Social Networking Sites and Content Communities: Similarities, Differences, and Affordances for Learning

Penny Thompson
Michigan State University

Abstract

A framework is proposed that matches two popular forms of social media with the types of learning they afford. Kaplan and Haenlein’s (2010) taxonomy is expanded to consider how learners participate in social media (based on Ito, et al., 2010) and how participation styles connect to general and discipline-specific learning. This framework can help researchers ask more precise questions about learning with social media, and can also provide guidance for teachers wanting to use social media with their students.

The term social media is familiar to most people, and there is a great deal of interest in how these popular forms of new media can facilitate learning. The term is broad, however, and encompasses many different types of applications with different affordances. Instead of asking “how can we use social media for learning?” researchers need to ask more precise questions, such as “what types of social media are the most helpful for what kinds of learners and what kinds of learning?” This precision can be difficult to achieve, however, in an emerging field where the terminology is still evolving. Kaplan and Haenlein (2010) provided a useful classification of social media sites based on the structure and features of each medium. In this framework they made a clear distinction between social networking sites (e.g., Facebook and MySpace) and content communities (e.g., YouTube and Flickr). While their framework was designed for the purpose of business and marketing and does not address how the features of these sites relate to learning, it does provide a useful starting point for analyzing the features and affordances of these two similar but distinct forms of social media.

Education researchers have begun to explore the potential of social networking sites for learning (Greenhow & Robelia, 2009) and also how to use the video content available on content communities such as YouTube (Burke & Snyder, 2008; Niess & Walker, 2009; Webb, 2010). Only a few studies (Birch & Weitkamp, 2010; Thompson, 2010) have emphasized both media and integrated comments on social media sites as a way to support learning in traditional school subjects. Ito et al. (2010) looked at social media from a learning perspective but focused on how people participate in social media rather than on the features of the sites. Their analysis adds greatly to our understanding of how people participate in social media, but offers only indirect guidance on matching a specific media type to a desired learning goal.

This paper expands on the definition of a content community (Kaplan & Haenlein, 2010) by incorporating the work of Ito et al. (2010) and research on learning in the disciplines (Langer, 2011; Langer, Confer, & Sawyer, 1994). It presents an analysis of how social networking sites and content communities afford different types of participation and interaction, and how these different affordances may support different types of learning. Specifically, it proposes that while social networking sites primarily provide opportunities for learning social skills and developing identity, content communities have affordances that can facilitate discipline-specific learning.

A Classification System for Social Media

Kaplan and Haenlein (2010) classify social media types into six categories based on a three-level (low, medium, and high) social presence/media richness scale and a two-level (low and high) self-presentation/self-disclosure scale. According to this scale, applications such as blogs and wikis feature a low level of social presence and media richness, while virtual social worlds and virtual game worlds provide very high levels of social presence and media richness. Applications such as Facebook, MySpace, and YouTube, which are among the most popular media types with teenagers and young adults today (Nielsen, 2009), are identified by Kaplan and Haenlein (2010) as having a medium level of social presence and media richness. Within this last group of applications, those requiring a high level of self-presentation and self-disclosure (e.g., Facebook) are labeled as social networking sites and those requiring less self-presentation and self-disclosure (e.g., YouTube) are called content communities.
The framework provided by Kaplan and Haenlein (2010) is a useful because it provides a precise way to label sites like YouTube and Flickr as belonging to a distinct category, separate from social networking sites like Facebook and MySpace. When classifying social media for learning, however, we need to look beyond the design features of the site and examine the type of content featured, how users interact with the content, and how users communicate with each other about the content.

Attributes of Social Networking Sites and Content Communities

On the surface social networking sites and content communities may appear to be very similar. Both types of sites allow users to create profiles, create connections to other users (e.g., "friend" or "follower" relationships), and comment on each others' contributions to the site. In fact, some early sites that began as content sharing sites gradually added social features and began to look more like social networking sites (boyd & Ellison, 2008). At the same time, the difference in the levels of self-presentation and self-disclosure noted by Kaplan and Hainlein (2010) present important differences between these two types of online communities. In a social networking site self-presentation and self-disclosure constitute the primary content on the site, whereas in content communities the content being shared (e.g., videos, photos, etc.) is the primary content. This shared content then provides the space where conversation between members occurs. Whereas in a social networking site conversation occurs in the comparatively private space of an individual member's "wall" or profile page, in a content community the interaction between members occurs in a public space within the site. Conversations occurring in public spaces are more likely include contributors outside each member's usual social circle, and to include contributors of different ages and with varying levels of expertise. These different attributes of social networking sites and content communities afford different kinds of communication and thus different kinds of learning.

Types of Social Media Participation

Ito, et al. (2010) defined two categories of participation in social media: friendship-driven and interest-driven, based on the users' motivation for engaging with a particular site. Friendship-driven participation refers to "the dominant and mainstream practices of youth as they go about their day-to-day negotiations with friends and peers" (Ito, et al., 2010, pp. 15-16) and is thus mainly social interaction between people of the same age. Social networking sites, where social interaction occurs on participants' personal space (e.g., the Facebook wall) and self-expression is the main content, provide an environment well suited to this type of participation. Ito et al. state that social network sites "are supporting those sometimes painful but important lessons in growing up, giving kids an environment to explore romance, friendship, and status just as their predecessors did" (Ito, et al., 2010, p. 22). Online social networks provide a place for teens to gather and "use specific media as tokens of identity, taste, and style to understand and display who they are in relation to their peers" (Horst, Herr-Stephenson, & Robinson, 2010, p. 41). The communication and media sharing capabilities of social networking sites facilitate this type of interaction.

Interest-driven participation centers on a common interest such as online gaming, sports, or music. In interest-driven forms of participation, people "develop deep friendships through…interest-driven engagements, but…the interests come first, and they structure the peer network and friendships, rather than vice versa" (Ito, et al., 2010, p. 16). Content communities such as YouTube, Goodreads, and TED are structured in a way that can facilitate interest-driven participation. On these sites interaction occurs in response to the content presented (e.g., the video or book being discussed) and opinions or insights about the content are the focus of the discussion. In addition, they can provide access to a community of expertise in the subject of interest, which is important for supporting high levels of interest-driven participation (Horst, et al., 2010, pp. 74-75).

Based on the distinctive affordances of these two types of social media sites, I propose that while social networking sites lend themselves well to developing communication skills, digital literacy, and identity (Greenhow & Robelia, 2009; Ito, et al., 2010), the interest-driven style of conversation that can occur in content communities affords an opportunity to learn discipline-specific ways of thinking and reasoning (Langer, et al., 1994), making them a promising tool for supporting engaged learning in traditional school subjects.

Content Communities and Disciplinary Learning

Research on learning in the disciplines suggests that, in addition to general skills such as critical thinking and problem solving, there are discipline-specific ways of thinking and reasoning that students need to acquire. According to Langer, "familiarity with language, structure, and disciplinary conventions are at the root of learning in
academic coursework" (2011, p. 4). Langer and her colleagues (Langer, 2011; Langer, et al., 1994) have written extensively on the differences in teaching and learning among various academic disciplines, but for illustrative purposes in this paper I focus on how content communities may support two aspects of disciplinary learning: (1) learning the vocabulary of the discipline, and (2) learning discipline-specific ways of making claims and selecting evidence.

**Discipline-Specific Vocabulary**

Content communities provide a way for learners to be exposed to and practice using the language of a discipline, since even the most informal posts can contain technical vocabulary. For example, the conversation below comes from comments attached to a YouTube video featuring guitarist Gary Hoey. The words in bold are technical terms related to guitar technique and references to other guitarists (Eddie Van Halen and Joe Satriani) that a serious guitarist would be expected to know.

"dude seriously though.. how did you get to sound so much like eddie [sic]?? that's like my ultimate goal. (WammyHammy, 2008)

"he also uses an auto wah pre set in here hence that Satrianiesque sound as well." (carsales34, 2008)

"half of EVH's sound is that flange/phase effect, and other than that it's technique and I don't mean that to belittle Eddie at all, he's absolutely amazing!" (zephanneliah, 2009)

This informal conversation would allow a novice guitarist to experience the vocabulary and style of speaking about music common among other "guitar geeks," and thus begin to learn the unique terminology of the craft.

The disciplines taught in school also have their unique vocabularies that students need to learn, and content communities can provide opportunities for exposure to these vocabularies. For example, in the following conversation attached to Dr. Bonnie Bassler's TED video on bacterial quorum sensing, the following post uses the vocabulary unique to biology:

If you really want to know more about how bioluminescent bacteria communicate, you should look up the lux operon on Google. The lux operon is a set of genes within the DNA of Vibrio fischeri that regulate the expression of the chemical (homoserine lactones) signals that the bacteria use in quorum sensing. This is just one example of how quorum sensing is regulated, however, there exists a plethora of examples within other species of bacteria that regulate quorum sensing in a very similar manner. (Derek_Boyer, 2009, April 10)

Conversations such as these can expose students to people outside the school environment engaged in conversation that is largely social in nature but also models the use of discipline-specific vocabulary.

**Discipline-Specific Ways of Using Evidence**

Langer, et al. (1994) discuss several aspects of what it means to "think in the discipline" but one important aspect is the type of evidence the discipline views as appropriate and convincing, and the closely related concept of what type of evidence teachers look for in assessing their students learning. For example, in biology, they found that teachers emphasized a proper understanding of parts of a system and how the parts functioned within the system. This type of systems-related thinking is exemplified in the TED comments linked to the bacterial quorum sensing video as the commenters debated the promise and pitfalls of anti-quorum sensing drugs to cure disease:

she didn't really explain the mechanism of the treatment, but the simplest would be that flooding the bacteria with these signals would cause them to act before they had the numbers necessary to cause damage, and then the immune system could fight them. the other possibility would be that these signals would bind on the sites and interfere with them from acting at all. (jason_brann, 2009, April 8)

In American history, in contrast, Langer, et al. (1994) found that teachers expected students to "provide the facts, as well as the students' explanations and interpretations – through similarities and contrasts, by explaining connections across time, cultures, and situations" (p. 32). In a discussion on the TED site in response to James Watson's talk on the discovery of DNA, participants argue about the role Rosalind Franklin played in the discovery. In the course of their discussion they draw attention to the appropriate interpretation of facts relative to their historical context.
Franklin is not the victim of some conspiracy by less talented people, she has become an icon for the ailing feminist cause who are now struggling to find reasonable examples of overbearing male oppressors depriving their sisters of historical importance...yawn! Franklin did not do the bulk of the work and lacked the essential insights that Watson and Crick provided. (j_michaels, 2010, April 11)

Your history and logic are awfully weak. Have you read the book that A. Brown recommends above? Do you really think the contributions by women were taken with the same seriousness as those by men in Cambridge in those days? How does being held up as an example by feminists affect the fact that Franklin received less credit for her work than she deserved? No logic there...In my field of astronomy women were not even allowed to use the world's largest telescopes until the late 1960s... (Douglas_Duncan, 2011, May 14)

These two examples demonstrate conversations from the same website (TED.com) but in two different disciplines, and reflect some of the discipline-specific differences in gathering and presenting evidence identified by Langer and her colleagues (1994) in their study of teaching and learning in the disciplines.

Conclusion

The examples shown here were chosen purposefully to illustrate the discipline-specific differences and the potential of content communities to support some aspects of discipline-specific learning. This does not mean that every discussion thread or every content community has the same quality of discussion. The educational potential of comments on the TED website, for example, may be particularly high and not typical of other content communities such as YouTube (Thompson, 2011). Nevertheless, because content communities, especially those featuring video, are popular with the current generation of students (Nielson, 2009), teachers and researchers should not overlook content communities as a unique type of social media, distinct from the better known social networking sites, with affordances that can be harnessed to support discipline-specific teaching and learning.

References


