



KEY WORDS IN INSTRUCTION

WebQuests

by Annette Lamb

In the mid-1990s, educators began exploring ways to make effective use of the vast information resources that were rapidly emerging on the Internet. Rather than using these new Web-based materials for low-level scavenger-hunt types of activities, school library media specialists sought ways to promote higher-order thinking through authentic assignments that emphasized information inquiry.

WebQuest Defined

In 1995, Bernie Dodge, Professor of Education from San Diego State University, coined the term "WebQuest" to describe a particular type of inquiry-based activity that asks students to use Web-based resources and tools to transform what they are learning into meaningful understandings and real-world projects. Most or all of the information used by learners is found on pre-selected websites. Rather than spending substantial time using search tools, WebQuests focus on using Web-based information to analyze, synthesize, and evaluate information to address high-level questions.

Dodge distinguishes between short-term and long-term WebQuests. The goal of a short-term WebQuest is knowledge acquisition and integration, while in a long-term WebQuest, learners analyze and transform knowledge into something that is understandable by others.

Dodge's model is similar to other information inquiry models. Critical attributes of a WebQuest include:

- An introduction that sets the stage of the activity;
- A doable, interesting task;
- A set of information resources;
- A clear process;
- Guidance and organizational frameworks; and
- A conclusion that provides reflection and closure.

Noncritical attributes included group activities, motivational elements, and interdisciplinary approaches.

First used at the university level, library media specialists like Kathy Schrock, known for her popular *Kathy Schrock's Guide for Educators* website, quickly adapted the WebQuest approach for teaching and learning across grade levels.

Rarely has an educational approach gained so much attention. Many examples across content areas can be found at *WebQuest.org* (<http://webquest.org>). More than five million visitors have used the WebQuest page (<http://webquest.sdsu.edu>) at San Diego State University since 1998.

Multifaceted Approach

WebQuests are a learner-centered approach to teaching, learning, and information inquiry drawing on a variety of theories that include the following areas:

- Constructivist philosophy;
- Thinking, understanding, and transformational learning;
- Authenticity and situated learning environments;
- Scaffolding;
- Differentiation;
- Cooperative learning;
- Motivation; and
- Motivate, challenge, and engage learning.

While working with Bernie Dodge at San Diego State University, Tom March created the first WebQuests for the K-12 environment. His well-known early WebQuests included "Searching for China," "Look Who's Footing the Bill!," and "Tuskegee Study WebQuest." March's websites *BestWebQuests.com* and *Ozline.com* contain resources to assist educators in using and developing Web-based materials. He has found that well-designed WebQuests:

- Promote dependable instructional practices.
- Combine research-supported theories.
- Make effective use of essential Internet resources.
- Produce open-ended questions.
- Offer authentic tasks.
- Motivate students.
- Allow students to develop expertise in a subject from within a situated learning environment.
- Offer opportunities for transformative group work.

A growing body of teacher action research, case studies, and experimental research points to the success of WebQuests as a rich instructional approach for promoting information inquiry (Hill, et al 2003).

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WebQuests in the Library Media Center

Library media specialists play an important role in the use of WebQuests by making certain that Web-based materials are carefully selected to support information needs. In addition, they often collaborate with teachers in promoting student knowledge, skills, and attitudes needed to become effective users of information. For instance, Linda Picceri, a middle school library media specialist, developed a seventh grade oral history WebQuest titled "Historically Speaking." Students become historians, brainstorm questions, conduct interviews and collect artifacts, and share their findings.

According to Walter Minkel, a former youth services librarian and technology editor for *School Library Journal*, since WebQuests combine traditional resources along with digital information resources, the school library media center is a logical focal point for WebQuest activities. For example, a middle-grade library media center became a mock science museum for a WebQuest project.

WebQuest development is time-consuming. Library media specialists can save time by adapting existing resources. For instance, a dozen or more WebQuests based on the book *Hatchet* can be found on the Web. Rather than creating one from scratch, library media specialists can combine elements from a few of the best sources, update Web links, and design additional assessment. WebQuests also can be modified by selecting resources at varied reading levels, creating additional content, examining different perspectives, or incorporating multimedia elements such as audio or video clips.

Collaborative partnerships are an effective way to design, develop, and manage WebQuests. Because WebQuests naturally reach across curriculum areas, library media specialists often can draw on content area, information, technology, and life skills standards when designing these technology-rich learning environments. Carol Truett, Professor of Library Science at Appalachian State University, advocates school library media specialists working with language arts teachers. For example, her article "Sherlock Holmes on the Internet: Language Arts Teams Up with the Computing Librarian" demonstrates this type of collaboration through a WebQuest focusing on mysteries.

WebQuests also are used in science and social studies. George Lipscomb, Professor of Education at Furman University, points out that students have a difficult time achieving historical empathy. Through a Civil War WebQuest incorporating role-playing and journal writing, eighth-grade students achieved varied degrees of historical empathy.

Literature-based WebQuests incorporate book(s) as a focal point for reading-centered,

online learning activities. Emphasis may be placed on characters, plot, theme, setting, genre, or authors depending on the particular learning outcome. Teachers often combine WebQuests with the literature circle approach to reading.

WebQuests aren't just for students. For example, Joyce Valenza, a library media specialist in Pennsylvania, developed a WebQuest for media specialists to learn about school library media websites.

WebQuests and Information Inquiry

Active, authentic use of information is at the core of the WebQuest philosophy. WebQuests require students to use a variety of authentic reading skills and strategies including skimming, scanning, and interpreting data. Dodge identified three domains to assist in developing Web-enhanced, information-rich learning environments: inputs (i.e., articles, resources, experts and other information sources); transformations (i.e., high-level activities such as analysis, synthesis, problem solving, and decision making); and outputs (i.e., products such as presentations, reports, and Web publishing). He points out that students need scaffolding in each of these domains, such as quality resource links, compelling problems, and production templates, to assist in building understandings.

Over the past decade, Bernie Dodge has developed a number of tools and approaches to facilitate the development of inquiry-based activities. For example, the *Taxonomy of Information Patterns* was created to illustrate different ways that information could be visualized. Types of information patterns include cluster, hierarchy, Venn diagram, timeline, flowchart, concept map, causal loop diagram, comparison matrix, and inductive tower. Educators can use the *WebQuest Taskonomy* to design a doable and engaging task that requires students to use information in thoughtful ways. These tasks include retelling, compilation, mystery, journalistic, design, creative product, consensus building, persuasion, self-knowledge, analytical, judgment, and scientific.

Recently, Dodge introduced templates called *WebQuest Design Patterns* to streamline WebQuest design. Each design pattern focuses on a unique instructional purpose and can be adapted for different subject areas. For instance, the "time capsule" design pattern directs students to survey a time period and develop judgments about the relative importance of activities and products. Sample topics include an ancient Egyptian, Colonial, or decade time capsule. Other patterns include alternative history, analyzing for bias, ballot, behind the book, beyond the book, collaborative design, commemorative, comparative judgment, compilation, concept clarification, concrete

design, exhibit, generic, genre analysis, historical story, in the style of..., meeting of the minds, on trial, parallel diaries, persuasive message, policy briefing, recommendation, teaching to learn, simulated diary, travel account, and travel plan.

Rather than writing an essay or making a speech for a teacher, quality WebQuests require students to connect their understanding of information to meaningful situations through original products for authentic audiences. The most effective WebQuest communication products provide students with opportunities to analyze, synthesize, and evaluate information and alternative perspectives.

Library media specialists increasingly are finding that students benefit from the development of WebQuests for a particular audience. Once students are shown the WebQuest format, they easily can build their own for others to use. Student WebQuest development can help students and teachers to think differently about information inquiry by asking them to design an inquiry project for others.

Library media specialists are under pressure to meet the needs of today's diverse learners. WebQuests provide an engaging, challenging learning environment for information inquiry for all ages.

Further Reading

- Dodge, Bernie. *Some Thoughts about WebQuests*. Updated May 5, 1995. (Available: http://edweb.sdsu.edu/courses/edtec596/about_webquests.html).
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WHO SAID...?

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Cormier (Tim Podell, 1996. 24 min. Available from Library Video.com).

THE ULTIMATE OBJECTIVE

The suggested activities are merely dust particles on the shelf of the hundreds of ideas available in books, magazines, and educational websites. An excellent site with which to begin with is ALA's *Banned Books Week* (<http://www.ala.org/ala/oif/bannedbooksweek/bannedbooksweek.htm>).

It goes without saying that many middle schoolers love reading, but we're talking about the hard sell. Beyond getting your fickle clientele

hooked on banned books, it is to be hoped that such activities will broaden their perceptions and inspire them to keep on reading. Ultimately, in developing the reading habit with young adults, we will produce more literate citizens and lifelong learners.

RESOURCES:

Books about Banned Books

- Bald, Margaret. *Banned Books: Literature Suppressed on Religious Grounds*. Facts on File, 1998.
- Blume, Judy, ed. *Places I Never Meant to Be*. Turtleback Books, 2001.
- Karolidis, Nicholas. *Banned Books: Literature Suppressed on Political Grounds*. Facts on File, 1998.
- Sova, Dawn B. *Banned Books: Literature Suppressed on Social Grounds*. Facts on File, 1998.

Some Novels about Book Banning

- (Note: Choose varying reading levels to meet the needs of your student population)
- Bradbury, Ray. *Fahrenheit 451*. Reissue. Dell Ray, 1987.
- Garden, Nancy. *The Year They Burned the Books*. Farrar, Strauss and Giroux, 1999.
- Hentoff, Nat. *The Year They Came to Arrest the Book*. Reissue. Laurel Leaf, 1983.
- Sijie, Dai. *Balzac and the Little Chinese Seamstress: A Novel*. Anchor, 2002.

Banned Books: The Movies

- Fahrenheit 451*. Universal Studios, 1966. 112 min.
- Go Ask Alice*. Golden Age Video, 1973. 73 min.
- Lord of the Flies*. Home Vision Entertainment, 1963. 91 min.
- The Outsiders*. Warner Home Video, 1983. 91 min.

Periodicals

- Bowman, David. "Banned Books & Censorship." *Newsweek Education Program* (1998): 1-9. 🖐