

WebQuest Taskonomy: A Taxonomy of Tasks

The Task is the single most important part of a WebQuest. It provides a goal and focus for student energies and it makes concrete the curricular intentions of the designer. A well designed task is doable and engaging, and elicits thinking in learners that goes beyond rote comprehension.

There must be fifty ways to task your learner. Since 1995, teachers have been adapting the WebQuest model to their own needs and settings, and from their collective wisdom and experience some common task formats have emerged. This taxonomy describes those formats and suggests ways to optimize their use. It provides a language for discussing WebQuest tasks that should enhance our ability to design them well. *It's likely that the task in a given WebQuest will combine elements of two or more of these task categories.*

Task Definitions and Tips



Retelling Tasks

Sometimes all you're asking of students is to absorb some information and then demonstrate that they've understood it. Research reports like these are bread-and-butter activities that don't break much new ground in educational practice, but they can provide an easy introduction to the use of the Web as an information source.

Students can report on what they've learned by way of PowerPoint presentations, posters, or short reports. These are the most commonly found WebQuests, and the least challenging (or interesting), but they can serve a purpose.

Are activities based on retelling really WebQuests? It's not a matter of black and white, and it depends on the degree of transformation required of the learner. If the task requires looking for simple, a sure answer to pre-determined questions, then the activity is clearly not a WebQuest even if the answers are found on the Web. These are just worksheets with URLs.

A modest WebQuest could be based on retelling if:

- the format and wording of their report is significantly different than what they read (i.e., the report wasn't produced by cutting and pasting);
- students are given latitude about what to report and how to organize their findings;
- skills of summarizing, distilling, and elaborating are required and supported.



Compilation Tasks

A simple task for students is to take information from a number of sources and put it into a common format. The resulting compilation might be published on the Web, or it might be some tangible non-digital product.

Ideally, a compilation task familiarizes students with a body of content and provides them with practice in making selection choices and explaining them, as well as organizing, chunking, and paraphrasing information drawn from a variety of sources in a variety of forms.

To make a compilation task qualify as a true WebQuest, there needs to be some *transformation* of the information compiled. Simply putting a hot list of Web sites or a collection of web images together arbitrarily isn't enough.

To ramp up the thinking skills required for a compilation task:

- use information resources that are in different formats, and require that they be rewritten or reformatted to create the compilation;
- set standards for the organization of the compilation, but don't make all the organization and formatting decisions for the students. Leave some of that job for them, and evaluate their product based on the consistency and reasonableness of the organization they come up with;
- require students to develop their own criteria for selecting the items they put together and to articulate their criteria.



Mystery Tasks

Everyone loves a mystery. Sometimes a good way to lure your students into a topic is to wrap it in a puzzle or detective story. This works well at the elementary school level, but can also be extended all the way up to adult learners.

A well designed mystery task requires synthesis of information from a variety of sources. Create a puzzle that cannot be solved simply by finding the answer on a particular page. Instead, design a mystery that requires one to:

- absorb information from multiple sources;
- put information together by making inferences or generalizations across several information sources;
- eliminate false trails that might seem to be likely answers at first but which fall apart under closer examination.

Mystery tasks can seem somewhat inauthentic because of the fictionalizing they require, though the tradeoff in increased learner interest can make it worthwhile.

If there are careers related to your topic which involve genuine puzzle-solving (as in what historians, scholars, archaeologists and other scientists do) then wrap the mystery around such people and the “bogosity” will be minimized.



Journalistic Tasks

Is there is a specific event at the core of what you want your students to learn? One way to craft a WebQuest is to ask your learners to act like reporters covering the event. The task involves gathering facts and organizing them into an account within the usual genres of news and feature writing. In evaluating how they do, accuracy is important and creativity is not.

Some people are well into adulthood before they realize that there is the potential for bias in all reporting, that all of us have filters that affect how we see things and what we choose to look at.

A well designed journalistic task will require your students to:

- maximize accuracy by using multiple accounts of an event;
- broaden their understanding by incorporating divergent opinions into their account;
- deepen their understanding by using background information sources;
- examine their own biases and minimize their impact on their writing.

To design such a lesson, you'll need to provide the right resources and establish the importance of fairness and accuracy in reporting.



Design Tasks

According to Webster, design is "a plan or protocol for carrying out or accomplishing something." A WebQuest design task requires learners to create a product or plan of action that accomplishes a pre-determined goal and works within specified constraints.

The key element in a design task is to build in authentic constraints. Asking students to design an ideal X without also requiring them to work within a budget and within a body of legal and other restrictions doesn't really teach much. In fact, an unconstrained design task teaches an illusory "anything goes" attitude that doesn't map well onto the real world.

A well crafted design task:

- describes a product that is genuinely needed somewhere by someone;
- describes resource and other constraints that are not unlike those faced by real designers of such products;
- leaves room for and encourages creativity within those constraints.



Creative Product Tasks

Might students learn about your topic by recasting it in the form of a story or poem or painting? Like engineers and designers, creative artists work within the constraints of their particular genre. Creative WebQuest tasks lead to the production of something within a given format (e.g. painting, play, skit, poster, game, simulated diary or song) but they are much more open-ended and unpredictable than design tasks. The evaluation criteria for these tasks would emphasize creativity and self-expression, as well as criteria specific to the chosen genre.

As with design tasks, the constraints are the key, and they will differ depending on the creative product and topic being worked on. Such constraints might include such things as requiring:

- historical accuracy;
- adherence to a particular artistic style;
- use of the conventions of a particular format;
- internal consistency;
- limitations on length, size, or scope.

Balanced against the constraints, a task of this type should invite creativity by being somewhat open-ended. There should be enough wiggle room in the assignment that a student or group of students will be able to leave a unique stamp on what you're asking them to do.



Consensus Building Tasks

Some topics go hand in hand with controversy. People disagree because of differences in their value systems, in what they accept as factually correct, in what they've been exposed to, or in what their ultimate goals are. In this imperfect world, it's useful to expose future adults to such differences and to give them practice as resolving them. Consensus building tasks attempt to do that. The essence of a consensus building task is the requirement that differing viewpoints be articulated, considered, and accommodated where possible. For better or worse, current events and recent history provide many opportunities for practice.

A well designed consensus-building task will:

- involve learners taking on different perspectives by studying different sets of resources;
- be based on authentic differences of opinion that are actually expressed by someone somewhere outside of classroom walls;
- be based on matters of opinion and fact, not just fact;
- result in the development of a common report that has a specific audience (real or simulated) and is created in a format that is analogous to one used in the world outside classroom walls (e.g., a policy white paper, a recommendation to some government body, a memorandum of understanding).



Persuasion Tasks

There are people in the world who disagree with you. They're wrong, of course, so it's useful to develop skills in persuasion. A persuasion task goes beyond a simple retelling by requiring students to develop a convincing case that is based on what they've learned. Persuasion tasks might include presenting at a mock city council hearing or a trial, writing a letter, editorial or press release, or producing a poster or videotaped ad designed to sway opinions.

Persuasion tasks are often combined with consensus building tasks, although not always. The key difference is that with persuasion tasks, students work on convincing an external audience of a particular point of view, as opposed to the persuasion and accommodation that occurs internally in a consensus building task.

The key to a well done persuasion task is that:

- a plausible audience for the message is identified whose point of view is different or at least neutral or apathetic.



Self-Knowledge Tasks

Sometimes the goal of a WebQuest is a greater understanding of oneself, an understanding that can be developed through guided exploration of on- and off-line resources. There are few examples of this type, perhaps because self-knowledge is not heavily represented in today's curricula.

A well crafted self-knowledge task will compel the learner to answer questions about themselves that have no short answers. Such tasks could be developed around:

- long term goals;
- ethical and moral issues;
- self-improvement;
- art appreciation;
- personal responses to literature.



Analytical Tasks

One aspect of understanding is the knowledge of how things hang together, and how things within a topic relate to each other. An analytical task provides a venue for developing such knowledge. In analytical tasks, learners are asked to look closely at one or more things and to find similarities and differences, to figure out the implications for those similarities and differences. They might look for relationships of cause and effect among variables and be asked to discuss their meaning.

A well designed analytical task goes beyond simple analysis to the implications of what is found. For example, while creating a Venn diagram comparing Italy with England is a fine task, a better task would include some requirement to speculate or infer what the differences and similarities between the two nations mean.



Judgment Tasks

To evaluate something requires a degree of understanding of that something as well as an understanding of some system of judging worth. Judgment tasks present a number of items to the learner and ask them to rank or rate them, or to make an informed decision among a limited number of choices.

A well designed assignment of this type will either:

- learners play a role while accomplishing a judgment task,
- provide a rubric or other set of criteria for making the judgment, or
- require and support learners in creating their own criteria for evaluation.

In the second case, it is important to get learners to explain and defend their system of evaluation.



Scientific Tasks

The scientific method lead to the technology that lead to your reading of these words. Science permeates our society and it's critical that today's children understand how science works, even if they never don a white smock and carry a clipboard around.

The Web brings both historical and up-to-the-minute data to our doors, and some of it can provide practice at doing real science.

What does a scientific task look like? It would include:

- making hypotheses based on an understanding of background information provided by on- or off-line sources;
- testing the hypotheses by gathering data from pre-selected sources;
- determining whether the hypotheses were supported and describing the results and their implications in the standard form of a scientific report.

The key to making a successful WebQuest of this type is to find questions that can be addressed by the kinds of data available online, that are not so arcane that they cannot be related to the standard science curriculum, and are not so well known that crunching the numbers becomes an exercise in going through the motions.