## **Class Websites Contribute to Global Environmental Awareness**

## Dr. Zoltan Grossman,

Assistant Professor of Geography and American Indian Studies, University of Wisconsin-Eau Claire

*Teaching with Technology Today* (University of Wisconsin System magazine), 2003

U.W.-Eau Claire students who take the Geography 378 course on International Environmental Problems and Policy have not only learned about global warming and hydroelectric dams. They have also learned about how environmental issues are communicated and discussed in our globalizing world.

The World Wide Web is integral to contemporary environmental issues, since it has become a clearinghouse for information, a forum for debate, and a tool for education and mobilization for governments, companies, and environmental groups. Knowledge of the strengths and weaknesses of the Web is indispensable in studying global environmental policy.

Instead of writing the usual undergrad papers, Geography 378 students wrote a press release on an environmental issue outside the U.S., and a "human interest" article on another environmental conflict (using e-mail contacts with affected individuals in other countries). Instead of a final term paper, the students together compiled a class website on an environmental issue in another country or world region. These assignments not only helped develop students' technical knowledge, but gave them tools and skills that they can one day use to research and publicize global environmental issues.

The class websites were developed partly by the entire class, and partly by each individual student. The class together identified an international environmental issue, and each student contributed a page about a particular thematic angle, or "subtopic" on the issue. In Fall 2002, the class website "Caspian Basin Alert" focused on the upsurge in oil and natural gas drilling around the Caspian Sea. In Spring 2003, the class website "Iraq and Our Energy Future" examined the environmental effects of wars in Iraq, and also looked at renewable energy options for the United States.

The democratic process of selecting a website topic has been a balancing act for the class. The website topic needed to be broad enough that it had enough material for each student's webpage, yet not so broad that it was too diffuse or "placeless." A topic that covered the entire globe (such as global warming) would have been abstract and impersonal because it lacked an immediate local scale. Because the course was centered on the geographical aspects of environmental issues, the students needed to analyze how a particular country or region was affected by an existing or proposed project. Students nominated possible topics in e-mails to the instructor, and narrowed the possible subjects in class. They then voted in an e-mail poll, choosing between 4-5 finalists, with ties broken by the professor. In Fall 2002, nominated topics included transboundary pollution, hydroelectric dams in Laos, oil drilling off Norway, and garbage power. Student discussion, however, turned toward Caspian Basin oil drilling, in the context of post-Soviet pipeline politics and the on-going war in Afghanistan. In Spring 2003, the class was divided between the negative environmental effects of the wars in Iraq, and a more positive spin on renewable energies that might make future "oil wars" less likely. A student suggested covering both topics in a way that interwove the negative and positive messages, and her idea prevailed.

The professor and the class together subdivided the main topic into subtopics, so students could conduct in-depth research on one aspect of the larger issue. "Caspian Basin Alert" included subtopic pages on the countries and physical environment of the Caspian region, the oil industry and oil economics, environmental and human impacts of oil development in the region, corporations and contending pipeline routes. (The professor added an external links page and map gallery.) In a class of 18, two students took each page, but the "free rider" phenomenon later rendered this decision less than desirable.

The Spring 2003 class had 36 students, each of whom developed their own webpage. The Iraq War section covered issues such as the war's oil connections and consumption of resources, Iraqi ecosystems and water shortages, Depleted Uranium and other munitions, Gulf War Syndrome, biochemical weapons, tactical nuclear weapons, Saddam's oil fires and marsh draining, and more. The Renewable Energies section examined the alternatives to a centralized oil-based economy: solar, wind, biomass, geothermal, tidal, hydrogen, *etc.* and the costs of these technologies, new transportation methods, energy conservation measures, and more.

After the subtopics were chosen, the professor developed a template webpage, with a column of links to each subtopic along the left side of the template page. From any of the subtopic pages, a reader could therefore jump to any of the other pages. The template and font package also offered a consistent look to the website. Each student renamed the template page, using their e-mail usernames. The files were kept in student folders within the course folder on the campus 'W' Drive.

When it came time to "publish" the class website, the professor dropped the final versions into the campus web drive. Nothing was more terrifying to students than the realization that their Final Project would be read not only by the professor, but would be available to all computer users on Earth. That constructive fear helped to improve the quality and readability of their submissions. An editing process also tried to make the text tone relatively consistent between printed drafts.

With 36 students and one inexperienced professor participating in the class website project, certain technical problems were bound to arise. Students had to be careful to give unique names to their files, so they did not accidentally replace another student's file when the files were put in the campus web drive. The students generally used PCs,

whereas the professor used a Mac, creating some interface problems. A few fonts were also not available on all project computers.

The Fall class used FrontPage, whereas the Spring class used Dreamweaver. Both programs had the problem of identifying graphics with their particular drive of origin, necessitating a massive clean-up effort of graphic files at the end of semester. The Spring 2004 class will be given more detailed instructions on linking graphics to their student folders, to avoid the previous problems. The students will also be given more standardized instructions on citing information and graphics, with links to their sources or pages of origin.

Despite the inevitable technical difficulties, Geography 378 students gained skills in Internet research (including the reliability of data), assembling a webpage, and choosing language and graphics to communicate complex ideas to a general audience. One student was so proud of her page that she put a copy on her refrigerator, and sent another copy home. Other students received messages sent from e-mail links on their pages, complimenting the pages or challenging the information they presented.

After "Iraq and Our Energy Future" was designated a "Website of the Day" on Counterpunch.org, Geography 378 students began receiving e-mails from around North America and the world. One message from Australia said simply "Your class gives me hope for the future of America and our planet." Not only had students reported on their topics, but in the process they had actually contributed to public knowledge and debate around environmental issues of global consequence.

> Caspian Basin Alert (Fall 2002) http://www.uwec.edu/grossmzc/caspian.html

Iraq and Our Energy Future (Spring 2003) http://www.uwec.edu/grossmzc/energy.html

Professor Zoltan Grossman https://sites.evergreen.edu/zoltan grossmaz@evergreen.edu