THIS WEEK: Management Strategies

Revolutionizing e-Learning: Innovation through Social Networking Tools

By Paul Signorelli

Trainers, teachers, and learners are beginning to use social networking tools in ways that promise to revolutionize the way e-Learning is produced and consumed. Innovations are carrying e-Learning far beyond its initial stages of replicating, then extending, existing classroom-base models.

E-Learning now frequently includes:
• Online learning sites driven by Wikipedia-style collaborations;
• Classroom-based efforts which benefit from social networking tools, including online discussion boards and live chats, Twitter, and Jott, many of which eventually become online learning modules through postings on YouTube; and
• Online sites where communities of learners use a variety of tools to create and share learning resources and modules.

Even the basic practice of embedding links to other resources, such as the ones in this article, extends the reach and effectiveness of e-Learning by leading learners to additional resources, at their own pace rather than one instructors established. It is education at the point of need, and the need never ends in our highly wired yet increasingly wireless world.

I will offer you links to examples of learner-centric, collaborative design that you can peruse. In addition, I have identified three tools (or platforms) that give an idea of what the next evolution of e-Learning may look like. You will also find a summary of some of the "lessons learned" that practitioners shared with me in interviews. Finally, there is research from The eLearning Guild that you may find useful as you consider whether and how to adopt social networking into your designs.

Many e-Learning practitioners are looking for examples of ways in which instructional designers are using social media. There are already a number of innovative applications that are publicly available. This week's author shows you a selection of the best uses to date of social networking, along with new tools, lessons learned, and research on what's next.

Learner-centric and collaborative examples

The result of innovations in social networking online is another tremendous move forward in learner-centric, rather than teacher-centric, instruction.

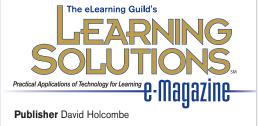Examples of such instruction include:

- Smarthistory.org, a free collaborative online art history site which was designated one of the "Top 100 Websites" worldwide by *PC Magazine* in July 2009, and which won an international "Best Education Website" Webby Award earlier this year.
- The University of North Texas Next Generation Education project.
- A classroom-based program at Kansas State University, Digital Ethnography, that uses social networking tools as an integral part of students' semester-long anthropology project.
- Small-scale adoptions of social networking technology in support of distance learning, and of high school and university projects
- The Public Library of Charlotte & Mecklenburg County's "23 Things Staff Needs to Know About Web 2.0."

Smarthistory.org

Smarthistory, combined with social networking tools, offers a new way to view e-Learning. Designed to be a dynamic enhancement or substitute for traditional Western art history textbooks, it goes far beyond the traditional model of trying to replicate classroom-based learning online. It provides education when the learner needs it – whether through a formal, organized university-level course or as a resource for those who are standing in museums throughout the world and in search of more information about artwork they are viewing. The site adds value by:

- Creating a strong element of collaboration by showing that contributors are trainer-teacher-learners
- Forming a community of learners through the Smarthistory blogs
- Providing RSS feeds for those who want to remain aware of new additions
- Incorporating well-produced Podcasts as an integral part of the learning mix
- Using Flickr for images
- Supporting extremely easy navigation

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Learning through disagreement, emotion, and passion

Founders Beth Harris, who has served as assistant professor of art history for the State University of New York's Fashion Institute of Technology, and Steven Zucker, dean of the school of Graduate Studies at the Fashion Institute of Technology, began Smarthistory as a blog in 2005. A partnership with the Portland Art Museum, and a Samuel H. Kress Foundation grant to support the redesign of the Website, have encouraged the continuing development of the project.

"The thing is that most art history texts and even audio are very authoritative-sounding – like you are being told what the work of art means – where we are interested in disagreement and emotion and passion and exploring openly, and sometimes not knowing the answers," Harris said during an online interview for this article. "We ask for content from artists and art historians and art critics. By the end of this month, you will be able to add comments to the Smarthistory pages, and we welcome that."

Reaction from users has been strong and positive. Institutions listing Smarthistory as a resource include:
- The Corcoran Gallery and College of Art;
- Education Network Australia;
- The Glasgow School of Art;
- Princeton University;
- UNESCO Bangkok;
- The University of Amsterdam;
- The University of Hong Kong; and
- The University of Melbourne.

The site, in a recent month-long period, was visited over 50,000 times by people in more than 130 countries. It is also listed as required reading for college courses, according to Harris and Zucker. Smarthistory even receives abundant praise from users of Twitter.

"We've experimented with annotating images – having students annotate images in Flicker and others tools – and we've experimented with students creating Podcasts," Harris added. "They really enjoy it, so we'd like to move toward doing more experimental things."

Next generation education at the University of North Texas

At the University of North Texas (UNT), where I am in my final semester as a (primarily online) student earning a Master of Library and Information Sciences degree, the commitment to innovative e-Learning is firm. Social networking tools are an integral part of what the school offers. Course materials are easy to access, and asynchronous and synchronous online discussions are common. An instructor who has a support team leads each of the most complex core courses. In fact, students often have the impression

that there is someone available every day, nearly every hour of the day. Students can get responses to their questions and assistance for their needs when the student needs that assistance – not just when instructors believe the help might be needed.

And that's just the beginning.

Philip Turner, Vice Provost for Learning Enhancement and Professor in the School of Library and Information Sciences, was instrumental in creating the Lifelong Education @ Desktop (LE@D) project in 2003. LE@D began as a collaborative effort between the University's School of Library and Information Sciences and the Northeast Texas Library system. An Institute of Museum and Library Sciences grant provided funding. The project expanded beyond the School of Library and Information Sciences in 2006 to become part of the University's Center for Distance Learning. It currently serves online learners through Texas library systems, state libraries, the American Library Association, and other organizations.

Noteworthy blended learning

Turner, since leaving the project, has become involved in another e-Learning initiative that combines online and on-site education. The University's Next Generation Course Redesign project was a 2008 Texas Education Star Award finalist. The project is gaining attention across the United States and offers a model that learning organizations in other countries could easily adopt.

In conversation earlier this summer and a follow-up exchange via email, Turner described how members of UNT's faculty meet on a regular basis to develop courses which combine the best of classroom-based learning with online modules. The online modules encourage students to engage in simulations and discussions. Other schools in Texas have already adopted UNT's "U.S. History to 1865" offering.

The commitment to effectively using online resources and social networking tools in the N-Gen project begins with an online video which describes the project and documents its successes. It continues with technical assistance provided to faculty through the University's Center for Teaching, Learning and Assessment, and continually focuses on the goal of creating enhanced learning experiences that completely engage students. Students use a variety of tools including Blackboard Vista and Moodle to facilitate online communication that adds to the effectiveness of classroom-based components of the courses.

Digital Ethnography

When Kansas State University assistant professor of cultural anthropology Michael Wesch posted his 4-minute video "The Machine is Us/ing Us" on YouTube

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in January 2007, he used Web 2.0 technology to introduce viewers to the potential of that collaborative technology. The video struck viewers so viscerally that the piece received nearly 10 million views by summer 2009. Follow-up efforts included the student-produced "A Vision of Students Today" using a variety of social networking tools. The 16-minute "World Simulation" is a video encapsulation of an innovative semester-long anthropology class project documented through Wesch's Digital Ethnography Web site. Students produced "World Simulation" both as a culminating online record and as an example of a student-produced e-Learning module. It began in a classroom setting with lectures, reading, and creative re-enactments of the subject being studied, and shows instructor and students taking advantage of new tools to produce lasting and shared results in learning.

"I think it is worth pointing out that we started the simulation in 2004, one year before the 'Web 2.0' buzz started to hit, and we ran it without the use of any networked digital technology for the first five semesters," Wesch said in an e-mail exchange in August 2009. "Later we added a wiki, Twitter, etc. The wiki improves collaboration among students, but has not radically changed what we are doing.

"We are definitely an example of a shift in learning, which I think of as the shift from trying to make students more knowledgeable to engaging them in real world practices that make them more 'knowledgeable' (able to find, analyze, and critique information and to collaborate and create knowledge). Social networking tools help, but only because we are using them in the service of this approach…"

"I do hope that work like mine and the others you mentioned [Smarthistory.com and the University of North Texas Next Generation Education project] carry us beyond these other modes of 'e-Learning' (which are really modes of 'e-teaching' with no real sense of whether or not anything is actually being 'learned')," he concluded.
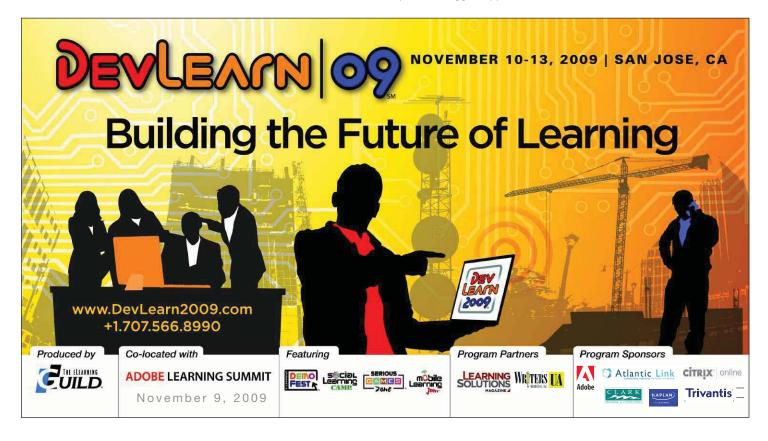
Additional school collaborations

Not all uses of social networking technology are as large or complex as the previous examples. Here are two much more modest applications. They are more modest, but they are not trivial.

Central Piedmont Community College

At Central Piedmont Community College, in Charlotte, North Carolina, distance learning has been in place for 11 years, according to instructional developer and e-media production specialist Adam Brooks. "Social networking really gathered a heated momentum in the higher education e-Learning community four years ago," according to Brooks.

The college is in the process of implementing official Twitter and LinkedIn profiles. Blogger supports course

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blogs and customized course home pages. Facebook serves "as a point of contact for students who want to continue their experiences online," he added.

Although he has not conducted controlled testing to prove or disprove the effectiveness of social networking tools in learning, Brooks does suggest that social networking as a communications tool should help, since "communication can increase retention" in online learning.

Paris-area schools

Google Apps, wikis, Facebook, and blogs have all been among the social networking tools that Julien Llanas uses effectively at a high school and university in the suburbs of Paris. Llanas is a history and geography teacher at Collège Vincent Van Gogh high school and teacher assistant at Paris V University.

One innovative project with students who were 10 to 15 years old involved the use of a blog to post book reviews they wrote. "The aim was to use the blog to encourage classical reading," he explained in an online chat conducted in July 2009. "I work in a poor neighborhood … For a couple of them, reading was a real challenge. It was a collaborative blog, so we did not make comparisons between students, but we can tell that some students who were reading with difficulty tried hard to write a review just to receive comments and obtain an audience."

One boy, who was not confident about his reading or writing skills, rose to the challenge by writing a long review on a book about Rosa Parks, Llanas added.

A university-level project designed to prepare students for an Internet and Informatics certification test through six two-hour sessions was equally immersive. The students created online lists, through a wiki, of resources available to them, and their work together introduced them to a variety of topics including copyright issues affecting their use of online material.

Charlotte-Mecklenburg Library's 23 Things

What started as an in-house project in August, 2006 under the direction of Helene Blowers has become a worldwide phenomenon. At the time, Helene was serving as technology director for the Public Library of Charlotte & Mecklenburg County in Charlotte, North Carolina. More than 250 libraries have adopted the program formally known as "Learning 2.0". Library staff members, though, much more commonly refer to it as "The 23 Things". The project encourages participants to complete 23 simple exercises designed to familiarize them with social networking tools.

Blower's concept was simple, and that is what makes it effective as an e-Learning model. It was designed to help staff learn about Web 2.0 tools by

using them, while creating a community of learners that extended throughout the entire library system. Even better, individuals or organizations not affiliated with libraries can easily adapt the project.

Clear and concise instruction

The three-month-long series of lessons and exercises begins with a clear and concise introduction to the topic. There is even a 14-minute "7 Habits of Highly Successful Lifelong Learners" module. Library Employee Learning and Development Coordinator Lori Reed prepared this module, which includes a combination of visual and verbal presentations. The lessons include Podcasts to support the written exercises. There are other modules on blogging, photos and images, RSS feeds and newsreaders, tagging, wikis, and Podcasts. The course concludes by having participants blog about the overall experience. Social networking tools explored by participants include Flickr, Bloglines, LibraryThing, Delicious, Technorati, and YouTube.

More than 300 staff members participated in Learning 2.0. One key outcome was creation of a new blog that has become one of the library's official communication tools. A Learning 2.1 project continues to be active, according to Reed.

Blowers, who has since moved on to the Columbus Metropolitan Library as digital strategy director, now writes about innovations in libraries and learning for her LibraryBytes blog. She was named a "Mover & Shaker" by *Library Journal* in 2007, and organizations all over the world have invited her to speak.

The seeds of Web 3.0

With many still struggling to master Web 2.0 social networking tools, e-Learning professionals may be more overwhelmed than elated that the Semantic Web, also known as Web 3.0, appears to be on the way. These tools place collaborators in close contact, and provide content based on users' preferences. Here are some examples that hint at where social networking and e-Learning may be headed.

Interactyx

I interviewed Interactyx Limited Vice President of Marketing and Communications Jeffrey Roth in an online chat in June 2009. He told me that the company and its Topyx software are already using social networking tools to serve online learners in schools, companies, and non-profit organizations around the world. The Judge Business School at the University of Cambridge became one of the newest users of this comprehensive e-Learning content distribution and collaborative learning platform by adopting it for use in August 2009.

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– Michael Wesch

"We've taken the best elements of the LMS (Learning Management System) world and combined them with the latest social networking tools to provide the most collaborative, easy-to-use learning environment possible. Then we took it one step further: we made it available on mobile devices as well," he noted. That's where Web 2.0 meets Web 3.0.

The geo-tagging capabilities that many mobile devices now feature help users determine when they are close enough to each other to meet in person, in addition to expediting their virtual contacts and connections. The ease with which Topyx facilitates contact among users via LinkedIn, Facebook, Skype, and other tools is part of what is making Interactyx successful, according to Roth. He claims that, "What we are doing isn't simply about flat training or education; it is about people connecting like never before in history!"

Twine

Nova Spivack is founder and CEO of the San Francisco-based technology venture Radar Networks and the Twine.com project. He is among those who believe that Web 3.0 is more than a dream, and he is doing his part to facilitate its growth through innovative social networking tools that bring e-Learning professionals and others together.

Twine.com itself, as Spivack shows in an online presentation, expedites social contacts through "interest networking." The application creates access to online resources through interest groups, called "twines." There are "e-Learning Resources," "e-Learning librarian," and "Web 3.0 – Semantic Web" twines comprised of members from all over the world. Members of each twine can establish formal connections much as they do on LinkedIn and other social networking sites. Within a twine, members post resources of use to other members of that twine. The system provides updates at intervals determined by each member. As an example, resources recently added to and disseminated via the e-Learning Resources twine include:

- A list of top tools for learning;
- An e-Learning handbook for classroom teachers; and
- Information about how to join live "Classroom 2.0" discussions using Elluminate as an online learning tool.

ELGG

ELGG is another social networking tool serving educational and other online communities. It is an open-source social engine that is also gaining attention from bloggers and others for its use in online training. Like Twine.com, it offers "a comprehensive activity stream which provides an at-a-glance look at activity from across the site, as well as your friends' activity and your own actions." Features that can be of use in e-Learning endeavors include:

- A blogging tool,

The bottom line, for e-Learning practitioners, is that tremendous innovations are underway, and there is still a large untapped audience to pursue as these innovations continue changing the way online learning is used and viewed.

• An imbedded media function allowing users to place their photos, audio clips, and files into a variety of online resources, and

• A social bookmarking tool.

Those interested in updates on how ELGG is promoting social networking in education will find additional information on the ELGG news site.

Creating online e-Learning social networks

If teaching is learning, then preparing to help others learn about social online networking tools is the best of all learning experiences.

In seeking interviewees and material for this article, I began with a variety of online resources. These included LinkedIn discussion groups for colleagues involved in workplace learning and performance throughout the United States, a few listservs with a similar audience, postings on a couple of blogs read by those involved in library training programs in several countries, and Twine.com, with its worldwide reach.

Mixed results: creating a new community of learners

The results were mixed. A few of the sources quoted in this article were drawn from a larger initial group of respondents; others became part of the project via e-mail exchanges. Brief follow-up conversations via e-mail, Google Chat, and other online tools helped determine which respondents were actually experimenting with online social networking tools in creative ways that promise to produce noteworthy results. Some respondents were interested solely in promoting products that have not yet attracted enough of an audience to show whether those tools will be effective in supporting e-Learning efforts. The follow-up conversations also helped me weed out individuals who were not able to discuss even the most rudimentary aspects of e-Learning and how social networking tools might expand the effectiveness of e-Learning in a global setting.

When the results were good, they were remarkably encouraging. The use of Twine.com led to at least one interview where it appears that the two of us will remain in contact to share what we continue to learn. Another contact, obtained through a LinkedIn group, may produce a collaborative effort to document how the results of e-Learning compare to the results of classroom-based learning. A third interview produced a two-way exchange of information and resources, which suggests that the online connection will continue far beyond the time required to conduct the interview.

Approach with caution

For all that can be said in favor of using social networking tools for e-Learning, there are also obvious caveats to consider. It is far from uncommon to find social networking tool providers who use customers' e-mail contact lists to promote their services. A good rule of thumb, before accepting colleagues' or friends' invitations to join a photo-sharing service, a shared-document service, or any other online social networking tool, is to forward the invitation to the person who supposedly extended that invitation and make sure he or she really wrote the note. This simple action prevents the recipient of the invitation from being tricked into signing up for a service the colleagues or friends are not promoting. It also alerts those colleagues and friends that their account is being used in ways they had not anticipated.

Here's an example of a fairly aggressive company that received more than expected for its efforts. Tagged's efforts to trick people into thinking that their friends were inviting them to join Tagged were documented in a *New York Times* article. The follow-up was swift. New York Attorney General Andrew Cuomo announced that he was going to sue Tagged. Tagged representatives denied sending invitations without the knowledge of the company's users. Those of us who received invitations from friends and colleagues learned to be a bit more skeptical about online invitations to join social networking sites.

What's next?

A recent *eLearning Guild* research project shows there is still plenty of room for growth in e-Learning that uses social networking tools. While nearly 50 percent of the respondents expressed the belief that e-Learning 2.0 initiatives are "very worthwhile," only a quarter of the respondents have implemented, or are in the process of implementing, Web 2.0 approaches to learning and work. Nearly a third of the group has considered and is leaning toward adoption, while more than a quarter of the group is not considering the use of Web 2.0 tools in workplace learning and performance.

Quality, access, use, and opportunities

The eLearning Guild's results are consistent with at least one other survey that examined interest and perceptions about the effectiveness of e-Learning overall, and the use of Web 2.0 technology in e-Learning endeavors. The *Guild's* survey showed that slightly less than 15 percent of the respondents cited a "big improvement" in learner and user performance, while another 39 percent demonstrated a modest improvement. It also showed that having good content avail-

able was useful to less than one-fifth of those who were encouraging people to embrace e-Learning 2.0 approaches. No other factor was of more importance in this endeavor, suggesting that e-Learning practitioners are far from united in what they believe will increase the use of Web 2.0 tools in online learning. According to a report from the Online Computer Library Center (OCLC), only 25 percent of the potential developers and 10 percent of the potential purchasers of e-Learning products cited "instructional effectiveness" as a reason for proceeding. Both groups of respondents expressed more interest in issues including access to learning than in documenting results.

Organizational support for social networking in e-Learning is also far from universal, the *eLearning Guild* survey shows. Fewer than 20 percent of the respondents reported that their organizations encouraged them to access external networking sites, while nearly 30 percent reported that their organizations are "not actively interested."

Actual use of the tools, on the other hand, is far greater than organizational support would suggest. Nearly three-fourths of the respondents read blogs on a daily or weekly basis, and an equally large group reports reading wikis on a daily or weekly basis. More than half of the respondents report storing bookmarks online and subscribing to RSS feeds. Social sites and services such as Twitter, Facebook, and MySpace attract much smaller groups of users among the respondents; the one exception is LinkedIn, which is used daily or weekly by more than half the group, and which is more business oriented than Twitter, Facebook, or MySpace.

The bottom line, for e-Learning practitioners, is that tremendous innovations are underway, and there is still a large untapped audience to pursue as these innovations continue changing the way we use and view online learning.

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