

Aggregation in the blogosphere

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Introduction

Students can make two kinds of contributions to a blogosphere; these are primary. As a blogger, each student produces an open journal, a monologue about the course content. As a discussant each student participates in a dialogue about the content of one or another post. As a secondary form of participation students can read in the blogosphere.

As a blogger, a student posts her reflections on some part of the course material. A blog post may refer to the text or quote the text, refer to the lecture, an issue that was discussed in class, another blog, or to an outside article, site, or book. Frequently students will include personal experiences or anecdotes as part of their post. The students develop their individual voices. The monologues of the students are published and broadcast, emerging in an open space, giving students exposure to multiple viewpoints and voices. The ratio, the balance, of these voices gives a student a textured view of the course material. In addition to authoring posts, students act as discussants on each other's posts. Much of the commentary is either an agreement or expatiation on another student's point. Other responses are more discursive.

This paper presents part of a case study of students co-blogging throughout the semester. The class blogosphere became a repository of information, opinions, monologues and dialogues about the course content. Over the course of the semester there was an aggregation of information that was "mined" by the students. The focus of analysis is on the impact of the students' co-blogging work on two papers they wrote during the semester. The data shows that each student's individual contributions to the blogosphere prepared the student for writing the papers. The data also shows that students leveraged the contributions of other students when they wrote their papers.

Background literature

A co-blogging community is social and student-owned (Oravec, 2002). Because co-blogging is Web 2.0 technology, the "buy-in" for students is fairly cheap (Glogoff, 2005; Duffy 2008). The informal nature and ease-of-use of co-blogging encourages students to explore and publish their own ideas under less pressure than in formal in-class discussions (Althaus, 1997). Because each student has her own blog, she has full control over the content and can establish personal and intellectual ownership of her work (Fredig & Trammell, 2004). When a student writes a blog post she practices at producing a narrative about the significant elements of the course material (Williams & Jacobs, 2004). Co-blogging creates opportunities to exchange, explore, and present alternate viewpoints (Fredig & Trammell, 2004). It exposes students to alternate ways of "seeing" and "constructing" what is significant and why (Oravec, 2002; Fredig & Trammell, 2004). Discussions on issues related to the course material naturally emerge, enabling students to collaboratively work through the arguments and trade-offs, weighing and comparing different explanations and justifications, which positively impacts learning (Andriessen, 2006).

The Co-blogging Environment

The co-blogging environment has been developed using the design-based research methodology, over a number of years, in several different courses; it is implemented using a wiki-based educational platform, the WDP, that supports a variety of collaborative learning activities (Larusson & Alterman, 2009). In the co-blogging environment, each student has a blog. Each blog post shows a picture of the author, a title, and a tag that relates the post to a lecture given in class. At the bottom of a post, there is a list of people who read the post. Any threaded discussion that emerges is shown below the relevant post. As a student writes her blog, she can read another student's post on the same topic with a click of the mouse. When a student begins to write a blog post she can use one of the tags that are assigned to each lecture. At the "front entrance" to the blogosphere, there is a list of the five most recent posts or comments on posts. Each item in the list displays the name of the author of the post or comment and a short excerpt from the contribution. Students can also access the posts via a word cloud or by doing a keyword search. Students receive daily email newsletters that summarize the online co-blogging activity in the previous 24 hours. The newsletter lists the title, author, and first line of all the newly created blog posts, and a list of similar information for any new comment. Students can use the links on the newsletter to directly navigate to any post or comment on the blog site that is of interest.

Case Study

In an introductory undergraduate course taught in Fall 2008 on *Internet & Society*, 25 students from a variety of disciplines co-blogged throughout the semester. At the beginning of the semester, an in-class tour and

exercise introduced the students to the important features of the co-blogging environment. The students were required to blog at the pace of one post per lecture: there were two lectures per week. A typical post was 1 or 2 paragraphs in length. The students were also required to read and comment on other contributions to the blogosphere. The co-blogging work of each student counted for 35% of his or her grade. All of the students' online work was automatically recorded in a transcript, which enabled both quantitative and qualitative analyses. Lecture slides were used as a basis for tagging content in the blogosphere and the paper. For each set of lecture slides, the instructor identified a set of key topics that were covered by the lecture. All the posts and comments in the blogosphere were coded using these topics/tags.

Capitalizing on the aggregation of information while writing papers

The total number of additions to the blogosphere is a rough measure of the amount of information “digested” by the class while doing the co-blogging exercise. Because posts and discussions, once created, persist throughout the semester, the students can “mine” the aggregated information as a resource for another learning activity, when the situation warrants it. Many students sampled other contributions in the blogosphere before posting to their own blogs (roughly 35%). Right before a paper deadline, many students did heavy reading in the blogosphere in order to access and review ideas, arguments, examples that were relevant to the paper they were writing, reproducing, in their own words, the content of relevant posts and discussions they found in the blogosphere.

Figure 2 shows the relation between activity within the blogosphere and students authoring papers during the time the class read two books for which they wrote short papers.

1. The y-axis compares the number of topics/tags on each student's posts and comments (primary participation) to that number for the same student's topics/tags in his or her paper. A positive number means that more of a student's paper was composed of topics they posted and/or commented upon in the blogosphere. A negative number means that a majority of the content in a student's paper did not originate in contributions to the blogosphere.
2. The x-axis computes a similar number for reads (secondary participation). So, a positive number means that more of a student's paper was composed of topics they read about in blogosphere prior to writing her paper. A negative number means that a majority of the content in a student's paper did not originate from reading in the blogosphere.

Consider each of the four quadrants of the graph starting in the upper left-hand quadrant:

- Q1:** Primary participation provided preparation for writing papers.
- Q2:** Primary and secondary participation provided preparation for writing papers.
- Q3:** Secondary participation provided preparation for writing papers.
- Q4:** Most of these students' papers were derived from work that was not influenced by their activity in the blogosphere.

For 16 of the 25 students, their work in the blogosphere familiarized them with a majority of the concepts that appeared in their two papers (their data is either positive on the x-axis or y-axis). The largest group of students (Q3) benefited most from the reading. The next largest group (Q2) benefited significantly from both primary and secondary participation in the blogosphere.

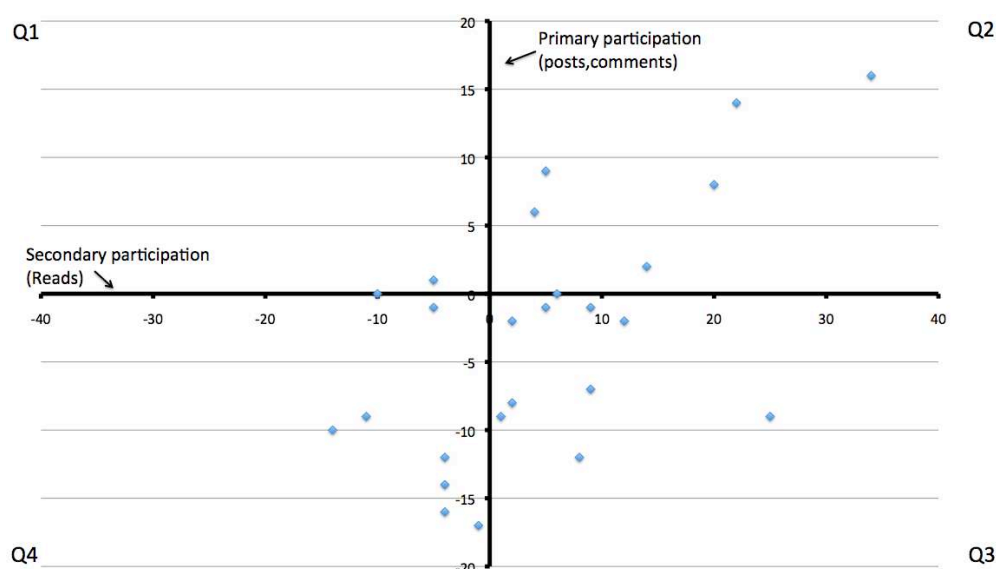


Figure 1: Activity in the blogosphere exposes students to topics they discuss in their papers.

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