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The Social Informatics of Blog and Wiki Communities: Authoring Communities of Practice (CoPs)

Abstract: Blogs and wikis are online social spaces for collaborative writing and communication. This paper will examine these technologies from a social informatics perspective to better understand the social dimension of participation behaviors. The pedagogical potential of blog and wiki communities will be explored through the analysis of student survey data.

Résumé : Les blogues et les wikis constituent des espaces sociaux en ligne pour la rédaction et la communication collaboratives. Cette communication examine ces technologies à partir de la perspective de l'informatique sociale, afin de mieux comprendre la dimension sociale des comportements des participants. Le potentiel pédagogique des communautés des blogues et des wikis sera exploré à travers l'analyse des données d'un sondage étudiant.

1. Introduction

The social dimension of Web 2.0 technologies such as blogs and wikis are integral to the technological aspects, which allow for information sharing, communication, and collaborative authorship. But the blog format embodies several seemingly contradictory characteristics, which complicate or confuse the relationship between the social and technical components. For example, a blog is defined as a journal or diary, both of which are traditionally considered individual, private or personal formats. But online blogs are created, archived, searched, and accessed in public Web environments. Web logs also provide opportunities for independent self-publishing, without any prior knowledge of HTML or Web programming, yet this format is easily interactive and participatory. Similarly, the wiki is an open editing environment that allows for collaborative writing, project planning, and information sharing, but questions have been raised about the credibility and reliability of the information produced in these spaces.

As the Web continues to rapidly move away from the presentation of static web documents and towards a semantic, participatory environment, it is useful to examine emerging social software and networking through a social informatics perspective. Blogs and wikis have the potential to foster *communities of practice (CoPs)* that connect individuals through shared experiences online as well as face-to-face collaborative problem-solving. This social informatics approach will allow us to avoid uncritical assumptions about these potentially collaborative information communication technologies (ICTs) and to think in creative ways about how to incorporate social software into blended teaching and learning environments.

The implications for this research will enhance our understanding of social software and online communities. It will also provide insights about blogging and wikis from the perspective of students who develop online content as active participants in virtual communities. The insights gained from this approach, within this particular social environment, are portable to other contexts (beyond the classroom). In many ways

college students are the ideal participants in a study such as this because of their willingness to explore social technologies as active participants, as well as their familiarity with popular social networking sites such as MySpace, media sharing communities such as YouTube, and perhaps the most popular wiki, Wikipedia.

2. Blogging Trends

Blogging is an area of interest in many fields of study and in popular culture. The blog is often described as an ICT that influences journalism and news events (Sullivan, 2004; Welch, 2003), scholarship (Martindale & Wiley, 2005) individual identity (Rak, 2005), teaching in the classroom (Barton, 2005; Dron, 2003; Oravec, 2003) teaching online (Dickey, 2004), and the field of librarianship (Bar-llan, 2004). Blogs are often discussed as a teaching tool that can be utilized with bulletin boards, email, and course management systems (Barton, 2005). In addition, the web log is discussed in relation to other technologies such as the semantic web (Karger & Quan, 2005), wireless (Leu, Chi, & Shih, 2005), and networked personal digital assistants (Todoroki, Konishi, & Inoue, 2006). The relationship between this technology and information dissemination is relevant as well (Bar-llan, 2005; Liberman, Baumgart, Eastman, & Pikas, 2005).

Technorati.com (2006), the web log search engine reported that between March 2003 and April 2006 the blogosphere doubled in size every six months. The Pew Internet and American Life Project (2005) found that blog readership increased by 58% in 2004, although many Americans who go online (62%) did not know what a blog was. In a separate study (2004), it was found that "44% of Internet users have created content for the online world through building or posting to Web sites, creating blogs, and sharing files." In 2006, the Pew Internet and American Life Project also asserted that "despite the public nature of creating a blog, most bloggers view it as a personal pursuit" (p. ii). By this time, the impact of political blogs was often covered in the mainstream media, but this study found that "the main reasons for keeping a blog are creative expression and sharing personal experiences" (iii). Although a highly public medium, the blog enables individual creativity and personal expression in ways that are less than private. This further supports the need for a pedagogical response that encourages critical thinking and collaborative Web authorship.

While this medium continues to expand in influence we do not have extensive data to examine the impact of blogging on authorship and collaboration. Nor do we have a clear picture of the pedagogical implications of blogging and its relation to student learning.

3. Wikis

As a Web-based, open-editing social software, Wikis challenge our traditional assumptions of authorship and peer review. Perhaps the most popular wiki is Wikipedia which is often compared to traditional paper bound and online encyclopedias. The mainstream media often focuses on the controversy surrounding the false Wikpedia entry about John Seigenthaler and questions are usually raised about the credibility of this resource. Popular research continues this approach by reducing the argument to error counting and comparing the number of factual mistakes in Wikipedia vs. Britannica (Giles, 2005, Chesney, 2006). This focus on errors, however, does not address the social dimension of wikis within a particular organizational or cultural context. Nor does it address how user-centered wikis are configured to meet the needs of a particular social network.

4. Blogs and Wikis as *Communities of Practice (CoPs)*

Kling, Rosenbaum, & Sawyer (2005) argue that "social informatics refers to the interdisciplinary study of the design, uses, and consequences of ICTs that takes into account their interaction with institutional and cultural contexts" (p. 6). An examination of blogs and wikis from a social informatics perspective closes the gap between the social and technological by considering the relationship between these particular ICTs and how they are developed and used by individuals within specific situations. This will allow us to better understand participation behaviors online and face-to-face, and to develop blogs and wikis that account for institutional and cultural settings. This study is especially interested in the development of blog and wiki communities by the "Net Generation" in higher education, but the findings are portable to other settings as well, such as business, a range of virtual communities, and K-12 (Oblinger & Oblinger, 2005). As we envision the pedagogical applications of social software it is important to understand "that the value of ICTs usually comes when social practices are changed along with the technologies; changing (or adding) technologies alone rarely produces many transformative benefits" (Kling, Rosenbaum, & Sawyer, 2005, p. 60).

This paper argues that blogs and wikis are potentially communities of practice (CoPs), but only if the face-to-face and online environments are interconnected and balanced. This term was first used by Lave & Wenger (1991) and asserts that "learning is social and comes largely from of our experience of participating in daily life" (Smith, 2003). Hara and Kling (2003), refer to the following definition originally developed by Hara (2000): "Communities-of-practice are informal networks that support professional practitioners to develop a shared meaning and engage in knowledge building among the members." But Schewn & Hara (2003) caution against an uncritical use of the term CoPs to describe online environments and suggest that "community of practice is not likely to be forced, but is emerging, and designers need to be aware of the characteristics of existing communities of practice to nurture them" (p. 257).

Brown and Duguid (2000) make a distinction between "networks of practice," and CoPs (p. 141). In a network of practice "the links between the members of such networks are usually more indirect than direct—Newletters, Web sites, Bulletin boards, listservs, and so forth keep them in touch and aware of one another" although they do not need to meet face-to-face and are essentially virtual connections only (p. 142). Brown and Duguid (2000) argue that CoPs are "subsections of these larger networks" but "they are relatively tight-knit groups of people who know each other and work together directly" in face-to-face situations (p. 143). In a Web-based environment that is **not** mediated in any way by in person activities, such as a college course that requires both in class and online components, the blog or wiki is closer to a network of practice. But in blended learning environments that require both face-to-face and online interactions and content development, we have a hybrid format that incorporates some aspects of a network of practice but is closer in definition to a CoP.

While a theoretical exploration of blogs and wikis would suggest that these environments have the potential to build online communities with individuals who share common goals and objectives, we need an empirical analysis based on survey data to understand the perceptions of blog and wiki content producers. This study offers insights related to whether or not the blog can be defined as a collaborative CoP in higher education, and this research informs the development of a follow-up survey to raise similar questions about student-developed wikis.

5. The Course Context

IST301X: The Information Environment

The undergraduate course IST301X: The Information Environment is a core requirement in the Information Studies interdisciplinary B.A. Program. It also meets the University at Albany's General Education Information Literacy requirement and incorporates principles in Web design and information theory. Students develop a variety of individual and collaborative Web assignments, as well as a formal APA-style research paper. The blog requirement replaced a formal final exam and was intended to encourage student thinking about the content of the course outside of class. Students were required to develop a minimum of 12 blog postings throughout the semester, based on any aspect of the course they wanted to write about. In spring 2007 the blog component was modified to offer a higher level of structure (based on the experiences in fall 2005 and spring 2006), and a course wiki was introduced to replace a mid-term exam and to encourage student team presentations and collaborative writing.

In fall 2005 and spring 2006, students were encouraged but not required to post to other student blogs. Each student produced an individual blog using blogger.com and they had access to an IST301X Commons via the main course site, which allowed every student in class to access all of the other student blogs.
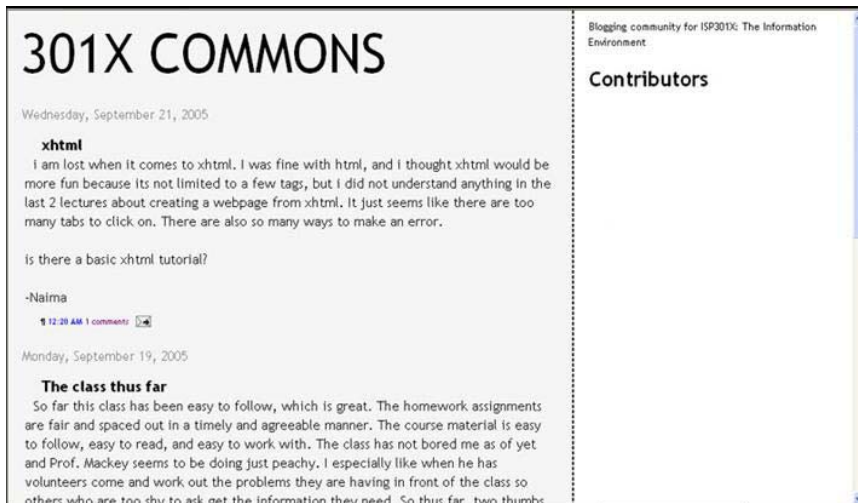

Figure 1: IST301X Commons (student names removed)

IST523: Digital Imaging and the Web

The graduate course IST523: Digital Imaging and the Web is a technology requirement in the Information Studies MSIS Program. It requires students to develop weekly Web pages using a range of software applications, such as Photoshop, Dreamweaver, HTML-Kit, Fireworks and Flash. Students also work collaboratively on a Web team project and presentation in which they teach the class specific discoveries they make about one of the Web development programs. The blog in this course was required on a weekly basis to accompany their Web pages and projects. Students were asked to discuss the process of making their Web pages in their blog postings and to examine issues related to digital imaging, such as copyright and intellectual property, image manipulation, and digital scholarship. In fall 2005, students were encouraged to post to other student blogs, and in some cases they were required to post responses to their peers.

As with IST301X, students in IST523 were also required to maintain an individual blog using blogger.com and to subscribe to the IST523 Community Blog, which included links to all of the student blogs in the class.

Figure 2: IST523 Community Blog

6. Methodology

Data was collected using a survey instrument that examined student response to active participation in blogging communities that required both individual and collaborative publishing. This approach offers a unique perspective on the perceptions of information producers (not simply searchers or readers) in the social context of web-based environments.   The first survey instrument for blogging consisted of 25 multiple-choice questions, each using the 5-response Likert scale (strongly disagree, disagree, neutral, agree, strongly agree) and one open-ended question.   The blog survey was conducted in two courses in fall 2005 and in one course in spring 2006. In fall 2005, the survey instrument was used in an undergraduate course IST301X: The Information Environment, and in a graduate course IST523: Digital Imaging and the Web. In spring 2006, the same survey was conducted in another section of the undergraduate course IST301X: The Information Environment.

Overall, this survey included three response groups (N=90):
- 14 graduate students in fall 2005 (93% of the class)
- 42 undergraduates in fall 2005 (63% of the class)
- 34 undergraduates in spring 2006 (50% of the class)

This study is part of an ongoing research project that includes multiple data sets based on student response to end-of-semester surveys conducted in the course management system WebCT. A wiki survey will be conducted in two separate courses in spring 2007. This paper will inform the second survey, which will examine student participation behaviors in wiki communities, with a particular emphasis on such issues as authorship, collaboration, and student learning in these settings.

7. Research Questions:

This study raises several inter-related research questions that focus on the social aspects of this technology:

1. To what extent does social software impact an author's sense of information production and sharing online?
2. How do students understand online communities as an individual and/or collaborative space?
3. To what extent does social software impact a student's perception of learning?

8. Preliminary Survey Results

The preliminary analysis of the survey results will address 5 main categories of the 25 survey questions:

1. Prior familiarity with blogging
2. Ease of use creating and maintaining blog
3. Relationship to course assignments and themes
4. Blogging as a writing process (compared to other forms of writing)
5. Audience considerations

Most students in all three response groups either agreed or strongly agreed with the assertion that they knew what a blog was before this course, but most did not have a blog prior to the course.

Questions	Course	Response by %					
		0	**SD**	**D**	**N**	**A**	**SA**
I knew what a blog was prior to this course.	301X (f 05)	0.0%	16.7%	11.9%	11.9%	19.0%	**40.5%**
	523 (f 05)	0.0%	7.1%	7.1%	0.0%	35.7%	**50.0%**
	301X (s 06)	2.9%	14.3%	11.4%	5.7%	22.9%	**42.9%**
I had my own blog prior to this course.	301X (f 05)	0.0%	**59.5%**	11.9%	0.0%	7.1%	21.4%
	523 (f 05)	0.0%	**42.9%**	28.6%	0.0%	14.3%	14.3%
	301X (s 06)	2.9%	**48.6%**	11.4%	5.7%	14.3%	17.1%
0: No Response							
SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree							

Table 1: Prior familiarity with blogging (N=90)

The data shows that a large percentage of students in all three response groups either agreed or strongly agreed with the assertion that setting up a blog for this course was easy. Similarly, the student response suggests that creating blog postings and maintaining a blog in this course was easy as well.

Questions	Course	Response by %					
		0	**SD**	**D**	**N**	**A**	**SA**
Setting up a blog for this course was easy.	301X (f 05)	0.0%	4.8%	0.0%	7.1%	26.2%	**61.9%**
	523 (f 05)	0.0%	7.1%	0.0%	7.1%	**50.0%**	**35.7%**
	301X (s 06)	2.9%	2.9%	0.0%	5.7%	**40.0%**	**48.6%**
Creating postings in my blog was easy.	301X (f 05)	0.0%	4.8%	0.0%	7.1%	**33.3%**	**54.8%**
	523 (f 05)	0.0%	0.0%	7.1%	0.0%	**42.9%**	**50.0%**
	301X (s 06)	5.7%	0.0%	0.0%	8.6%	**48.6%**	**37.1%**
Maintaining a weekly blog in this course was easy	301X (f 05)	0.0%	11.9%	16.7%	16.7%	**38.1%**	**16.7%**
	523 (f 05)	0.0%	7.1%	7.1%	28.6%	**42.9%**	14.3%
	301X (s 06)	2.9%	2.9%	17.1%	31.4%	**31.4%**	14.3%
0: No Response **SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree**							

Table 2: Ease of use creating and maintaining blog (N=90)

The student responses to the questions that relate the required blog to other course assignments and themes suggests that most students either strongly agreed or agreed with the assertion that maintaining a blog provided the opportunity to reflect on the Web page assignments, although the percentages were much higher overall for the graduate course that required students to do so. Students also agreed or strongly agreed with the assertion that maintaining a blog provided the opportunity to reflect on the topics covered during the semester, but again the favorable assertion from the graduate students was significantly higher.

The responses suggest that students did not see a connection between the blog assignment and their understanding of how to develop content for web pages. Most of the undergraduates either strongly disagreed or disagreed with the statement that maintaining a weekly blog provided the opportunity to understand academic research methods, while 50% of the graduate students selected a neutral response.

Questions	Course	Response by %					
		0	**SD**	**D**	**N**	**A**	**SA**
…reflect on the web pages I created this semester.	301X (f 05)	0.0%	9.5%	11.9%	23.8%	**38.1%**	16.7%
	523 (f 05)	0.0%	0.0%	7.1%	0.0%	**57.1%**	**35.7%**
	301X (s 06)	2.9%	5.7%	22.9%	14.3%	**34.3%**	**20.0%**
…reflect on the topics we covered this semester.	301X (f 05)	0.0%	7.1%	7.1%	23.8%	**31.0%**	**31.0%**
	523 (f 05)	0.0%	0.0%	7.1%	0.0%	**50.0%**	**42.9%**
	301X (s 06)	2.9%	5.7%	5.7%	25.7%	**45.7%**	14.3%
…understand how to develop content for web pages.	301X (f 05)	0.0%	**16.7%**	**23.8%**	**28.6%**	23.8%	7.1%
	523 (f 05)	0.0%	7.1%	**28.6%**	**21.4%**	**35.7%**	7.1%
	301X (s 06)	2.9%	17.1%	17.1%	**31.4%**	20.0%	11.4%
…understand academic research methods	301X (f 05)	0.0%	**19.0%**	**35.7%**	23.8%	19.0%	2.4%
	523 (f 05)	0.0%	21.4%	14.3%	**50.0%**	7.1%	7.1%
	301X (s 06)	2.9%	**20.0%**	**22.9%**	**20.0%**	**28.6%**	5.7%
0: No Response **SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree**							

Table 3: Relationship to course assignment and themes (N=90)

Student response to the questions related to blogging and writing offer many interesting findings. For example, the responses suggest that students understand the blog as a diary, and not as form of research writing. The assignment guidelines seemed to provide

students with ideas about what to write about, while also limiting what they could write about. Most students did not see an improvement in their writing through the blog assignment, but it did help to improve their understanding of blogging itself.

Questions	Course	Response by %					
		0	**SD**	**D**	**N**	**A**	**SA**
…how to write about academic sources of information.	301X (f 05)	0.0%	**26.2%**	**28.6%**	21.4%	21.4%	2.4%
	523 (f 05)	0.0%	28.6%	14.3%	**35.7%**	7.1%	14.3%
	301X (s 06)	2.9%	**20.0%**	**20.0%**	**22.9%**	**22.9%**	11.4%
Writing in a blog is different from any other kind of writing	301X (f 05)	0.0%	19.0%	16.7%	**28.6%**	26.2%	9.5%
	523 (f 05)	0.0%	7.1%	**35.7%**	28.6%	28.6%	0.0%
	301X (s 06)	2.9%	5.7%	14.3%	**37.1%**	**20.0%**	**20.0%**
Writing in my blog was similar to writing in a diary.	301X (f 05)	0.0%	7.1%	14.3%	9.5%	**52.4%**	16.7%
	523 (f 05)	0.0%	14.3%	21.4%	14.3%	**42.9%**	7.1%
	301X (s 06)	2.9%	8.6%	22.9%	8.6%	51.4%	5.7%
Writing in my blog was similar to writing a research paper	301X (f 05)	0.0%	**47.6%**	**31.0%**	16.7%	4.8%	0.0%
	523 (f 05)	0.0%	**21.4%**	**35.7%**	35.7%	0.0%	7.1%
	301X (s 06)	2.9%	20.0%	**45.7%**	20.0%	5.7%	5.7%
guidelines provided ideas for what to write about	301X (f 05)	0.0%	7.1%	14.3%	19.0%	**42.9%**	**16.7%**
	523 (f 05)	0.0%	0.0%	7.1%	14.3%	**50.0%**	**28.6%**
	301X (s 06)	2.9%	8.6%	8.6%	17.1%	**54.3%**	**8.6%**
Guidelines limited what I could write about in my blog.	301X (f 05)	0.0%	7.1%	23.8%	19.0%	**33.3%**	**16.7%**
	523 (f 05)	0.0%	0.0%	35.7%	7.1%	**42.9%**	**14.3%**
	301X (s 06)	2.9%	5.7%	22.9%	28.6%	22.9%	17.1%
At times I did not know what to write about in my blog	301X (f 05)	0.0%	2.4%	11.9%	14.3%	**50.0%**	**21.4%**
	523 (f 05)	0.0%	0.0%	**35.7%**	14.3%	28.6%	21.4%
	301X (s 06)	2.9%	0.0%	8.6%	20.0%	**31.4%**	**37.1%**
The blog assignment helped to improve my writing	301X (f 05)	0.0%	**28.6%**	**26.2%**	23.8%	19.0%	2.4%
	523 (f 05)	0.0%	14.3%	21.4%	**35.7%**	21.4%	7.1%
	301X (s 06)	5.7%	**14.3%**	**22.9%**	25.7%	22.9%	8.6%
…helped to improve my understanding of blogging	301X (f 05)	0.0%	11.9%	9.5%	9.5%	**47.6%**	**21.4%**
	523 (f 05)	0.0%	7.1%	0.0%	21.4%	**50.0%**	**21.4%**
	301X (s 06)	2.9%	5.7%	5.7%	11.4%	**48.6%**	**25.7%**
0: No Response							
SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree							

Table 4: Blogging as a writing process (N=90)

In the final section of the survey student responses indicate that the course professor was the primary audience for their blog postings. Responses were somewhat divided about whether or not the audience for the blog was other students in class, although the graduate students agreed with this assertion. Interestingly most students did not agree with the statement that the audience extended beyond the professor and other students but many did share their blog with people outside of the course.

Questions	Course	Response by %					
		0	**SD**	**D**	**N**	**A**	**SA**
I will continue to maintain a blog after this course	301X (f 05)	0.0%	**26.2%**	**16.7%**	28.6%	11.9%	16.7%
	523 (f 05)	0.0%	7.1%	**35.7%**	21.4%	21.4%	14.3%
	301X (s 06)	2.9%	**22.9%**	**14.3%**	25.7%	25.7%	8.6%
The audience for my blog was my professor	301X (f 05)	0.0%	4.8%	11.9%	28.6%	**38.1%**	16.7%
	523 (f 05)	0.0%	0.0%	21.4%	7.1%	**50.0%**	**21.4%**
	301X (s 06)	2.9%	2.9%	2.9%	20.0%	**57.1%**	**14.3%**
The audience for my blog was other students in class	301X (f 05)	0.0%	14.3%	9.5%	**35.7%**	**38.1%**	2.4%
	523 (f 05)	7.1%	7.1%	14.3%	14.3%	**57.1%**	0.0%
	301X (s 06)	2.9%	**28.6%**	**20.0%**	20.0%	22.9%	5.7%
audience extended beyond my professor and other students	301X (f 05)	0.0%	**28.6%**	**16.7%**	19.0%	19.0%	16.7%
	523 (f 05)	7.1%	**28.6%**	**28.6%**	21.4%	0.0%	14.3%
	301X (s 06)	2.9%	**37.1%**	**20.0%**	11.4%	22.9%	5.7%
I shared my blog with people outside of this course	301X (f 05)	0.0%	**38.1%**	19.0%	7.1%	**33.3%**	2.4%
	523 (f 05)	7.1%	14.3%	21.4%	7.1%	**35.7%**	**14.3%**
	301X (s 06)	2.9%	28.6%	25.7%	20.0%	14.3%	8.6%
I visited the blogs created by other students in this class	301X (f 05)	0.0%	**31.0%**	19.0%	9.5%	**33.3%**	7.1%
	523 (f 05)	7.1%	0.0%	0.0%	28.6%	**50.0%**	**14.3%**
	301X (s 06)	2.9%	17.1%	20.0%	14.3%	**34.3%**	11.4%
I posted comments in blogs created by other students in this class	301X (f 05)	0.0%	**54.8%**	**33.3%**	4.8%	2.4%	4.8%
	523 (f 05)	7.1%	0.0%	7.1%	7.1%	**78.6%**	0.0%
	301X (s 06)	2.9%	**54.3%**	**28.6%**	5.7%	2.9%	5.7%
0: No Response							
SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree							

Table 5: Audience considerations (N=90)

How does this preliminary review of the survey data inform responses to the three research questions for this study?

1. *To what extent does social software impact an author's sense of information production and sharing online?* Based on the survey data, the use of blogger.com made it easy to create, post, and maintain a weekly blog for this class. Although students published in the public space of the Web, they most clearly defined their blogs as a diary, rather than a form of research writing. In addition, while students understood that this was a course assignment, and identified the course professor as their primary audience, they also shared their blogs with people beyond the scope of the course.

2. *How do students understand online communities as an individual and/or collaborative space?* This initial survey suggests that students understood their blogs as a form of personal writing, similar to a diary, and as an assignment in a course. Although many students viewed the course blogs created by their peers, most were reluctant to post comments, except for the graduate students, who were required to do so in some instances. This finding suggests that the blog is not an inherently collaborative space, but rather a personal one that has a public audience.

3. *To what extent does social software impact a student's perception of learning?* This particular study may be limited in fully addressing this question because it does not have a formal assessment strategy that compares student survey

responses with student grades. But the student responses to the survey suggest that students did not see a tangible connection between their writing performance and blog authorship. At the same time, however, the students identified strong connections between their blogging activity and other aspects of the course, such as the opportunity to reflect on web development and course topics.

How does this preliminary survey address the questions related to understanding blogs as a CoP? If we return to Hara's (2000) definition of CoPs as "informal networks that support professional practitioners to develop a shared meaning and engage in knowledge building among the members," we can see that some of these elements are evident here, although the collaborative dimension is not fully developed. This may reflect a limitation in the assignments or the survey itself, but the use of blogs in these courses did not automatically produce a sense of cooperation and collaboration among students. The blog was an individual writing activity in an open space that others could access to read, but not necessarily respond to, unless it was a requirement to do so. At the same time, the course blogs did provide opportunities for individual reflection and the sharing of insights and knowledge in support of other class activities, such as web page design and in-class discussion. This finding supports Schewn & Hara's (2003) assertion that "designers need to be aware of the characteristics of existing communities of practice to nurture them" (p. 257). In blended learning environments, the face-to-face and online activities must be balanced and supported as inter-related and purposeful activities.

9. Course Wiki

While the blog may not be an inherently collaborative space for cooperation and participation among individuals with common objectives and goals, the wiki may offer the potential for a higher level of interaction through its open-editing format. Within this framework, the individual page has been replaced by a group or community page that can be authored by anyone.

In spring 2007, based on the prior experience teaching with blogs in the courses discussed in this paper, a wiki assignment was introduced to IST301X, as well as a first year Honors College course (IST250H) on the topic of Social and Community Informatics. The course wiki was developed using PBwiki.com. The next phase of this particular research study will be to develop a student survey, similar to the blog survey that addresses the collaborative aspects of the online wiki communities created in spring 2007.
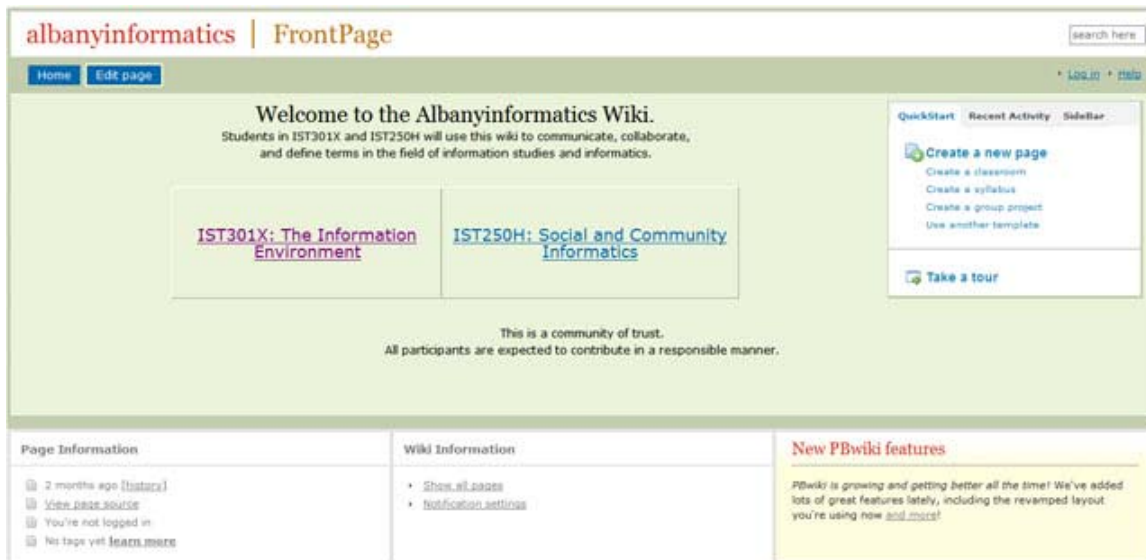
Figure 3: albanyinformatics wiki (pbwiki.com)

Preliminary observations suggest that wiki authorship is different from blog authorship because the interface challenges the single-authored format of a web page and/or web site and supports collaborative writing. Although users may want to maintain their individual sense of authorship, the wiki provides opportunities to collaborate at the levels of writing and design. The extent to which a wiki is a CoP also depends on the social context for this particular ICT and how it is developed and utilized.

10. Conclusion

Overall, Web-based applications such as Blogger.com and PBwiki.com make it easy for users to create and maintain blogs and wiki communities (and for educators to implement blogging assignments). Increasingly, users are becoming familiar with blogging but do not necessarily have their own blog (until they have a reason for creating one). Blogging encourages student writing and provides the opportunity to reflect on course content. Blog assignments that have some structure may be more helpful to students than open-ended requirements.

The relationship between the face-to-face dynamics in a course and the online components are essential considerations. For example, there may be a relationship between the size of the class and the sense of community in the class that extends to the virtual CoP of course blogs.

Although this reseach project is ongoing, it is important to situate this discussion of blog and wiki communities within a social informatics perspective that considers the social and technological aspects of ICTs. Through this framework we see that CoPs are defined by common interests, goals, and incentives for creating community (professor, other students, invited readers beyond CoP). Sharing information and knowledge may be facilitated through an invitation that extends to the audience, but this *read-only* group may not be seen as active participants in the community until they participate as authors. As such, it may be the extent to which authorship is a cooperative enterprise that defines the nature of online collaboration in a virtual CoP.

This relationship between authorship and CoPs is a relevant concern for future research. In addition, it will be useful to compare blogging with other online communities such as MySpace, Facebook, and WebCT and to study blogging and wiki trends in other contexts, beyond the classroom.

11. The Survey Instrument

1. I knew what a blog was prior to this course
2. I had my own blog prior to this course
3. Setting up a blog for this course was easy
4. Creating postings in my blog was easy
5. Maintaining a weekly blog in this course was easy
6. Maintaining a weekly blog provided me with the opportunity to reflect on the web pages I created this semester.
7. Maintaining a weekly blog provided me with the opportunity to reflect on the topics we covered this semester.
8. Maintaining a weekly blog provided me with the opportunity to understand how to develop content for web pages.
9. Maintaining a weekly blog provided me with the opportunity to understand academic research methods.
10. Maintaining a weekly blog provided me with the opportunity to understand how to write about academic sources of information.
11. Writing in my blog was different from any other kind of writing I have ever done.
12. Writing in my blog was similar to writing in a diary.
13. Writing in my blog was similar to writing a research paper.
14. The guidelines provided for the blog assignment provided me with ideas for what to write about in my blog.
15. The guidelines provided for the blog assignment limited what I could write about in my blog.
16. At times I did not know what to write about in my blog
17. The blog assignment helped to improve my writing
18. The blog assignment helped to improve my understanding of blogging.
19. I will continue to maintain a blog after this course.
20. The audience for my blog was my professor.
21. The audience for my blog was other students in class.
22. The audience for my blog extended beyond my professor and other students in this class.
23. I shared my blog with people outside of this course.
24. I visited the blogs created by other students in this class and I read their postings
25. I posted comments in blogs created by other students in this class.

1. Strongly disagree   2. Disagree   3. Neutral   4. Agree   5. Strongly agree

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