

# WIKI-ING YOUR WAY INTO COLLABORATIVE LEARNING

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## OVERVIEW

Practitioners in information literacy and library instruction have touted the benefits of collaborative learning for years. Students learn more when they work together to develop critical research skills. Wikis have added a new dimension to the process of collaborative learning. This presentation demonstrated how quickly and easily librarians can create classroom assignments that engage students, generate immediate results, promote collaboration, and reinforce learning objectives all through the use of a wiki.

Session participants were asked to:

- Examine the connection between collaborative or active-learning activities in library instruction and student learning outcomes,
- Discuss the ways in which newer technologies, particularly wikis, can facilitate these connections,
- Develop practical applications for the use of wikis in multiple instructional settings.

The session included an overview of our experiences incorporating wikis into course-related information literacy instruction sessions and outlined the connection between interactive wiki assignments and collaborative learning theory. We then provided a brief demonstration outlining the basic mechanics of the free wiki software currently used by instruction librarians at the Rebecca Crown Library at Dominican University. We discussed the basic goals and considerations for creating

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engaging classroom assignments, followed by a hands-on opportunity for participants, working in small groups, to develop wiki-friendly projects. Groups were asked to create simple classroom assignments, based on several different instructional scenarios using a wiki to engage students and reinforce information literacy standards and objectives. Groups were offered the opportunity to share their results with other participants, followed by an open discussion and comment period. Participants were encouraged to bring laptop computers with them to support the group activity.

## BACKGROUND

Starting in 2004, the Rebecca Crown Library and the English Department at Dominican University collaborated to make the Information Literacy Foundation Requirement (a graduation requirement for all undergraduate students) a part of English 102, moving it out of the Freshmen Seminar and into a course that required a research assignment. The migration of this requirement to English 102 created the need for at least two instruction sessions covering brainstorming, search strategies, database selection, information retrieval, and source evaluation and citation format. Initially, the Texas Information Literacy Tutorial (TILT) was used as an assessment tool. Prior to the start of the second year of this collaboration, the librarians and the English instructors created a new assessment tool - an annotated bibliography assignment. The annotated bibliography was designed to complement the final required research paper for the course. The librarians assessed the annotated bibliography and provided feedback to the students. The sources, citations and annotations were assessed in order to evaluate student and librarian success. The new assignment was well received by librarians, faculty and students. The annotations proved to be a consistent challenge to the students as the assignment was assessed over the course of multiple semesters. Librarians and English instructors focused additional time and attention on assisting students with writing annotations through the use of repeated iterations, classroom activities, group writing exercises,

and group discussion. The use of wikis in collaborative exercises evolved after the introduction of several similar classroom activities, as described below.

## COLLABORATIVE LEARNING AND GROUP ACTIVITIES

The benefits of collaborative learning are well documented in the literature. Among the rewards of collaborative learning - specifically group activities - are increased retention, improved teamwork skills, and improved critical thinking skills (Payne, Monk-Turner, Smith, & Sumter 2006). Recognizing the importance of collaborative learning, Crown Librarians sought to find a workspace where students could build collective knowledge through exchanging ideas with peers in a collaborative environment.

Nicol, Littlejohn and Grierson (2005) identified the following student attitudes toward using a shared workspace in their research on collaborative learning design:

- Helps support teamwork
- Facilitates and encourages the sharing of resources
- Easy and continuous access
- Easy to update and share updates with group
- Limits repetition of information
- Reduced number of paper copies
- Facilitates monitoring of group or individual progress
- Resources available even if group member doesn't show up

Crown Librarians identified wikis as an ideal shared workspace platform in which students could engage in peer collaboration in the classroom.

## WIKIS

“A **wiki** is a collection of web pages designed to enable anyone who accesses it to contribute or modify content, using a simplified markup language.” (Wikipedia)

Wikis used as a repository of knowledge continue to be controversial, especially by many in academia. Despite criticisms directed towards wikis - in particular the most well known example, Wikipedia - wikis are a valuable platform for group work because multiple users can create and edit content collaboratively.

Some of the features common to most wikis include:

- Pages can be edited collectively
- Links to other websites, files, images and “widgets” can be easily added
- Track history of changes
- View recent changes
- Revert content to an earlier iteration

- Alert users to any changes to the wiki
- Search content by keyword
- Access to wiki can be set to public or private

A variety of wiki software is freely available, including MediaWiki, Seedwiki and PBWiki. Crown Librarians chose PBWiki software because we believed it to be one of the most user-friendly software available. PBWiki allows users to contribute and edit information using a “What You See is What You Get” (WYSIWYG) editor, eliminating the need or knowledge of markup languages. Additionally, Crown Library Librarians created an internal staff wiki using PBWiki thus librarians were already familiar with using the software prior to introducing it to students in workshops.

Access to wikis can be designated public or private, and the ability to edit a wiki can be open to anyone or restricted to invited users. PBWiki version 1.0 allows the wiki administrator to invite users to the wiki, whereby they can edit pages. Invited users must establish a PBWiki account which enables the user to edit the wiki. Administrators can also establish an “Invite Key,” a common password that allows users who have the invite key to edit the wiki. We chose to create an Invite Key to save the classroom time needed for contributors to create an account. When accessing the wiki using the Invite Key, users must input their names and email addresses, which allows the wiki administrator to track changes made by individual users.

## IMPLEMENTING WIKIS IN ENGLISH 102

As described above, librarians and English instructors have worked together to design assignments to assess both writing and researching skills. Prior to the start of the 2007-2008 academic year, the librarians proposed using wikis in the classroom and explained the benefits of collaborative learning in a groupware environment. We recommended the wiki platform to the English composition faculty as an ideal choice of groupware because of its ease of use for both students and instructors.

Librarians developed a series of exercises designed to demonstrate student command of library skills learned in class while also introducing students to using the wiki. Assignments varied in the level of difficulty. Easier assignments were introduced first, followed by more complex assignments as the course progressed. Introducing the assignments in this order allowed students the opportunity to collaborate comfortably with their peers and to become proficient in editing the wiki. As student comfort levels increased, greater attention could be given to assignments that develop critical thinking skills.

## IN-CLASS ASSIGNMENTS

In-class assignments are tied to discussions and demonstrations of a particular resource or activity. We selected basic assignments as a way to acclimate students to collaborative learning and the mechanics of editing the wiki. In one assignment, students were asked to use the online catalog to

locate a book on a given topic. Students were assigned to groups and asked to create search strategies, such as Boolean and phrase searching, using limits and brainstorming for appropriate search terms. In another assignment, students were asked to use an article database to locate answers to specific questions, such as the number of results a search returned when combining search terms or comparing results to those found using Google. For all exercises, one student was assigned to update the wiki (a PBwiki page can be updated by only one user at a time) while the balance of students in the group searched the catalog or database.

### THE ANNOTATED BIBLIOGRAPHY ASSIGNMENT

The culminating assignment used by librarians to assess student information literacy skills is the Annotated Bibliography. The Annotated Bibliography provides the basis for resources that is connected to a final research project. The Annotated Bibliography assignment is a pass/fail assignment as determined by the librarian. The instructor may also grade the assignment and include the grade as part of the final grade. Typically, students are assigned a broad topic, such as drug use in sports or terrorism in America. Students must write an introductory paragraph that describes the topic, including a thesis statement; provide citations for the resources using MLA style, write an annotation for each resource that includes the application of review criteria as detailed in the CRAP Test (see below), and include information on how the resource was located. The assignment typically requires students to locate between 3-5 scholarly articles, articles from a magazine and/or newspaper, a website, and a book that is either recent or a seminal work in the field.

### THE CRAP TEST

The CRAP Test is a risqué acronym used to drive home the importance of critically evaluating any source. CRAP stands for: Currency, Reliability, Authority and Purpose/Point of View. Each of the four criteria are further defined to give students better understanding of the review criteria. Student (and faculty) feedback indicated the acronym was well received, the evaluative criteria were better understood, and the information was retained for a longer period of time.

### CREATING ANNOTATIONS THROUGH COLLABORATION

In the workshop, students are asked to work in groups of two or three to collectively evaluate a resource either given to them by the librarian or located on their own. Students are encouraged to use the criteria from the CRAP Test as prompts for group discussion in creating their resource evaluations. Students are typically given ten minutes to review the resource and write the annotation. To increase student engagement and understanding of the assignment, groups are informed that they will present their finished annotations to class, whereby a critique and discussion of their work takes place.

### CONCLUSION

It is our experience that student collaboration using wikis as groupware has improved student ability in assessing information as outlined in the Information Literacy Foundation Requirement, a standard required for graduation. This is evidenced by an overall reduction in number of assignments requiring resubmission. Faculty feedback has indicated that the overall level of research has improved since implementing wikis as groupware, and that final projects are of higher quality.

### Wiki URL

<http://loex2008collaborate.pbwiki.com/>

### NOTES

- Nicol, D., Littlejohn, A., & Grierson, H. (2005). The importance of structuring information and resources within shared workspaces during collaborative design learning. *Open Learning, 20*(1), 31-49.
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- “Wiki.” *Wikipedia, The Free Encyclopedia*. 15 Feb 2008 <[http:// en.wikipedia.org/w/index.php?title=Wiki&ol did=251473324](http://en.wikipedia.org/w/index.php?title=Wiki&ol did=251473324)>.

### ADDITIONAL READING

- Keane, J. (2006). Creating to Learn: Curriculum steers your school’s technology assets. *Library Media Connection, 24*(6), 38-39.
- Lujan, H. L., & DiCarlo, S. E. (2006). Too much teaching, not enough learning: What is the solution? *Advances in Physiology Education, 30*(1-4), 17-22.
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- Yazici, H. J. (2004). Student perceptions of collaborative learning in operations management classes. *Journal of Education for Business, 80*(2), 110-118.

# Wiki-ing Your Way into Collaborative Learning

LOEX 36th National Conference  
Oak Brook, Illinois, May 1-3, 2008

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Workshop Wiki: <http://loex2008collaborate.pbwiki.com/>  
Invite Key: loex

## The Assignment

Using the scenario detailed below, brainstorm for ways to include collaborative learning activities in Information Literacy sessions. Design **at least one** small group activity that could utilize a wiki or other groupware tool.

Consider the following:

- the time needed for the activity,
- the ideal size of the groups,
- any materials that would be provided by you - handouts, examples, resources, instructions, etc., and
- how you would implement the activity and set the tone.

Please be prepared to share your results with the audience.

## Scenario #1

Psychology 290 Research Methods: Students are assigned a psychological disorder (clinical depression, post traumatic stress disorder, social phobia, generalized anxiety disorder, etc), and a treatment (drug therapy, behavior therapy, or cognitive-behavior therapy). They are asked to find three scholarly articles on the disorder and the treatment and write a critical synthesis of the three articles. The instructor would like the students to use PsycINFO and to focus on locating clinical trials.

## Prompts

Based on the scenario, what would you plan to cover in an ordinary instruction session?

How would you adapt your lesson plan objectives to include collaborative learning activities like small group work?

How could you adapt small group activities to wiki use?

# Wiki-ing Your Way into Collaborative Learning

**LOEX 36th National Conference  
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## **The Assignment**

Students are assigned to work in groups to assess a resource such as a scholarly article or website by applying the CRAP test. Since a wiki page can be edited by only one user at a time, group members choose a student to act as a scribe whose task is to enter the annotation into the wiki. Once the annotations are completed, a discussion of the students' work can take place.

## **The CRAP test**

In fall, 2007, Librarians began using wikis as work spaces for student group learning. One component of the Annotated Bibliography is to assess the usefulness of resources by applying evaluative criteria. Molly Beestrum created a most memorable acronym, the **CRAP test**, for students to use in evaluating resources.

### **Currency -**

- How recent is the information?
- How recently has the website been updated?
- Is it current enough for your topic?

### **Reliability -**

- What kind of information is included in the resource?
- Is content of the resource primarily opinion? Is it balanced?
- Does the creator provide references or sources for data or quotations?

### **Authority -**

- Who is the creator or author?
- What are the credentials?
- Who is the publisher or sponsor?
- Are they reputable?
- What is the publisher's interest (if any) in this information?
- Are there advertisements on the website?

### **Purpose/Point of View -**

- Is this fact or opinion?
- Is it biased?
- Is the creator/author trying to sell you something?

## **The Outcome**

Student, faculty and librarian responses to using wikis have been favorable. Since implementing wikis as collaborative work spaces, the overall quality of assignments submitted by students has improved. Student engagement in library workshops has increased.