This paper discusses a process for developing inquiry-based activities using WebQuests in which a majority of the information used by students is generated from the Internet. This structured activity facilitates effective use of student's time; focuses on using and applying information; and develops higher level thinking skills. Classroom Internet access is not essential since programs like Web Buddy or Web Whacker can download pages onto disks for use later. Contains 15 references and sample projects. (Author/RS)
WebQuests: Teachers and Students as Global Literacy Explorers

Connecticut Reading Association 51st Annual Conference, November 14, 2002, Cromwell, CT

Abstract

This paper discusses a process for developing inquiry-based activities using WebQuests in which majority of the information used by students is generated from the Internet. This structured activity facilitates effective use of student's time; focuses on using and applying information; and develops higher level thinking skills. Classroom Internet access is not essential!

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
What's a WebQuest?

A webquest is an inquiry-oriented activity, in which some or all of the information that students interact with comes from resources on the Internet (Dodge, n.d.; Schrock, 2002).

- Uses learner’s time well
- Focuses on using information rather than looking for it
- Supports learners' thinking at the levels of analysis, synthesis and evaluation

Types of WebQuests

Basically, there are two types of WebQuests (Dodge, n.d.; Schrock, 2002). Short term WebQuests which can take from one to two class periods and long term WebQuests which can take from one week to a month.

Critical Attributes of an Effective WebQuest

A webquest is comprised of 6 major components: introduction, task, resources, process, evaluation and conclusion (Dodge, n.d.; Forshaw, 2002; Schrock, 2002; Sherwood, 2002). The introduction sets the stage for the learning and engages the students’ interest. It is typically a short paragraph that explains to the students why they are engaging in a WebQuest and gives some background information.

The task explicitly explains the problem or issue that the students will investigate. A clear statement of objectives helps students know what they need to learn as a result of engaging in this activity. A wonderful teacher resource, The WebQuest Taskonomy: A Taxonomy of Tasks, describes 12 categories for describing what teachers can ask learners to do which can lead to higher level thinking. Some examples of potential “tasks” are a problem or mystery to be solved, a position to be formulated and defended, a product to be designed, a personal insight to be articulated, a summary to be created, a persuasive message or journalistic account to be crafted, a creative work. The key to an effective task is that it require the learners to process and transform the information they've gathered.

The resources is the main Internet component of the WebQuest in that it provides a structures search maximizing time on task and minimizing unfocused wandering. In the resources section, one must place the appropriate links that the students will visit in order to get the information necessary to complete the task.

The process is the actual substance of the WebQuest. One can think of the process section as a lesson plan including a list of directions for any project that students follow in order to be able to answer the question(s) or complete the objectives as they are proposed in the task section. A successful WebQuest must be intuitive and explicit.
because these are the actual directions that the students will follow in completing the WebQuest.

The evaluation explains to the students how their work will be evaluated. It is strongly recommended that the teacher create a rubric for the students to see what exact criteria they are being evaluated on. Since some teachers include individual and group projects, it is important that students understand if the WebQuest and/or any parts of it will be assessed as a group project, or as an individual one. Finally, the evaluation must be clearly connected to the objectives stated in the task or in the introduction.

The conclusion is like a closure in class lesson. Similar to the introduction which told the students what they would learn, the conclusion summarizes what the students have learned throughout their WebQuest activities. This is also an opportunity to add some final questions for consideration, and additional enrichment links if students want to explore the topic further.

Creating a WebQuest

A template (Forshaw, 2002; Sherwood, 2002) is a pre-made WebQuest format, that the teacher edits in order to individualize the content for a specific WebQuest. To begin, a teacher can access one of the websites below, and pick a template.

- http://www.lakelandschools.org/EDTECH/webtemplate.htm* (Beginner friendly)
- http://edweb.sdsu.edu/webquest/templates/lesson-template1.htm * (Beginner friendly)
- http://www.sjc.edu/rchatel/internetprojects/overview.htm
- http://edweb.sdsu.edu/webquest/LessonTemplate.html
- http://www.spa3.k12.sc.us/WebQuests.HTM Web Quest Templates

Filamentality (2001). http://www.csudh.edu/soe/faculty/pt3/webquestsb.html "Filamentality is a fill-in-the-blank interactive Web site that guides you through picking a topic, searching the Web, gathering good Internet sites, and turning Web resources into learning activities. It helps combine the "filaments" of the Web with a learner's "mentality". Support is built-in through Mentality Tips that guide you along the way to creating a Web-based activity you can share with others even if you don't know anything about HTML, Web servers, or all that www-dot stuff."

WebQuest Generator (2002) http://teachers.teach-nology.com/web_tools/web_quest/. The WebQuest Generator guides the educator in the development of a WebQuest in which you Fill in the sections with required information for each step and submit the form to get a completed WebQuest. This seems to be a very exciting teacher tool that is just "begging" to be tried!
**Put the Title of the Lesson Here**

* A WebQuest for xth Grade (Put Subject Here)

**Designed by**

Put Your Name Here
Put Your E-mail Address Here

Put some interesting graphic representing the content here

Introduction | Task | Process | Evaluation | Conclusion | Credits | Teacher Page

**Introduction**

This document should be written with the student as the intended audience. Write a short paragraph here to introduce the activity or lesson to the students. If there is a role or scenario involved (e.g., "You are a detective trying to identify the mysterious poet.") then here is where you'll set the stage. If there's no motivational intro like that, use this section to provide a short advance organizer or overview. Remember that the purpose of this section is to both prepare and hook the reader.

It is also in this section that you'll communicate the Big Question (Essential Question, Guiding Question) that the whole WebQuest is centered around.

---

**The Task**

Describe crisply and clearly what the end result of the learners' activities will be. The task could be a:

- problem or mystery to be solved;
- position to be formulated and defended;
- product to be designed;
- complexity to be analyzed;
- personal insight to be articulated;
- summary to be created;
- persuasive message or journalistic account to be crafted;
- a creative work, or
- anything that requires the learners to process and *transform* the information they've gathered.

If the final product involves using some tool (e.g., HyperStudio, the Web, video), mention it here.
Don't list the steps that students will go through to get to the end point. That belongs in the Process section.

The Process

To accomplish the task, what steps should the learners go through? Use the numbered list format in your web editor to automatically number the steps in the procedure. Describing this section well will help other teachers to see how your lesson flows and how they might adapt it for their own use, so the more detail and care you put into this, the better. Remember that this whole document is addressed to the student, however, so describe the steps using the second person.

1. First you'll be assigned to a team of 3 students...
2. Once you've picked a role to play....
3. ... and so on.

Learners will access the online resources that you've identified as they go through the Process. You may have a set of links that everyone looks at as a way of developing background information, or not. If you break learners into groups, embed the links that each group will look at within the description of that stage of the process. (Note, this is a change from the older WebQuest templates which included a separate Resources section. It's now clear that the resources belong in the Process section rather than alone.)

In the Process block, you might also provide some guidance on how to organize the information gathered. This advice could suggestions to use flowcharts, summary tables, concept maps, or other organizing structures. The advice could also take the form of a checklist of questions to analyze the information with, or things to notice or think about. If you have identified or prepared guide documents on the Web that cover specific skills needed for this lesson (e.g. how to brainstorm, how to prepare to interview an expert), link them to this section.
## Evaluation

Describe to the learners how their performance will be evaluated. Specify whether there will be a common grade for group work vs. individual grades.

<table>
<thead>
<tr>
<th>Stated Objective or Performance</th>
<th>Beginning 1</th>
<th>Developing 2</th>
<th>Accomplished 3</th>
<th>Exemplary 4</th>
<th>Score</th>
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<td>Description of identifiable performance characteristics reflecting a beginning level of performance.</td>
<td>Description of identifiable performance characteristics reflecting development and movement toward mastery of performance.</td>
<td>Description of identifiable performance characteristics reflecting mastery of performance.</td>
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</table>

Conclusion
Put a couple of sentences here that summarize what they will have accomplished or learned by completing this activity or lesson. You might also include some rhetorical questions or additional links to encourage them to extend their thinking into other content beyond this lesson.

Credits & References
List here the sources of any images, music or text that you're using. Provide links back to the original source. Say thanks to anyone who provided resources or help.

List any books and other analog media that you used as information sources as well.

Last updated on August 15, 1999. Based on a template from The WebQuest Page

Pink and Say
by Patricia Polacco

A WebQuest experience for Intermediate-level Elementary through Middle School Reading & Language Arts

Designed by
Mrs. Bongiovanni
Mrs. Hughes
Mr. Modell

Paper presented at the Connecticut Reading Association 51st Annual Conference, 7 November 14, 2002, Cromwell, CT
Evaluating a WebQuest: What makes for a good WebQuest? (Bellofatto, L., Bohl, N., Casey, M., Krill, M. & Dodge, B. 2001; Dodge, 1998; Lamb, 2002; Peterson, n.d.)

There are many rubrics in the references section of this paper which can be accessed on the Internet to evaluate WebQuests. In general, one needs to consider the following aspects: engaging beginning, the question/task, background knowledge, roles/expertise, use of Internet and resources, transformative thinking potential, real world feedback, evaluation of student learning, conclusion, and technical quality.

**An Engaging Beginning** has to contain something that compels attention drawing students into the inquiry by its relationship to their interests or goals; and/or by describing a compelling question or problem. It builds on learner's prior knowledge by explicitly mentioning important concepts or principles, and effectively prepares the learner for the lesson by foreshadowing new concepts and principles.

**A Clear Question and Task** that flow from the introduction and indicate clearly a direction for learning. Clear support for instructional objectives. Aligned with evaluation rubric. Task requires synthesis of multiple sources of information, and/or taking a position, and/or going beyond the data given and making a generalization or creative product. Task is doable and engaging, and elicits thinking that goes beyond rote comprehension. The task requires synthesis of multiple sources of information, and/or taking a position, and/or going beyond the data given and making a generalization or creative product.

**Sufficient Background Knowledge** is developed for **Everyone**. When working with WebQuests it becomes evident that there is a great need for a common set or foundation of knowledge which must be provided through the electronic medium. However, it is not sufficient to provide the information students need to complete the WebQuest. The teacher must build in opportunities for activating background knowledge through the use of advance organizer or graphic organizers and links to support its development or some other format. Student must have multiple different opportunities to process the content in order to reach a deep level of comprehension.

Since one of the critical attributes of a WebQuest is collaborative interdependence in order to achieve the delineated tasks, Roles and responsibilities must be clearly defined and match the issues and resources. Not only must the roles provide multiple perspectives from which to view the topic but they must be interdependent fostering collaboration!

The technical aspects of the WebQuest are critical to the success of a project. It is vital that the Web and Resources uses the Web to access interactive materials, provide multiple perspectives on topics, connect to current information and use authentic and credible sources of information. The resources listed must support the completion of the
inquiry. Since students are very motivated by technology, especially the Internet, it's critical that the WebQuest developer direct students to engaging and high quality sources.

Although there are many perspectives on the potential of technology to affect learning, it is at its best then it results in Transformative Thinking. In order for a WebQuest to lead to higher level thinking which is required to construct new meaning, the inquiry project must scaffold learning or the tasks to support student achievement. This means that it should have multiple problems, explanations, or experiences presented with connections to authentic contexts. Inquiry requires students to access multiple sources of information, to synthesize from them, to make a generalization or a creative product. Open-ended tasks with more than one interpretation are essential. The inquiry project should not lead all students to the same end result but open their learning options. This means that the process must account for the fact that students will be coming in at different entry levels with strategies and organizational tools to access and gain the knowledge needed to complete the task. One must be vigilant in the design of activities by asking one self the question, “Are the activities are clearly related and designed to take the students from basic knowledge to higher level thinking?”

The opportunity for Real World Feedback is a bonus in any inquiry project! Any connection to experts in the field, other students around the world or other sources that provide a broader audience for student work enhance the relevance of a WebQuest and build in motivation. When students see that others value their efforts, they try much harder to create a high quality product.

Since Web-Quests are a valuable learning and teaching tools, Evaluation of Student Learning is essential. The criteria for success need to be clearly stated in the form of a rubric eliminating the guessing work that students frequently engaged in when trying to determine what’s good enough! The criteria should include qualitative as well as quantitative descriptors and measures of independent and collaborative efforts. Finally, it should clearly refer to the goals and objectives of the inquiry project including academic and social learnings.

In evaluating the Conclusion, one must see a clear tie-in to the introduction. It must make the students' cognitive tasks overt and suggests how this learning could transfer to other domains/issues. The conclusion must help students recognize the learning and its value.

Final, the Technical Components of web inquiry projects must be appropriate, contribute to the learning and graphic elements, if used, must make visual connections that contribute to the understanding of concepts, ideas and relationships. Differences in type size and/or color must be used well and consistently. All links must create seamless and intuitive navigation. It should always be clear to the learner what all the pieces are and how to get to them.
Rationale for Developing and Using WebQuests (March, 1998)

Increase student motivation

✓ central question that honestly needs answering
✓ relevant to learners
✓ students are given real resources to work with
✓ authentic assessment: the answer or solution the student teams develop can be posted, emailed or presented to real people for feedback and evaluation.

Develop critical thinking skills

✓ the question posed to students can not be answered simply by collecting and spitting back information
✓ students transform information into something else: a cluster that maps out the main issues, a comparison, a hypothesis, a solution,
✓ use scaffolding or prompting which has been shown to facilitate more advanced thinking
✓ when students need to understand a more complex or sophisticated topic, they need are many examples with lots of information and opinions on the topic

Foster collaborative learning and working skills

✓ Tomorrow's workers will need to be able to work in teams
✓ Students take on roles within a small student group
✓ Learners divide to conquer
✓ Empowers learners

Provides Efficiency of Learning

✓ Students use the Internet to learn not to roam.
✓ Students are guided through a process of inquiry through a set of assigned tasks that lead them to a conclusion, or that results in a product.

One computer without Internet access (March, 1998

Teachers with Web access at home but non-networked computers in school can use a program like Web Buddy or Web Whacker to download the Web pages from home and then copy them from disk onto computers at school. This creates a virtual Web where the pages look identical to the pages on the Web, but they are running from the computers' hard drives. Some schools carry this notion one step father by loading the pages onto their proxy server / intranet.

Paper presented at the Connecticut Reading Association 51st Annual Conference, 10 November 14, 2002, Cromwell, CT
Sample Projects

Almost everyone knows the story of Cinderella and how her Fairy Godmother helped her get to the ball,  
meet the Prince, and live happily ever after. But we know that Fairy Godmothers are make-believe. Your  
quest is to help Cinderella figure out how to get to the ball without depending on magic.

Bucci, R. A. (2001). *WILL THE REAL WILLIAM SHAKESPEARE PLEASE STAND UP: An Internet WebQuest on the Shakespearen Authorship Question.* Who wrote William Shakespeare's plays and sonnets? This WebQuest invites readers and students to work in teams to gather evidence and make a  
decision on a case that has been debated for over 200 years. The most compelling bit of evidence is the lack  
of any evidence which would decisively William Shakespeare to any literary work or activity.

Fast Food WebQuest Think that speedy meal will keep you on your feet? Think again! This WebQuest was  
created by the Rowland Unified School District in California to show students that the fast choice isn't  
always the healthiest choice. Follow the links to the different restaurants and answer the questions on nutrition.

Williams, K. *Celebrating Cultures With Tomie dePaola*  
Introduction: Have you ever been to Ireland? How about Italy? Where in the world is the Nile River? What  
do you say we find out and let's have Tomie dePaola's books kick us off!

WebQuest: Integrating Technology into Literacy Instruction

Spring, 2001

*Regina G. Chatel, Ph.D.* [http://ww2.sic.edu/rchatel/webquests/list.htm](http://ww2.sic.edu/rchatel/webquests/list.htm)  
SAINT JOSEPH COLLEGE, West Hartford, CT 0611

<table>
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<td><strong>Elementary</strong></td>
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<td>Experience the White House: A WebQuest for 5th Grade (Social Studies) by Mrazik, K., Butler, C. &amp; Torchio, S. (2002)</td>
</tr>
<tr>
<td>Explore Connecticut: A WebQuest for 4th Grade (Social Studies Unit with the Integration of Language Arts) by McDonald, T. &amp; Estanislau, I. (2002)</td>
</tr>
<tr>
<td>A Rainforest Journey: A WebQuest for 1st Grade (Reading/Language Arts) by Genovese, S. &amp; Amore, M. (2002)</td>
</tr>
<tr>
<td>Harriet Tubman &amp; The Road to Freedom: A WebQuest for 4th Grade Social Studies by Veneziano, J. (2002)</td>
</tr>
<tr>
<td>Pink and Say: A WebQuest for Intermediate-level Elementary through Middle School Reading &amp; Language Arts by Bongiovani, E., Hughes, P. &amp; Nodel, J. (2002)</td>
</tr>
<tr>
<td>PLANTS AND YOU! A WebQuest for 2nd Grade (Science) by Demi, S., Crane, J. &amp; Parent, B. (2002)</td>
</tr>
<tr>
<td>Who Needs Books? We've Got the Internet! Trying to Understand &quot;THE BIG PICTURE&quot;: A WebQuest for 5th Grade Social Studies by Lawrence, E. (2002)</td>
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</table>

References


Forshaw, L. (2002). Webquests, What are they, and How do I make one?! Paper presented in EDUC 370 Lagaue Arts in the Classroom at Saint Joseph College, West Hartford, CT.


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