How to Get Web Presents! Designing a Collaborative K-12 Web Project

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Since I first launched the collaborative ecology project, "A World Community of Old Trees," on the Web two years ago, I have received hundreds of contributions from children and adults from all over the world. Each time I opened an electronic file, I felt like I was opening a very special present! What wonderful old tree would be inside?

Using "A World Community of Old Trees" as an example, this paper presents methods for K-12 teachers and students to design, maintain, and evaluate their own collaborative project for the WWW. For me, having a global Web project has been like hosting a party and inviting the world to join in! The purpose of this presentation is to share the excitement of the definite potential of the Web medium for global collaborative learning.

"A World Community of Old Trees" was specifically designed to provide an open digital space for the global community to identify, write about, and document with visual images, the most extraordinary trees in their environment. The project contains three major components: the Tree Gallery, with both scanned art and Web-specific imagery and accompanying descriptive text, the Tree Museum, where references to extraordinary trees are listed in the continually growing Print Sources and Web Sources sections, and Tree Talk, which contains tree ecology facts, personal narratives, photos, participants' responses, and a built-in Comment and Survey Form about the project.

For me the most wonderful section of the Tree Gallery is the Student Projects section. It showcases the wonderful art work, poetry, and stories from children, all lovingly documenting the most extraordinary trees in their worlds. It was especially exciting when these files came into my email account! When I opened them, I was greeted with beautiful tree art works, stories, and photos of children proudly

standing next to their trees. Children from many parts of the world, including the United States, Canada, Lithuania, Australia, and Japan, have sent in their tree gifts for the world to share. When visitors responded to a particular student's contribution, I pasted that email directly on the bottom of their page. For example, Rosemary, an eighth grader in Australia, did research on the oldest species of tree in the world, the Wollemi Pine, and contributed both text and photos to the project. When I received an email comment on Rosemary's work, it was added to her page.

Another exciting student contribution to the project was the Interactive Tree Chaos Series page by Josh, a twelfth grader in New Jersey. In this project within a project, Josh invited visitors to interact with his imagery with either conventional art media or with computer graphics and to send their pieces back to the site. His pages include the interesting interactions that came in from several diverse participants: a sound file by an eight-year-old Toronto girl singing "I Am a Tree," a series of computer-graphics manipulations of his imagery by a graduate student in New York City, and similar images from a handicapped artist in the Pacific Northwest.

This experience convinces me that with an open, interactive design, any educational theme that has its basis in the concerns and issues of young people would be successful in an international, shared resource. From my work, I have identified the following factors as considerations for effective design of collaborative K-12 Web projects: interaction, participation, content, promotion, information collection and distribution, and evaluation.

"A World Community of Old Trees" demonstrates several modes of interaction with the project: participants can send in comments on a Comment Form, complete a Survey Form, send in email on tree topics, or interact with existing work already on the site. In one case, they are even invited to manipulate a student artist's imagery. I believe that in creative circumstances, the possibilities for interaction are numerous and fantastic. By its nature, the World Wide Web invites interactions. Thoughtfully designed collaborative Web projects can maximize this innate characteristic of the medium and celebrate it within any thematic context.

Within its three major components, TREE GALLERY, TREE MUSEUM, and TREE TALK, global participants of all ages rejoice in the planet's most extraordinary trees. I am able to witness the pictures and words from many hearts. By making participation in a collaborative project as open as possible, project designers can maximize the potential of the Web for engaging a large and diverse group.

With regard to the content of "A World Community of Old Trees," my purpose was not to examine global tree ecology problems nor to suggest solutions to them. Rather, my aim was to provide a framework for participants to have relationships with trees, and through an interactive digital context, also with each other. I was more interested in seeing what came in rather than in presenting any particular view. Initially, I presented a few demonstration pages featuring my own pieces in a variety of media as examples of page layout and possible style. As each contribution came in to the project, I put it on the site right away for potential participants to see, and to add to the ongoing demonstration of possibilities of interpretation. Content design should be inclusive and open, within a flexible structure.

Since "A World Community of Old Trees" is a Web project, the natural dynamics of the medium itself function quite spontaneously for the project's promotion. Since it is developing over time while open to

public view, it is its own best advertisement. Still, initially, I had to consistently publicize the project by repeated email postings on numerous subject-matter-related listservs. After a while, though, the project picked up its own momentum, and began to have a life of its own, gathering participants daily. Information will reside silently on a server unless determined efforts are made to promote those links to the target audience. A very effective method to consider is the use of complementary links.

With regard to information collection and distribution, I found that the practice of building the site as the contributions came in was very effective, particularly for students who were anxious to see their

work on the Web. As soon as I received them, I put new files on the server, and immediately sent out email messages that included the new URL.

Within a Web-based collaborative project a lot of teaching goes on in the most unexpected and marvelous ways, but how can you best evaluate the project? Once again, the interactive nature of the Web itself can provide the means. As with "A World Community of Old Trees," various fill-out forms can be placed on the site requesting input on the the project's objectives. And, if your email inbox is always full of new messages from people all over the world, discussing, suggesting,

questioning, and telling, you will be wellsupplied with feedback on your project.

But most of all, it is the quantity and quality of those precious gift files that speak to the strength of your Web project. How do you get the best Web presents? If you carefully consider the factors of interaction, participation, content, promotion, information collection and distribution, and evaluation when you begin to design your collaborative Web project, you have the best chance, I've found, of maximizing the potential of the Web, an entity as vast and synergistic as the human spirit itself.



