Gilfus Education Group

Educational Research, Strategy and Implementations

"Social Learning" Buzz Masks Deeper Dimensions

Mitigating the confusion surrounding "Social Learning"

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Foreword

It is our hope that by leveraging socially based technologies the education industry can shape a new educational technology paradigm that realizes the promises of true "Social Learning". By understanding its applications we can create a unique opportunity to improve student engagement, student retention, academic success and overall educational outcomes.

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Mission

While on the exhibit floor at NECC 2009 (The National Education Computing Conference) in late June in Washington, DC, I overheard an intriguing conversation about "social learning." A very distinguished looking university professor was talking with a small group of graduate students. The professor pointed out to her younger colleagues that scores of exhibitors were promoting solutions for "social learning," but that the vendors were misappropriating a term that had been established in the education field for a very long time.

She complained that today's technology companies were simply cobbling together social networking tools such as blogs, wikis and bookmarking tools, pawning them off as "social learning" innovation. As an

e-learning innovator with over a decade of experience in the education sector, this conversation reminded me that several core educational principles were not being thoughtfully considered.

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History

There is a century of rich literature on social learning from the fields of education, psychology, and sociology characterizing a wide variety of practical applications such as instructional techniques, consumer behavior conditioning and determining criminal motives. Most sources credit that social learning theory is based on research by the French sociologist, Gabriel Trade who lived from 1843 to 1904.

The simplest definitions of Social Learning are:

- 1) The acquisition of knowledge that happens within in a social group, and
- 2) The process in which individuals observe the behavior of others and its consequences, and modify their own behavior accordingly.

As a field, social learning originated during the 1930s at Yale University. Significant contributors to social learning theory during the twentieth century listed alphabetically by last name include:

Ronald Akers, Marshall Becker, Molly Brunk, Robert Burgess, Kay Bussey, June Chance, Pricilla Coleman, Darwin Dorr, John Dollard, Leonard Doob, Kathleen Durning, Steven Fey, Robert Hale, Scott Henggeler, Christopher Hensley, William Huitt, Clark Hull, J. Hummel, Katherine Karraker, Jean Lave, Howard Liddle, Fred McDonald, Neal Miller, Walter Mischel, O. H. Mowrer, Jerry Phares, Julian Rotter, Irwin Rosenstock, Ted Rosenthal, Dale Schunk, Robert Sears,

Stephen Singer, Victor Strecher, Edwin Sutherland, Richard Walters, John Whiting, Lev Vygotsky and Barry Zimmerman.

The field is so vastly rich, that the list is by no means complete.

One of today's most prominent experts on social learning theory is Albert Bandura, a psychology professor at Stanford University since 1953, who is regarded as one of the most preeminent psychologists of all time. In 1976, he published the landmark textbook, Social Learning Theory, which is still used at many colleges today.

According to Bandura, since individuals learn best by observing others, learners are tremendously influenced by the roles models who they observe.

In social learning theory there are four fundamental requirements for people to learn and model behavior:

1) attention, concentrating on the topic or task, 2) retention, remembering the information for later use often by using imag-

ery and language, 3) reproduction, translating the imagery and language back into an action, and 4) motivation, reinforcing the behavior through rewards, punishments, incentives and repeat exposures.

Social Learning in Practice

In 2001 eSylvan created an online learning environment that deliberately incorporated Bandura's four steps. eSylvan, focused on trans-forming the classic Sylvan Learning Cen-ter tutoring curriculum for reading, writing and math, into an online offering available via the Internet.

At a scheduled time, a group of three or more students logged into a tutoring session from their individual schools or homes, while a teacher would log in to lead the session. The teacher and students would interact with each other via their individual PCs connected to the Internet. Each participant wore a headset for voice-over-IP technology and each used a digital pencil (stylus) and writing

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pad (tablet) to solve problems within an online "virtual classroom environment;" most notably a shared online whiteboard and voice conferencing.

The session was automatically populated with the proper individualized lesson for each student. Many of the problems were of a repetitive nature so that a student could master a particular skill, before moving to the next level.

At the beginning and end of each session, students could interact with each other in an informal manner. Sometimes they discussed the current subject matter; other times they played an educational game as a group. During their interaction, the students would often end up teaching each other either something new about the current topic or about the way the eSylvan learning environment worked.

As the session continued, the teacher would spend one-on-one time with each student to formally work on the individualized lesson while the other students solved problems from each of their individualized lessons. At any point in the session, if the teacher felt that the student was doing a good job, the teacher could reward the students with digital tokens which could be saved up and eventually redeemed for books, software or educational toys.

When a student returned a few days later for the next session, the student was often logged in with a different teacher and a new group of students in order to expose the student to additional members in the eSylvan community. In mapping

eSylvan into Bandura's four fundamental requirements, the teacher served as the primary role model while the students served as secondary roles models for each other.

Although the tools used for eSylvan in 2001 were new and exciting at the time, they were by no means perfect. In fact the learning environment was quite crude compared to what can be created using today's technologies. There was little opportunity for a student to reach out to the larger community to seek additional information about a particular topic.

- eSylvan as it maps to Bandura's four fundamental requirements,
- 1) Attention was encouraged by the student focusing on the individualized lesson found on his PC screen, wearing headsets and using the digital pencil and writing pad.
- 2) Retention was promoted through working one-on-one with the teacher and the repetitive problem sets.
- 3) Reproduction was prompted by the student's need to show their work to the teacher by using the digital pencil and writing pad and explaining their work to the teacher and perhaps the other students.
- 4) Motivation was encouraged via rewards in the form of praise from the teacher and digital tokens.

Formal versus Informal Learning Practices

eSylvan was primarily a formal learning environment. Each student's individualized lesson plan was extremely focused so that over several sessions the student could advance to the next grade level in the subject matter being taught. The student could not randomly interact with other members of the eSylvan community and certainly could not use the platform to interact with anyone outside of the community. Besides the beginning and end of each tutoring session, there was little opportunity for informal learning.

Several of the teachers at eSylvan lobbied that students needed more informal learning opportunities with their peers within the eSylvan community. Some practitioners believe that 20% of learning takes place formally while 80% takes place informally.

Disruptive Technologies

Historically, technologies like record players, film strip projectors, film projectors, radio, overhead projectors, tape recorders, television, video players, video recorders and personal computers were considered "disruptive" when they were first introduced to the classroom. These technologies can also be used very effectively in a social learning context, but by themselves they are not social learning solutions. At some point, practitioners and researchers developed rules and best practices for using these technologies within the classroom and applying social learning contexts. The pedagogies for effectively using social media software within learning environments still need to be developed.

A Call for New Approaches

One issue with today's offerings for social software in education is that they are being presented as "social learning" solutions, but they are not being designed, packaged or integrated with the greater concepts of social learning theory in mind. This is not to say that Web discussion forums, surveys, bookmarking, file sharing, blogs, wikis, podcasts, vodcasts, and conferencing tools cannot be effectively used within a social learning context, but by themselves, they are not social learning solutions.

There has been a recent trend in which teachers and course designers simply plug in a variety of free social media tools such as Blogger, Delicious, Digg, Facebook, Flickr, LinkedIn, Ning, PBwiki, PBworks, Twitter, WordPress and You-

Requirements to Responsibly Support Social Learning:

- 1. Common user experience and interface practices
- 2. Role Models
- Formal and Informal Learning Capabilities
- 4. Academic Analytics
- 5. Performance Rewards

Tube into online learning management systems such as Blackboard and Moodle and claim to have "social learning." With the wide-variety of social media tools available, and the plethora of user interface variations, features and functions, the online experience can be overwhelming for both teachers and students. Furthermore, a growing number of school administrators are concerned that personal and institutional data can become scattered throughout the Internet creating data security and privacy issues with the risk of FERPA (Family Education Rights and Privacy Act) violations.

Clearly there is a need for an online learning platform that securely integrates social media tools within a social learning context and provides a seamless user experience for learning and collaboration in both formal and informal modes. In addition, the platform must include a set of tools that can help identify and designate role models.

As social learning experts have proven again and again, learning can be more productive if there is clarity about which role models to emulate. This is analogous to being informed about which news sources can be trusted for their reliability and credibility. Moreover, tools are also needed to administer and deliver rewards and incentives whether they are compliments, stars, stickers, points or grades.

Lastly, especially for formal learning, the teacher needs measurement tools to readily understand how well each student is mastering concepts to assess both teaching success and provide supplemental instruction, materials and assistance to students who need additional help and

reinforcement. Although the overall set of capabilities may seem like a tall order, technologies now exist to construct these applications in a cohesive manner. One great attribute of the various Web tools is that they enable rapid feedback and interaction allowing teachers and students to be more participative and collaborative during the learning process. In addition since most of the tools have content repository features, they can be used as a basis for collective intelligence and academic analytics.

Call for Organizing New Educational Technologies

Creating a well-crafted social learning platform would most likely require a deeply collaborative effort among a group of technology experts, educators, social learning theorists, psychologists, sociologists and students. Until there is a serious effort to create a holistic online learning platform that is based on facilitating the fundamental principles of social learning theory, the term "social learning" should not be used to describe learning platforms which simply include social media capabilities.

In the meantime, a more precise descriptor for that movement would be something such as "STIL", Social Technology in Learning.

