 Wikis in the Classroom: Properties, Perceptions, and Potential Uses of This Collaborative Learning Tool

Jayna L. DeVore, Kristen K. Cecala, and John C. Maerz
Warnell School of Forest and Natural Resources, University of Georgia, Athens, GA

Student engagement is tied to course performance and information retention. Shifting the focus of the classroom from a lecture-based approach to a student-centered learning environment is one way to achieve this goal. One tool that can be used to allow student contribution to the content and direction of a course is a wiki.

What is a wiki?
Wikis are highly flexible collaborative websites that can be structured to meet course needs and allow multiple users to contribute to site content. They are intended to promote group learning through collaboration rather than isolated reflection, and can provide another avenue through which instructors can connect with various types of learners through multimedia learning.

What can a wiki be used for in college courses?
Wikis can be adapted to facilitate many different types of classroom activities such as collaborative projects, peer review, debates, competitions, and student comments and reflections on course material. Within these contexts faculty can promote the use of multimedia and creativity within student work and enable peer learning through public project viewing. They also track each student’s edits and additions to site content, allowing for instructor assessment of an individual’s contributions to group progress.

You can compare wiki hosting sites and identify one that is suited to your needs at www.wikimatrix.org

Wiki Usage within the Course Surveyed: Herpetology
Herpetology is a 4-credit upper division organizational course taught each spring. Enrollment is typically around 30 students (80% undergraduate students). A wiki was incorporated into the course in 2009; all of the lecture and lab materials for the course are posted on the wiki, and all electronic communication with the students is conducted through the wiki’s message feature. All of the students surveyed indicated that they checked the wiki for updates at least once a day. Two projects that occur principally on the wiki are highlighted below:

“Herp” of the Month (Individual assignment)
Students were required to discover, identify, and photographically voucher a previously unreported species each month. Each find was posted to the wiki along with a description of how the identification was made. This assignment served to motivate students to utilize their sampling and identification skills; the use of the wiki for this assignment made it easy for the assignments to be submitted in real time, allowed students to keep track of what species had already been taken, and gave anxious students an opportunity to show off the species they had found. The wiki stimulated increased participation in this assignment; some students continued to post their finds for months after the class had ended.

Amphibian Survey (Group project)
In this project groups were assigned to wetlands, which they were responsible for surveying throughout the semester. All finds were vouchered through photos, video, or audio evidence, which was posted to the wiki site for verification. The instructors maintained a running tally of the species found by each group; this motivated competitive groups to find more species at their ponds. A final report that connected the finds at each pond to habitat attributes and search effort was written collaboratively by the group members at the end of the semester. Findings are maintained year-to-year so that comparisons can be made through time, as well as across habitat types.

Student Perceptions
Student feedback demonstrates that the wiki format promoted class participation, increased inter-student communication, fostered a sense of community within the course in question, gave an impression of increased control over course content, and was accompanied by a feeling of project ownership and accomplishment. Students felt that posting assignments publically motivated them to produce quality work, and also found that the wiki made group projects easier to complete. Students did not find the wiki difficult to use, but their major complaints about the use of the wiki in the course were related to technological issues, such as upload limits (which were imposed by WebPaint on both file size and quantity) and problems with browser support; educators looking to incorporate wikis into their classes should pay special attention to these issues as they choose a wiki-hosting site.

Representative Student Comments

Likes:
Allowed me to discuss and interact with classmates, teachers, and TAs and give me access to anything I may need that was available for resources as a student; in notes, lectures, handouts, readings, keys, grades, etc.

Dislikes/Suggestions:
The wiki was really easy to use, in theory. However, it often had technical problems, especially in uploading photos and powerpoints, simply because of the amount of information this site had on it. It was sometimes frustrating not being able to post an entire powerpoint or taking several attempts to post pictures. Besides these set backs, it was a good tool for the course and definitely created a community feel.