Teaching Social Software with Social Software

by Ulises Mejias

This article explores how the current wave of information and communication technologies (ICTs) known as *social software* can enable new forms of study and research, preparing students to participate in networks where knowledge is collectively constructed and shared. This approach to learning, which I call *distributed research*, might be attractive to educators because it exhibits three comparable advantages to those associated with problem-based learning (cf. Watson 2002; De Vry and Watson 2003). First, it engages students in learning to learn by having them assume some of the responsibility for integrating and maintaining the social software systems that allow learning to happen. Second, it promotes the benefits of working cooperatively with tools that facilitate the aggregation and organization of knowledge while at the same time demonstrating that the diversity of individual research interests enhances learning for all. And last, it helps students develop practical research skills that they need in a world where knowledge construction and dissemination make increasing use of online information networks. In short, social software allows students to participate in distributed research communities that extend spatially beyond their classroom and school, temporally beyond a particular class session or term, and technologically beyond the tools and resources that the school makes available to the students.

In what follows, I first provide a more detailed definition of social software and explain the importance of studying it in an educational context; I then illustrate and discuss my particular experience in teaching a course on social software *with* social software in a manner consistent with what I have just described.

The Concept of Social Software

Vicki Suter, Bryan Alexander, and Pascal Kaplan (2005) conducted a review of various definitions of social software, identifying at least three possible perspectives for defining it: "social software as a tool (for augmenting human social and collaborative abilities), as a medium (for facilitating social connection and information interchange), and as an ecology (for enabling a 'system of people, practices, values, and technologies in a particular local environment')" (48). With these perspectives in mind, any definition of social software therefore needs to be broad enough to encompass technologies as varied as the following:

- blogs: personal Web publishing systems;
- wikis: collaborative content management systems that allow any user to create or edit pages instantaneously;
- distributed classification systems: software that allows individual users to classify items by associating them with any number of keywords known as tags, which are then aggregated by the software for the benefit of the whole community; and
- rich site summary (RSS) feeds: a subscription system that alerts the user when new content is available, for example, in a blog, a wiki page, or a particular tag in a distributed classification system.

While the polysemic nature of the term social software is indicative of its newness, the history of how computers have been applied to replicate or enhance social dynamics is as long as the history of computers itself (c.f. Allen 2004). Perhaps what makes social software unique then is not only the new generation of tools that can be grouped under the label but also the fact that these technologies have reached a widespread use in a very short time. According to a report by the Pew Internet Project (2006), it took the Web less than four years to gain an audience of 50 million while it took radio almost 40 years to gain that same number of users.

This rapid dissemination, however, can sometimes mean that there is not enough time to think carefully about the applications and affordances of the technologies. In the course I taught, it was my intention not only to give students hands-on experience conducting distributed research using some of these new technologies but also to encourage the class to address more fundamental questions regarding them: What is social about social software? How is the notion of community being redefined by social software? How is social agency shared between humans and code in social software? What are the social repercussions of unequal access to social software? Can social software be an effective tool for individual and social change?

The Social Software Affordances Course at Teachers College

During Fall 2005, I taught a course titled Social Software Affordances at Teachers College, Columbia University. This graduate seminar had a total enrollment of 13 graduate students from the Communication, Computing, and Technology in Education (CCTE) program. The course aimed for students to acquire proficiency in the use of social software for conducting distributed research while engaging in a critical analysis of the affordances of social software, or the types of actions the technology makes possible or prevents. Because a central theme was the exploration of social software to effect social change, the course also asked students to apply their newly acquired skills and knowledge to promote a social cause or project of their choosing. In order to accomplish these objectives, I organized students into a distributed research community: a work group that used social software to explore a topic collectively by sharing and organizing resources, analyzing data, reporting on individual research projects, and contributing to group projects.

The syllabus (Exhibit 1) identifies the following three learning objectives for the course:

1. The class will develop competency in the use of blogs, wikis, distributed classification system, and RSS subscription feeds.
2. The class will perform a state-of-the-art review of social software tools, applications, and theory, focusing on a critical assessment of the affordances of social software.
3. Class members will conduct an individual exercise on the potential of social software to effect change at a personal and social level.

Although the students met for a few classroom sessions (one introductory session, one mid-point session, and one final session plus some informal meetings), most of the classwork unfolded online. A central Course Blog disseminated information about the course itself, its assignments, its suggested readings, and other material pertinent to course activities. Using a free distributed classification system called del.icio.us, the class contributed to a repository of research pertinent to our studies. Students also set up personal blogs where they could post individual reactions to the research and the class readings or update the rest of the class about their individual projects. Using a RSS aggregator, a program that allows users to subscribe to and read RSS feeds, students were able to track new additions to the research repository instead of having to check each resource individually and repeatedly to see if any updates had been made. The class as a whole also edited a final wiki project, which we collectively defined in the earlier part of the semester. Although all of the class activities and tools functioned in conjunction with one another, each activity warrants further detail.

Distributed Research: The Power of Many

The distributed classification system referred to above consisted of using del.icio.us to bookmark items related to social software by assigning to them the tag "ccte" (for Communication, Computing, and Technology in Education, the name of the program at Teachers College). The resulting (and ongoing) collection of links can be viewed here. All students were expected to contribute items throughout the semester. Students were also expected to subscribe to the RSS feed generated by del.icio.us as a way to keep track of all contributions. Class members then explored items of personal interest and discussed them in their individual blogs, often in the context of the books assigned as course readings on the syllabus.

But beyond the benefits of better information management, this exercise turned students into contributors, not mere recipients, of knowledge about social software. Students became researchers who could add something to our study of the topic while at the same time building their own collection of resources tagged according to their own classification schemes. Of course this required that I, as the instructor, be willing to give up the role of being the sole source of information. Yet this strategy benefitted me as well, exposing me to more research, resources, and ideas than I could identify on my own. My interest and knowledge of the topic, in other words, were augmented by the contributions of my students.

Blogging: Finding an Individual Voice

Contributing to a pool of resources is valuable in and of itself, but a detailed examination of social software requires a more individualized space for reflection, which is why I asked everyone in the class to maintain a blog throughout the course. Of course, this activity also was intended to expose students to issues of identity, writing style, posting frequency, community formation, and the like that accompany the use of blogs.

In his individual self-evaluation at the end of the course, one student summarized the experience of being introduced to this new form of communication:

For the first time, I really delved into the world of blogging, examining blogs of many types, reading "blogs of note" and award winners. I really enjoyed the convoluted paths wound from one blog to the next by clicking on blog rolls. Eventually I started to get a feeling for how things worked. I explored the possibilities for add-ons for my blog. I added Sitemeter to measure traffic, included syndicated feeds from del.icio.us and feed digests, and customized the templates from each to match the look of my site. . . I started to get anonymous hits and comments on my blog. Even though there were not many, it was very exciting. I began to see the addictive nature of blogging and the excitement of participating in a large, distributed conversation. (M. Curinga, personal e-mail, December 24, 2005)

The blog also served as a journal of each student's engagement with the readings. Instead of relying upon a fixed reading schedule, I experimented with letting students read and report on readings in the order that interested or made sense to them. My hope was that by reading a review of a book or chapter posted by one of their peers, students would be motivated to read that section as well, if it matched their individual research interests at the moment. The motivation would be different than in the case of my telling students what to read and when to read it.

Wikis: Synthesis and Collaboration

While blogging encouraged individual reflection, requiring students to synthesize their knowledge in a wiki project that they could author collectively allowed the class to explore collective uses and negotiations of knowledge (c.f. Ferris and Wilder 2006). After a series of discussions, students agreed to start a wiki to identify social software design patterns. The resulting Design Patterns of Social Computing Wiki attempts to capture the essence of various problems in social software and illustrate best practices and good designs that have been employed to tackle them. We consider this a work in progress and hope that other interested parties become involved in this ongoing project, which could become a useful resource for the community.

Issue Entrepreneurship: Putting the "Social" in Social Software

I wanted the course to be more than just a review of social software and a theoretical discussion of its affordances. In my own work (c.f. Mejias 2005), I argue that the true potential of social software lies in helping us figure out how to integrate our online and onsite social experiences. Thus, social software must live up to its name by relating to the individual's everyday social practices and fostering a desire to connect to the world as a whole, not just the parts that exist online. Furthermore, in order for software to be truly social, it must promote in the few who have access to it a responsibility for converting its benefits into benefits for a larger

part of society.

With this goal in mind, the class was asked to address the question of whether social software can be an effective tool for individual and social change. Each learner undertook an issue entrepreneurship assignment (c.f. Agre 2004), which involved identifying a social cause of interest of the student and using social software tools to attempt to make a meaningful contribution to the cause at three different levels: the personal, the local, and the global. Learners used their individual blogs to post progress reports, inviting comments from their peers. I informed students that they would not be graded on whether they succeeded or failed in making a meaningful contribution to their cause as long as they documented their experience and could discuss how social software contributed to their success or failure. This project was by far the most difficult of the course but, perhaps in the long term, the most rewarding as well.

Projects ranged widely in nature and scope and included the following:

- an online community space for the Youth Venture Media Network;
- a wiki/knowledgebase for West Siders for Responsible Development, Inc., a group protesting plans to build two towering buildings on Broadway between 99th and 100th streets; and
- a blog and a wiki to promote awareness of accessibility and assistive technology issues at Seton Hall University.

The goal of the project was to get students to think about using social software to promote social change. I expected that students would find major obstacles along the way since meaningful social change is hard work regardless of the technological means one utilizes to foster it. In fact, many projects failed in their first iterations, and students had to reconceptualize their proposals. I tried to make these frustrations part of the learning experience by addressing them in our discussion of the affordances of social software; such difficulties allowed us to recognize how the technology, for all its benefits, can only do so much. At the end of the semester, students considered their projects far from over and were willing to continue working on them because of their investment in the social issues they addressed. To paraphrase the rhetorical question posed by one student: Why do we need a class to get us involved in this type of activism concerning the social causes we feel passionate about? In the final review of her project, a student commented:

I am proud of my efforts thus far to introduce West Siders to the potential benefits of social software. At the same time, the process of change has been slower and more frustrating than I anticipated. If a primary goal of this project was to learn firsthand how hard it is to build networks and foster change using social software, that goal was certainly achieved. (Goldstein 2005, ¶ 4)

Another student remarked:

Even though it's the end of the semester, I feel it's just the beginning of my issue entrepreneurship project. It makes sense (to me) though that only after putting some time and thought into studying how social software works that I would be ready to use it effectively to pursue my issue. (Curinga 2005, ¶ 1)

One advantage of blogging about their projects as they unfolded—as opposed to waiting until the end of the class to present them—was that students recognized that they were not the only ones encountering problems, and they were able to support and critique one another.

Future Improvements and Recommendations for Practice

I believe future variants of the course may be strengthened through some adjustments. For example, although students enjoyed being able to create their own reading schedule according to their individual

interests, in the future I will provide a document at the beginning of the course that matches specific topics with particular readings so that they can better plan their readings. I will also create wiki spaces for each major reading to collect student comments regarding that text. This will allow for some collaboration and continuing dialogue around the texts even when students are not reading the same text at the same time. Also, as a means of better preparing students for the issue entrepreneurship project, I will probably include a text on understanding and driving change—for example, Gladwell's *The Tipping Point (*2002).

Another improvement I will make based on student feedback is to provide more opportunities for informal online interaction. I made a conscious decision to make all of the work produced by the class accessible to the public since this would increase students' appreciation of social software dynamics. As a result, students felt some pressure to craft their blog posts carefully because they were visible not only to the whole class but also potentially to a larger audience. While I do not think this is necessarily bad, I do recognize that there should be a space (such as a discussion board, for instance) where students can interact in a more informal and conversational manner.

I believe that with the proper adjustments, the use of social software to facilitate distributed research has much potential for implementation in other learning contexts as well. Instructors in other academic fields, particularly those who seek to cultivate a collaborative ethos of engaged research in their students, may want to consider how such social software tools as blogs, wikis, distributed classification systems, and RSS feeds can be utilized to achieve this end in their own teaching. Based on my experience and the experience of my students, I have listed a number of recommendations for practice in Exhibit 2.

Conclusion

As the diversity of the work produced and the depth of the student's observations indicate, I think the course was successful in what it set out to achieve: to organize students into a distributed research group using social software, to require them to think critically about the affordances of the technology, and to allow them to experiment with using it to promote social change.

One student summarized her progress at the end of the course in this way:

. . . today I can call myself a reflective social software user. I'm able to decide which social software tool (or combination of tools) is better in a specific situation based on the pros and cons of each one of them. However, I cannot say that I'm a specialist in this field: only now I understand that I have more questions than answers. (Teif 2005, ¶ 2)

In conclusion, while the size of the class does not represent a large enough sample to make generalizations, I do believe based on my experience teaching this course that social software can be used to create effective distributed research communities. I also feel that a similar design can be used to teach classes in different subject matters. Most importantly, I think the application of social software in this manner supports a constructivist pedagogy where students feel empowered to take charge of their own learning.

References

Agre, P. E. 2004. The practical republic: Social skills and the progress of citizenship. In *Community in the digital age: Philosophy and practice*, eds. A. Feenberg & M. Bakardjieva, 201-223. Lanham, MD: Rowman & Littlefield. http://polaris.gseis.ucla.edu/pagre/republic.html (accessed May 19, 2006).

Allen, C. 2004. Tracing the evolution of social software. http://www.lifewithalacrity.com/2004/10/tracing_the_evo.html (accessed May 19, 2006).

Curinga, M. 2005. Issue entrepreneurship: Making bilingual-NYC.

http://mcuringa.blogspot.com/2005/12/issue-entrepreneurship-making.html (accessed May 19, 2006).

De Vry, J. R., and G. Watson. 2003. University of Delaware's faculty-IT partnership: Educational transformation through teamwork. *The Technology Source*, May/June. http://technologysource.org/article/university_of_delawares_facultyit_partnership/ (accessed May 19, 2006).

Ferris, S. P. and H. Wilder. 2006. Uses and potentials of wikis in the classroom. *Innovate* 2 (5). http://innovateonline.info/index.php?view=article&id=258&action=article (accessed May 19, 2006).

Gladwell, M. 2002. *The tipping point: How little things can make a big difference*. Boston: Back Bay Books.

Goldstein, M. 2005. IE project—A recap. http://marionblogger.blogspot.com/2005/12/ie-project-recap-as-ive-blogged-about.html (accessed May 19, 2006).

Mejias, U. A. 2005. A nomad's guide to learning and social software. *The Knowledge Tree* 7. http://www.flexiblelearning.net.au/knowledgetree/edition07/html/la_mejias.html (accessed May 19, 2006).

Pew Internet and American Life Project. 2006. A decade of adoption: How the Internet has woven itself into American life. http://www.pewinternet.org/PPF/r/148/report_display.asp (accessed May 19, 2006).

Suter, V., B. Alexander, and P. Kaplan. 2005. Social software and the future of conferences—Right now. *EDUCAUSE Review* 40 (1): 46–59. http://www.educause.edu/er/erm05/erm0513.asp?bhcp=1 (accessed May 19, 2006).

Teif, M. 2005. Final reflection. http://www.livejournal.com/~jadess_/7122.html (accessed May 19, 2006).

Watson, G. 2002. Using technology to promote success in PBL courses. *The Technology Source*, May/June. http://technologysource.org/article/using_technology_to_promote_success_in_pbl_courses/ (accessed May 19, 2006).

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