Unit 2: Collaboration Technologies

The second unit of this workshop guide focuses on the various technologies that can be employed to support students and faculty members in deploying collaborative learning experiences. It is worth noting to participants that many of the tools discussed in this unit are Web 2.0 applications and are thus freely available online (for those that charge fees, costs vary depending on use). However, several of these tools now also exist within many learning management systems (e.g., Blackboard, Moodle, Sakai, etc.), and, although tool availability will vary by institution, participants might be more comfortable using tools housed within such a system. Using Web 2.0 and other emerging technologies often requires users to set up accounts with their own user names and passwords. Additionally, in consideration of the learner’s experience, it’s often a good idea to limit the number of tools and accounts so that, as much as possible, the learning experience is contained within a few sites.

Learning Objectives

1. To understand and experiment with instructional technology tools that support collaborative learning.
2. To consider implementing technologies that support collaborative learning methodologies, especially student project work.
3. To explore, experiment, and evaluate/critique collaborative learning technologies as a group, perhaps throughout this workshop.

Begin this unit by briefly defining Web 2.0 technologies, many of which are designed to support collaboration. Some examples may include video-sharing sites, wikis, blogs, and location-aware or mobile devices. You might consider using a collaborative document tool, such as Google Docs, as a group to define and list examples of Web 2.0 technologies that participants may have used. Doing so will give participants the experience of using one of the tools and also using it in a collaborative manner.

Suggested Poll

Use of the following poll or other survey instrument will increase the facilitator’s awareness of participants’ experience with Web 2.0 technologies in relation to collaborative learning (consider using http://www.polldaddy.com or http://www.polleverywhere.com):

Select all learning technologies, if any, that you have used to support collaborative learning.

- Blogs
- Wikis
- Social bookmarking
- Video sharing

<elio discovery tools>
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- Photo sharing
- Other

Consider that licensed software provided by your institution might appropriately be included in this section. Many Web 2.0 technologies can be purchased and used locally or housed within a variety of learning management systems. Consider introducing this unit on collaborative learning technologies early in the workshop and then “threading” the various technologies, especially wikis and some of the survey tools mentioned below, to assist participants in engaging and interacting with the content. Doing so will help gather ideas and strategies for the effective use of collaborative tools and will also give participants a chance to try them out firsthand.

**Wikis**

Although just about any tool can be purposed to support collaborative learning, wikis tend to lend themselves particularly well to this type of instructional methodology. Wikis are easy-to-create, editable web pages that allow multiple individuals—if granted permission by the wiki owner—to edit the content. Wikis can enable and facilitate the collaborative creation of any kind of document: presentation, text document, spreadsheet, and others.

Consider showing Lee LeFever’s YouTube video ([http://youtube.com/watch?v=-dnL00TdmLY](http://youtube.com/watch?v=-dnL00TdmLY)) that briefly and clearly explains a wiki. This is one of many videos that are suggested in these units; the videos are very useful because they can be viewed repeatedly as needed and can also be reused with students when they are introduced to these collaborative technologies. Again, it is helpful to allow time for participants to explore a few instructional examples of wikis. It does not matter whether they are student, instructor, or content-related wikis. It may be beneficial to try to gather some instructional examples from your specific institution, if available.

**Wiki Examples**

- Kansas State University, Digital Anthropology: [http://www.netvibes.com/wesch#Digital_Ethnography](http://www.netvibes.com/wesch#Digital_Ethnography)
- Florida State University, LIS 5313: [http://lis5313.ci.fsu.edu/wiki/index.php/Main_Page](http://lis5313.ci.fsu.edu/wiki/index.php/Main_Page)

Consider the following resource as an overview or guide to using Google Apps (docs, spreadsheets, calendar, sites, chat) for collaborative instructional applications: [https://sites.google.com/a/umn.edu/glearning/description](https://sites.google.com/a/umn.edu/glearning/description)

To further engage participants, consider the following activities:

- Set up a wiki and allow participants time to explore setting up their own free wikis. This gives participants a chance to do so with the support of the workshop facilitator. Ask participants to post the link of their new wiki on your wiki page. Any of the following programs can be used: Wikispaces ([http://www.wikispaces.com/](http://www.wikispaces.com/)), Wetpaint ([http://www.wetpaint.com/](http://www.wetpaint.com/)), or Google Docs ([http://docs.google.com/](http://docs.google.com/)).
- Prior to this workshop session, set up a wiki for participants. After they have explored the example instructional wikis, have them form pairs and collaborate to design a collaborative student project for one of their courses. Ask them to record their ideas, on their own unique page, inside the existing wiki. Next, have participants review at least two other groups’ ideas and comment on each other’s activities on the wiki pages. This gives participants an opportunity to use a wiki in both a teaching and learning experience and to learn some of its functionality, such as creating links and new pages.
Social Bookmarking

Social bookmarking is a web service that allows users to bookmark or save, sort, search, share, and easily access web pages that are of value to each user. Social bookmarking is similar to browser-based bookmarking, but it is flexible, user-centered, and can be accessed from any computer or browser (source: http://en.wikipedia.org/wiki/Social_bookmarking).

Consider showing Lee LeFever's YouTube video (http://youtube.com/watch?v=x66lV7G0cNU) on social bookmarking:

Suggested Poll

Consider posing the following four questions to participants:

• How many of you bookmark web pages that you visit?
• How many of you often struggle to locate pages you've bookmarked because they could be in any number of folders you've created?
• Have you ever lost your bookmarks when you received or purchased a new computer?
• Have you ever looked for a bookmark and could not recall the computer—home or office—on which you saved it?

It might be helpful for participants to ponder whether they do actually struggle with organizing their bookmarks—something they may never have considered before. These probing questions are a good introduction to the many benefits of social bookmarking:

• Saving bookmarks to a website, rather than a specific computer or browser, can facilitate organization and resource collection.
• Tagging—assigning labels or identifiers to favorite sites—allows for placement in “multiple folders,” thereby facilitating the bookmark search process.
• Bookmarks saved online can be shared and updated very easily.
• Links and categories of links, such as Civil War resources, can be easily shared with one link, maintained, and also posted to any learning management system or website.

Social Bookmarking Instructional Scenario

While teaching multiple sections of a course, an instructor asks students to visit multiple websites pertaining to a specific topic area. The instructor places all of these links in a learning management system course folder called “Module 3.” Without social bookmarking, if the instructor finds a website link that has expired or is no longer valid, wants to add another link, or needs to replace a web link with a newly discovered website, he will have to go into the Module 3 folder for each course and make those changes. However, an instructor using a social bookmarking service could create a “tag” called “Module 3” and assign that keyword to all of the sites that relate to the topic area. Users can search by that tag, and the application will display a list of all the sites that have been assigned that keyword. New sites can be added and similarly tagged, and they will then be included in any search on that keyword.

Activity

Ask participants to visit a few social bookmarking providers (some are listed below) and identify and explore the features:
• **Tags**: Descriptors that users assign to websites they are bookmarking; tags allow for easier access in the future

• **Network**: Connects users together by allowing easier access to their accounts

• **Bundle**: Allows users to organize tags by grouping tags together

• **Subscription**: Allows users to watch or subscribe to their favorite tags; once you subscribe to a tag, any time a site is assigned that tag it is delivered to your subscription page

• **Tag cloud**: A visual representation of a collection of tags that serves as a way to view tags in a more compact manner than a list

Then have your participants set up their own social bookmarking accounts and add each other to their networks. Lastly, have them seek out professionals in fields similar to theirs and add them to their network and tag a few sites as well.

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**Focus Session Resources**

- All Collaborative Learning Focus Session Proceedings: http://net.educause.edu/Proceedings/1022124.

- “Technologies That Enhance Collaborative Interdisciplinary Learning,” 2009. Beryl Levinger, Distinguished Professor and Chair of Public Administration, Monterey Institute of International Studies, an Affiliate of Middlebury College, https://admin.na3.acrobat.com/_a729300474/p35926411/ (case study of a student project designed around collaborative learning; a faculty member shares the tools and technologies that were used to support students in their project).


- “Project Parlors: A Lightning Round of Innovative Projects in Interdisciplinary Collaboration,” 2009. Roger Debo, North Carolina State University; Michael Reese, Johns Hopkins University; Cyprien Lomas, Kathryn Gretsingner, and Andrew Riseman, University of British Columbia, https://admin.na3.acrobat.com/_a729300474/p25185337/ (short summaries of institutional projects on instructional interdisciplinary collaboration along with the tools they used to support students and their work).

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**Collaborative Web 2.0 Technology Tools and Resources**

- Google Docs (collaborative document creation): https://docs.google.com

- Cmap Tools (concept mapping): http://cmap.ihmc.us/conceptmap.html


- Zoho Notebook (wiki): http://notebook.zoho.com

- PollDaddy (survey): http://www.poll daddy.com/

- Zoho Polls (survey/polls): http://zohopolls.com/

- Delicious (social bookmarking): http://delicious.com/
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- Twitter (microblogging): http://www.twitter.com/
- Diigo (social bookmarking): http://www.diigo.com
- Web 2.0 Toolkit: http://web20-toolkit.wetpaint.com/
- Web 2.0 in Education: http://web2educationuk.wetpaint.com/
- Baker’s Dozen: http://bakersdozenarizona.wetpaint.com/
- Web 2.0 Applications Index: http://www.go2web20.net/

Endnotes

1. For more information, see ELI’s 7 Things You Should Know About Wikis, http://www.educause.edu/ELI/7ThingsYouShouldKnowAboutWikis/156807.
2. For more information, see ELI’s 7 Things You Should Know About Social Bookmarking, http://www.educause.edu/ELI/7ThingsYouShouldKnowAboutSocia/156804.