancing Education

A Producer's Guide



Case Studies (cont'd)

In Search of Shakespeare 48

This four-part series is the first full-scale history of William Shakespeare on television. The documentary features the Royal Shakespeare Company acting out scenes from Shakespeare's works at locations around England where Shakespeare's original company performed.

Budget: Medium (\$50K-\$250K) *Formats:* Print, Web, Person-to-Person

Lewis & Clark: The Journey of the Corps of Discovery 56

This four-hour television documentary chronicles the four-year journey of explorers Meriwether Lewis and William Clark to the uncharted American West.

Budget: Medium (\$50K-\$250K) *Formats:* Print, Web, Person-to-Person

My Journey Home 62

The two-hour documentary probes America's diversity through three personal stories.

Budget: Medium (\$50K-\$250K) *Formats:* Print, Web, Person-to-Person

The New Americans 68

This seven-hour, three-part series is about the search for the American dream as reflected through the eyes of today's immigrants and refugees.

Budget: Very large (over \$500K) *Formats:* Print, Web, Person-to-Person

Poetic License 79

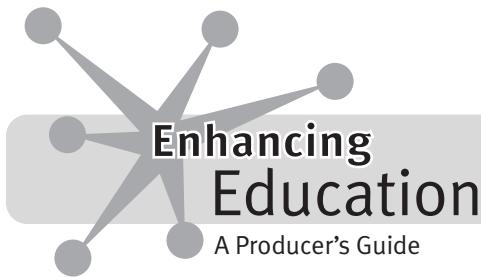
Enter the lives of several bright young poets in this one-hour documentary film about what it is like growing up in America today.

Budget: Medium (\$50K-\$250K) *Formats:* Print, Web, Person-to-Person

Promises 84

This *P.O.V.* presentation explores the conflict between Palestinians and Israelis through the voices and experiences of seven children who have grown up in its midst.

Budget: Small (under \$50K) *Formats:* Web



Case Studies

Africa

Producer

Co-production of Thirteen/WNET New York's *Nature* series and National Geographic Television, in association with Tigress Productions Limited and Magic Box Mediaworks, Inc.

Series Description

In this eight-part series on Africa as seen and told through the eyes and voices of people from Africa, audiences learn how the continent's cultures, traditions, lifestyles, and economic opportunities have been influenced by its diverse and often changing regional landscapes.

Funders (and resulting constraints)

Park Foundation, Canon U.S.A., Ford Motor Company, TIAA-CREF, Corporation for Public Broadcasting, and the nation's public television stations. (For broadcast series only. The educational outreach efforts received no external funding.)

Educational Outreach Budget Range

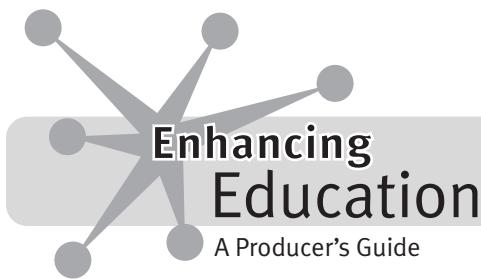
Large (\$250K-500K)

Educational Outreach "Producers"

- Outreach department created the toolkit for stations.
- Interactive and Broadband department produced the series Web site.
- Educational Publishing department produced the teacher's guide and poster.
- National Geographic provided the map of Africa and brochure.

Partners

The Africa-America Institute, Africare, The Africa Society, African Studies Association, AllAfrica.com, Bread for the World, Constituency for Africa, National Summit on Africa, TransAfrica Forum. (Each group promoted the broadcast to its constituents via e-mail listservs and newsletters.)



Enhancing Education

A Producer's Guide



Case Studies: Africa

Goals & Audience

Goals

The overall goal of the educational outreach was to educate children and adults about this vastly important but misunderstood continent.

Target Audience

- Fifth to eighth graders
- Educators
- Community groups
- Public television stations
- Local educational outreach
- Organizations and individuals with an interest in Africa and its relationship to the U.S.
- Policymakers, including legislators, public officials, leaders of aid and development agencies, and other non-governmental organizations (NGOs)

Standards Addressed

Africa addressed national educational standards for both middle school geography and social studies.

For geography, *Africa* covers:

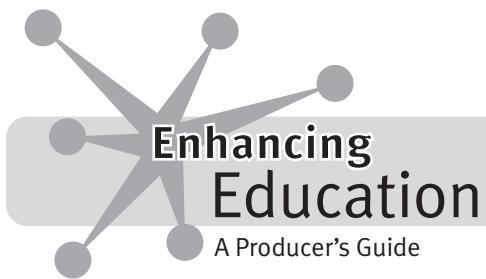
- Standards 4 and 6: Places and Regions
- Standards 10 and 11: Human Systems
- Standards 14, 15, and 16: Environment and Society

For social studies, *Africa* covers:

- Standard 1: Culture
- Standard 4: Individual Development and Identity
- Standard 7: Production, Distribution, and Consumption
- Standard 9: Global Connections

For more information on the National Geography Standard for grades 5-8, contact the National Council for Geographic Education at 724-357-6290, or go to www.ncge.org/publications/tutorial/standards.

For more information on the 10 strands of National Council for Social Studies (NCSS), call NCSS Publications at 800-683-0812, or go to www.ncss.org/standards/2.1.html.



A Producer's Guide



Case Studies: Africa

Educational Outreach Elements

Print

Pre-Broadcast Brochure

The brochure outlines the major elements of the project, including special events, lectures, educational outreach projects, media, the official PBS Web site, and the National Geographic Society complementary site.

Poster

Hundreds of full-color *Africa* posters announcing airdate, Web sites, and companion book were distributed to public libraries throughout New York City.

Teacher's Guide

This 20-page, illustrated teacher's guide with a contemporary map of Africa was mailed to social studies and geography teachers in every public, private, and parochial elementary and middle school across the nation—more than 73,000 schools. In addition, 5,000 guides were distributed to PBS stations for local educational outreach.

Features

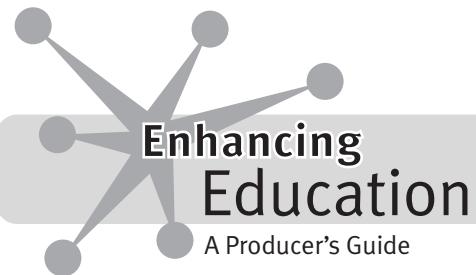
Articles highlighting geography, conservation, travel/tourism, and the culture of modern-day Africa appeared in *National Geographic*, *National Geographic Traveler*, *National Geographic Adventure*, and *National Geographic World*. The premiere issue of *National Geographic for Kids*, the Society's classroom magazine for upper elementary students, included a feature on African elephants and a report on conservationist Michael Fay's 1,200-mile trek across Africa.

Web/Interactive

The official *Africa* Web site (<http://www.pbs.org/wnet/africa>) includes the following elements:

- Virtual tours of eight key African regions
- In-depth photo essays on issues affecting the continent
- Interactive games for kids
- Video clips
- Teacher tools, including lesson plans and a downloadable teacher's guide
- Series information

The National Geographic Web site (<http://www.nationalgeographic.com/africa>) highlights Society resources and activities on Africa, and includes interactive maps, a photo gallery, video clips, and classroom activities.



Case Studies: Africa

Educational Outreach Elements (cont'd)

Video

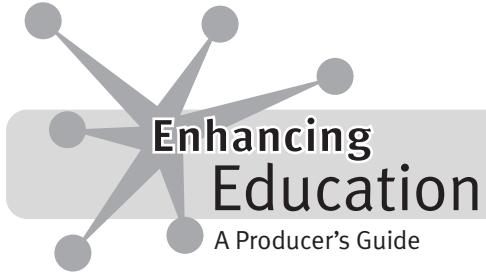
Special week of African wildlife programming: This week of programs on the National Geographic Channel was presented as part of the *Living Wild* series. In addition, *National Geographic Today*, the Channel's live daily news program, presented live daily features.

Person-to-Person Activities

A series of lectures, street fairs, and exhibits helped to publicize and promote the series. Series co-executive producer Jennifer Lawson of Magic Box Mediaworks discussed her experiences and insights filming this landmark production at numerous venues nationwide, including screenings at the Brooklyn Public Library Main Library; the New York Public Library 125th Street Branch; the Flushing Library International Resource Center; the National Press Club in Washington, D.C.; and at events in Atlanta, Georgia.

In November and December 2001, Thirteen/WNET New York's National Teacher Training Institute (NTTI) held training events for 80 tri-state area teachers at the Armory NYC in Washington Heights, New York. Participating upper elementary and middle school teachers learned to effectively incorporate *Africa* and Internet resources into lesson plan development and received the *Africa* teacher's guide, a full-color map of *Africa* developed by National Geographic, and specially designed NTTI lesson plans based on the series and its Web components.

Africa press releases were distributed at the International African Arts Festival opening reception held at the Brooklyn Museum.



Case Studies: Africa

Outcomes

No formal evaluation has been completed, but according to anecdotal comments, the *Africa* educational outreach initiatives were well received.

Challenges & Lessons Learned

Lack of funding for educational outreach on this project was a challenge, but locally, producers we were able to draw upon Thirteen/WNET New York's relationship with the New York Public Library, the Queens Public Library, and the Brooklyn Public Library to host screenings and discussions. These events were enthusiastically received.



Case Studies

Auschwitz: Inside the Nazi State

Producer

A KCET/Hollywood/BBC Co-Production

Series Description

Auschwitz was the largest extermination center the world has ever seen. More than 1 million people were murdered there between May 1940 and January 1945. While many survivors of the period have documented what happened, Auschwitz: Inside the Nazi State is the first television series to document how it happened.

As the Communist era ended in the early 1990s, previously closed archives containing Third Reich files, diaries, and architectural plans became available for review. They reveal with startling clarity the decisions that were made and the people who made them. These newly available research findings are featured in this six-hour public television series, which commemorates the 60th anniversary of the liberation of the camp in January 2005.

Through dramatizations, interviews with perpetrators and survivors, and the use of the latest in computer technology, the series retells the history of Auschwitz as it unfolded over four years.

Funders

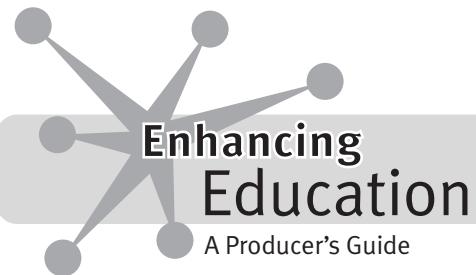
British Broadcasting Corporation (BBC), Corporation for Public Broadcasting (CPB), Public Broadcasting Service (PBS), Peter and Helen Bing, The Arthur Vining Davis Foundations, Wasserman Foundation

Educational Outreach Budget Range

Large (\$250K-\$500K)

Educational Outreach "Producers"

KCET contracted with Toby Levine Communications, Inc. (TLCI), to coordinate educational and outreach efforts. TLCI developed the content for the project fact sheet, station toolkit, poster (including the teaching materials on the back of the poster), and the online teaching and community guides. KCET/Hollywood (www.kcet.org) produced the Web site. DZAP Productions, Ltd., was the Web site editor. Avian Mind Design created the design for the Web site. Evins Design created the graphic design of the poster.

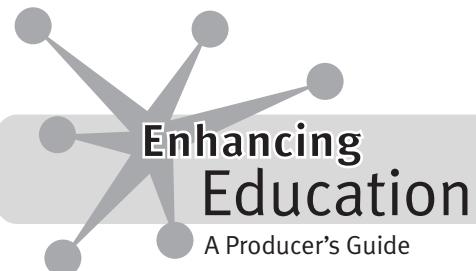


Case Studies: Auschwitz: Inside the Nazi State

Auschwitz: Inside the Nazi State (cont'd)

Partners

American Library Association (ALA), Anti-Defamation League (ADL), Association of Christian Schools International (ASCI), Association of Holocaust Organizations (AHO), Facing History and Ourselves, The Jewish Foundation for the Righteous (JFR), Museum of Jewish Heritage -- A Living Memorial to the Holocaust, National Center for Outreach (NCO), National Council for the Social Studies (NCSS), National Council of Teachers of English (NCTE), public television stations, Survivors of the Shoah Visual History Foundation, Union for Reform Judaism (URJ)



Case Studies: Auschwitz: Inside the Nazi State

Goals & Audience

Goals

The goals and objectives of the educational outreach plan are the following:

- To provide opportunities for high school teachers in both secular and faith-based schools to learn to use the series effectively to achieve curriculum goals
- To engage the general community in discussions of power, politics, personal responsibility, violence, racism, prejudice, and diversity

Target Audience

The target audiences for Auschwitz: Inside the Nazi State's educational outreach are high school social studies and English teachers and students, public television stations, and community organizations and groups interested in exploring topics related to the series.

Standards Addressed

Auschwitz: Inside the Nazi State's educational resources are based on the following standards from the National Council for the Social Studies (NCSS) and the National Council of Teachers of English (NCTE):

For Social Studies:

- Standard I: Culture
- Standard II: Time, Continuity, and Change
- Standard III: People, Places, and Environment
- Standard IV: Individual Development and Identity
- Standard V: Individuals, Groups, and Institutions
- Standard VI: Power, Authority, and Governance
- Standard VII: Production, Distribution, and Consumption
- Standard VIII: Science, Technology, and Society
- Standard IX: Global Connections

For English:

- Standard 3: Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).



Case Studies: Auschwitz: Inside the Nazi State

Goals & Audience (cont'd)

- Standard 5: Students employ a wide range of strategies as they write and use different writing process elements appropriately to communicate with different audiences for a variety of purposes.
- Standard 6: Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.
- Standard 7: Students conduct research on issues and interests by generating ideas, and questions, and by posing problems. They gather, evaluate, and synthesize data from a variety of sources (e.g., print and non-print texts, artifacts, people) to communicate their discoveries in ways that suit their purpose and audience.
- Standard 8: Students use a variety of technological and information resources (e.g., libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

For more information on the National Council for the Social Studies standards, call NCSS Publications at 800-683-0812, or go to www.socialstudies.org/standards/strands/.

For more information on the National Council of Teachers of English standards, call NCTE at 800-369-6283, or go to www.ncte.org/about/over/standards/110846.htm.



Enhancing Education

A Producer's Guide



Case Studies: Auschwitz: Inside the Nazi State

Educational Outreach Elements

Print

Poster

The Auschwitz: Inside the Nazi State poster was distributed to 77,000 educators. The poster announced the airdate, promoted the Web site, and provided teachers with a range of resources (on the back), including guidelines for teaching about the Holocaust, background on the series, discussion prompts for using the series in the classroom, and related online resources. The poster was distributed to the following:

- Social Education, the journal for the National Council for the Social Studies (NCSS), as an insert
- High school teachers on the National Council of Teachers of English (NCTE) membership list
- Catholic school administrators
- Partners
- General public (by request)

One-Sheet

This customizable, reproducible project fact sheet provided information on the series and outreach.

Person-to-Person Activities

The majority of face-to-face activities for the project were conducted through conferences, outreach presentations, and teacher-training workshops. Early in the project, Toby Levine Communications, Inc., (TLCI), met individually with all outreach partners to determine their interest in the project and to discuss how the partnership might proceed. Once the Educational and Outreach Advisory Committee was appointed, it convened in Los Angeles for a one-day meeting to discuss the major themes and content of the series, audiences, educational and outreach activities, potential uses of new media, and ways in which the project could create additional partnerships and further those that had already been established.

Teacher-Training Workshops

KCET and Facing History and Ourselves sponsored eight teacher-training workshops led by historian Mary Johnson, with stations selected through a competitive grants process. The workshops were held between March 2005 and June 2005 at the following stations:



Enhancing Education

A Producer's Guide



Case Studies: Auschwitz: Inside the Nazi State

Educational Outreach Elements (cont'd)

- WTVS in Detroit, in collaboration with the Macomb Intermediate School District (March 4-5)
- KETC in St. Louis, in collaboration with the Jewish Federation of St. Louis (March 16)
- KUSD in Vermillion, S.D., in collaboration with a United States Holocaust Memorial Museum (USHMM) Fellow (March 18)
- WXXI in Rochester, N.Y., in cooperation with the Rochester Area Council for the Social Studies (April 2)
- KCET in Los Angeles, in cooperation with the L.A. office of Facing History and Ourselves (April 16)
- WGBY in Springfield, Mass., in cooperation with the Hatikvah Holocaust Education Center (April 18)
- WFWA in Fort Wayne, Ind., in cooperation with the Fort Wayne Jewish Federation and the USHMM Fellows (April 21)
- KERA in Dallas, in collaboration with the Dallas Holocaust Museum (May 31)

Conferences

National Center for Outreach (NCO)

Toby Levine, director of education and outreach for the project, presented the series to public television outreach professionals as part of a PBS Pipeline session. (March 2004, San Diego)

National Catholic Educational Association (NCEA)

Judy Bartel, a social studies teacher at Hill-Murray School in Minneapolis, spoke on "Teaching Respect for Holocaust Education" and screened a three-minute clip from the series for approximately 55 high school educators from Catholic schools. One-sheets and press releases were distributed, and Toby Levine answered questions. (April 2004, Boston)

Association of Holocaust Organizations (AHO)

Robert Jan van Pelt, professor of cultural history at the University of Waterloo School of Architecture in Canada, discussed his role as a series scholar. Toby Levine introduced the three-minute preview and discussed opportunities for Holocaust organizations to work with their local public television stations on public programs around the series premieres. The one-sheet and press release were distributed. (June 2004, New York City)

National Council of Teachers of English (NCTE)

Toby Levine, KCET's vice president of new media Jackie Kain, and English teacher and educational and outreach advisor Carol Danks presented on the series. (November 2004, Indianapolis)



Enhancing Education

A Producer's Guide



Case Studies: Auschwitz: Inside the Nazi State

Educational Outreach Elements (cont'd)

National Council for the Social Studies (NCSS)

Toby Levine, senior associate for Facing History and Ourselves Mary Johnson, and Robert Jan van Pelt presented on the series. (November 2004, Baltimore)

Partners

Each partner offered the Auschwitz: Inside the Nazi State project unique assistance according to its mission and goals: Some partners served on the Educational and Outreach Advisory Committee; some reviewed the project's educational materials; some helped publicize the series and/or distributed educational materials to their members; some did all of the above. Selected examples follow:

Association of Holocaust Organizations (AHO)

The Association provided the project with its member mailing list. The Auschwitz project also made a major presentation about the series at the Association's annual meeting and sent e-mail announcements to Association members regarding broadcast dates and poster availability. A number of individual members were instrumental in developing and facilitating outreach efforts for the series in their local communities.

Facing History and Ourselves

As a nationally known teacher-training organization on issues relating to the Holocaust, Facing History helped develop and facilitate the project's teacher-training workshops. Facing History staff also reviewed scripts and educational materials, and the organization co-sponsored a Boston-based screening and discussion with local public television station WGBH during the series' premiere week. Facing History trained their regional office personnel to conduct workshops using the series' resources and will continue to use these materials in their workshops in perpetuity. In addition, their staff consulted on the development of the educational DVD-ROM. (See details below.)

The Jewish Foundation for the Righteous (JFR)

In addition to publicizing the premiere of the program in two issues of its newsletter, JFR did the following:

- Hosted a screening and discussion on the series with series scholar Robert Jan van Pelt as part of an intensive weekend seminar for its Lerner Fellows



Case Studies: Auschwitz: Inside the Nazi State

Educational Outreach Elements (cont'd)

- Co-sponsored a one-day workshop with the New York City Department of Education for 59 high school social studies and English teachers. Held at the New York Tolerance Center on January 18, 2005, the workshop featured Robert Jan van Pelt and Wojtek Smólen, the senior English-speaking guide at Auschwitz.
- Arranged for Mr. Smólen to speak about the series at six synagogues and community locations in New Jersey and Georgia
- Continues to conduct workshops about the series upon request and encourages Holocaust organizations that are part of its Holocaust Centers of Excellence to do the same

Museum of Jewish Heritage – A Living Memorial to the Holocaust

The Museum's executive director, David Marwell, served as a scholar in the series' epilogue. Museum staff, in addition to reviewing scripts and educational outreach materials, also did the following:

- Permitted the production team to tape the epilogue of the series in its building, which overlooks Ellis Island and the Statue of Liberty
- Co-sponsored a public program with Thirteen/WNET which was attended by more than 300 individuals. An hour of the series was screened, and key issues were discussed by scholars Raul Hilberg, Harry Reicher, and Robert Jay Lifton.
- Provided space for a New York screening and reception the night before the series premiere

Interactive/Web

pbs.org/auschwitz

The Web site provides a wide range of resources, including teaching materials, maps and other archival documents, background on the Holocaust, and information about the series.

Learning Resources

In addition to the teaching guide and community guide described below, this section includes a range of educational resources for the classroom or community, such as a glossary, timeline (described below), bibliography, Web resources, and a list of related organizations.

- **Teaching Guides:** Developed for high school teachers of social studies, English, and the humanities, the six teaching guides (one for each of the programs) contain a segment-by-segment synopsis, before-viewing and post-viewing discussion ideas, curriculum connections, and selected readings.



Enhancing Education

A Producer's Guide



Case Studies: Auschwitz: Inside the Nazi State

Educational Outreach Elements (cont'd)

- **Community Guide:** This guide helps a variety of community-based organizations and groups lead discussions exploring lessons from the Holocaust, including those about power, politics, personal responsibility, violence, racism, prejudice, and diversity. The guide includes guidelines for teaching about the Holocaust, viewing strategies, discussion prompts, and related links.
- **Biographies:** This section provides numerous biographies on individuals from the period, including prisoners, politicians and high-ranking German officials, SS officers, and other army personnel.
- **Auschwitz 1940-1945**
Presents a history of Auschwitz, including personal stories and essays
- **Dachau 1974**
A groundbreaking installation of video art by Beryl Korot, presenting a powerful personal and artistic reflection on the Holocaust. Installation can be viewed online.
- **Understanding Auschwitz Today**
An edited collection of interviews conducted by Linda Ellerbee with scholars, writers, and students on the meaning of Auschwitz today
- **Timeline**
Presents major events in the history of Auschwitz
- **Maps & Plans**
Includes archival maps, plans, and photographs of Auschwitz; an interactive map that explores the evolution of Auschwitz and its three camps; and a guide to Nazi concentration camps and ghettos
- **About the Series**
Includes segment-by-segment program descriptions, an interview with Auschwitz: Inside the Nazi State writer/producer Laurence Rees, transcripts, and other information about the series



Enhancing Education

A Producer's Guide



Case Studies: Auschwitz: Inside the Nazi State

Educational Outreach Elements (cont'd)

Preview Cassette

The seven-minute preview clip was fed to all stations as part of the PBS Annual Meeting Teleconference in May 2004. The three-minute preview (without the introduction by series executive producer Mary Mazur) was distributed as part of the 2004 National Center for Outreach Pipeline Clip Reel at its 2004 Annual Conference in March and also was sent to stations hosting outreach activities prior to the series premiere.

Outreach Grants

KCET/Hollywood made available eight general outreach grants of \$5,000 to each of the following stations:

- Georgia Public Television
- KCPT, Kansas City, Mo.
- KCTS, Seattle
- KUHT, Houston
- UNC-TV, Research Triangle Park, N.C.
- WFYI, Indianapolis
- WJCT, Jacksonville, Fla.
- WNET, New York City

Although each local outreach project was unique, each station had to complete the following:

- Preview the series for local religious, civic, and educational organizations
- Arrange opportunities for adult viewers to learn more from experts
- Involve viewers in informed discussions following broadcast of the series
- Provide opportunities for high school teachers in both secular and faith-based schools to learn how to use the series effectively to achieve curriculum standards
- Introduce high school students to Holocaust history
- Engage youth in discussions about power, politics, personal responsibility, violence, racism, prejudice, and diversity

Station Toolkit

The toolkit was distributed to stations to assist their local outreach efforts surrounding *Auschwitz: Inside the Nazi State*. The toolkit included information about the series, an interview with executive producer Laurence Rees, outreach ideas, description of outreach tools available to stations (e.g., one-sheets, program clips, posters, press release template) and information and the application for the outreach grants.



Case Studies: Auschwitz: Inside the Nazi State

Educational Outreach Elements (cont'd)

DVD for Schools

KCET is in the process of developing an educational DVD-ROM version of the series that will contain five teaching units about the Holocaust, using roughly 120 minutes of the series that best correlate to curriculum standards and frameworks. Additional readings, images, maps, and other resources will be included on the DVD.



Enhancing Education

A Producer's Guide



Case Studies

Outcomes

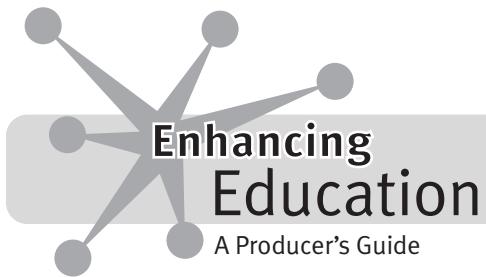
At this writing, the outreach for the project is very much in progress, so it is difficult to assess final outcomes. The following outcomes, however, had been achieved by May 2005:

- In addition to the 70,000 posters distributed via mailing lists, more than 1,200 copies of the poster were requested via e-mail as a result of outreach promotional strategies.
- A Google search on the series title yields almost 400 entries, many of which represent secondary and tertiary organizations that picked up project information from a variety of outreach initiatives.
- Many stations rebroadcast the series in late April and early May in conjunction with Yom Hashoah, the Jewish holiday that commemorates the Holocaust (the Shoah).
- Many stations not awarded outreach grants have, nonetheless, completed outreach initiatives around the series.
- Each of the first two teacher-training workshops was attended by more than 50 participants from 21 school districts in southeastern Michigan and high schools in New York City.

Challenges & Lessons Learned

There will undoubtedly be challenges and lessons learned as the project outreach continues, but some basic lessons have already been encountered:

- It is never too early to contact outreach partners. Organizations often have a lengthy process for approving involvement in public television projects, and longer lead time often yields a greater level of partner participation. Ongoing communication with partners is equally important.
- Curriculum developers should begin to develop teaching materials as early as possible in the production process, even based on treatments. That way, if the final production is delivered only weeks before the materials are slated for distribution, as was true for Auschwitz, only refinements will be necessary.
- Provide as many resources as possible electronically. Electronic delivery saves money, and the resources arrive quickly and can be easily re-sent if something is lost. The project found that even when materials were mailed, or e-mailed, to a specific list, requests for additional copies came in for months afterward, and the easiest way to fulfill them was electronically. Electronic communications also enabled this project -- with offices in Los Angeles; Stockbridge, Mass.; and London -- to share ideas and materials efficiently, unfettered by local time differences.



Case Studies

Challenges & Lessons Learned (cont'd)

- An audioconference during which station outreach directors discussed grant opportunities was very effective for disseminating the same message to everyone and answering everyone's questions. Roughly half the participants in the audioconference subsequently submitted grant proposals. The audioconference helped clarify the two grant opportunities and also gave stations a chance to test out ideas and hear other stations' questions. A problem occurred, however, when one individual put the call on hold and never returned, subjecting everyone else to the music on that participant's radio station. For future audioconferences, we would address issues of audioconference etiquette up front.
- Every subject matter brings with it unique sensitivities and attracts organizations with conflicting viewpoints and great champions. Learn what they are, and learn from them. In the case of Holocaust education, the continuum ranges from teaching the specific contextual history of the Holocaust to making the study relevant for students' lives today. "Guidelines for Teaching about the Holocaust," issued by the United States Holocaust Memorial Museum, helped the project balance these two goals. The subject of sensitivities underscores yet another reason to start the project outreach as early as possible: An early start improves understanding of different points of view about the content and helps you reach consensus on the direction the project will take.



Enhancing Education

A Producer's Guide



Case Studies

Building Big

Producer

WGBH

Series Description

A five-part miniseries on megastructures, hosted by David Macaulay, each one-hour program focused on a different type of structure: bridges, domes, skyscrapers, dams, and tunnels.

Funders (and resulting constraints)

National Science Foundation, National Endowment for the Humanities, The Arthur Vining Davis Foundations, CPB, PBS, American Society of Civil Engineers, Siemens. The National Science Foundation was a major funder through the Informal Science Education directorate. Therefore, the focus of the outreach had to be on informal—outside the classroom—education settings.

Educational Outreach Budget Range

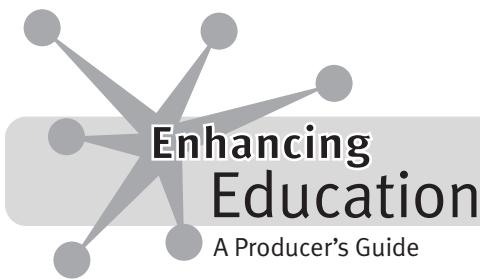
Very large (over \$500K)

Educational Outreach "Producers"

All elements of the project were handled by WGBH staff. The educational materials and outreach activities were handled by the Educational Print and Outreach staff, the short video by Educational Programming staff, and the Web site by WGBH Interactive staff. A project director served as the communication lynchpin between all the different departments and the production, holding biweekly meetings and helping facilitate communication.

Partners

- Boys & Girls Clubs of America
- Computer Technology Centers Network (CTCNets)
- American Society of Civil Engineers (ASCE)—The ASCE was a national sponsor. They also donated additional financial support (in particular travel costs for *Building Big* outreach staff to go to their regional meetings to train engineers) as well as 20,000 volunteer hours of members' time to support educational outreach efforts. WGBH trained over 2,000 engineers through 20 workshops.
- Public television stations



Case Studies: Building Big

Goals & Audience

Goals

To provide a range of creative activities that explore physical science principles and construction technology, thus encouraging "viewers" to become "doers" in the process of science and engineering. Specifically, the educational outreach aimed to give program participants:

- A heightened awareness of the built environment and the scientific and engineering principles on which it rests
- A deeper understanding of the historical background of some of the world's major construction types
- A more positive attitude toward science, math, and engineering and the applied aspects of these disciplines
- A deeper understanding of the impact of engineering and technology on the environment and surrounding communities
- A new openness toward career possibilities

Target Audience

Middle school youth, in formal and informal educational settings, and their families. Two subsets of this group—girls and minorities—were targeted for special attention, as they have traditionally fared poorly in science and math.

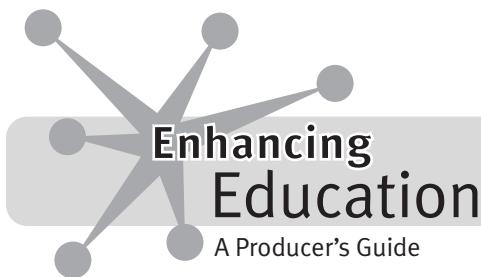
Standards Addressed

Building Big educational outreach activities addressed national content standards for science, math, and technology.

For middle school science, the project addressed aspects of the following:

- Content Standards A: Science as Inquiry
- Content Standards B: Physical Science
- Content Standards E: Science and Technology
- Content Standards F: Science in Personal and Social Perspectives
- Content Standards G: History and Nature of Science

For math, it addressed aspects of geometry, measurement, problem solving, connections, and representations. For technology content standards, it addressed aspects of the nature of technology, technology and society, design, abilities of a technological world, and the designed world. A full description of the standards addressed can be found in the *Building Big* educator's guide (<http://www.pbs.org/wgbh/buildingbig/educator/index.html>).



Case Studies: *Building Big*

Educational Outreach Elements

Print

Pre-Broadcast Brochure

The brochure, aimed at an education audience, outlined the full scope of the project and contained a sample activity that illustrated the type of activities to be found in the guide. One hundred twenty-nine thousand brochures were distributed through mailings to ASCE members (American Society of Civil Engineers), libraries, middle school science and technology teachers, as well as through a booth at the National Science Teachers Association Conference.

Activity Guide

This 40-page guide was written for teachers, informal educators in after-school programs and museums, and engineers (see Partners section). It included hands-on activities; engineering principles and science concepts; pathways through the curriculum linking activities, video, and Web components, depending on how much time the user wanted to spend; viewing strategies for breaking up the one-hour programs; and resources. The promotional poster, featuring artwork from David Macaulay, was also bound into the guide. Fifty-nine thousand were distributed through orders generated by the brochure and Web site (20,000), PTV stations (12,000), "model communities" (7,500); conferences and miscellaneous educational outreach activities (12,500).

Web/Interactive

The *Building Big* Web site (<http://www.pbs.org/wgbh/buildingbig>) features the following elements:

- Overviews of each of the five structures from the broadcast series:
 - Bridges
 - Domes
 - Skyscrapers
 - Dams
 - Tunnels
- Interactive Labs designed to give visitors "hands-on" experience with the basic principles that underlie all built structures
- Building Challenges, which invite users to play a role in an interactive story about building a structure
- "Who Builds Big?," which profiles a diverse set of real engineers, both male and female, from a variety of ethnic backgrounds
- "Wonders of the World" database which profiles structures from around the globe



Enhancing Education

A Producer's Guide



Case Studies: *Building Big*

Educational Outreach Elements (cont'd)

- Glossary with definitions of commonly encountered physics and engineering terms
- Local Wonders feature
- Educators' guide to the Web site, an online version of the *Building Big* Activity Guide
- Series Information

Video

Building Small

These five short videos, available at the end of the home video as well as packaged with *Thinking Big* for use by formal and informal educators, feature Kenny and Caroline from ZOOM presenting hands-on activities to give kids a feel for forces at work in different structures.

Thinking Big

This 17-minute video explores how engineers design and build a large structure such as a skyscraper. Throughout the video, a group of middle school students share their thoughts about tall buildings and the design process.

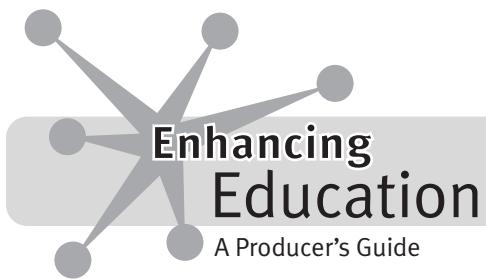
Person-to-Person Activities

Activity Hours

These were one-time experiences lasting anywhere from 60 minutes to two hours. Volunteer engineers (see Partners section) visited a classroom or after-school program, where they introduced young people to fun hands-on activities from the *Building Big* Activity Guide and talked about their work. Five hundred sixty-five Activity Hours involving more than 6,000 youth and 150 engineers were held in 10 model communities.

Local Wonders

Over the course of two or three meetings, engineers teamed up with youth to explore an interesting local structure selected by the children. After investigating how the structure worked, why it was built, and what it meant to the community, the group wrote up their "Local Wonder" reports.



► Case Studies: *Building Big*

Educational Outreach Elements (cont'd)

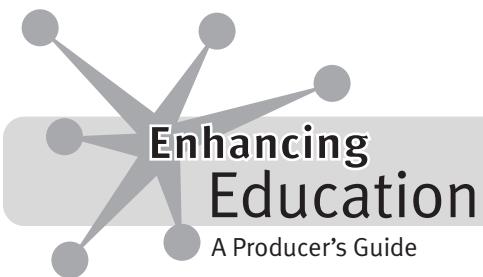
Build-a-thons

These one-day engineering fairs facilitated by local engineers involved children and their families in simple hands-on activities to introduce them to big structures and how they work.

Model Communities

Ten model communities involving local coalitions of PTV stations, professional engineers and architects, and youth-serving groups received a \$13,000 mini-grant to support their project. A training for station representatives was held at that year's PTOA (Public Television Outreach Alliance). Requirements for model communities, concretely spelled out, were to:

- Team up with local branches of *Building Big*'s national partners
- Organize a minimum of 10 activity hours, five local wonders, one build-a-thon, and other opportunities to share the project and its resources
- Reach a minimum of 2,000 participants through these efforts



Case Studies: *Building Big* Outcomes

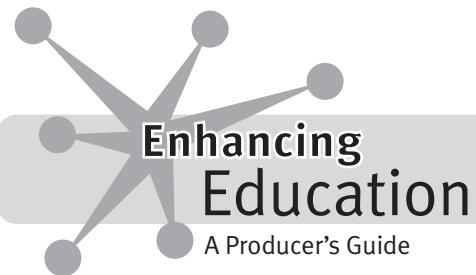
More than 15,500 youth and family members participated in the *Building Big* educational outreach activities. Response to the educational materials was overwhelmingly positive, with most model community sites singling out the Activity Guide for special praise.

Public television staff found the topics covered to be exciting and rejuvenating, a refreshing change from the "heavy" subjects they often deal with.

Youth-serving organizations welcomed the opportunity to explore new ideas and activities with their children, and teachers said they were excited that not only were their students learning civil engineering, but they themselves were learning also.

Students expressed their excitement about the content through their interest in watching the programs, their use of new terminology, and their use of problem-solving techniques in group work and discussions. One eighth-grade teacher reported students were coming in at lunch to watch the programs and taking notes even though there was no test.

Public TV outreach staff, teachers, and Boys & Girls Club leaders reported learning quite a lot about engineering. ASCE members, on the other hand, said they learned more about educational outreach, the market for educational outreach, and effective ways for spreading the word. In fact, the ASCE was so pleased with the project's outcomes that they approached WGBH to look for new opportunities for collaboration, which resulted in a ZOOM educational outreach initiative called "ZOOM into Engineering."



Case Studies: *Building Big*

Challenges & Lessons Learned

Keep things focused. One of the key reasons this project was so successful was because the subject was narrow and focused, and there was great synergy among all the elements.

The timing of educational outreach resource production was not optimal. Many of the educational outreach partners wished the Web site had been launched earlier (it was launched a few weeks before the premiere). The short videos were completed after the series premiere, because they were based on series footage, which couldn't be accessed earlier.

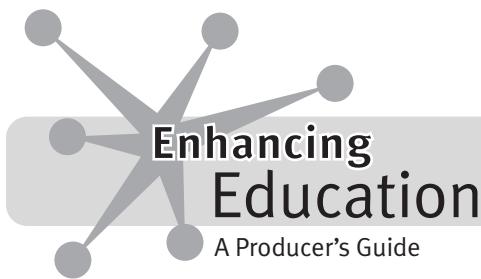
The model community RFP process was arduous but effective. Sites were required to send in an "intent to apply" letter a month before their proposal was due. WGBH then worked with them before they sent it in to make sure their project was rigorous and thorough.

By being fairly specific in the basic requirements on the model community RFP, *Building Big* got the reach it needed, while also giving communities room to customize. In the past, WGBH has found that fairly open-ended RFPs yield very uneven results that are impossible to measure. In general, being prescriptive when developing partnerships (local or national) works well. It helps build the relationship because all the participants know what's expected from them, and there are fewer misunderstandings and miscommunications.

Building Big sent all model community applicants all the resources they gave to the 10 sites that were ultimately chosen, except the stipend and training. All of them launched educational outreach efforts anyway, a third of them quite extensive.

Building Big provided its partners with many materials electronically, including photos, logos, a demo of the Web site, and an interview with David Macaulay to create press materials. Most importantly, partners were sent a PowerPoint presentation that stations and engineers could use to train other engineers. This proved very effective.

The *Building Big* poster, produced through WGBH's promotion department and distributed primarily as an enclosure in the teacher's guide to project partner ASCE, model sites, and at conferences, wasn't particularly useful as an educational outreach tool. Posters with pretty pictures but no educational content, which simply promote the broadcast, are not an effective way to spend educational outreach dollars.



Enhancing Education

A Producer's Guide



Case Studies

Culture Shock

Producer

WGBH

Series Description

Culture Shock is a four-part series exploring themes central to debates about cultural values, freedom of expression, and the role of arts in society. Each program tells the story of a once controversial, now classic work of art in literature (*Huck Finn*), painting (Manet's *Olympia*), music (1920s jazz), or film (the Hollywood production code), and explores its relevance today. Premiered January 2000.

Funders (and resulting constraints)

Ford Foundation, National Endowment for the Arts, CPB, National Endowment for the Humanities, PBS, John S. and James L. Knight Foundation, the Herb Alpert Foundation, the Nathan Cummings Foundation, the Albert A. List Foundation, Inc., the Geraldine R. Dodge Foundation, the Sheldon H. Solow Foundation, and the George Gund Foundation

WGBH returned to the Ford Foundation and got an additional outreach grant for *Huck Finn*-related activities on top of series outreach.

Educational Outreach Budget Range

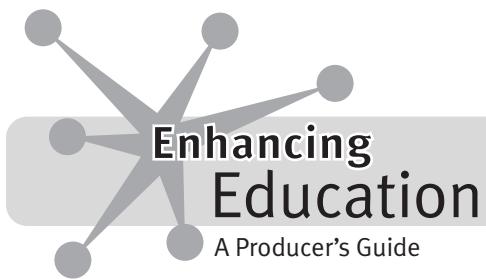
Large (\$250K-\$500K)

Educational Outreach "Producers"

WGBH staff developed and produced all educational outreach elements of the project. The Educational Print and Outreach staff handled the print and person-to-person activities, and WGBH Interactive staff produced the Web site.

Partners

National Council of Teachers of English, National Association for Campus Activities (NACA), Borders Books and Music, public television stations, and the Television Race Initiative



Case Studies: *Culture Shock*

Goals & Audience

Goals

- Increase the audience for the series and Web site
- Give teachers tools to incorporate discussion about freedom of expression, the role of the arts in society, and the politics of culture into their curricula
- Provide English teachers with a model for teaching controversial literature
- Encourage the general audience to continue thinking about the issues raised by the series long after series broadcast

Target Audience

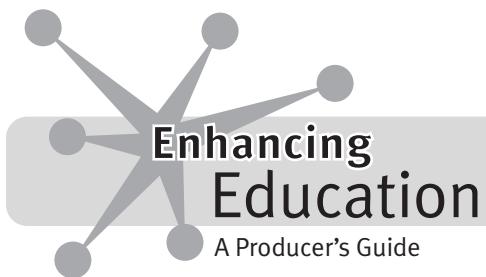
High school English and social studies teachers, college students, general public

Standards Addressed

Culture Shock materials address the following educational standards from the National Council of Social Studies' (NCSS) Expectations of Excellence:

- Standard 1: Culture
- Standard 2: Time, Continuity, and Change
- Standard 4: Individual Development and Identity
- Standard 5: Individuals, Groups, and Institutions
- Standard 6: Power, Authority, and Governance

For more information on the 10 strands of NCSS, contact NCSS Publications at 800-683-0812 or go to <http://www.ncss.org/standards/2.1.html>.



Enhancing Education

A Producer's Guide



Case Studies: *Culture Shock*

Educational Outreach Elements

Print

Pre-Broadcast Brochure

Sixty-five thousand pre-broadcast brochures were sent to high school English department heads, literature teachers, social studies department heads, media specialists, and college faculty in a range of departments, including humanities, American studies, American literature, U.S. social and cultural history, history of jazz, history of film, and art history. The brochure describes the series and allows educators to order the *Culture Shock* series guide.

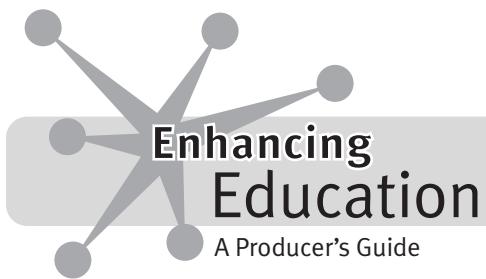
Teacher's Guide

Twenty-eight thousand *Culture Shock* teacher's guides were distributed upon request at the National Council of Teachers of English (NCTE) annual conference and to public television stations to support local educational outreach efforts. The guide includes discussion and activity ideas for each film as well as for the overarching themes of the series, and an abbreviated version of the "*Huck Finn in Context*" curriculum, with ordering information.

"Huck Finn in Context": A Teaching Guide

This teacher's guide, which accompanies one of the *Culture Shock* films, is based on curriculum developed in Cherry Hill, New Jersey, a community that addressed a challenge to teaching Mark Twain's *Adventures of Huckleberry Finn* in a unique manner, by teaching the novel within its historical and literary context. The guide offers the point of view of all the groups involved—parents, students, teachers, professors, and administrators—and provides a model for dealing with curriculum complaints. WGBH adapted the Cherry Hill curriculum and distributed it to high school principals, curriculum specialists, and teachers; an online version of the "*Huck Finn in Context*" guide is also available on the series Web site. In addition, teachers can purchase the "*Huck Finn Coursepack*," which includes the curriculum, all the companion readings cleared for classroom use, and a copy of *Culture Shock*'s "Born to Trouble" video. WGBH received additional funding support from the Ford Foundation to produce the "*Huck Finn in Context*" teacher's guide.

As part of WGBH's partnership with the NCTE, the "*Huck Finn in Context*" project was featured in the November 1999 issue of *English Journal*, in an article by the author of the teacher's guide about her experience in Cherry Hill (<http://www.pbs.org/wgbh/cultureshock/teachers/article2.html>).



A Producer's Guide



Case Studies: *Culture Shock*

Educational Outreach Elements (cont'd)

A second article, "Culture Shock: Using Art and Art Controversy to Teach History," (<http://www.pbs.org/wgbh/cultureshock/teachers/article1.html>) was published in the National Council for the Social Studies' magazine *Social Education*.

Web/Interactive

The companion Web site to the *Culture Shock* series was developed and launched on PBS Online several weeks before broadcast. In addition to giving background on the series, the site provides context to the issues addressed in the films and presents additional examples of works of art that were deemed controversial in their own era or today.

Aimed at a general adult audience, the goal of the site is to explore the many contexts in which art is created and understood.

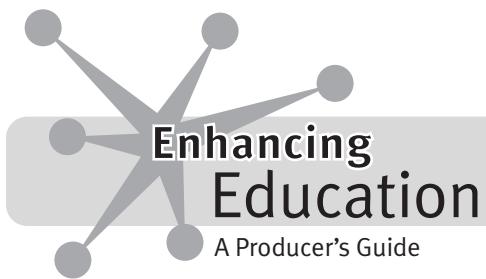
Because much of the material on the site is controversial, the site includes a warning page that all site visitors come to first, which explains the nature and contents of the site. Within the site, users must pass through further "gates" before reaching potentially controversial material. This makes the site difficult for many K-12 audiences to use, although it has been popular with college users and informal groups of adults.

The *Culture Shock* Web site (<http://www.pbs.org/wgbh/cultureshock>) includes the following elements:

- Text and image Flashpoints that explore works of art that crossed the boundary of what was acceptable in their time.
- You Decide, a series of provocative online polls that challenge users to question their assumptions about controversial art.
- Online panel discussions and public forums on topics such as the role of public religious sentiment in the exhibition and distribution of the arts, and teaching controversial material.
- A "For Teachers" section that includes a brief guide for teachers on how to use the site, a one-page site map that points to features appropriate for use in the K-12 classroom, and an online version of "*Huck Finn* in Context: A Teaching Guide."

Person-to-Person Activities

WGBH conducted two workshops at the NCTE annual conference: a panel discussion including representatives from all the parties involved in the Cherry Hill experience, and a workshop



Case Studies: *Culture Shock*

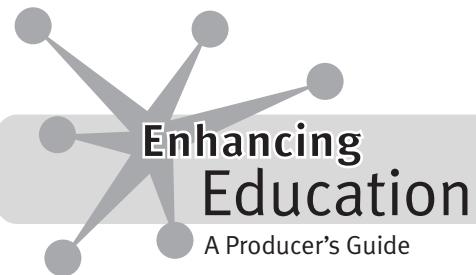
Educational Outreach Elements (cont'd)

on how to use the curriculum that emerged from these efforts. Additional teacher-training workshops were held at University of Massachusetts/Boston and the Mark Twain House in Hartford, Connecticut.

The College Art Association encouraged universities to bring the series to their campuses, and the National Association for Campus Activities (NACA) worked with student activity directors to develop campus-wide *Culture Shock* events. Activities included screening and discussion series of the four films; a teacher-training series around controversial contemporary works of art for local high school educators; a continuing education course anchored in the four central themes of the series; and a forum on jazz, rock 'n' roll, and rap involving local DJs and a college music department.

WGBH established a two-pronged strategy with Borders Books & Music. In fall 1999, activities and related merchandise displays culminated in Banned Book Week, and *Culture Shock* materials were distributed during Fall '99 Teacher Appreciation Nights. A second initiative coincided with the series premiere in January 2000, featuring in-store displays highlighting books related to the series themes, and related outreach events.

The Television Race Initiative encouraged PTV stations to use the program "Born to Trouble: *Adventures of Huckleberry Finn*" to create dialogue around race; the Many Faces, Many Voices diversity initiative organized community activities around "Born to Trouble."

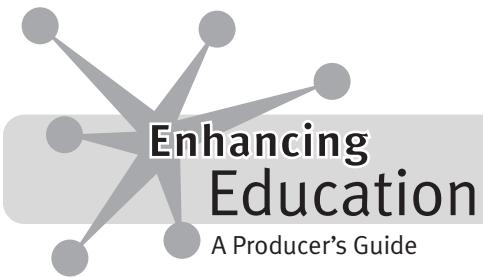


Case Studies: *Culture Shock*

Outcomes

With a number of different targets, the outcomes from *Culture Shock* were varied and exciting. For example:

- An Oklahoma school board delayed its vote on whether to remove *The Adventures of Huckleberry Finn* from its required reading list until after viewing "Born to Trouble," because a school board member's colleague had attended WGBH's workshops at the NCTE conference.
- Novelist and professor Howard Norman successfully petitioned the University of Maryland to offer a new course designed around *Culture Shock*.
- Colleges around the country scheduled *Culture Shock*-related programming throughout the spring semester after the series premiere.
- Borders Books & Music stores promoted the series and educational materials twice, receiving from WGBH only phone support, a book list, copies of *Culture Shock* brochures and guides, and a small poster for displays. Many local stores scheduled related programming, in some cases in collaboration with local universities, through WGBH's partnership with the National Association for Campus Activities.
- More than 50 public television stations distributed *Culture Shock* materials locally, and Television Race Initiative station members designed extended activities, some ongoing.



Case Studies: *Culture Shock*

Challenges & Lessons Learned

The *Culture Shock* project took seven years from the first educational outreach proposals to the series premiere. Fundraising was a painful process. The original budget was somewhat limited compared to many educational outreach projects WGBH initiates. There was money to develop materials and hire an educational outreach coordinator, but not enough to support the coordinator beyond paying her phone bill. Much of the educational outreach project was the result of her persuasive personality and the compelling subject matter; the National Association for Campus Activities covered the cost of distributing materials to its constituency, as did Borders Books and Music.

Working with potentially controversial material presented another challenge to both the *Culture Shock* series and educational outreach teams. The Web site producers found that this challenge ultimately strengthened the project by forcing the Web team to consider a wide range of viewpoints, making significant use of advisors who reviewed the site, helped refine its editorial mission, and specified how and by whom the site should be used.

One lesson learned by WGBH is that sometimes the best educational outreach can be created around a subset of a series. Once outreach staff screened the rough cut for the *Huck Finn* episode "Born to Trouble," they knew they had a perfect vehicle for a very focused educational outreach initiative. The Ford Foundation agreed, and the educational outreach initiative was expanded. Because many funders had already signed on to the full series-based outreach initiative, WGBH ultimately implemented both the full series initiative and the more targeted *Huck Finn* effort.



Enhancing Education

A Producer's Guide



Case Studies

Cyberchase

Producer

Production of Thirteen/WNET New York and Nelvana

Series Description

Cyberchase is a new, daily, animated adventure series that engages 8- to 11-year olds in the fun and challenge of mathematics. In each episode, three young Earth kids embark on exciting missions and travel to thrilling locations where they must use math and problem-solving skills to save the day. Each program ends with a catchy live-action segment, "Cyberchase for Real," which explores the show's topic in the real world. Two charismatic young hosts employ the math content featured in the animated episodes as they face everyday situations.

Funders (and resulting constraints)

National Science Foundation, PBS, Corporation for Public Broadcasting, the Arthur Vining Davis Foundations, the Kettering Family Foundation, and The Volckhausen Family

Educational Outreach Budget Range

Large (\$250K-\$500K)

Educational Outreach "Producers"

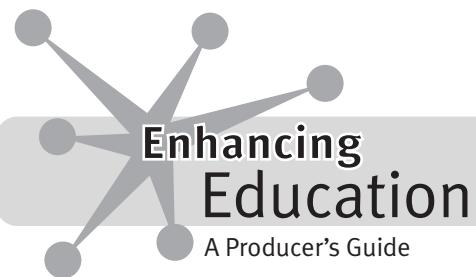
Thirteen/WNET staff created all the educational outreach elements.

Partners

The American Library Association, EQUALS/Family Math, the Association of Science and Technology Centers, and PBS stations nationwide offered training sessions, workshops and computer resources, distributed materials to after-school programs and other community-based organizations that work with kids 8 to 11 years old, and promoted the project in newsletters, Web sites, and at conferences.

Thirteen will distribute project materials through the National Teacher Training Institute, one of the nation's largest grassroots professional development projects, which to date has trained more than 130,000 teachers to use technology effectively in the classroom.

Thirteen's community partners, including the Girl Scouts, the Boys & Girls Club, and The Urban League, participated in the educational outreach efforts by distributing materials to their constituents and promoting the series and its educational outreach materials to their local affiliates.



Enhancing Education

A Producer's Guide



Case Studies: *Cyberchase*

Goals & Audience

Goals

Cyberchase is designed to help millions of children around the world develop and sustain enthusiasm for mathematics and increase their knowledge and skills beyond present expectations. The project's overall goals are to:

- Foster a positive attitude towards mathematics and ensure children remain engaged with mathematics during their school years
- Provide opportunities to develop skills in mathematics reasoning and problem solving
- Demonstrate the usefulness of mathematical thinking
- Motivate children to approach mathematics with enthusiasm, confidence, and competence

The educational outreach is designed to extend the impact of the *Cyberchase* broadcast. The goal is to build youngsters' confidence, especially those who are underserved and most likely in need of motivation, by providing stimulating, hands-on mathematics activities. The three-pronged strategy includes reaching children in the following ways:

1. At home, through *Cyberchase* Online, print materials, and a partnership with *Weekly Reader*
2. In the community, through training staff at youth-serving organizations, at hands-on work shops, training sessions, and conferences, and by providing print materials
3. At school, through training teachers and providing a comprehensive teacher's guide

Target Audience

8- to 11-year-olds

Standards Addressed

The content of *Cyberchase* is guided by the *Principles and Standards for School Mathematics* of the National Council of Teachers of Mathematics (NCTM). Each episode centers on a single mathematical concept, selected from the corpus of mathematics content important for children in grades 3-5. These concepts do not constitute a curriculum, but they fit within it, and teachers will recognize them as valuable adjuncts to classroom experience. Over the course of each season, concepts from all five content strands in the NCTM Standards (Standards 1-5) will be addressed. *Cyberchase* also demonstrates the process of doing mathematics, as described by NCTM Standards 6-10.

For more information on the NCTM Standards, call 703-620-9840 or go to <http://www.nctm.org>.



Enhancing Education

A Producer's Guide



Case Studies: *Cyberchase*

Educational Outreach Elements

Print

Poster

Fifty thousand two-sided posters introducing *Cyberchase* and including a math challenge were printed and distributed to stations, partner organizations, and schools nationwide.

Postcards

Partners organizations, museums, and local PBS stations have used 30,000 of these cards to promote the series and workshops.

Teacher's Guide

Fifteen thousand guides were distributed to educational outreach sites, after-school programs, Boys & Girls Clubs, the Girl Scouts, 4-H clubs, libraries, guidance centers, and professional development programs, as well as to 1,000 individuals by request. An online version of the guide is accessible from the Web site. It contains lessons for third to fifth graders based on *Cyberchase* episodes. Activities span NCTM/state educational standards, and seven lessons feature topics from the programs and include extension activities. The following can be found in the teacher's guide:

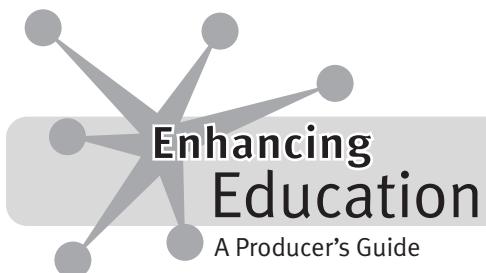
- Teacher pages that provide overviews and activities for seven *Cyberchase* programs
- Student activity masters that can be photocopied and distributed in class
- Title and content focus for each of the seven shows
- Program descriptions for the first 26 episodes of *Cyberchase*

Decoder Wheels

Two hundred fifty thousand of this promotional piece, which includes an interactive game and a tune-in push for the series and Web site, were produced.

Magazine

One hundred thousand magazines were printed and distributed to public television stations, public libraries, school districts, Boys & Girls Clubs, after-school programs, housing agencies, 4-H Clubs, and the Girl Scouts. Hundreds of requests were also received from individuals via the e-mail request line. The 24-page, full-color magazine includes fun activities, comics, and math problems that feature the series' heroes and villains.



Enhancing Education

A Producer's Guide



Case Studies: *Cyberchase*

Educational Outreach Elements (cont'd)

Weekly Reader Insert

In October 2002, the *Weekly Reader* printed a four-page, full-color insert in its fourth-grade edition. The insert announced the series and broadcast information, included math puzzles and games, and introduced some of the program stars.

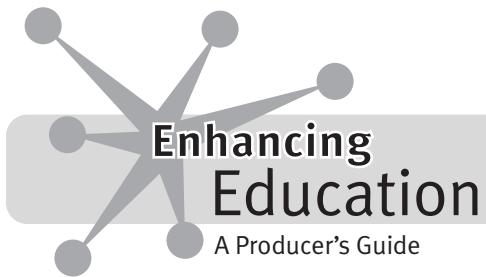
Web/Interactive

The daily TV series and the *Cyberchase* Web site (<http://pbskids.org/cyberchase>) converge at the point where kids become engaged in the storyline and in the math challenges connected to each daily program. Online, kids can play interactive games and take polls, solve puzzles, download free stuff, sneak a peak at an upcoming show, meet the characters, watch the live-action "Cyberchase for Real" segments in streaming video, and experience virtual adventures. Original "Webisodes" offer comic stories embedded with interactive math challenges. In the Parents and Teachers section, the site provides the mathematics focus of each episode along with lesson plans and activities, as well as an introduction to the *Cyberchase* series and Web site. A content matrix shows at a glance the math content standard covered in each of the first 26 programs. *Cyberchase* Online also features family activities.

Person-to-Person Activities

The Association for Science and Technology Centers (ASTC), a *Cyberchase* partner, provided a train-the-trainer workshop for their Youth Alive teens, who will mentor younger kids by facilitating *Cyberchase* activities in their respective museums and science centers. These teens reach more than 5,000 youth in their communities.

Twenty-nine PBS stations in 19 states have all held local workshops, where they involved kids in math activities and/or introduced the series to teachers, librarians, after-school providers, and parents. Stations made a special effort to involve girls and minority students. Each worked with community groups, particularly local Boys & Girls Clubs, libraries or library districts, and 4-H Clubs in rural areas. The Headwater Science Center in Bemidji, Minnesota; the New Orleans Center for Science and Math; the Children's Museum of Indianapolis; and Teens Need Training, a group of at-risk kids in Cookeville, Tennessee, are just some of the institutions that have co-presented educational outreach workshops. Eureka, California, had a *Cyberchase* Family Fun Night that was covered in the press.



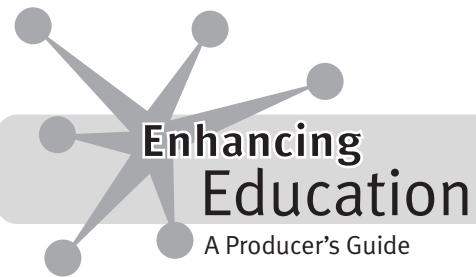
Case Studies: Cyberchase

Educational Outreach Elements (cont'd)

Since the presentations include math content, some stations brought in teachers to present the series. The Houston station, for instance, recruited the math director of the Southwest Texas school district and two math specialists from her department to lead a training for parents, teachers, and child care professionals.

Thirteen has promoted *Cyberchase* at various public events across the country, among them:

- NSF Kids Day, Arlington, Virginia: Thousands of children and families attended.
- Children's Day at the South Street Seaport, New York City: More than 30,000 kids and parents attended numerous other events nationwide hosted by our PBS pilot sites.



Enhancing Education

A Producer's Guide



Case Studies: *Cyberchase*

Outcomes

To date, the following educational outreach materials have been distributed:

- More than 30,000 posters
- More than 12,000 teacher's guides
- More than 25,000 postcards
- More than 240,000 decoder wheels
- More than 31,000 advance orders for magazines
- The fourth-grade edition of the *Weekly Reader* reached 800,000 students and 40,000 teachers.

As of September 2002, the Web site had received more than 100 million page views (more than 300,000 unique visitors). The site averages 2.5 to 4 million page views per week.

To date, *Cyberchase* partners have accomplished the following:

American Library Association (ALA)

- Created the book list for the *Cyberchase* toolkit
- Promoted the series launch and the Web site to their members via an online newsletter (ALA has a membership base of more than 63,000 librarians nationwide)
- Season II: Will roll out a parent component through their affiliates

EQUALS/Family Math

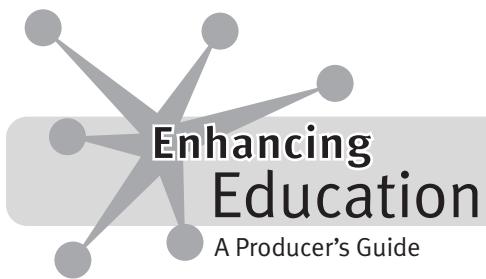
- Promoted the series and the Web site to their sites in 35 states
- Created "family math" activities for *Cyberchase* educational outreach toolkit
- Promoted the series and the educational outreach materials at conferences

Association for Science and Technology Centers (ASTC)

- Provided a train-the-trainer workshop for their Youth Alive teens, who will mentor younger kids by facilitating *Cyberchase* activities in their respective museums and science centers. These teens reach more than 5,000 youth in their communities.

PBS Demonstration Sites

Twenty-nine PBS stations in 19 states have all held local workshops, where they involved kids in math activities and/or introduced the series to teachers, librarians, after-school providers, and parents. Stations made a special effort to involve girls and minority students.



Case Studies: *Cyberchase*

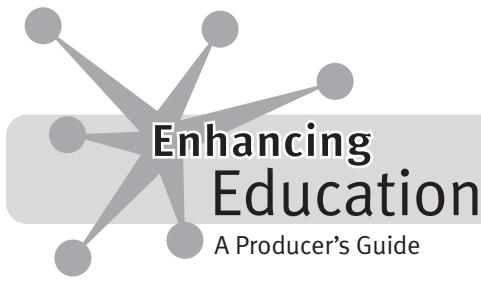
Challenges & Lessons Learned

Additional funding is key when rolling out an educational outreach initiative for a program. Stations and community organizations are more than willing to partner if the fit is right, but the level of their commitment depends upon funding. Organizations will distribute materials and include information in their newsletters as much as possible, but to ensure that workshops and training are in place, local affiliate partners require funding.

There were a finite number of educational outreach materials available for distribution to stations and partner organizations. This led to materials rationing to ensure supplies through the end of the season. Creating materials that are reproducible or available online in a PDF format has been a helpful solution, but many partners and audiences prefer professionally printed resources.

Keeping track of and documenting educational outreach efforts of all of community partners, non-grantee stations, etc., is challenging, due to the limited budget.

The viewing age of *Cyberchase* is very broad, which poses exciting educational outreach opportunities as well as challenges. Our primary goal is to serve and build our target audience (8- to 11-year-old children/math content for grades 3-5). As we move forward with the project, we hope to balance resources so we can reach out to the younger viewers who are tuning in.



Case Studies

Evolution

Producer

WGBH

Series Description

A seven-part, eight-hour series that examines evolutionary science and its profound effect on our lives and our planet. Premiered fall 2001.

Funders (and resulting constraints)

Clear Blue Sky Productions (co-producer)

Educational Outreach Budget Range

Very large (\$500K)

Educational Outreach "Producers"

The educational outreach materials and person-to-person activities were handled by WGBH Educational Print and Outreach staff, the short video by WGBH Educational Programming staff, and the Web site by WGBH Interactive staff. A project director served as the communication linchpin between all the different departments and the production, holding biweekly meetings and helping facilitate communication among project teams.

Partners

National Association for Biology Teachers, National Science Teachers Association



Case Studies: Evolution

Goals & Audience

Goals

To provide support and resources to high school biology teachers to improve the teaching of evolution

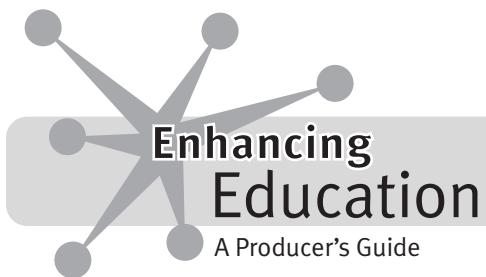
Target Audience

High school biology teachers and students

Standards Addressed

The *Evolution* project addressed a range of national science education standards for grades 9-12, including the following:

- Content Standard A: Science as Inquiry
- Content Standard C: Life Science
- Content Standard F: Science in Personal and Social Perspective
- Content Standard G: History and Nature of Science



Enhancing Education

A Producer's Guide



Case Studies: Evolution

Educational Outreach Elements

[Print](#)

Pre-Broadcast Brochure

One hundred thousand, five hundred copies were distributed to high school science department chairs, high school biology teachers, high school principals, and public television station outreach departments, describing all the different project elements and offering the opportunity to order the teacher's guide.

Teacher's Guide

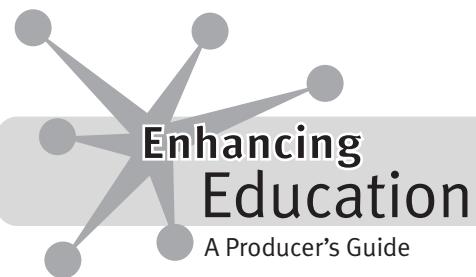
Distributed to 124,000 educators and administrators, the teacher's guide provides units modeling how to integrate all the *Evolution* series, video, and Web-based resources around specific questions, among them: What is the nature of science? What is the evidence for evolution? Why does evolution matter now? The guide offers different pathways through the material depending on what is being taught in the classroom, strategies for dealing with controversy around evolution, assessment rubrics, and a series index that breaks each program into small, annotated segments to make it easier for teachers to use the series in the classroom. The *Evolution* teacher's guide is also available in an online version through the project Web site.

Web/Interactive

The *Evolution* Web site (<http://www.pbs.org/wgbh/evolution>) is a comprehensive educational experience packed with interactive features that allow users to test evolutionary principles in action. The site is geared to a general popular adult audience (viewers of the *Evolution* broadcast and those seeking an independent Web experience) and high school students and science teachers interested in exploring evolutionary science and the impact of evolution on society.

The Web site includes the following:

- Twenty-one content-rich, interactive activities—including experimental simulations, interactive timelines, virtual environments, and online forums—that facilitate experiential learning
- The *Evolution* Library, which features direct Web access to hundreds of multimedia evolution resources, including video, photographs, interviews, articles, and annotated Web links
- An evolution FAQ and a glossary of evolution terms
- An extensive Teachers and Students section of the Web site which presents an array of resources for learning about and teaching evolution. Included in this section:



Case Studies: Evolution

Educational Outreach Elements (cont'd)

- *Learning Evolution:* Produced in tandem with the *Evolution* teacher's guide, these inquiry-based, teacher-assigned online lessons provide students with online activities to enhance their understanding of the nature of science and evolution.
- *Teaching Evolution:* This eight-session online course for high school teachers draws on the broadcast series, Web features, case study videos, and the *Evolution* Library to provide a vibrant learning experience. The course is designed to deepen teachers' understanding of evolutionary concepts and to help them address obstacles to teaching evolution.
- Streamed professional development videos for teachers and classroom videos for students
- An online version of the *Evolution* teacher's guide
- Project information

Video

Videos for Students

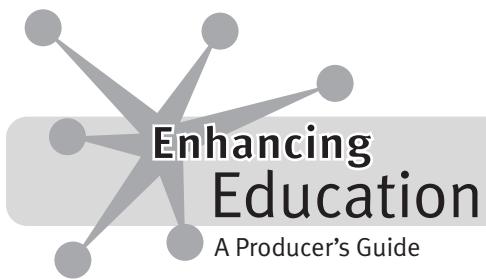
Evolving Ideas: These seven short classroom videos (streamed on the series Web site and available for purchase on videocassette) combine storytelling and science to explore the concepts of evolution and spark students' interest.

Videos for Teachers

Teaching Evolution Case Studies: Four 15-minute professional development videos (streamed on the series Web site and available for purchase on videocassette) that highlight a range of strategies for teaching evolution in classrooms across the country.

Person-to-Person Activities

- A Lead Teacher Initiative was held, which trained a cadre of 25 teachers to run *Evolution* workshops around the country.
- *Evolution* participated in major conferences, including the National Science Teachers Association and National Association of Biology Teachers conferences, through panel discussions, teacher-training workshops, and a booth for distribution of educational outreach materials.



Enhancing Education

A Producer's Guide

Case Studies: Evolution Outcomes

Listserv

More than 11,000 teachers have subscribed to the *Evolution* teacher listserv.

Teacher's Guide

Demand for the *Evolution* teacher's guide outstripped the initial print run of 94,000 guides. Thirty thousand additional guides were printed and used to fulfill requests, distribute at conferences, and complete another mailing to biology teachers. (Previous evaluation of teacher's guides associated with science series such as *NOVA* have shown that each guide is shared among an average of four teachers and used with approximately 70 students.)

Teaching Evolution: Online Course for Teachers

More than a dozen course license agreements have been completed to date with educational organizations around the country. Many more license agreements are pending. More than 50 organizations have expressed a desire to use at least some portion of the course with their students. Northeastern University in Boston has launched a customized version of the online course for teachers. The initial offering was almost filled to capacity. Additional offerings will be made in the 2002-03 academic year.

Lead Teacher Initiative

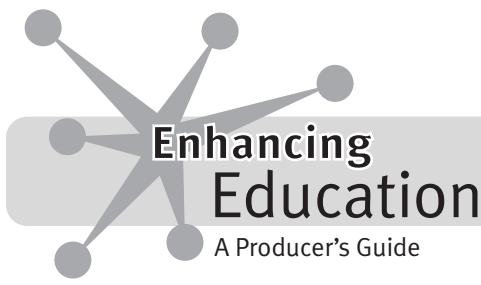
More than 120 applications were received for 25 Lead Teacher positions. In the end, 31 teachers were chosen. Each teacher completed a minimum of two workshops for colleagues throughout their districts and states, reaching more than 1,200 high school biology teachers nationwide. Some teachers have also published articles about the *Evolution* project in professional journals, such as *The American Biologist* and *Science Teachers*.

Evolution Online

The Web site has received almost two million IP visitors since its launch. The Teachers and Students section has consistently been the first or second top-accessed subdirectory (that is, where a visitor goes after the home page).

Awards and Kudos

The *Evolution* Web site, student videos, teacher videos, brochure, and teacher's guide received numerous awards and recognition from their respective media associations.



Enhancing Education

A Producer's Guide



Case Studies: *Evolution*

Challenges & Lessons Learned

The *Evolution* project was the largest and most highly integrated educational outreach project WGBH had ever undertaken. The project focused more on electronic formats than had been attempted previously, stretching the experience and resources of staff and facilities. WGBH learned that projects of the scale and complexity of *Evolution* are not just bigger than other projects; they are significantly different, requiring new strategies for organizing and managing staff and resources.

Among the lessons learned (most of which were unavoidable given the uniqueness of the project and only clear in hindsight):

- There was insufficient time devoted to strategic planning and the establishment of standards and procedures prior to beginning production. Even if deadlines feel tight, taking the time to really plan complex projects beforehand will actually save time and money in the long run.
- Interdependencies between project components (such as the broadcast series, *Evolution* Library, project Web site, and student videos) can result in rich end products but difficult working conditions.
- An overall project director with strong project management skills, a clear directive, overt support from the executive producer, and preferably deep content knowledge is essential to projects of this size.
- As advisors play a critical role on integrated educational outreach projects, it is crucial to be clear about expectations and workload up front. One key content advisor should review all components (including the series), and each educational outreach component should identify and work closely with a small number of core advisors from the project's shared advisory board who have the appropriate time and expertise. Communication among component departments about who is using which advisors for what is key to avoiding advisor burnout.
- Be prepared to launch early. PBS scheduled the premiere of *Evolution* earlier than anticipated, creating many late nights and busy weekends.



Case Studies

In Search of Shakespeare

Producer

Maya Vision International

Series Description

In Search of Shakespeare is a four-part series exploring the life of the world's most famous writer. The first full-scale TV production about the life of William Shakespeare, this innovative history series features the Royal Shakespeare Company acting out scenes from Shakespeare's works at locations around England where Shakespeare's original company performed. The series is shot in documentary style, with live action on and off the stage.

Funders

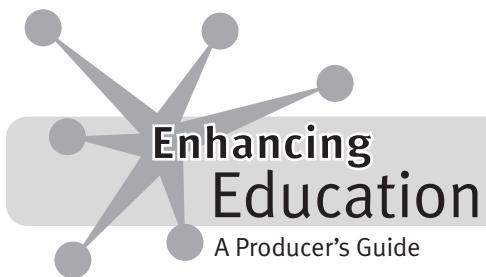
Corporation for Public Broadcasting (CPB)

Educational Outreach Budget Range

Medium (\$50K-\$250K)

Educational Outreach "Producers"

PBS (PBS.org) worked with a team of freelancers recommended by the Folger Shakespeare Library as well as Folger staff to produce content, which is made available through the *In Search of Shakespeare* Web site. The general-audience Web site content was coproduced by Maya Vision and Vertebrate.



Case Studies: *In Search of Shakespeare*

Goals & Audience

Goals

The goal of the educational outreach is to provide educators with the resources and support needed to make lessons on Shakespeare an engaging and exciting learning adventure for students.

Target Audience

The target audience is educators and students in elementary, middle, and high school.

Standards Addressed

The following standards are addressed in the educational resources for *In Search of Shakespeare*:

International Reading Association

www.ncte.org/about/over/standards/110846.htm

Standard 1: Students read a wide range of print and non-print texts to build an understanding of texts, of themselves, and of the cultures of the United States and the world; to acquire new information; to respond to the needs and demands of society and the workplace; and for personal fulfillment. Among these texts are fiction and nonfiction, classic and contemporary works.

Standard 2: Students read a wide range of literature from many periods in many genres to build an understanding of the many dimensions (philosophical, ethical, aesthetic) of human experience.

Standard 3: Students apply a wide range of strategies to comprehend, interpret, evaluate, and appreciate texts. They draw on their prior experience, their interactions with other readers and writers, their knowledge of word meaning and of other texts, their word-identification strategies, and their understanding of textual features (e.g., sound-letter correspondence, sentence structure, context, graphics).

Standard 4: Students adjust their use of spoken, written, and visual language (e.g., conventions, style, vocabulary) to communicate effectively with a wide variety of audiences and for different purposes.



Enhancing Education

A Producer's Guide



Case Studies: In Search of Shakespeare

Goals & Audience (cont'd)

Standard 5: Students employ a wide range of strategies as they write and use different writing-process elements appropriately to communicate with different audiences for a variety of purposes.

Standard 6: Students apply knowledge of language structure, language conventions (e.g., spelling and punctuation), media techniques, figurative language, and genre to create, critique, and discuss print and non-print texts.

Standard 8: Students use a variety of technological and informational resources (libraries, databases, computer networks, video) to gather and synthesize information and to create and communicate knowledge.

Standard 11: Students participate as knowledgeable, reflective, creative, and critical members of a variety of literacy communities.

Standard 12: Students use spoken, written, and visual language to accomplish their own purposes (for learning, enjoyment, persuasion, and the exchange of information).

McREL

www.mcrel.org

Language Arts

Standard 1: [The student] uses the general skills and strategies of the writing process.

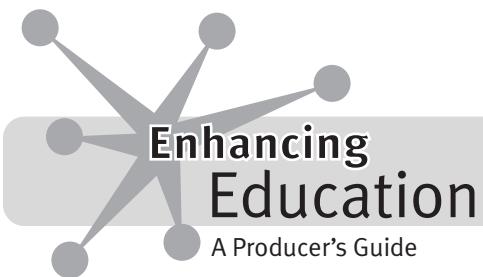
Standard 2: [The student] uses the stylistic and rhetorical aspects of writing.

Standard 3: [The student] uses grammatical and mechanical conventions in .
written compositions.

Standard 4: [The student] gathers and uses information for research purposes.

Standard 5: [The student] uses the general skills and strategies of the reading process.

Standard 6: [The student] uses reading skills and strategies to understand and interpret
a variety of literary texts.



Case Studies: In Search of Shakespeare

Goals & Audience (cont'd)

Standard 9: [The student] uses viewing skills and strategies to understand and interpret visual media.

World History

Standard 27: [The student] understands how European society experienced political, economic, and cultural transformations in an age of global intercommunication between 1450 and 1750.



Enhancing Education

A Producer's Guide



Case Studies: *In Search of Shakespeare*

Educational Outreach Elements

Web/Interactive

www.pbs.org/shakespeare/

The *In Search of Shakespeare* Web site is the primary educational outreach element for the series. It includes educator resources, an interactive game, background information about the program, and additional resources.

- **For Educators: Shakespeare in the Classroom**

Developed in partnership with the Folger Shakespeare Library, these classroom resources are designed around six thematic strands: Shakespeare's Language, Shakespeare on Film, Performance, Primary Sources, Teaching Shakespeare to Elementary Students, and Teaching Shakespeare with Technology. Each theme area includes the following:

- Professional Development: Case studies, articles, and quick tips designed to help educators bring Shakespeare to life in their classrooms
- Lesson Plans: Interdisciplinary lesson plans for elementary, middle, and high school students
- Resources: Print and online resources that continue the study of Shakespeare
- Multimedia Digital Library: Video, images, and documents from *In Search of Shakespeare* to use in the classroom
- In Your State: A searchable database of Shakespeare-related educational opportunities in local communities

- **The Playwright Game**

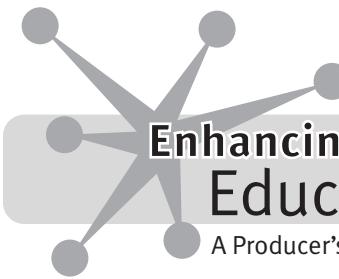
This interactive game advertises for "One writer of plays needed for gainful employment." Choosing from heroes and topics, the playwright steadily develops his or her craft and career while simultaneously uncovering similar themes in Shakespeare's plays.

- **Discussion Forum**

Visitors to the Web site add comments or read what others are saying on this discussion board.

- **The Investigation: The Shakespeare Dossier**

Explore the events, people, and locations that shaped Shakespeare through a timeline, biographies, primary sources related to Shakespeare's life, a glossary defining some lesser-known Elizabethan words, synopses of Shakespeare's works, and a map of specific locations in Shakespeare's England. This section also includes "The Fribbling Reports,"



Enhancing Education

A Producer's Guide



Case Studies: In Search of Shakespeare

Educational Outreach Elements (cont'd)

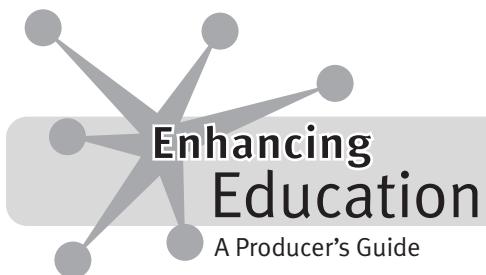
an entertaining exploration of the life and times of Shakespeare. The "Reports" follow John Fribbling, an entirely fictional agent of the state, in his dogged and ineffectual pursuit of one William Shakespeare, suspected Papist and known thinker.

- **The Show**

The Web site also includes information about the series, including episode descriptions, an interview with executive producer and author Michael Woods, and behind-the-scenes production information.

Person-to-Person Activities

Executive producer and author Woods spoke at screenings in several cities around the United States.

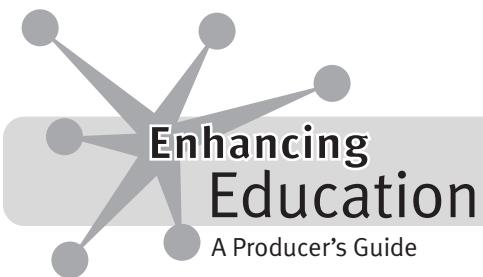


Case Studies: In Search of Shakespeare

Outcomes

The *In Search of Shakespeare* Web site filled a major content gap on the PBS Web site in Shakespeare-related content for both general audiences and K-12 educators.

The Web site received extensive hits during broadcast in early to mid-February and remains active today. The number of e-mails and calls associated with the programs was high, even after the expected post-broadcast drop-off in page views. The educators' section continues to receive a high number of visitors.



Case Studies: *In Search of Shakespeare*

Challenges & Lessons Learned

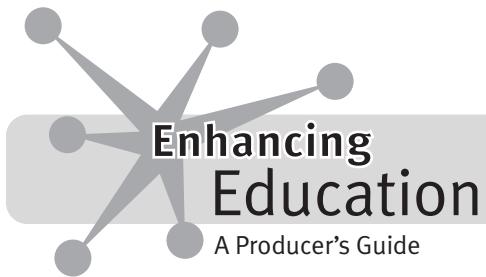
One of the main challenges of the outreach plan was to create classroom content that went beyond lesson plans and interactive features. The producers wanted to develop an integrated educational resource by including extensive professional development resources for teaching Shakespeare in a way that was rewarding for teachers and students. One challenge that was successfully met was connecting the content components in the For Educators section to those in the program and general-audience Web site.

The feature "Shakespeare in Your State" is a database of Shakespeare-related activities in all 50 states. The producers found it difficult to create a truly exhaustive database, nor did they anticipate the level of updating required to keep it current.

The content partnership between PBS and Folger proceeded smoothly because of many face-to-face meetings and other robust communication. Despite the tight two-month deadline, all content was delivered on time. This was due in large part to objectives and guidelines being clearly stated up front.

Despite significant educator interest in the site, there was not enough activity on the For Educators discussion board to deem it truly successful. Additional promotion directed toward teachers might have made it more successful.

PBS worked with 10 freelance curricula developers recommended by Folger who had never before created content for PBS.org. Familiarizing these writers with PBS's editorial guidelines was perhaps one of the greater challenges. The producers anticipated this problem and built extra time into the schedule for it.



Case Studies

Lewis & Clark: The Journey of the Corps of Discovery

Producer

Florentine Films and WETA

Series Description

This four-hour television documentary chronicles the four-year journey of explorers Meriwether Lewis and William Clark to the uncharted American West. Starting out with \$2,500, their small expedition traveled thousands of miles, experiencing the lands, rivers, and peoples that no Americans had ever seen before.

Funders

General Motors Corporation, The Pew Charitable Trusts, The Arthur Vining Davis Foundations, Corporation for Public Broadcasting (CPB), Public Broadcasting Service (PBS), William T. Kemper Foundation, The William and Flora Hewlett Foundation, and Travel Montana

Educational Outreach Budget Range

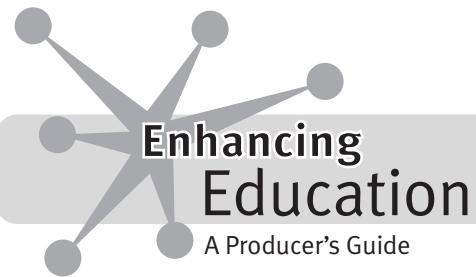
Medium (\$50K-\$250K)

Educational Outreach "Producers"

PBS Online (PBS.org) produced the Web site. Roger Los of Seattle, Wash., developed original graphic design and site development. Bean Creative completed site redevelopment and interactive activities. Blackbean Design developed the student activity sheet layout. Sunlight Design created the maps.

Partners

There were no external partners for this project.



Case Studies: Lewis & Clark

Goals & Audience

Goals

The goal of the educational outreach is to provide educators with the resources and support needed to help students do the following:

- Examine the geographic, scientific, and other discoveries made by the expedition to learn why it's considered one of the most successful expeditions in U.S. history
- Identify and analyze the short- and long-term effects of the expedition, including how the expedition affected Native American tribes in the region
- Develop complex and systematic reasoning about expedition-related decisions
- Participate in collaborative assignments
- Improve their knowledge of and skills required to use multimedia resources as tools in the learning process

Target Audience

The educational outreach was targeted to middle school American history teachers and their students, but the resources can also be adapted for use with elementary or high school students.

Standards Addressed

The social studies, math, science, and language arts lessons on the Web site correlate to the national McREL standards located online at www.mcrel.org/.



Enhancing Education

A Producer's Guide



Case Studies: Lewis & Clark

Educational Outreach Elements

Interactive/Web

www.pbs.org/lewisandclark

Lewis & Clark premiered in 1997 and was rebroadcast in 2003. The outreach for the initial broadcast included a teacher's guide (see description below) and the *Lewis & Clark Web site*. For the rebroadcast, the Web site was updated and revised. The site includes educator resources, an interactive map, archives of images and primary source documents, background information on the show, and other resources.

- **Classroom Resources**

These multidisciplinary lessons plans and activities use television and computers as learning tools in the subject areas of science, mathematics, social studies, and language arts. Each lesson includes teacher notes and downloadable student handouts.

- **Inside the Corps**

This section provides biographical information about the members of the Corps of Discovery. It also includes "To Equip an Expedition," which provides a partial list of the supplies Lewis and Clark brought on the expedition, and "Circa 1803," which puts the expedition into a historical and political context, investigating popular misconceptions of the West as well as President Thomas Jefferson's motivations for exploring it.

- **The Native Americans**

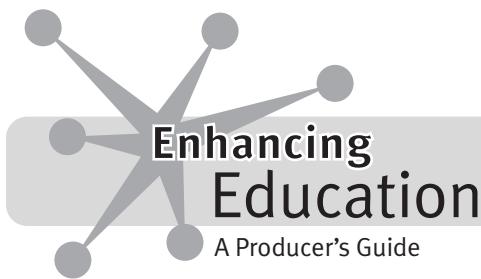
Over the course of the expedition, the Corps of Discovery came into contact with nearly 50 Native American tribes. This section provides a short article about the tribes that had the most significant interactions with Lewis and Clark. Each article provides introductory information about the tribe and touches on the tribe's relationship to the expedition.

- **Interactive Activities**

The Interactive Trail Map traces the Corps of Discovery's historic journey west and back home again. Follow the Corps' journey with the "Into the Unknown" activity, which features descriptions of their journey along with selected entries from the journals of the explorers.

- **Living History**

Listen to or read a wide range of experts' responses to a series of questions, ranging from "What kind of man was William Clark?" to "What was life like for York, Clark's black slave, during the expedition?" to "How did Lewis and Clark deal with the Indians they encountered?"



Enhancing Education

A Producer's Guide



Case Studies: *Lewis & Clark*

Educational Outreach Elements (cont'd)

- **The Archives**

Florentine Films compiled a number of resources, including:

- The Journals: A searchable, chronological compilation of excerpts from the journals of seven members of the Corps of Discovery, including Lewis and Clark
- A Timeline of the Trip: An easy-to-follow overview of the expedition, from its inception to the death of William Clark
- Online Resources: A comprehensive list of Lewis and Clark-related Web sites
- Sources: An extensive bibliography of sources used for researching the Web site, as well as a guide to the site's images
- Interview: Full-length, unedited interviews (RealAudio and text) with seven of the experts featured in the film *Lewis & Clark*
- Maps: Historical maps created by Clark, a pre-expedition map, and a map showing the route taken by the Corps of Discovery to the Pacific

- **Forum with Ken Burns**

Listen to or read the answers of Ken Burns, the director and co-producer of *Lewis & Clark*, to seven frequently asked questions from viewers.

Teacher's Guide

The guide, targeted to grades 5-8, was part of the outreach for the premiere of the show in 1997. It was designed to help students join in the journey west with Lewis and Clark. Hands-on learning activities highlight many of the expedition's achievements and help students understand its significance in the history of America. The guide includes a full-color poster with reproducible activity sheets and teacher suggestions printed on the back.

Videos

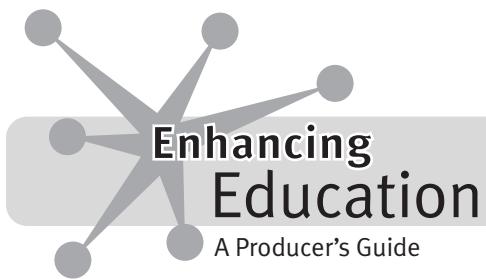
Schools across the country received 24,500 *Lewis & Clark* programs.



Case Studies: Lewis & Clark Outcomes

Page views for the *Lewis & Clark* site have ranged from one to three million over the past three years. The site has consistently been one of the most popular Lewis and Clark online resources for K-12 educators.

The Web site (www.pbs.org/lewisandclark) relaunched in October 2003 to coincide with the rebroadcast of *Lewis & Clark: The Journey of the Corps of Discovery* and the beginning of the Lewis and Clark bicentennial commemoration across the country. The relaunch prompted revisions of all the lesson plans, updated biographical information on the experts featured on the site, event information about the Lewis and Clark bicentennial, and commissioned local content from PBS stations along the Lewis and Clark Trail.



Case Studies: Lewis & Clark

Challenges & Lessons Learned

Because the producers were revising an existing site, they didn't face the challenges associated with new-site launches. The renewed interest surrounding the bicentennial of the Corps of Discovery provided them with an opportunity to connect with local stations and communities along the Lewis and Clark trail. Five stations (in Idaho, Missouri, Montana, North Dakota, and Oregon) responded to a Request for Proposal (RFP) to develop *Lewis & Clark* content -- lesson plans, articles, interactive maps, and so on -- for their stations' Web sites.

With only five weeks to complete the relaunch, it was a challenge to coordinate and complete the stations' *Lewis & Clark* projects. WETA hired local freelancers who then, in a couple of cases, commissioned additional assistance. Consequently, keeping track of the project's progress and ensuring that assets would be delivered on time was difficult. In retrospect, the producers believe that they may have underestimated (1) the time needed to assemble, edit, and approve the local content, and (2) the need to establish clearer and stricter editorial guidelines for the stations to follow. Still, the resulting content enriched the site by providing a strong local-national connection.

According to a focus group study and online survey, 96 percent of repeat visitors to the *Lewis & Clark* site said they would recommend it to others. This extremely strong endorsement of the site by educators was very consistent across all types and grade levels of educators.

