Evaluating Social Networking Tools for Distance Learning

Ellen S. Hoffman
Department of Educational Technology
University of Hawai'i at Manoa
Honolulu, Hawaii, U.S.A.
ehoffman@hawaii.edu

Abstract: Debates rage about the appropriateness of using social networking in teaching, with arguments ranging from waste of time and distraction from academic goals to needed to reach net generation students. This paper explores a range of current social networking choices and argues that like any tool, it should carefully evaluated in terms of affordances and course goals. Several different tools are reviewed, and questions that might be useful for evaluation are discussed. An example of using a social networking tool, Ning, in an online class is reported.

Introduction

In an online debate hosted by *The Economist* about the value of using social networking in education, opinions ranged from waste of time and distraction from academic goals to empowering and inevitable ("Economist debates: Social networking," 2008). Based on Internet voting, 63% supported the proposition that social networking will bring large, positive changes to educational methods. Similar debates have occurred elsewhere online, in periodicals, and in schools raising issues of affordances versus challenges common to any new technology.

Many advocates promote the use of social networking for community building and increasing student engagement in higher education classrooms. Some critics have suggested that the links between computer-mediated discussion (CMC) and learning or engagement are not well documented, proposing that such advocacy is more hype than reality (Godwin, Thorpe, & Richardson, 2008). But recent studies such as that by Mazer, Murphy and Simonds (2007) indicate that teacher self-disclosure via social networking can increase motivation and improve classroom climate thus impacting student outcomes.

In many of these debates, the focus is often limited to the massive and most well known of the social networks, MySpace and Facebook, particularly because media coverage has ensured that even those who have limited familiarity with social networking have heard about these Internet environments. However, social networking tools are more diverse and in fact, some may better fit specific class needs.

This paper examines examples of the social networking tools available for use by educators, then explores in greater depth the use of a particular one, Ning (http://www.ning.com), in a distance learning course. Rather than a blanket endorsement

or condemnation of social networking, the case study supports the more sophisticated recognition that technology is only a tool that is successful when carefully evaluated to meet learner needs and course goals.

Definitions of Social Networking

Social networking covers a wide range of online environments, with many formal definitions broad enough to encompass almost any Web 2.0 collaborative environment (Alexander, 2006). While various public social collaborative environments existed on the Internet as early as the 1980s, the emergence of social networking as it is best understood today arose with the large commercially-supported sites such as Friendster (2002), LinkedIn and MySpace (2003), and Facebook (2004), along with content-sharing focused sites with limited social network features such as Flikr (2004) and YouTube (2005). Other social networking sites were developing which have higher usage outside the U.S. including Orkut (2005), popular in South America and Asia/Pacific areas, Bebo (2005) in Europe and Australia, and QQ (2006) in China. With the development of Twitter in 2006, social networking took a new twist that increased immediacy and incorporated mobile phones into the social mix.

Boyd and Ellison (2007) include three criteria in their definition of social network sites (SNSs) which are:

> web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. (paragraph 4)

Further, they note that many SNSs commonly allow users to leave persistent comments on "friend's" profiles and send private messages although these are not universal features. In particular, rather than communities organized by topic, SNSs are "structured as personal (or 'egocentric') networks, with the individual at the center of their own community" (Boyd & Ellison, 2007).

Perhaps more critical from an educational viewpoint, many of the SNSs are enhanced with multiple collaborative tools that go beyond the personal profile and "friending" links, including the ability to post and share files (text, images, audio and video), participate in discussions or blogs, co-create and edit content with wiki-like tools, and link in and tag external resources from other web sites paralleling social bookmarking. Sites such as Flikr or YouTube are in fact more commonly seen as environments primarily for sharing content, digital pictures and video respectively, rather than SNSs despite meeting the Boyd and Ellison criteria.

Examples of Social Networking Sites for Education

Multiple lists exist of SNSs appropriate for education, each with links to multiple tools and descriptions or charts comparing features. One of the better known is that by Jane Hart (2007, 2008), who maintains the Centre for Learning & Performance Technologies

(http://c4lpt.co.uk/). In her education focused site, Hart tracks the emergence of Web 2.0 tools for learning and polls technologists world-wide to develop a list of the "Top 100 Tools for Learning" (http://c4lpt.co.uk/recommended/top100.html), with the most recent compiled in October 2008 based on nominations from 223 learning professionals.

Hart categorizes social networks as tools "for creating social networks and communities and supporting social learning" (http://c4lpt.co.uk/Directory/Tools/social2.html). While she includes Facebook and LinkedIn as public tools in her Top 100 list, along with Twitter and tumbler/twhirl for microblogging, the sites included as "private social networking tools" have particular relevance for distance learning. These allow development of course spaces dedicated to a particular community with the potential, but not requirement, to link to broader audiences.

She identifies 60 private social networking tools for education as of the end of 2008, with Elgg (http://elgg.org/) and Ning (http://www.ning.com/) topping her list. Both are freely available and allow users to create their own social communities, with Elgg being open source and downloadable to host on one's own server, while Ning is an advertising-supported cloud application. Either allows creation of a community that is internal, with viewing limited to members only, or external, with open or closed membership and content available to all on the Internet. For a fee, users may add additional services and features. This is in contrast to the more well-known sites such as Facebook or MySpace which are publicly viewable and joinable by all.

What makes each private social network environments particularly useful for education are the communication tools and widgets that allow building customized environments for blogging, discussions, file/content sharing, and messaging as well as sub-groupings within the larger network for smaller or specialized team activities. Each user creates a profile and is then able to develop private content or participate in shared spaces. Unlike the public networks, these tools also allow the site creator/managers to determine access, tools available, and customized site appearance.

An easy way to learn more about the features and potential of these tools, a topic too lengthy for this short paper, is to join one of the large public networks developed on either platform devoted to educational uses. In the case of Elgg, *Eduspaces* (http://eduspaces.net/) was launched in 2004 and now has over 19,000 members including course examples. A similar community in Ning is *Classroom 2.0* (http://www.classroom20.com/) with 17,000 members.

Starting Resources for Tool Evaluation

With so many options available and new examples continually appearing, how should an instructor determine which might be appropriate for a particular distance learning situation? Multiple approaches have been recommended in evaluating social networking environments for course designers (Bower, 2008; Hart, 2008; Mason & Rennie, 2008; Storey, Phillips, Maczewski, & Wang, 2002). Typical of most is an analysis of context and goals, involving examining technology, pedagogy, learners, and resources for

development and support. Evaluation tools also exist that are specific to assessing SNSs beyond learning that provide useful analytical frameworks for course designers (Byrne, 2008; digizen.org, 2008; Gallant, Boone, & Heap, 2007).

Particularly useful are the resources from JISC, including their multimedia information kit for higher education, "Effective Use of Virtual Learning Environments" designed for instructors (http://www.jiscinfonet.ac.uk/InfoKits/effective-use-of-VLEs). They remind course designers to keep in mind: "the reasons you intend to use a VLE especially the intended benefits for you, the tutor, and for your students; the different ways in which the VLE will assist your students achieve the learning outcomes of the course; the student activities you are going to use in the VLE; and the content you will need to support these activities."

A Case Study in Implementing Social Networking for Distance Learning

The case which illustrates the implementation of a selection process shows that the real-world is not nearly as neat as suggested by any rubric or checklist. Beyond the questions of technology and pedagogy were history, environment, and the time constraints on design and implementation of a distance learning course.

The course was an undergraduate class in educational technology for teachers at the University of Hawaii at Manoa taught by the author and other faculty. Typical students in the course include juniors and seniors taking the course as a requirement in their teacher education program and practicing teachers who are graduate students seeking additional technology skills. Students typically range in age from their early twenties to early fifties and sometimes older. Skill levels range from novice to experienced Internet users, with most students falling closer to the lower end on technology skills.

The course is fully asynchronous with weekly modules. These online lessons are supplemented by two optional and usually sparsely attended synchronous sessions, as most students prefer the flexibility to work without a set schedule and quickly gain autonomy in their ability to work with course materials. Course activities include online discussions, individual assignments, and collaborative group projects, the latter completed wholly online as students are frequently on different islands and therefore separated geographically. Students use multiple online collaborative and local productivity tools, although the main content for the educational technology course is structured within a traditional course management system (CMS). Some tools external to the CMS are required to complete assignments while others are links to explore, and in every case tools are implemented for completing a learning activity rather than just as a technology demonstration.

The course is an ongoing one, offered in multiple sections every semester and typically updated yearly, with each instructor able to customize the main content and activities to fit their particular interests and teaching style. However, few instructors have the time to fully re-develop the existing modules and it is most often used with only updates to any dead links and addition of a few new resources an individual instructor wants to feature.

As the course was being revised in mid-2008, the issue that arose was not initially about finding a social networking tool but identifying a better discussion forum to respond to technical problems and student complaints about CMS tools previously used. Other design objectives were to model the use of emerging technologies, impact both cognitive and affective domains of learning with the recognition that both formal and informal interactions are critical to student engagement and motivation, and find tools that promoted student-student interaction. Student-to-student interaction has been promoted as one of the keystones in student satisfaction with distance learning as shown through multiple meta-analyses of DL (Tallent-Runnels, et al., 2006; Zhao, Lei, Yan, Lai, & Tan, 2005). Finally, when possible without distracting from the academic objectives, an underlying intent is to provide an environment that offers a "fun" experience for the students with the recognition that distance learning remains less satisfying for most students than the face-to-face classroom (Young, 2007).

While there are multiple online and freely available tools that have discussion forum capability, the private social networks have the advantage of including capabilities that met other course objectives, such as formal and informal student interactions, the ability to create an individual "personality" in cyberspace, the potential to establish a more personal learning environment within the larger course structure, and content sharing tools that could be used to encourage creativity. After exploring tools recommended by various educational web sites including Jane Hart's "100 Tools," reading reviews and early research reports on the use of social networking (for example, EducauseConnect., 2008), and talking to colleagues who were also exploring social networking in their scholarly work and teaching, the decision was to adopt Ning.

At the time, Ning (http://www.ning.com) had a number of advantages in reviewing features, complexity, user interface, and ability to support course activities. A primary appeal was that it was freely available to any educator, even one with limited technical skills given multiple instructors, to set up a private space for a class and did not require local server infrastructure. Features included the needed discussion forum, but the social networking aspects allowed students to develop a customized profile, make connections, and share personal and course related resources including images, video, text and web links, and the ability for an instructor to select which features to use or restrict while adding a somewhat customized appearance. Further considerations, since the site is advertising supported, were that students retained their privacy and the corporation that ran the site had sufficient stability to ensure the site was not likely to disappear mid-semester.

The result, based on the use in ten sections to date, is that Ning has been a positive asset in the course, by providing a formal structure for required discussions, for helping students as they work on collaborative projects, and for the informal comments and messages that helped personalize student interactions.

As a first assignment, students logged in, posted a digital picture of themselves, customized their personal page, and were required to visit other students' profiles. They

quickly began making "friends," adding comments on each other's pages, and many shared images of their personal lives, including pictures of family and children, weddings and parties, and videos of excursions to the beach or just working at home. About half the students made the decision to share personal information while others later indicated that, being new to social networking, this was not something they were comfortable doing themselves but enjoyed seeing what others posted.

As the semester progressed and the workload intensified, fewer students continued to post new personal images and comments, but in the required discussions on Ning, there was clear indication of connection that helped intensify interactions and increased comfort relating differing opinions. Students later noted how much it helped to "see" who they were talking with online via the images that appeared both when opening the course Ning site and as a thumbnail with each discussion response. A small number of students consistently added digital resources to help classmates with assignments or just to keep them laughing. Said one student, "Ning put faces to names and allowed everyone to interact in a less formal, yet still professional way."

The end-of-course evaluations indicated that some students had initially found the use of Ning confusing because it existed external to the course management system holding the weekly modules and assignment information, but all indicated that this was a short-lived problem. The overall rating of the course was higher than previous iterations, and most students indicated student interaction as the first in their list of the three highlights of the course. None suggested removing Ning as a course tool in future classes.

There was insufficient evidence to suggest that Ning directly impacted individual student achievement. The indication from student comments and instructor assessment of assignments was that social networking had a greater impact on affective aspects of the online class, making a significant difference in student motivation, retention, engagement, and satisfaction. This was reflected not only in the comments about the online course and structure, but in positive reactions to the instructor(s) because all class participants had become more "real." For example, one student in the class noted that with Ning, the student connections went beyond what she might have found in a campus-based class:

> I loved the personal piece of it. I enjoyed learning from my peers and seeing what works for them in their classrooms. I also liked that I really got to know those students with whom I had more in common with. It was easy to communicate and nice to learn about everyone in the class, whom I may not have interacted with in a face-to-face class.

Recommendations and Conclusion

The concept of the essential need to evaluate instructional technology to best fit a particular learning situation is hardly new, dating back to the audiovisual movement in the past century (for example, Day, 1976; Reed & McNergney, 2000). The failure of past technologies, promoted and adopted because advocates' overstated claims and educators

were too often attracted more by novelty than effectiveness, have been well documented (Cuban, 1986; Maddux & Cummings, 2004). But when carefully selected, a tool may not only enhance a course and provide a platform for needed strategies but add new and useful capabilities not expected.

Social networking is a tool, with both its advantages and problems for usage in teaching and learning. When used in a learning context where affordances of the technology are carefully evaluated in terms of pedagogical requirements and student learning outcomes, including those elements that result in a supportive and collaborative learning environment, these tools offer significant advantages for distance learning. Among the positive attributes are impacts on student engagement, motivation, personal interaction, and affective aspects of the learning environment. In the case study reported here, specific positive effects included the balancing of individual creativity and personal interactions with the need for structured learning and collaborative course activities. The direct contribution to student achievement remains to be proven, but when technology supports an affirmative, constructivist learning environment and contributes to successful pedagogical strategies without distracting from essential objectives for development of knowledge and skills, the result of formative evaluation of social networking potentials for distance learning is positive.

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