

TEACHING WEB 2.0 TO STUDENT 1.5: EFFECTIVE METHODS FOR INTRODUCING NEW INFORMATION TOOLS

ROBIN L. EWING AND MELISSA K. PRESCOTT

BACKGROUND ON STUDENT USE OF WEB 2.0

Recent reports on the online behavior of teens indicate that today's youth are avid users of Web 2.0 tools such as social networking, blogging, and photo sharing (Lenhart, Madden, Macgill, and Smith, 2007; National School Boards Association, 2007). As a result, academic librarians feel an urgent need to become familiar with these tools. Many academic librarians have begun experimenting with social networking, blogging, and podcasting to reach and connect with students in this age group (for examples, see Draper & Turnage, 2008; Farkas, 2007; Kroski, 2007). At the same time, some librarians believe that students do not want librarians invading their social spaces.

To determine their library's appropriate participation level on the Web 2.0 continuum, instruction librarians at St. Cloud State University (SCSU) began discussing blogs, wikis, podcasts, and other tools in library instruction and one-on-one reference interactions. Unexpectedly, students consistently responded with blank looks. The librarians noted that while students regularly use Facebook, MySpace, and YouTube, they appeared to be much less familiar with other Web 2.0 tools such as blogs, podcasting, social bookmarking, wikis, and RSS.

WEB 2.0 AWARENESS SURVEY

To test this observation, librarians asked students enrolled in semester-long information literacy courses to complete a Web 2.0 Awareness survey. Seventy-four undergraduate students (26 male and 48 female) completed the survey. As suspected, an overwhelming majority had used YouTube (93%), Wikipedia (93%), and Facebook or MySpace (91%). A much smaller percentage of students had read or posted information to a blog (66%). Surprisingly, only a few students had listened to a

podcast (20%), used a photo sharing tool such as Flickr (17%), used a wiki besides Wikipedia (13%), or used social bookmarking tools (5%). Remarkably, only a handful of students had heard about RSS (8%), and none had ever used an RSS feeder or aggregator. For more detailed survey results, see Appendix A.

The fact that SCSU undergraduates were less familiar with Web 2.0 tools than the national surveys reported, along with the increased prevalence of Web 2.0, raised a concern among librarians that students were encountering these resources in their research without knowing anything about them. Information literacy concepts become even more difficult for students to grasp in the Web 2.0 environment. Even if students understand that they are using information from the social Web and that they need to be critical of that information, "concerns remain that students will be unable to evaluate the authority of articles without identifiable authors and which are published without traditional editorial control" (Deitering & Bridgewater, 2006).

CURRICULAR OPPORTUNITIES

In an effort to address awareness and evaluation issues of Web 2.0 resources, librarians developed mini lessons on specific information tools and introduced them to students in semester-long information literacy courses. Initially these lessons were part of a one-credit information literacy class that was being piloted at SCSU. This course was co-taught the first time it was offered, allowing two librarians to develop the lessons together. The mini lessons were popular with students and were expanded and modified to be included in the three-credit information literacy courses already established on campus. Typically, these courses are taught by faculty librarians. One course (IM 104) focuses on the organization of information and basic research and information literacy skills, while the other course (IM 204) focuses on research strategies with a diversity perspective.

In the initial one-credit course, offered in spring 2007, the co-instructors decided to devote the last five minutes of each

Ewing (Access Services Coordinator & Assistant Professor)
and *Prescott* (Reference Coordinator & Assistant Professor)
St. Cloud State University [St. Cloud, MN]

class to a particular social software/Web 2.0 tool. They used a variety of methods for introducing these resources to students including short PowerPoint presentations and YouTube videos. Each mini lesson included an overview of the tool and examples of the tool in action. In subsequent courses, in-class activities and methods for evaluating each tool were also included as part of the lessons. These activities continue to evolve each time the courses are taught. For a list of tools and products discussed, see Appendix B.

IN-CLASS ACTIVITIES

In-class activities provide a practical way for students to learn about Web 2.0 tools. One activity that students have done more than once is a Flickr library tour. This activity was developed to liven up the traditional library tour. For this activity students are put into groups of 5 or 6. Each group is given a digital camera, assigned an area of the library, and directed to take pictures of anything that they think is important or interesting. Once they've taken the pictures, they upload the pictures to a Flickr account created for the class. To become familiar with tagging pictures, students spend five to ten minutes playing with the Google Image Labeler (<http://images.google.com/imagelabeler/>). The groups then work on tagging their own pictures in Flickr. Like all activities and assignments, this one continues to evolve. In the beginning, students were sent out without much direction, but some students commented that they wanted a library tour. The students now receive an abbreviated tour covering the service desks, periodicals, and the basement before going off to take pictures. See Appendix C for this activity.

During the fall 2007 semester, the presentation on social bookmarking was supplemented with a video and an in-class activity because the original PowerPoint presentation did not adequately explain the topic. After the PowerPoint presentation, students viewed the Common Craft video, "Social Bookmarking in Plain English," available on YouTube. Students enjoyed the video and asked to learn more about del.icio.us. Students worked on a short in-class activity that required them to register for a del.icio.us account and tag a few Web sites during the next class period. See Appendix D for this activity.

The mini lesson on podcasting was also updated in fall 2007 to include a section on evaluating podcasts. When podcasting was first presented, few resources on evaluating Web 2.0 existed. Since then, some evaluation guides have been developed including the *Online* article, "Stick it in Your Ear: Keeping Current with Podcasts," by Adam Bennington. This article provides a detailed description of how to evaluate podcasts. Evaluation criteria (pp. 31-32) include:

- Is the podcast associated with someone reputable?
- What does the accompanying Web site say about the podcast?
- Is there a way to contact the host?

- How old is the show?
- Is a special player or proprietary software needed to play the show?
- How is the audio quality?
- How easy is it to acquire?

After a short PowerPoint presentation, students listened to the first episode of the podcast, *Unbroken Chain: My Journey through the Nazi Holocaust*, by Dr. Henry Oertelt. Dr. Oertelt, a Holocaust survivor, has spoken on the SCSU campus several times through the Center for Holocaust and Genocide Education. In a series of podcast episodes, available from the SCSU radio station (<http://www.KVSC.org>), Dr. Oertelt reads from his book and describes 18 events in his journey. After listening to the first episode, students evaluated the podcast's Web site using Bennington's checklist. The Oertelt podcast meets most of the criteria in the checklist. In addition, the podcast's Web site includes a study guide and links to additional sources. This exercise allowed students to apply the evaluation criteria to a practical example.

IMPLICATIONS FOR INFORMATION LITERACY INSTRUCTION

While the introduction of Web 2.0 tools in undergraduate classes will help students recognize them in online search results, the evaluation of these sources should be the primary focus of information literacy instruction. Students "need to understand how easy it is to create information and then learn to question, think critically and be able to evaluate material" (Godwin, 2006, p. 282). The typical criteria used to evaluate traditional Web sources may not be sufficient given that "The variety of information sources available via Web 2.0 makes it challenging to apply a 'checklist' approach to evaluation" (Deitering & Bridgewater, 2006).

To account for the social nature of Web 2.0 sources, Laura Cohen and Trudi Jacobson recently published "Evaluating Web Content." This useful guide provides tips for evaluating traditional Web sites as well as Web 2.0 sources like blogs, wikis, and social networks. Librarians need to focus on developing additional techniques for teaching Web 2.0 evaluation and sharing those methods through presentations and publications.

In addition, issues of privacy are important for librarians to include as part of Web 2.0 instruction. Students must realize the implications of posting personal information on the social Web, such as the use of this information by professors and/or employers. A discussion of who owns and controls information students post on free services such as Facebook, PBWiki, and Flickr would also highlight intellectual property issues.

NEXT STEPS

Instructors will continue to adapt teaching techniques

as Web 2.0 tools appear and evolve. At a minimum, evaluation should be part of each lesson. One obvious improvement is to integrate more videos like “Social Bookmarking in Plain English.” Students love video; the quick clips capture student attention and interest. Additionally, since the Awareness survey indicated that few students had created Web 2.0 content, students could do this through class assignments. For example, students could start their own blogs and use them as research logs. Also, students could write Wikipedia articles as Guess describes in his recent publication, “When Wikipedia Is the Assignment.” Another idea is for students to use del.icio.us accounts to bookmark and tag useful Web sites discussed throughout the semester.

As an alternative to spending more class time on Web 2.0, instructors could use a structure similar to “Learning 2.0 – 23 Things” (<http://plcmcl2-things.blogspot.com/>) from the Public Library of Charlotte & Mecklenburg County. In this program, participants explore various tools and share their experiences through blog postings. By using this structure, more content could be delivered out of class leaving more in-class time for other course objectives. Another way to maximize class time would be to assign short readings, such as those in the “7 Things You Should Know About...” series from EDUCAUSE, prior to introducing the Web 2.0 tools in class.

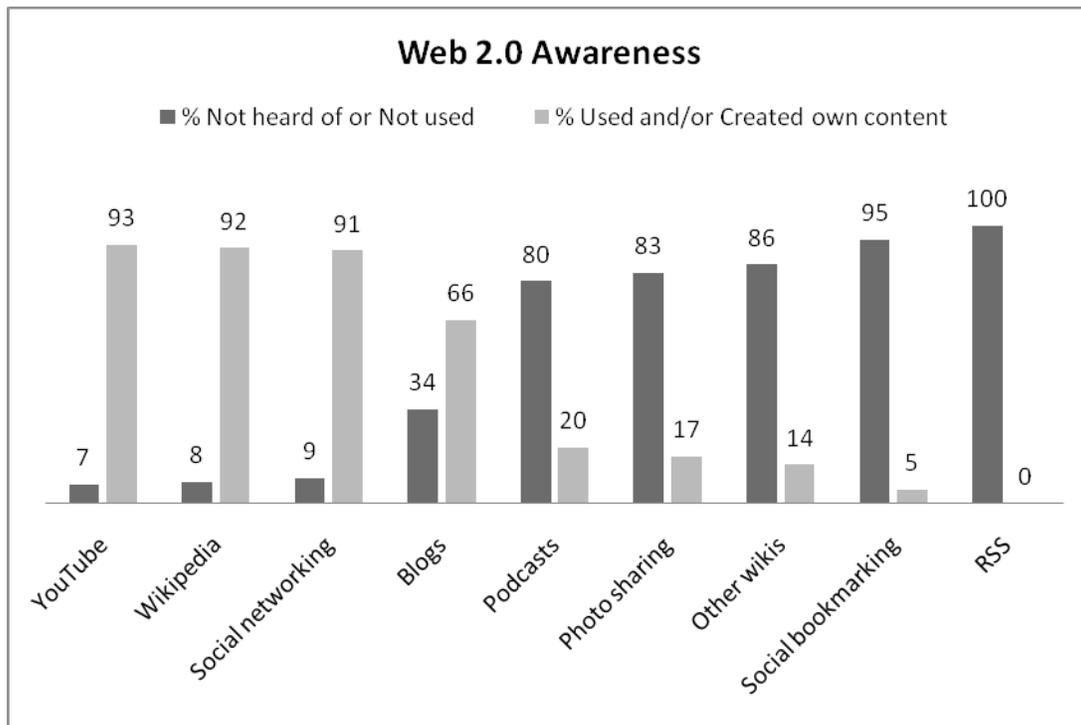
CONCLUSION

When SCSU librarians discovered their students’ lack of awareness of Web 2.0 tools other than Facebook, MySpace, and YouTube, they developed a program to introduce these tools and concepts in various information literacy credit courses. In class, students learn about blogs, wikis, podcasts, and similar tools through various teaching methods. They also develop evaluation skills specific to Web 2.0.

Part of being information literate is recognizing different types of information sources and evaluating them appropriately. Academic librarians should assess their own students’ Web 2.0 awareness and determine the appropriate tools and activities to include in information literacy classes. Students first need to develop an awareness of the tools, and then an understanding of best practices in content creation and evaluation methods. As Web 2.0 continues to evolve and new tools are developed, librarians need to make sure their students are using them effectively.

APPENDIX A

St. Cloud State University Undergraduate Web 2.0 Awareness Survey Results



APPENDIX B

Tools Discussed

Social bookmarking and tagging: del.icio.us, Ma.gnolia, Flickr, Google Image Labeler

Visual searching: Grokker, AquaBrowser

RSS: Bloglines, Google Reader

Social sharing and collaboration: Blogger, PBwiki, Wikipedia, podcasting, YouTube

Social networking: Facebook, MySpace, Ning, Twitter

Google products: Google Scholar, Google Docs, Google Maps

APPENDIX C

Flickr In-Class Activity

1. Go to <http://www.flickr.com/>
2. Click Sign in
 - a. Yahoo id: fall2007im204
 - b. Password: *****
3. Working in the groups from Tuesday, you're going to tag the pictures that you took. Divide up the pictures among the group as you see fit. Add a minimum of three tags per picture. Add notes to the photos as you see fit.
4. What about the pictures of people? Are you allowed to post them without consent? What does Flickr say on this topic?

APPENDIX D
Del.icio.us In-class Activity

1. What is a tag? Read the [Wikipedia definition](http://en.wikipedia.org/wiki/Tag_%28metadata%29) available at http://en.wikipedia.org/wiki/Tag_%28metadata%29
2. Discover tag clouds. From Wikipedia:
“A tag cloud (or weighted list in visual design) can be used as a visual depiction of content tags used on a Web site. Often, more frequently used tags are depicted in a larger font or otherwise emphasized, while the displayed order is generally alphabetical. Thus both finding a tag by alphabet and by popularity is possible. Selecting a single tag within a tag cloud will generally lead to a collection of items that are associated with that tag.”
3. A good example of a tag cloud is the [Tag Cloud at Flickr](http://www.flickr.com/photos/tags/), see <http://www.flickr.com/photos/tags/>. Scroll to the middle of the page to see the tag cloud. Notice the differences in the font size and boldness of the words. Most popular tags are larger and bolder. You can click on any tag to see photos that were tagged with that tag.
4. Read [What is del.icio.us?](http://del.icio.us/about/), available at <http://del.icio.us/about/>.
5. Read [What are tags? \(in del.icio.us\)](http://del.icio.us/help/tags), available at <http://del.icio.us/help/tags>.
6. [Register](http://del.icio.us/help/tags) for your own del.icio.us account at <http://del.icio.us/help/tags>. If you install the buttons in your browser on your home computer or laptop, you can easily post any site to your del.icio.us account and view your bookmarks, right from your browser toolbar.
7. Once you have your own account, open a new window and surf to your favorite Web sites. Post the sites to your del.icio.us account, adding comments and appropriate tags.
8. Share.
 - What do you like/dislike about del.icio.us?
 - How might you make use of this tool?

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