Neil R. Syrek CEP 810 section 740 Susan Way 25 November, 2007

## Analysis of WebQuests in the Classroom

#### Overview

The technological and educational innovation reviewed in this paper is the use of WebQuests: inquiry-oriented activities in which some or all of the information that learners interact with comes from the internet. (1) The review was performed by Neil Syrek.

## The Problem of Practice

The primary educational need that this application of technology seeks to address is a structured way to use the internet for research purposes.

Access to current information is a second educational need that WebQuests address.

## The Setting

Whereas some lessons involve the passing of knowledge from teacher to students, the WebQuest uses a different approach. Since a WebQuest is a constructivist or inquiry method of learning, the teacher's role is one of a guide in the learning process. The teacher is responsible for setting up the WebQuest which includes such duties as creating a task for the students, designing the website, determining the process students will use, and creating links to useful resources.

As with any inquiry activity the learners in this setting will perform a great deal of synthesis, judgment, analysis, creativity and problem solving. (2) The methods by which they will accomplish these things are outlined by Bernie Dodge, the co-creator of WebQuests, in his paper, "Kickstarting Inquiry with WebQuests and Web Inquiry Projects:"

J	
1. Introduction	Prepares and hooks the students. Often motivational tools are presented
	to students, such as real-life scenarios.
2. Task	Describes what the end result of the activities will be. The task could
	be a problem or mystery to be solved, a position to be formulated and
	defended, a persuasive message or a journalistic account to be crafted,
	a creative work, or anything that requires learners to transform the
	information they have gathered into a new form.
3. Process	Lays out the steps learners should follow in order to complete the task.
	The online resources identified by the WebQuest developer are usually
	provided to students in the process. This section might also provide
	guidance on how to organize the information gathered from the list of
	websites. This advice could include suggestions to use flowcharts,
	spreadsheets, charts, concept maps, or other organizing structures.
4. Evaluation	Describes to learners how their performances will be evaluated. Often
	a rubric or multiple rubrics are provided.
5. Conclusion	Summarizes what students will have accomplished or learned by
	completing this activity. Often includes rhetorical questions or
	additional links to encourage learners to extend contemplation beyond



An important aspect of WebQuests is that they are extremely flexible. They can be used by any grade level for any subject matter. Proving this are the many websites, such as <a href="http://www.webquest.org">http://www.webquest.org</a>, that have searchable databases of previously created WebQuests. Webquest.org allows teachers to search WebQuests for all grades and all subjects. The fact that they are not confined to any grade or content area, make WebQuests a powerful tool.

As for the setting of using WebQuests, the extent to which they can be used varies greatly from school to school. Depending on the availability of computers, and the speed of internet connection, WebQuests could be used very often, or as little as once a year.

#### **Technology Integrated Solution**

Many times when researching on the internet, students inadvertently come across inappropriate material. Content filters only go so far in protecting students, so a more structured approach to using the web must be employed. WebQuests only allow students on pre-determined websites so there will no chance of students accidentally viewing improper content.

Another concern regarding web-based research can also be solved by the structure of the WebQuest. With some web searches returning over a million results, WebQuests can save students the frustration of information overload. (3) All the information they need is linked in the main website.

Furthermore, with print material in schools often being outdated and obsolete, it is necessary for students to view accurate data and information. Using the information on the web, students can discover new concepts, ideas and facts in real time. (3) WebQuests give the teacher a chance to direct students to those resources.

The logistics of using WebQuests, as mentioned above, depends on the availability of resources. Limited opportunity to use computers or a slow internet connection can cause problems. Use of WebQuests, however, can also be affected by a teacher's ability to use, or willingness to learn, website creating software. It takes a great deal of time to learn and use these tools, so one must be prepared to spend several hours putting together a robust WebQuest. (3)

### Benefits of this Solution

One benefit of using WebQuests to research information on the internet is increased student engagement. If students are given a context for their research, they are likely to find it more meaningful and be more engaged. For example, in one WebQuest designed by social studies teacher, students researched qualities of past politicians and political activists to reflect on their own personal qualities and beliefs. (1) This example allows students to relate the past to their own lives in a very meaningful way. If the assignment would have been to simply research a past politician and describe his qualities, students may not have been able to make any connections to their own lives.

Enabling students to make up missed work is another benefit of WebQuests. If a student is out of school for any reason, all he or she needs to make up the assignment is the URL of the WebQuest. (4) Because of the structure of the WebQuest, the students will likely need no further assistance from the teacher.

Although the benefits of using WebQuests are numerous, there are a few drawbacks as well. For instance, just because a student is supposed to be on a particular website, does not automatically mean he will. Any time students use the internet, there is the chance they will intentionally view unauthorized or improper sites. Although this is sometimes the case, having access to powerful technology and fresh information offers a much greater benefit than the antiquated method of print-only research. (3) Having clear consequences for inappropriate viewing should minimize this behavior.

## **Implications**

By researching and implementing the use of WebQuests in the classroom, there are several lessons that can be learned about technological innovations. The first is that all innovations have advantages and disadvantages. In the case of WebQuests, the pros outweigh the cons, but this is not always the case. It is important that an innovation makes a difference in student learning and achievement, and is not simply a new way of doing the same thing.

Another implication of introducing new technological applications is that there may be initial problems. One such difficulty regarding WebQuests is link demise. (3) This occurs when a linked website becomes inaccessible. Applications such as Web Whacker can prevent this dilemma, but usually knowledge of solutions to common problems such as these comes with experience.

Just as answers to problems come with experience, so does a full understanding of the capabilities of an innovation. The effectiveness of anything increases with practice. The more WebQuests a teacher creates, the better she will be at it. In the same way, the more any technological innovation is utilized, the more useful it will become.

WebQuests are fantastic tools; and being a science educator who teaches by inquiry, I will use them a great deal. The beauty of a WebQuest is that it is essentially a method which needs only to be tailored to specific classrooms. I can determine the task my students will accomplish, decide on the process, and find and link useful websites. I create the learning opportunity for the students, they themselves experience it.

# Works Cited

- (1.) Dodge, Bernie. "Some Thoughts About WebQuests." <a href="http://webquest.sdsu.edu/about\_webquests.html">http://webquest.sdsu.edu/about\_webquests.html</a>. (1995)
- (2.) Molebash, Philip, and Bernie Dodge. "Kickstarting Inquiry with WebQuests and Web Inquiry Projects." <u>Social Education</u>. 67.3 (2003): 158-62.
- (3.) Summerville, Jennifer. "WebQuests." <u>TechTrends.</u> 44.2 (2000): 31-5
- (4.) Kelly, Rebecca. "Working with WebQuests." <u>Teaching Exceptional Children</u>. 32.6 (2000): 4-13.