The Well-Constructed WebQuest

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In this article, I would like to offer criteria for evaluating WebQuests that are intended for use by students in the elementary grades. There are two general areas that teachers should consider: (A) Pedagogy—whether a WebQuest is developmentally appropriate and educationally useful for their students, and (B) Scholarship—whether the content is factually accurate and presents different points of view for young learners to consider. I'll also briefly discuss the parts of a WebQuest, and how to introduce your students to a WebQuest that meets your particular curriculum and time requirements.

**Pedagogy**

I like to refer to eight essential elements of the elementary classroom. Many of these elements are criteria that good teachers have applied to their classrooms for decades. Why not apply these criteria to a modern tool for teaching and learning: the WebQuest? The following section defines each of the elements of a creative classroom and explains how a well-constructed WebQuest reflects these criteria.

**ABSENCE OF THREAT:** It is imperative for teachers to build good relationships with students and among students in order to create a trusting environment. Inclusive and energizing activities serve as a foundation for creating a non-threatening environment. In addition, using agendas and procedures that students and teachers follow together creates rapport. Students also feel more comfortable when they are excited about what they are learning. Without trust, no learning can take place.

Students feel most comfortable in a school environment when they are excited about what they are learning. Using computer technology is exciting for children, so there is an emotional affiliation for using a WebQuest.

**CHOICES:** Providing choice allows students to have a better chance at making a connection with the content. Students need not all be working on the same projects to demonstrate their knowledge. Based on individual learning differences and comprehension levels, students can choose different projects to complete at a WebQuest, with their teacher as the facilitator rather than planner and instructor.
Teachers may build choices into the task or process sections of a WebQuest assignment.

Adequate Time: When teachers are forced to cover an inappropriately huge curriculum, students do not attain long-term retention of skills or concepts. Spending fragments of time on bits of knowledge is not a good model for education. Students need to cover fewer topics in greater depth. To arrive at understanding, students must recognize where new information fits into the world as they know it. In order to do this, students must spend enough time with ideas and facts to allow them to connect with prior knowledge.

Using WebQuests provides purposeful “time-on-task” for elementary students. WebQuests are also self-paced, which allows each student to decide what time he or she needs for each task.

Enriched Environment: An enriched environment stimulates thinkers to make connections and find meaning in the content of the lessons. When entering an enriched classroom, one is immersed in displays, pictures, and exploratory stations. An enriched environment can also include a color scheme, book collections, a geometric seating arrangement, occasional guest speakers, and other resources and variations.

Computers can be part of a stimulating environment for elementary students. Classroom teachers then become facilitators, resource specialists, and research librarians in addition to being content experts.

Collaboration: Students can collaborate, work together toward a common goal, which builds a sense of community within the classroom that will cultivate responsible citizens of the future. There are many benefits to students working in small groups. When two or three students gather around a computer to navigate a WebQuest, cooperation often follows naturally.

Immediate Feedback: Providing support and immediate feedback to students is critical to learning. To provide immediate feedback, teachers need to use authentic assessment. They should also provide verbal feedback in the classroom from teacher to student and between students.

In a computer lab setting, it is fairly easy to identify struggling students and help them, whereas during a lecture, it is often not clear how well students are learning. Students engaged in a WebQuest are getting immediate feedback as they access to information immediately available. They can move from one task to another when they are ready. Also, set up the correct way, students will be able to self-check in many WebQuests.

Mastery (Application): The criteria determining mastery can be summed up by “the 3 Cs of assessment”: Is the student’s work complete, correct, and comprehensive? First, any project, task, or inquiry must be completed and turned in on time. Second, the inquiry must contain accurate information, and several sources must be consulted. Finally, the project must be researched thoroughly, presenting different points of view when this is appropriate.

A good WebQuest provides an opportunity for students to master academic skills. A “process page” should clearly identify the steps needed to complete the quest. Older students can learn to do independent research, including searches using key terms. They can analyze and synthesize new information that they have found for use in a final report or project.

Meaningful Content: The learner determines what in the curriculum is meaningful to him or her. Students are a part of a very fast-paced world. Using technology as a pedagogical tool provides teachers with a motivator that can help make curriculum more meaningful to the learner.

Scholarship
When evaluating a WebQuest found on the Internet, you should consider the following six criteria with regard to the academic content. A well-constructed website will not fall short in any of these areas. It will be:

Authoritative: Who is the author? Is the site hosted by a credible organization? A proper home page provides the title, author, credits, and date of authorship. An incomplete home page is like a book without a cover. The home page should also provide links to other parts of the WebQuest.
There should also be information about how to contact the creators of the website, in case teachers or students bump into a programming problem (such as a link, a citation, to another website that is no longer active), or more seriously, a factual inaccuracy within the lesson (such as a historical error).

**Objective:** Many websites are sponsored by groups that have an “agenda.” They believe that one of two sides of an argument is clearly correct. Does this WebQuest site present two or more perspectives on a historical event or current issue? Do links lead to a variety of other reliable sources?

**Accurate:** Accuracy includes the validity of the content of a website as well as the scholarship of the references that are cited. Are images, links, or other material clearly cited to their original source? Are the data verifiable in some way? Are links that serve as references and background relevant to the content? Do they lead you to other websites that are credible?

**Current:** Is the information on the WebQuest current? When was the last time that the website was updated? For example, if the site describes cultures and traditions “in the Soviet Union,” then it is presenting outdated information.

**Helpful:** A webpage for teachers might provide added insight, assessment suggestions, or helpful links for use by the teacher only. For example, in my Explorer WebQuest, the teacher is led to a webpage with lesson plans for activities that would help students prepare for a class debate.

**Attractive:** What is the quality of the visual and textual presentation? Does the website look professional? Is it well written and free of spelling and grammar errors? Or are there advertisements and flashing messages all over?

**Getting Started with a WebQuest**

Until recently, I had used the Internet solely as a search engine, and this in itself proved to be challenging. Students needed lots of guidance in order to be efficient with their time. They needed help assessing the value of websites. So when we turned to the more complex challenge of using a WebQuest, students felt uncertain of how to proceed. To get started, I modeled the use of a WebQuest for the students with a large projection screen, “walking” slowly through the site. Then it seems logical to let them explore a WebQuest in a computer lab.

If you have limited computer lab time, or few computers available in your classroom, a sixteen-day WebQuest is not going to meet your needs. In the beginning it is probably a good idea to use WebQuests that can be finished in one or two sessions.

Another advantage to using WebQuests is the reduction of paper that students need to provide to teachers. It is certainly my future dream as a teacher for students to submit assignments electronically. WebQuests allow for this feature. They reduce paper because the task or assignment is obtained on line, and the final product can be delivered online. A student’s final piece of work, submitted for assessment, can be a short report (with a few links to appropriate webpages), a PowerPoint presentation for classmates or parents, or possibly even a webpage hosted on your school’s Internet server.

The benefits of WebQuests to the learning environment are clear. If we can be careful in our choices and use of WebQuests, then our elementary classrooms can become even more interesting and active places of learning. I hope that these descriptions, examples, and suggestions will assist you in your quest to use the Internet appropriately, creatively, and effectively in your classroom.

**Notes**

2. During the Summer Institute held by the James F. Ackerman Center for Democratic Citizenship, our team of teachers designed several different WebQuests to support our fifth grade theme, “From Sea to Shining Sea.” We designed these WebQuests to guide students in exploring the core democratic value of “Truth.” To find out more about the Center and the Summer Institute, please visit [www.edci.purdue.edu/ackerman](http://www.edci.purdue.edu/ackerman).
3. For more detail on the WebQuest model, please see “Using WebQuests to Scaffold Higher-Order Thinking” by Phillip VanFossen in this issue.
4. I would like to thank fifth grade team teachers Pamela Mick, Michelle Webb, and Rebecca Combs, who attended the Ackerman Summer Institute 2003 with me. I also want to thank our principal, Mark Pearl, for his support of professional development.

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