Web-based Organizational Tools and Techniques in Support of Learning

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Abstract

The Internet, particularly the Web, is a wonderful free source of information that can vastly improve the array of resources available to library patrons. Unfortunately, not all information is honest and accurate, and some of it is not suitable for certain age groups. Students using the Web for research often come upon unsuitable sites. We can get around this by constructing Web learning environments containing safe sites for students. These learning experiences include WebQuests, Pathfinders, Treasure Hunts, Scavenger Hunts, and Tracks.

As librarians, we pride ourselves on providing our clients with open and free access to uncensored information. We have always been at the forefront in the fight against censorship and threats to individual privacy rights. We realize that these two civil rights are important components at the base of a free society. Granted, we do pick and choose the materials that we place in our libraries. With limited budgets and space we cannot include everything in our holdings. We do pick and choose and, in doing so, may limit materials that may be deemed “controversial” by some. Saying this, we do not limit materials and opinions just on the basis of controversy. We also try to take advantage of services that expand our holdings in the most cost-effective way we can. We form partnerships and cooperatives to purchase materials and services. We share our materials through interlibrary loan and other cooperative efforts. As good stewards of our monies and the public trust, we take advantage of as many opportunities as we can to stretch our budget and acquire accurate and unbiased information for our patrons.
One such opportunity for expanding our horizons is the Internet in general and the World Wide Web (WWW) in particular. The WWW allows us to access amounts of information that we never dreamed possible even just a few short years ago. I remember saying years ago that the effect of the Internet on the world would be greater than that of the printing press. People thought that I was crazy back then, but it seems that this has come to pass.

The Internet is not without its problems though. Everything seems to be out there and available to our patrons with just a few keystrokes or clicks. Everything: honest information, dishonest information, biased information, and information that may be just plain inappropriate for the customer because of age or ability to understand. This can be a particular problem for librarians working in our schools. How can we have free and open access to information and yet screen this information to insure its availability in an age-appropriate form? The answer very simply is that we can’t. Many schools rely on student trust that self-limits access to inappropriate sites. Many politicians and others have touted Internet filters as a panacea. Most of these individuals have good intentions.

Unfortunately, filters don’t work as well as people claim. A 2001 study reported in *Consumer Reports* (2001) found that most filtering software packages failed to block one out of five undesirable sites. Many times sites that would be appropriate sources of information are denied to students. Klauck (1999) studied common Web filtering software and, using search terms common in school settings, found results that were undesirable for students.

So, what can be done? How can we give our students the opportunity to use the Web or Web-based information and yet stay in a safe environment? This is not as difficult as it may seem. We do this by guiding each step of their Web experience to assure that their keystrokes and clicks get them to the information they need with no chance of them going astray. We do this by constructing WebQuests and Pathfinders and using lists of specific sites and information that we construct or are available on the Web.

**WebQuests**

Bernie Dodge and Tom March first developed WebQuests at San Diego State University in 1995. A WebQuest is a self-contained, inquiry-oriented activity constructed in the form of a Web page. Some or all of the information the students will interact with comes from the Web. Information found in other library resources may also be used along with films, television, and other technologies. From this central page the student is prompted to read or view other information, and visit other Web pages constructed by the instructor, and other Web pages of supplemental information around the world. The information they gather from other sources and these Web pages is used by the students to complete their tasks.
The main page of the WebQuest contains several parts: introduction, task, process, evaluation, conclusion, and resources. Links to a separate teacher page may also be included. The introduction, though short in itself, is one of the most important parts of the WebQuest. This portion introduces the student to the activity. It is designed to “hook” the student and make the student want to go on. The task concisely states the outcome of the quest. It is usually short and to the point. WebQuests may be of short or long duration, to be completed individually or with a group. The process lists the steps the students will follow to achieve the desired outcome. A well-designed WebQuest is different and interesting. Students don’t write reports and parrot information. Rather, they may write a play, give a presentation, have a debate or construct a final project. The fourth area is evaluation. Here, students see how their performance will be evaluated. Many times assessment rubrics are used. Students learn about individual and/or group grading. The conclusion summarizes and brings closure to the activity. It also encourages students to extend their studies in or near the area covered by the WebQuest. Additional examples of projects or topics to explore may be introduced. And finally, the resources section may contain links to other useful sites containing supplemental and enrichment information. WebQuest etiquette allows teachers three choices. It is perfectly acceptable to use someone else’s WebQuest that may be found posted on a site. Of course, permission should be asked as common courtesy. Posted WebQuests may be changed to more closely meet the needs of the curriculum. Again, it would be courteous to send a copy of this to the originator of the WebQuest. And, of course, the instructor can also make a WebQuest from scratch. Many tutorials and templates can be found with a simple Web search.

Pathfinders
Pathfinders are guides to information resources on a specific topic. They are designed to provide a path for students to follow that focuses on their areas of research and specifically targets the most appropriate resources available. General Pathfinders may contain print resources such as books and periodicals; nonprint resources such as videos, CD-ROMS, and audiotapes; and Internet sources such as Web sites and discussion groups. Many librarians have constructed Pathfinders or subject guides for their patrons. This is a good way to have a list of prescreened sources for students to use. As long as librarians can use a word processor, they can turn a Pathfinder into a Web page by just saving it in that form or utilizing such Web construction tools as Netscape Composer, available free as a part of the Netscape Web browser. There is even a Pathfinder for constructing Web-based pathfinders easily located on the Web (http://home.wsd.wednet.edu/pathfinders/path.htm)! Web-based Pathfinders allow our students the easy access to online resources such as Web sites, online community resources, library catalogs, encyclopedias, newspapers, and magazines.
Many of the better resources such as online databases are not easily found through the use of regular Web searching. This vast pool of virtually searchable information, called the Invisible Web (discussed elsewhere in this issue) contains some of our best resources. A simple search using the term Invisible Web will yield many lists of these resources to add to and increase the value of our Pathfinders.

Bookmarks are sometimes called “pathfinders” without a sense of direction. They are collections of seemingly unrelated sites. Many teachers use their collection of bookmarks as jumping-off points in history and English classes. A well-constructed group of bookmarks can be an extraordinary resource for teachers and students for safe surfing through troubled Web waters.

**Web Treasure Hunts/ Scavenger Hunts**

Web Treasure Hunts, sometimes called Scavenger Hunts, are just like regular treasure hunts except that the students use the Internet to find answers to questions. Many great sites are available to help the teacher find, construct, and utilize Treasure Hunts in their classroom (http://www.ctnba.org/ctn/k8/treasure.html, for example). Treasure hunts focus on a particular theme that a teacher in interested in using in class. They do require much more time online than WebQuests, since the students must take more time finding the sites and digesting the information. Unlike Pathfinders, Treasure Hunts may be designed to introduce students to searching and search engines to find the information they need. This may introduce variables that can’t be controlled but, by using search engines designed for student use, these variables can be minimized. Other Treasure Hunts rely on carefully collected and evaluated sites and questions related to the topic under study so students will have a more controlled environment to work in. One of the fun aspects of Treasure Hunts is that they are often timed. This is a great way to keep students occupied and on task.

**Tracks**

A Track is a collection of sites about a similar topic. They can be used by teachers and students to create their own Scavenger Hunts or Treasure Hunts. Many times it is worthwhile for students to actually construct their own hunt. A search of many of the popular teacher Web sites will yield many lists of sites on similar subjects. These lists are a good place to get started while the teacher and students construct their own tracks and hunts.

The Web is a wonderful place. The more we use it, the more we marvel at the vast collection of information that is out there available with just the click of a mouse or the pushing of a few keys. It is also a minefield. Hazards abound. Sites with wrong, misleading, and biased information abound. Through the careful use of some of the resources that we have
discussed, it is possible to help our students navigate this minefield and find good, useful information quickly and easily.

References
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