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How to develop and design a WebQuest

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Abstract

This review will help to solve the problem of not knowing how to develop and design a WebQuest. A WebQuest is "an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Web. WebQuests are designed to use learners' time well, to focus on using information rather than looking for it, and to support learners' thinking at the levels of analysis, synthesis, and evaluation" (Dodge, 2001, p. 1). They help teach research skills using the Internet. By learning how to write a WebQuest, an educator would be able to integrate one into his/her existing curriculum. Literature will be reviewed to find out how to prepare a WebQuest.

How to Develop and Design a WebQuest

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Introduction

This review will help to solve the problem of not knowing how to develop and design a WebQuest. A WebQuest is "an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Web. WebQuests are designed to use learners' time well, to focus on using information rather than looking for it, and to support learners' thinking at the levels of analysis, synthesis, and evaluation" (Dodge, 2001, p. 1). They help teach research skills using the Internet. By learning how to write a WebQuest, an educator would be able to integrate one into his/her existing curriculum. Literature will be reviewed to find out how to prepare a WebQuest.

There are many reasons to use WebQuests. One reason is that they promote information literacy. "Information literacy is the set of skills needed to find, retrieve, analyze, and use information" (Association of College and Research, 2002). WebQuests promote information literacy by leading students step by step through the research process. When students receive the task of their WebQuest, they are given a question. They need to conduct research focusing around their given question. In the resources part of the WebQuest the students are given a list of Web sites that will help answer their question. The evaluation part of a WebQuest gives students a format to follow when they are researching their quest. In essence, a well-written WebQuest will lead students through a research project step by step. Because of the steps that the children take the research is organized. Teachers need to emphasize the research steps that students need to take so that they can complete their WebQuest (Braun, 2001). When students realize that research is conducted in steps and they are able to implement the steps, they have become information literate.

WebQuests teach children how to use technology. "It is important to make sure that the design of a WebQuest doesn't hinder the student's ability to focus on the assignment and locate the information needed in order to be successful" (Braun, 2001). A WebQuest needs do be designed so that it helps teach the technology used when a student navigates through the Internet. Without the use of WebQuests, students find themselves in information overload. There is so much information on the net that students may become frustrated with the links that might exist when a search reveals many sites to visit (Summerville, 2000). By providing WebQuests, technology is taught. WebQuests help children by teaching them how to navigate the Internet. By giving students a list of resources to use, children have a smaller amount of information to sift through. This way they will not be in information overload. Also, teachers will have pre-selected Web sites that will be appropriate for their students' technology level. Students can practice their technology skills in a smaller setting that has been provided by the WebQuest.

Promoting student collaboration is another reason to use WebQuests. WebQuests promote collaboration by assigning roles to each individual in a team. When tasks are given there is usually too much to be mastered by all the students. This is when teamwork is built into a WebQuest. Students find out that they need to work together to complete their task. At first individuals may take on a role and then work alone. In the conclusion part of the WebQuest, students find they need to come together and agree on their findings. Each individual shares their research findings and then the group needs to come to a decision. To agree on a decision students must collaborate (March, 1998).

Motivation occurs when using WebQuests. One way to motivate students is through the task. The task of a WebQuest proposes a real problem for students to solve.

When students take on the real problem, it is authentic. The authenticity of their task is motivating. Another reason for children to be motivated when using WebQuests is that they are using real and current information. Instead of using information from out of date books and encyclopedias, students are receiving up to date information from Internet. Motivation can also occur when students are held accountable to their group members. In a WebQuest students assume a role. They need to become an expert in their role and find out information that will support their viewpoint. When students come together to conclude the quest each group member is held accountable for their work. This can be motivating to students. As students come together to conclude their WebQuest, they may be asked to present their work. It can be motivating for students to know that the results of their research will be posted on the Web or presented to real people. Other people in the real world will see the results of their quest (March, 1998). Throughout all of the attributes of WebQuests, motivation is built in. WebQuests are a good thing, but they need to be well designed. To design, there are steps to follow.

Analyzing information is appropriate for addressing this issue. Analyzing information will give a WebQuest designer an in depth knowledge based upon which to design his/her own WebQuest. Many WebQuests are available on the World Wide Web, but many are not true to the WebQuest form. Many WebQuests that are on the Web are just activities. They are not really WebQuests because they do not delve past content and push students to think. By analyzing the available literature a designer will be able to develop a true WebQuest.

The scope of literature reviewed consists of literature that discusses what WebQuests are, how they are designed, and how to evaluate them. The extent of

literature reviewed encompasses these three topics so that a designer has a background from which to write and develop a WebQuest.

The results of this review can be applied to any classroom situation. The reviewer will apply the results of this review to her classroom. The reviewer would like to write a WebQuest that deals with western expansion and pioneers. Before the reviewer can design and develop a WebQuest she needs to find out what a WebQuest is, how to evaluate a WebQuest, and how it is designed. This literature review will give the reviewer the knowledge needed to know what a WebQuest is, how to design one, and ways to evaluate a WebQuest.

Methodology

The author found information at the Heartland Area Education Agency. When the author was at the AEA's computer lab, a search was conducted using the ERIC system. When the author found topics under a key word search, the summaries of the articles were then read. The author looked for journal articles that discussed the topic of WebQuests and the design of WebQuests. Literature was also selected from resources that were mentioned in articles. Additional literature was found from other authors that were listed in the resources. When applicable journal articles were found, the AEA was asked to print the article.

The reviewer also looked for literature from Internet. In fact, a great deal of literature from the Internet was used. Dr. Tom March and Dr. Bernie Dodge have published extensive information on the World Wide Web. Therefore, the Internet was a vital resource for this paper's reviewed literature. Dr. March and Dr. Dodge are credited

with developing the concept of WebQuests. Not only was information from these men used, but also used was literature published by other authors.

The rationale for selecting the sources of information to analyze had to do with three types of information. These types of information were the definition, design, and evaluation of WebQuests. It was imperative to first find out what a WebQuest was and then to find literature that talked about how to design a WebQuest. It was also important to find out how to evaluate a WebQuest. Without knowing what a good WebQuest looked like it would be hard to design one. Once the reviewer felt comfortable with the definition and evaluation of a WebQuest, she tackled the problem of how to design one. Literature was selected to help the reviewer learn how to design a WebQuest.

Two procedures to analyze the sources of information were used for this paper. The first procedure was to find literature that fit into three subject areas. As mentioned above, a complete understanding of a WebQuest must first be understood. The evaluation and design of a WebQuest are also important. The reviewer analyzed literature that discusses these three topics. The second procedure used to analyze the sources of information for this paper was to look for people who are associated with the creation of WebQuests and authors who wrote about WebQuests.

The criteria used to evaluate the information for this paper was based on the developers of WebQuests. Literature was used for this paper if it fit the concepts of what these two men presented. Other authors are writing about WebQuests. These authors often refer to Drs. Dodge and March. Literature was reviewed from other authors.

Analysis and Discussion

Before WebQuests can be discussed, they must be defined. "WebQuests are an inquiry-oriented activity in which some or all of the information that learners interact with comes from resources from the Internet" (Summerville, 2000, p. 32). Dr. Bernie Dodge and Dr. Tom March, both professors at San Diego State, developed WebQuests. Dodge came up with this definition in 1995. Both Dr. Dodge and Dr. March worked together to develop and implement WebQuests (Summerville, 2000).

Educators need to teach children how to use the Internet. Children should be taught how to navigate the web, as well as how to choose useful information. It is hard for students to choose relevant information because of the vast amount of information available on the Internet. One way to teach about the Internet is to use a WebQuest. Teachers can learn about and create WebQuests. When teachers implement a WebQuest they are teaching children how to navigate and select information (Why WebQuests?, an introduction, 1998).

Definition of WebQuests

In more detail, a "WebQuest is an inquiry-oriented activity in which most or all of the information used by learners is drawn from the Web. WebQuests are designed to use learners' time well, to focus on using information rather than looking for it, and to support learners' thinking at the levels of analysis, synthesis and evaluation." (WebQuest Page, 2001) A WebQuest consists of five main attributes. The attributes include Task, Resources, Process, Evaluation, and Conclusion. (Braun, 2001) The activities are usually stated in the form of a scenario. In the Task part of the WebQuest, the students will find out what they need to do to complete the assignment. After understanding the task,

students then receive the resources that will help them complete the task. Students will use both Internet resources as well as books. The list of resources that children receive will have all been pre-selected to help complete the Task. The Process part of a WebQuest shows students the steps taken to complete the WebQuest. Many times the students will form a team. Within the team, they will assume roles. The different roles of the team give different perspectives on the information they find. In the Evaluation part of the WebQuest, students are given the evaluation tool by which they will be assessed. Many times this will be a rubric. The last attribute of a WebQuest is a Conclusion. In this part, students will complete a summary of the information and perspectives that they have found during the quest (Braun, 2001). The length of the WebQuest determines its type.

Types of WebQuests

There are two types of WebQuests, Short Term and Long Term. Short Term WebQuests take anywhere from one to three class periods. The goal of a short term WebQuest is to learn new information and integrate it with technology. When the quest is finished, students will have encountered a large of amount of new information and they will have made sense of it. This type of WebQuest would be beneficial to elementary children. It is a long enough activity to teach them about maneuvering their way through the Internet without overwhelming them (Dodge, 1997).

Long Term WebQuests take anywhere from a week to a month. The goal of a long term WebQuest is for students to take the information they have learned and extend it in some way. When the quest is finished students will have encountered a large amount of new information, synthesized it, and then extended it into some other form. Students will create something new. This could be presented on-line or off-line. This form of

WebQuest can be implemented in the intermediate grades. If the students have had experience with a short term WebQuest, then the extension into using a long term WebQuest would not be that hard. Intermediate age children will have had more exposure to using the Internet. Exposure and their maturity would make them more able to synthesize and then present information (Dodge, 2000).

Use of WebQuests

WebQuests can promote the use of higher level thinking skills. Traditional research methods expect students to find information and explain about the facts they learned. A WebQuest can ask students to take the search for information a step farther. "As the goal of WebQuests is to encourage inquiry-based learning, teachers are then required to prepare activities which move away from the traditional drill and practice models of technology use and instead promote higher-level thinking skills." If a WebQuest forces students to do something with the information they find, they are using higher level thinking skills (Fernald & Molebash, 2000, p.2253). .

When students do something with their information, they are not just telling about facts. WebQuests teach higher level thinking skills by dividing a task into small chunks. During the procedure part of the WebQuest, chunking can lead children through the process of higher level thinking (March, 1998). When students have been led through their search for information then students will need to form a conclusion. "If students are required to make a decision based on evidence gathered and presented, then they are being required to think critically about the topic at hand" (Braun, 2001, p. 33). When students come together and make a decision on what they have learned they have used

higher level thinking skills. This is not just telling facts they have learned. The telling of facts has been taken a step farther.

Evaluation of WebQuests

Before designing a WebQuest, one must review and evaluate different samples of WebQuests. By evaluating a WebQuest, a designer receives an idea of the different characteristics of sample WebQuests for a designer, it is important to see examples of what a person is going to design. By looking at different WebQuests a person can get a clearer understanding of WebQuests (March, 2000). In Appendix A there are a few examples of WebQuest evaluation forms. A beginning WebQuest designer can view examples of different WebQuests on the following Web sites:

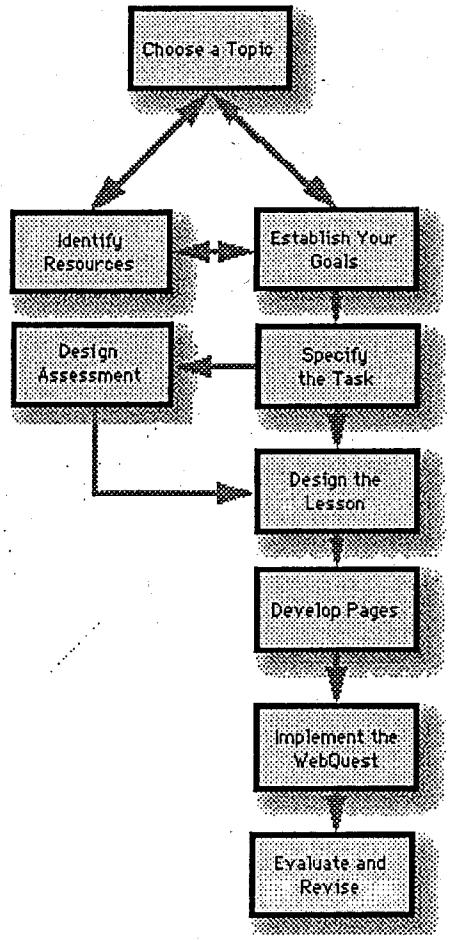
- The WebQuest Page Matrix - http://edweb.sdsu.edu/webquest/matrix.html
- WebQuest Collections - http://webquest.sdsu.edu/webquest_collections.htm
- Blue Web'n - http://www.kn.pacbell.com/wired/bluewebn/ (go to the bottom of the page and type in the keyword search "WebQuest")

Before creating a WebQuest, one should view WebQuest examples to develop the necessary background knowledge of what is available (March, 2000). Also, by looking at other WebQuests, a designer can see the different characteristics that other designers have implemented. "By sifting through a stack of WebQuests you should have a clear idea of not only what defines this particular type of Web-based learning activity, but also what aspects contribute to making a great WebQuest" (March, 2000, p. 58). When a WebQuest designer evaluates other WebQuests he/she can see strengths and weaknesses of what is out on the Web.

WebQuest Design

After a person knows what a WebQuest is, and has evaluated the samples available on the World Wide Web, that person is ready to start the design of his/her own WebQuest. There are different models that illustrate the design of a WebQuest. The illustration that follows shows the steps a designer takes to develop a WebQuest.

Figure 1. WebQuest Design Process



From Understanding and building WebQuests for young adolescents, Dodge & March, [available online] http://voyager.snc.edu/education/s2000middle/webquest/webquest.html

The first three tasks include choose a topic, identify resources, and establish the goals of the WebQuest. This is known as the planning phase of the WebQuest Design Process see figure one (March, 1998). March (1998) has developed a prewriting activity that could be helpful in organizing ideas. This outline gives the designer an opportunity to think about what he/she wants to create. This prewriting activity is called "Prewriting Your WebQuest" (WebQuests for Learning, 1998). A sample template can be found in Appendix B.

Once an initial outline is completed then the designer is ready to begin the process of planing the WebQuest (The WebQuest Design Process, 1998). There are many templates available on the Web that can assist a designer in writing a WebQuest. The templates that the reviewer found are available for designers to use free of charge. The templates lead a designer through the steps that Dodge and March have flowcharted (see Figure 1). The following Web sites show templates that are available for WebQuest design:

- Templates created by Dodge for use in formatting a Web Quest page – http://www.edweb.sdsu.edu/webquest/LessonTemplate.html
- Another WebQuest Template taken from Dodge's Web page – http://www.esc20.net/etprojects/workshops/inquiry/materials/template.htm
- Filamentality is found on March's Web page – http://www.kn.pacbell.com/wired/fil/

Even though a designer might use a template, an understanding of the process is still needed. The first thing to do is to find a topic. Not only is finding the topic the first thing to do, it is also one of the most important things (March, 1999). Without a topic that is clear, there is confusion to the students. WebQuests are special because they set up learning so that it enables children to think. To do this "WebQuests take learning from a

content experience to a contextual one" (March, 1999a). WebQuests have students address essential questions. March (1999) has developed a "Creative Brief" which can be used to develop essential questions. This is what March uses in Web-based activities. In other instructional design models, this is known as the "Front-End Analysis" (Dick & Carey, 1996).

In the Creative Brief, a designer chooses a general topic, identifies learning gaps, and brainstorms a "What-If Inventory." According to March (1999a), it does not matter which part of this process that a person starts with. It is important that a person does all three parts. Choosing a General Topic is easy. A designer needs to brainstorm and keep all ideas. These ideas will lead to others by association. Brainstorming is not the time to make value judgments. The Website called the Idea Machine (2002) could be a resource to use when finding a topic. After the designer thinks he/she has an idea, he or she needs to chunk the ideas into sub-categories. This will show the relationships of ideas. Chunking will also help identify the main question and sort the Quest into student roles (March, 1999a). When the designer decides on a topic, he or she needs to make sure that the idea is large enough to have enough potential resources and be able to meet student learning needs. If the designer finds a topic that is large enough to use, a topic that has the ability to be sub-categorized, and a topic that will support student learning needs and resources, the designer is ready for the next phase of the Creative Brief (March, 2000).

In the What-If Inventory, the designer needs to look at the "What-Ifs" and the "Why Nots?" The designer needs to look further then the constraints of curriculum and time frames, to what the designer is really interested in the students learning. The ideas

that are generated in the What-If Inventory enrich the learning experience and make up the context part of the WebQuest topic (March, 2000).

Targeting a Learning Gap is where the curriculum design takes place. This is the part that addresses the students' needs and abilities. March (1999a) recommends asking the question "What's educationally most interesting about this topic?" (p. 4). By asking this question, the designer is able to find an activity that adds context to learning instead of content. When context of learning is added, a designer has developed a vision to carry through the unit. Other questions that can be asked along with the essential question from above are, "What makes up the parts to this topic?; "What opinions do people hold about it?"; "How does the topic function, happen, or interrelate?" (March, 1999a). The designer's answers to these questions can bring his/her professionalism into a WebQuest. This will help facilitate the students' learning. When the designer addresses these questions, he/she will have developed the WebQuest topic into context instead of content. This will lead the students to using higher order thinking skills (March, 2000).

When a designer has taken the time to set up a Creative Brief, he/she has selected a topic and established the goals of the WebQuest. The designer is then ready to identify the resources that will be used for the WebQuest (Dodge, B. and March, T., 2002). The resources for a WebQuest are all of the resources that could be used in the Quest. This includes Web sites along with books or anything else that can be used. Idea Machine (2002) can help the designer find the resources that would be beneficial to the WebQuest. March (2002) provides assistance in identifying good Web sites. Blue Web'n (2002) has a Hotlist category that can also give the designer help to locate sites appropriate for a WebQuest. Filimentality is an interactive site that helps guide designers to sites for Web-

based activities. When searching for resources, the designer can use the subcategories from the Creative Brief as the key words.

Another point needs to be added to identifying resources. March (1996) suggests that the designer does not need to spend much time searching for sites. The use of Filamentality and Blue Web'n does not waste a designer's time. When a designer uses search engines, rather than these specific sites, he/she might have to sort through many hits from a search result. This takes a lot of time and often leads to frustration. Filimentality and Blue Web'n allow a designer to gather resources that have already been contributed by many other teachers, students, and media specialists.

After the resources have been identified and gathered, the designer is ready to specify the task. The students need to know what they need to do to complete the WebQuest. The task describes the actions the students will take to complete the WebQuest (Braun, 2001). The task takes the goal that was determined before and focuses it into something that needs to be accomplished. There are many ways to task students. Dodge (1991) describes eleven ways develop tasks in his Taskonomy of Tasks (See Table 1).

Table 1: Taskonomy of Tasks

Task Name	Task Description
Retelling Tasks	This is an easy way to introduce students to a WebQuest. The students can retell what they learned by making a multimedia presentation, poster, or reports.
Compilation Tasks	This task has students take information from sources and compile the information into something. Transformation of knowledge must be present to be considered a true WebQuest.
Mystery Tasks	Motivation is a positive reason for using this task. Synthesis of information must be present to be considered a true WebQuest.
Journalistic Task	This task is great if the goal is to learn a specific event. The teacher needs to teach fairness and accuracy.
Design Tasks	A design task is when students create something that accomplishes pre-determined goals and guidelines. The important thing to remember when using Design Tasks is to make the guidelines authentic or real world.
Creative Product Tasks	A creative product task creates something like a poem, play, painting, song, or game. The product accomplishes pre-determined goals and guidelines. The guidelines are not as rigid as in a design task.
Consensus Building Tasks	This type of task exposes children to different viewpoints. The children need to look at each viewpoint and synthesize the viewpoints into a consideration.
Persuasion Tasks	In this type of task a student is required to develop a way to convince someone of something. Their persuasion has to be based on what they learned.
Self-Knowledge Tasks	There are not many WebQuests that use this task. The goal of this task is to develop a greater understanding of oneself.
Analytical Tasks	Analytical tasks require the learner to look closely at something. The learners then need to find similarities and differences in what they find. After looking for similarities and differences the students might be asked to make an inference based on what they learned.
Judgment Tasks	This type of task requires the learner to order or rank items that have been presented to learners. The students need to make informed decisions to rank or order items.
Scientific Tasks	Scientific tasks ask students to make a hypotheses or test a hypotheses based on information they have found.

Note. Adapted from "WebQuest Taskonomy: a Taxonomy of Tasks," by Bernie Dodge, 1999, [available online] http://edweb.sdsu.edu/webquest/taskonomy.html

When deciding on what task to use, the WebQuest designer has entered the design phase of the WebQuest. The design phase of the WebQuest has three parts. Those parts are Specifying the Task, Designing the Lesson, and Designing the Assessment (Dodge and March, 2002). The design phase of development is where the WebQuest designer actually develops the meat of the WebQuest.

There are five parts to a WebQuest. So far, the designer has developed the Task and the Resources for the WebQuest. Now the designer needs to complete the lesson and assessment parts of the Quest. These parts are the Process, Evaluation, and Conclusion. The process part of a WebQuest outlines what the students need to do to complete the WebQuest. Many times the process organizes students into teams. Each team member has a role in the Quest. When the students read the process part of a WebQuest, they should be able to assume their roles and begin their search for information. "Roles become an important part of the WebQuest as they allow students to look at the topic from a variety of perspectives" (Braun, 2001, p. 6).

The evaluation part of the WebQuest is where the students look to see how they will be assessed. A rubric can be used so that students can assess themselves and find their grade. The WebQuest designer needs to develop the student assessment part of the WebQuest.

The conclusion is the last item to develop. The conclusion is the review part of the WebQuest. It tells the students what the WebQuest experience should have provided for them. In other words, it summarizes the learning experience. The conclusion also congratulates the learners on their hard work (Braun, 2001). When the designer has finished developing the five parts of the WebQuest he/she has completed the design

phase of the WebQuest. Now the WebQuest developer is ready to move on to the next part of the creating a WebQuest.

The reviewer is now entering the last stages of developing a WebQuest. It is now time to "Develop the Pages" to the WebQuest. A WebQuest template can make a designer's work easier (March, 1998). A template sets up the WebQuest pages for the designer. All the designer needs to do is enter the information he/she has designed. This information would be the five parts of the WebQuest. To review, the five parts of a WebQuest include the Task, Resources, Process, Evaluation, and Conclusion. After the pages to the WebQuest are developed, links need to be placed. On the resource page hot links need to be set and tested. If a WebQuest designer were not using a template he or she would need to make a separate page that introduces the WebQuest. If a template is not used then a computer program that creates web pages needs to be used.

After the web pages have been developed, there are two more parts to developing a WebQuest. The last two parts of developing a WebQuest are to implement the WebQuest and to evaluate and revise it (Dodge and March, 2002). Implementing the WebQuest means that the designer needs to put it on the Web and try it out. The designer needs to test all the links and make sure that everything works. Then the designer needs to use it with students. As the students use the WebQuest, evaluation can be completed. The designer can formatively evaluate the WebQuest at different points during implementation. Revisions can be made to the WebQuest. A summative evaluation can be made on the WebQuest by using a WebQuest evaluation form. These evaluation forms were used to evaluate other WebQuests at the beginning of this paper. A designer can have other teachers and students evaluate the WebQuest and make suggestions. Based on

the results of the evaluations the WebQuest designer would need to make revisions to the WebQuest. At this point the designer has developed a WebQuest.

Conclusions and Recommendations

To draw together the literature that has been examined, the author first must recommend the use of WebQuests. WebQuests seem to be an excellent way to introduce children to research. WebQuests introduce children to research by showing them the small steps that lead students through the research process. These steps are naturally built into a WebQuest.

WebQuests also show students how to conduct research by integrating technology with their research. By providing a task and giving a list of resources WebQuests integrate learning with technology. The children who are being taught today need to be able to work their way through the Internet. Instructors need to teach children how to do this independently. WebQuests are scenarios that give children the opportunity to practice their technology skills.

Through the writing this paper, the author has had the opportunity to review the literature on the design of WebQuests. After reading and learning how to design a WebQuest, the reviewer is now ready to design her own. Much of the literature that is available on the design of WebQuests follows other instructional design models. The model that has been presented had a planning, design, and implementation phase. The reviewer can conclude that to create a WebQuest a designer could follow basic design principles. WebQuests are unique because they strive to get students to use higher order thinking skills. In conclusion, making a WebQuest does not seem that difficult to do. The important thing to remember, is that at the beginning of the development process, time

needs to be spent planning. When a designer takes the time to organize his or her thoughts then everything comes together when design begins.

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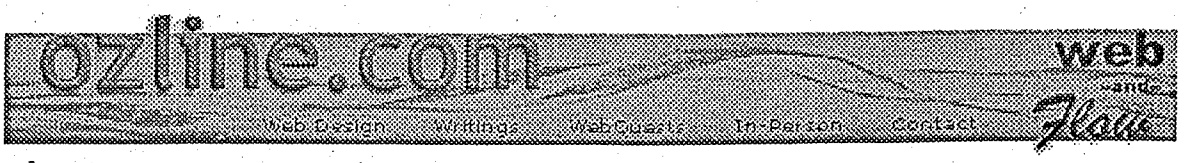
Appendix A
WebQuest Evaluation Forms



Assessing WebQuests

Use this rubric to assess your own or another's WebQuest.

	Low Probably not a WebQuest	**Medium** A solid draft	**High** Ready for Blue Web'n
Engaging Opening	No attempt made to appeal to learners.	Honestly attempts to appeal to student interests.	Has that something that compels attention.
The Question / Task	Fuzzy Question or Task. Maybe what's asked for is lower level thinking.	The Question and Task target higher order thinking, but may not be totally clear.	Clear Question and Task. These naturally flow from the introduction and signal a direction for learning.
Background for Everyone	No attempt to access prior learning or build common background.	Some mention of addressing a common body of knowledge. (May not happen within the activity.)	Clearly calls attention to the need for a common foundation of knowledge and provides needed (Web?) resources.
Roles / Expertise	Roles are artificial or not requiring	Roles are clear. They may be limited	Roles match the issues and resources. The roles provide multiple

	interdependent teamwork.	in scope.	perspectives from which to view the topic.
Use of the Web	This activity could probably be done better without the Web.	Some resources reflect features of the Web that make it particularly useful.	Uses the Web to access at least some of the following: interactivity, multiple perspectives, current information, etc.
Transformative Thinking	No Transformative thinking. (This is not a WebQuest, but may be a good Treasure Hunt).	Higher level thinking is required, but the process for students may not be clear.	Higher level thinking required to construct new meaning. Scaffolding is clearly provided to support student achievment.
Real World Feedback	No feedback loop included.	The learning product could easily be used for authentic assessment although this may not be mentioned.	Some feedback loop is included in the Web page. May include a rubric.
Conclusion	Minimal conclusion. No mention of student thinking or symmetry to intro.	Sums up the experiences and learning that was undertaken. Probably returns to the intro ideas.	Clear tie-in to the intro. Makes the students' cognitive tasks overt and suggests how this learning could transfer to other domains/issues.

A Rubric for Evaluating WebQuests

The WebQuest format can be applied to a variety of teaching situations. If you take advantage of all the possibilities inherent in the format, your students will have a rich and powerful experience. This rubric will help you pinpoint the ways in which your WebQuest isn't doing everything it could do. If a page seems to fall between categories, feel free to score it with in-between points.

	Beginning	Developing	Accomplished	Score
Overall Aesthetics (This refers to the WebQuest page itself, not the external resources linked to it.)				
Overall Visual Appeal	0 points There are few or no graphic elements. No variation in layout or typography. OR Color is garish and/or typographic variations are overused and legibility suffers. Background interferes with the readability.	2 points Graphic elements sometimes, but not always, contribute to the understanding of concepts, ideas and relationships. There is some variation in type size, color, and layout.	4 points Appropriate and thematic graphic elements are used to make visual connections that contribute to the understanding of concepts, ideas and relationships. Differences in type size and/or color are used well and consistently. See Fine Points Checklist.	
Navigation & Flow	0 points Getting through the lesson is confusing and unconventional. Pages can't be found easily and/or the way back isn't clear.	2 points There are a few places where the learner can get lost and not know where to go next.	4 points Navigation is seamless. It is always clear to the learner what all the pieces are and how to get to them.	
Mechanical Aspects	0 points There are more than 5 broken links, misplaced or missing images, badly sized tables, misspellings and/or grammatical errors.	1 point There are some broken links, misplaced or missing images, badly sized tables, misspellings and/or grammatical errors.	2 points No mechanical problems noted. See Fine Points Checklist.	
Introduction				

Motivational Effectiveness of Introduction	0 points The introduction is purely factual, with no appeal to relevance or social importance OR The scenario posed is transparently bogus and doesn't respect the media literacy of today's learners.	1 point The introduction relates somewhat to the learner's interests and/or describes a compelling question or problem.	2 points The introduction draws the reader into the lesson by relating to the learner's interests or goals and/or engagingly describing a compelling question or problem.	
Cognitive Effectiveness of the Introduction	0 points The introduction doesn't prepare the reader for what is to come, or build on what the learner already knows.	1 point The introduction makes some reference to learner's prior knowledge and previews to some extent what the lesson is about.	2 points The introduction builds on learner's prior knowledge and effectively prepares the learner by foreshadowing what the lesson is about.	
Task (The task is the end result of student efforts... not the steps involved in getting there.)				
Connection of Task to Standards	0 points The task is not related to standards.	2 point The task is referenced to standards but is not clearly connected to what students must know and be able to do to achieve proficiency of those standards.	4 points The task is referenced to standards and is clearly connected to what students must know and be able to do to achieve proficiency of those standards.	
Cognitive Level of the Task	0 points Task requires simply comprehending or retelling of information found on web pages and answering factual questions.	3 points Task is doable but is limited in its significance to students' lives. The task requires analysis of information and/or putting together information from several sources.	6 points 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. See WebQuest Taskonomy.	
Process (The process is the step-by-step description of how students will accomplish the task.)				

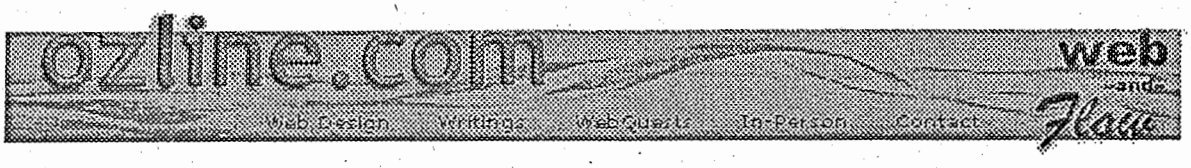
Clarity of Process	0 points Process is not clearly stated. Students would not know exactly what they were supposed to do just from reading this.	2 points Some directions are given, but there is missing information. Students might be confused.	4 points Every step is clearly stated. Most students would know exactly where they are at each step of the process and know what to do next.	
Scaffolding of Process	0 points The process lacks strategies and organizational tools needed for students to gain the knowledge needed to complete the task. Activities are of little significance to one another and/or to the accomplishment of the task.	3 points Strategies and organizational tools embedded in the process are insufficient to ensure that all students will gain the knowledge needed to complete the task. Some of the activities do not relate specifically to the accomplishment of the task.	6 points The process provides students coming in at different entry levels with strategies and organizational tools to access and gain the knowledge needed to complete the task. Activities are clearly related and designed to take the students from basic knowledge to higher level thinking. Checks for understanding are built in to assess whether students are getting it. See: • Process Guides • A Taxonomy of Information Patterns • Language Arts Standards and Technology • WebQuest Enhancement Tools • Reception, Transformation & Production Scaffolds	
Richness of Process	0 points Few steps, no separate roles assigned.	1 points Some separate tasks or roles assigned. More complex activities required.	2 points Different roles are assigned to help students understand different perspectives and/or share responsibility in accomplishing the task.	

Resources (Note: you should evaluate all resources linked to the page, even if they are in sections other than the Process block. Also note that books, video and other off-line resources can and should be used where appropriate.)				
Relevance & Quantity of Resources	0 points Resources provided are not sufficient for students to accomplish the task. OR There are too many resources for learners to look at in a reasonable time.	2 point There is some connection between the resources and the information needed for students to accomplish the task. Some resources don't add anything new.	4 points There is a clear and meaningful connection between all the resources and the information needed for students to accomplish the task. Every resource carries its weight.	
Quality of Resources	0 points Links are mundane. They lead to information that could be found in a classroom encyclopedia.	2 points Some links carry information not ordinarily found in a classroom.	4 points Links make excellent use of the Web's timeliness and colorfulness. Varied resources provide enough meaningful information for students to think deeply.	
Evaluation				
Clarity of Evaluation Criteria	0 points Criteria for success are not described.	3 points Criteria for success are at least partially described.	6 points Criteria for success are clearly stated in the form of a rubric. Criteria include qualitative as well as quantitative descriptors. The evaluation instrument clearly measures what students must know and be able to do to accomplish the task. See Creating a Rubric.	
Total Score				**/50**

Original WebQuest rubric by Bernie Dodge.
This is Version 1.03. Modified by Laura Bellofatto, Nick Bohl, Mike Casey, Marsha Krill, and Bernie Dodge and last updated on June 19, 2001.

Appendix B

Prewriting Your WebQuest



Pre-Writing Your WebQuest

an exercise in 4 Parts

Note: This page uses a Javascript. This means you have to use Netscape or Explorer versions 3 or higher with "javascript enabled." Also as javascript pages don't save the data you enter, you might want to collect the info on a word processed file, then copy and paste from it into this page. Thanks.

Instructions

The purpose of this page is to help designers of WebQuests quickly think through some key elements before they invest gobs of time designing their WebQuest. This is a good activity to use in WebQuest workshops so that participants can share what they came up with. If you want more info on these aspects, use the **WebQuest Design Process** to get more ideas and resources to help you.

1. Fill in all the input and text fields on this page. You don't have to go in the order they are listed. Since curriculum is a creative process it's likely you will go back and forth between sections as your ideas clarify and the sparks fly.

2. When you are satisfied with everything, click the "How 'bout that?" button.

3. A working page will be generated for you. Because this page is run by a javascript, none of your work is saved unless **you** do so. Many people prefer to use **Filamentality** or **Web-and-Flow** as these sites create a datafile that can be accessed repeatedly from anywhere on the Web. You choose.

Part 1 - The Big Ideas

Use this section to identify main aspects of this WebQuest. Click on the headings to find out more about what's being asked for.

Working Title:

Content Area(s):

Specific Topic:

WebQuest Question:

Type of Cognition:

Possible Tasks:

Part 2 - Links You're Likely to Use

List three websites that you feel will engage and support students in their efforts to answer the Question. These will show how you plan to use the power / character of the Web. They aren't all the sites you'd like to use, just a sampling. Do you want a few ideas on **Use of the Web**?

Link #1 Title:

Link URL:

How I'll use it:

Link #2 Title:

Link URL:

How I'll use it:

Link #3 Title:

Link URL:

How I'll use it:

Part 3 - Roles or Jobs for Developing Expertise

List the likely Roles or Jobs you plan to divide student groups into. As a general rule, three - four roles is usually a good number. Want a few tips on **Creating Roles or Jobs**?

#1:

#2:

#3:

#4:

#5:

#6:

Part 4 - 10 "Go / No Go" Questions

I have answered yes to all these questions or else my questions / comments are listed below:

1. Is the Topic curricularly worth the time and effort needed to build this WebQuest? (Think about Frameworks, curriculum guides, course requirements, etc.)
2. Is the level of potential student cognition / learning worth your and their effort to do this WebQuest?
3. Are you excited by the activity?
4. Does the Web offer so much that its use is warranted? (Do you want some tips on **Picking Links**?)
5. Does the Question ask something that people in the real world find important? (i.e., this isn't just school work, is it?)
6. Is the answer to the question open to interpretation / argument / hypothesis? (Want some sample **Questions / Tasks**?)
7. Have you specifically identified the kind of higher-level, transformative thinking that will transpire in the minds of learners?
8. Would most teachers have the right technology, time, and comfort level to support the Task you've identified?
9. Do you believe there's enough on the Web to support the roles? (what in-class supplements might be needed?)
10. Is this a WebQuest or really another **format**? (last chance for an easier way out - Treasure Hunt, Subject Sampler, Concept Builder, etc.)

If you've answered yes to all the questions above, you're on the way to creating a great WebQuest!

If you have questions or notes to yourself,
use the field below to jot them down.

Your name:

Your Email address:

How 'bout that?

First Posted November 16, 1998
Last Updated, April 17, 2001
http://www.ozline.com/webquests/prewrite.html

G'Day! | the ozline story | bald self-promotion | site sorter | good-bye!