

Connected Learning: Evaluating and Refining an Academic Community Blogging Platform

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This study investigates the benefits of a community blogging platform for students in an online LIS program. Using a web survey and descriptive content analysis methods, this paper empirically addresses how student blogging communities can be effectively foster connections amongst instructors and students, and enhance perceptions of learning performance. Overall, students reported the blogging community and blogging assignment created a positive impact on their learning performance, particularly with productivity and competence. The positive feedback concerning usability and connections to others in the system reported lead to an overall positive perception of learning within the blogging community. Instructors seeking to create communities such as this for students should make the sites usable, customizable, and attractive.

Keywords: LIS education, blogging, pedagogy, online communities, online teaching, student blogging, reflective learning

Introduction

The rapid development of emerging technologies is a driving force behind the evolution of online delivery of courses and has changed the very fabric of higher education. Highlighted in the *Horizon Report* (2013, 2014) and *Horizon Report Library Edition* (2014), these disruptions include flipped classroom models, technology-enabled platforms for collaborative learning, use of technologies such as blogs for reflection, and more. Many library and information science (LIS) education programs are updating courses to take advantage of these technologies, including the School of Information (SoI) at San Jose State University. A recent update to a core course in the Masters of Library and Information Science (MLIS) program adopted the trends and technologies noted above to encourage collaborative sharing, written and media-based reflection, and hands-on experience with technologies utilized in libraries and information centers.

This study will offer insights regarding

the use of community-focused technologies for students to help educators in LIS and across disciplines better understand their potential. This study evaluated student perceptions of a community blogging platform, identifying areas where the model is effective, providing recommendations regarding improvements, and offering insights for instructors considering the use of blogging in their courses.

Background and Literature

This review of the literature provides an overview of research related to educational blogging, online delivery of courses, and connected learning. It also provides insights into the genesis of the community blogging platform for the SoI at San Jose State University and a core course redesign.

Blogging for Learning

Blogging as an educational tool has been used across disciplines for over a de-

cade (Downes, 2004). It is used to enhance virtual communities (Blood, 2004) and to encourage cognitive growth and deeper reflection (Jimoyiannis & Angelaina, 2012). The open-source software package WordPress is one example of a tool used for easy web publishing and will be the platform focus of this study. Other blogging software offers similar mechanisms.

Recently, enhancements to blogging software have led to more robust uses as social networks and fully functional community sites within higher education and beyond. These enhancements include user profiles, Twitter-like status updates and robust content management capabilities. Journalism students at the University of Nevada Las Vegas used a WordPress multiple-user community to work on writing projects in a networked environment. This initiative won a 2013 Sloan-C Effective Practice Award in the Student-Generated Content category (OLC, 2014).

Research regarding the use of blogging in the educational setting focuses on the usability of blogging software, measurements of student success, and interaction within blog communities. Researchers have found that student blogging can lead to improved learning outcomes and a positive experience with the medium itself (Cameron, 2012). Blogging can also be tool to enhance student reflection. Xie et al. (2008) found that in student blogging communities reflection “is germane to learning in that it makes learning meaningful (p. 24).”

Wang & Tang (2012) and Wang, Li, Li & Wang (2014) proposed a model of assessment for blogging systems geared toward educational use. Their research supports a multidimensional model of assessment featuring six variables: system quality, content quality, context and linkage quality, student satisfaction, system use, and learning performance. The authors also argued that blogging represents a participatory activity involving learner-learner, learner-instructor and learner-content interaction. This study explores

assessment of two of the model’s variables in depth: student satisfaction with the platform and overall perceptions of learning performance. It also explores the creation and development of connections between students and students/instructors.

Crafting Online Learning Environments

Online learning platforms include commercial offerings such as Blackboard, open-source learning management systems, and instructor created wikis, Google sites, WordPress blogs, and any other online tools that educators have utilized to teach. One constant concern has been: how do we create engaging spaces and opportunities for students to explore ideas? Morville (2012, *The Architecture of a Class* section, para. 3) argues that a virtual learning environment’s “architecture shapes the quality of the academic experience” and an environment that provides students the chance to learn to express themselves amongst peers, reflect on ideas, and share those ideas collaboratively is necessary. Adding these opportunities for sharing and feedback amongst peers as part of the learning experience led SoI faculty to rebuild one of the MLIS program core courses as part of “flipping” the experience.

INFO 200—Flipping a Core Course

From 2012 to 2014, a group of SoI faculty worked to update and revamp all core courses in the MLIS curriculum including INFO 200, most often the first three-credit class students take. What was once “Information and Society” became “Information Communities.” The updated course explores the foundations of information behavior, the information cycle, and the creation, use and sharing of knowledge within information communities. Fisher and Durrance’s characteristics of information community (2003) served as a theoretical framework for the course revamp and include the following:

Information communities:

- Exploit the information sharing qualities of technology
- Promote collaboration among diverse groups
- Form around user needs
- Help to overcome trust barriers
- Foster social connectedness (Fisher & Durance, 2003)

Students in the new version explore a community of their own choosing throughout the semester through assignments, blogging, and discussion. They utilize the five characteristics to define their chosen communities, locate research articles and community resources pertaining to their specific community, and apply insights from readings across 15 modules to understand how library and information centers might meet the needs of their groups. Recent communities studied have included Harry Potter fans, teenagers, women's health communities, surfers, commuter bicyclists, and many more.

In redesigning INFO 200, the group worked to incorporate some of the most recent discourse concerning teaching and learning as part of the update. The 2014 *Horizon Report* lists flipped classrooms as an important development in education suggesting integration within higher education happen within one year or less. The flipped model, also explored by Morville (2012), features lecture-style content consumed before class so class time can be spent more collaboratively. For the 100% online model at SoI, faculty experts recorded a series of lectures on the various course topics, which then allowed instructors to focus more on interaction with students. The group utilized a concept found in literature concerning blended learning and massive open online courses (MOOCs) in which instructors use core course content and “wrap” their own lectures, readings, and insight around it (Bruff, *et al.*, 2013). A “wrapper” in the form of a short video, an audio recording,

or other class interaction allows the section instructor to personalize each module to reflect their own approaches to information communities.

Another guiding concept was “connected learning,” which Jenkins (2012) notes has three important components: a shared purpose, a production-centered approach, and an openly networked environment. For INFO 200, the plan established that students would blog/reflect on the course materials and readings, work toward utilizing their blog reflections in a research paper, and review each other's work in the blogging community and groups. The blogging assignment is reproduced in Appendix A.

A Community Blogging Platform

To further enhance the INFO 200 experience, the School of Information launched its own blog-based community platform for all new students starting in the autumn of 2015. Built on WordPress and BuddyPress, an open-source content management system and suite of plugins that enable social networking capabilities, the site affords each student an individual blog, a personal profile, and the ability to interact via social networking features: status updates, @replies (similar to Twitter), and instructor-created or student-created groups built around interests or career goals. This is the same platform used by UNLV noted above.

While students explored information communities of interest to them, the platform also acted as an information community for the LIS students in the program. The Fisher and Durance (2003) definition comes into play here as well: utilizing technology to bring together a diverse group for collaboration, and fostering connections for the core course and beyond. The plan as of this writing is to host student blogs at the site for future classes throughout the time an individual is in the program.

Students are introduced to the community platform in INFO 203, a one-credit

course that introduces new students to the online learning environment of the SoI. In this course, students create their blog, practice posting and linking, and explore the platform.

This platform is based on similar configurations used by the instructor for course offerings at the SoI as well as the Hyperlinked Library cMOOC, a large-scale professional development course offered in the autumn of 2013. cMOOCs that have their foundations based on the pedagogical assumptions in connectivist learning theory, which recognizes that knowledge exists in dynamic relationships and external connections and expands with increased access to networks of people, materials, and tools (Clarà & Barberà, 2013). The #hyperlib cMOOC was evaluated via a study funded by an internal grant from SJSU in the spring of 2014. In an article published in the *Journal of Library and Information Science Education* (2014) the investigator and co-author Kyle Jones found the social affordances of the MOOC platform encouraged connected learning, enabling students to create, share, and remix course content and their own knowledge. They used the platform as a central location to access materials, but through blogs, groups, and status updates within the platform, they developed “affinity spaces” (Gee, 2005) for learning around their own interests and needs, while still maintaining a core course community.

Features of the Platform

As noted above, the platform built on a WordPress and BuddyPress installation included the following features, defined briefly here:

Blogs: Each student registered with the site creates a full customizable blog space of their own, including theme, tagging, categories for posts, and the basic information architecture of the system.

Activity Stream: The BuddyPress plugin creates a page of all site activity: blogging, comments on blog posts, etc. Indi-

vidual members of the site have their own activity stream as well.

User Profile: Each student registered on the site has a customizable personal profile page.

Status and @ Replies: Like the micro-blogging site Twitter, BuddyPress enables a mechanism on the site for members to utilize @username in status updates, which allows students to receive notification when the feature is used in conversation across the site. The username is created when the site account is registered.

Groups: Any member of the site can create a group and invite others to join. Groups, similar to discussion forums, can be public or private and may focus on any topic of interest to members.

Student Privacy

For the community blogging site, no student is required to use a photo or identify themselves by their full name. A detailed “Privacy Options” page explores issues related to sharing, privacy, and the creation of a professional identity online. From that page:

Unlike Canvas and other traditional learning management systems, this course site is open to the public and accessible by everyone online. We encourage you to be highly social with your peers and connected to this community by making interpersonal and professional connections, and we understand that this means there might be some extra things for you to think about and keep in mind while creating your profile and as you move through the course.

Research Questions

Building such a platform for student blogging should rely on constant evaluation and attention to feedback from students and instructors. This study formalized the feedback process for students. The questions guiding the research included the following:

- Q1: How do students perceive the effectiveness and usefulness of student blogging communities?
- Q2: Can student blogging communities create connections to other students and instructors across multiple sections of a course?
- Q3: To what extent do student blogging communities enhance student perceptions of learning performance?

Methodology

A Web-based survey tool, designed to address the research questions, included Likert scale or yes/no questions and open-ended questions, reflecting a research design that was both quantitative and qualitative. The Institutional Review Board of San Jose State University (SJSU) verified the survey questions in the spring of 2016. The survey questions are reproduced in Appendix B.

Sample

The target population for the survey was determined to be those students who had been in multiple sections of INFO 200 offered in Fall 2015. Prior to this semester, the community blogging platform did not include the BuddyPress plugins. These plugins enable the added social features and activity streams. There were 360 students

total enrolled in INFO 200 in the Fall of 2015. The survey was announced in February 2016 via an email alert message sent to all students.

A total of 101 valid responses were collected from an initial pool of 128 respondents. 21 students started the survey but had not taken INFO 200 in the Fall of 2015. Other responses deemed incomplete were those in which no answers were given beyond the initial “Did you take INFO 200 in the Fall 2015 term?” question. These responses were removed from the initial data set.

Findings

Usefulness and Effectiveness of the Site

Various statements regarding the usability of the SJSU School of Information community site were measured using a 6-point Likert scale to record responses, ranging from Strongly Agree to Strongly Disagree.

For ease of use with the community site, responses were overwhelmingly positive with 72% ($n = 52$) of the respondents either Strongly Agreeing (23%) or Agreeing (49%) that the site was easy to use. Similarly, the site was perceived to be user friendly, with 63% ($n = 45$) of the respondents strongly agreeing (22%) or agreeing (40%) to a statement that the site was user friendly. See Table 1 for a full breakdown of this section of the survey.

Table 1. The SJSU School of Information Community Site (N = 72).

	Strongly Agree (%)	Agree (%)	Somewhat Agree (%)	Neither Agree nor Disagree (%)	Somewhat Disagree (%)	Disagree (%)	Strongly Disagree (%)
Is easy to use	17 (23)	35 (49)	13 (18)	2 (3)	3 (4)	2 (3)	0 (0)
Is user-friendly	16 (22)	29 (40)	16 (22)	4 (6)	5 (7)	2 (3)	0 (0)
Has attractive features	14 (20)	34 (47)	13 (18)	7 (10)	3 (4)	1 (1)	0 (0)
Provides interactive features	15 (21)	38 (53)	10 (14)	7 (10)	1 (1)	1 (1)	0 (0)
Was effective for my class blogging	22 (31)	35 (49)	9 (12)	4 (6)	0 (0)	1 (1)	1 (1)

Enhancements

Open-ended responses to the survey question, "What enhanced your work on the SJSU School of Information Community Site?" were analyzed and categorized by the researcher into three themes: (1) the highly customizable features of WordPress, (2) the incorporation of media into student work, and (3) the ability to connect/communicate with other students through the WordPress platform.

Respondents were highly positive in how customizable WordPress was when choosing layouts and themes and making the workspace their own. One respondent said, "For a first time blogger, it was really easy to post and edit on the site. The themes allowed me to set the appearance of my blog without knowing anything about design." Another noted: "Options to customize layout and getting to choose my own theme" was an enhancement.

A high number of responses indicated that the ability to quickly and easily incorporate media into their reflection posts was convenient and helpful. Some felt that the use of media made posts more enjoyable to read: "Once I was able to figure out a little more—how to post videos for example—I felt that my blog was more engaging. It was a little difficult to figure out the size and embed it, it took me some time to figure out but overall it is a user-friendly site". Other students shared similar thoughts: "I enjoyed posts that had videos and pictures" and "The ability to attach pictures and links enhanced my work". The simplicity with which it was possible to include pictures and video in WordPress into student work made people feel more engaged with the subject material.

Students also commented on the ability to better connect/communicate with other students through the community site, often mentioning that they liked being able to see other students' discussion posts and comments even when they weren't participating directly (lurking). A respondent re-

ported the "various functions that allowed us to interact with classmates were a definite help to my work in the class." Another appreciated the "Who's Online" widget on the site's front page: "Just being able to see when others were online so we could chat together (like in a real classroom setting) was amazing."

Impediments

While there were a number of aspects of the community site that enhanced student work, students also shared a number of concerns that they said impeded their work on the site. Coded answers for this section included impediments such as technical issues, content formatting, and navigation as primary issues.

Technical issues seemed to stem from the lack of previous experience with WordPress and some students felt that a tutorial would have helped them learn the platform. Although numerous tutorials and "How To" pages are available on the community blogging platform, one student reported that technical challenges took them awhile to work out and had a negative impact on their grade.

Content formatting often gave students problems, especially between the editing and the publishing stages. Often this came in the form of content not appearing properly between the editor and the final post. More than one student voiced their concerns with content formatting, saying: "I spent quite a bit of time adjusting the embedded content in my posts so it stayed where i [sic] wanted it to when the post was published."

Navigation also seemed to be a problem for a number of students and many found themselves lost within the community site. In particular, students found it difficult to navigate to the WordPress Dashboard while others had difficulty finding their home page or other basic navigation. One student reported: "I sometimes found it difficult to navigate. It was not immediately user friendly."

Table 2. I participated in The SJSU School of Information Community Site . . . (N = 72).

Answer	Responses	Percentage
For my assigned blog posts with required comments only	42	58%
Weekly to see what was happening	22	31%
Daily to see what was happening	8	11%

Improvements

Survey respondents were asked to provide feedback with regard to improving the community site and blogging experience. Overall, responses to this question revolved around the need for better instruction and improved notification systems. Respondents noted that more instruction on how to use the blogging platform would be helpful, including more time spent in class learning the system to the addition of quick video tutorials, and detailed, step-by-step instructions for common tasks related to writing, formatting, and publishing a post.

A majority of students also reported that a better notification system for blog posts and comments would improve the site. Others stated that the site should be integrated into Canvas, the school’s learning management system. Others suggested features such as an automatic widget that suggests other posts of interest across the site.

Most Used Features

Student participation in the site was mainly for the required blogging and commenting (58%), but 31% used the site weekly to see what was happening. Eight students (11%) reported logging in daily. Participating in the site involved blogging, making use of the social features of the site, and following activity feeds. See Table 2.

Blogging

Students’ use of the site varied greatly, though two of the most popular reasons

were to hyperlink to articles and other blog posts (87%, n = 60) and to include media in the blog post (88%, n = 61). Another popular use for the SJSU community site was the use of the “About Me” or other pages (59%, n = 41). Over half of respondents used this page to share information about themselves for classmates, while less than half of the respondents used the community site for scheduling posts (46%, n = 32), personalized image headers (41%, n = 28), tagging (30%, n = 21), and how-to’s (23%, n = 16).

Table 3 offers a full breakdown of student response (N = 69) for the statement “I utilized the following features of the SJSU School of Information Community Site” for the category related to blogging.

Social Features

The majority of respondents in the survey used the community site to respond/comment on blog posts written by students in their own section of INFO 200 (99%, n = 66) while only 13 respondents (19%) used the community site to comment on blog posts outside of their section of INFO 200. A small population of the respondents created groups within the community site (3%, n = 2) while a significant number of respondents said that they took part in the discussions within those groups (39% n = 26). The @username feature was used by only a limited number of participants (21%, n = 14).”

Table 4 offers a full breakdown of student response (N = 67) for the statement “I utilized the following features of the SJSU School of Information Community Site”

Table 3. Use of Blogging Features at The SJSU School of Information Community Site ($N = 69$).

Answer	Responses	Percentage
Hyperlinking to articles and other sites in my blog posts	60	87%
Scheduled posts	32	46%
Images and media in my blog posts	61	88%
"About Me" or other Pages	41	59%
Personalized image headers	28	41%
Tagging	21	30%
"How-to's" and Helper pages	16	23%
Other	2	3%

for the category related to the site's social features.

RSS

Rich Site Summary (RSS) is defined as XML-based metadata content from a blog or other source. Whenever the source gets updated, the RSS feed gets updated and any aggregators that are subscribed to that feed are notified that new content is available. People who use aggregators to monitor RSS feeds get alerts when new content is added to the blogs or news sites they monitor. A total of 33% of students reported using RSS feeds.

Feeling Connected to Other Students

Overall, 61% ($n = 42$) of the survey re-

spondents indicated that they felt connected to other students using the SJSU community site, while 39% ($n = 27$) indicated that they did not feel connected to other students while using the site.

An open-ended follow up question (Describe your feelings about connection to other students . . .) yielded varied responses from students illustrating both sides of the answers. One student wrote, "With an online class, it can be hard to connect with other students. By reading and commenting on blogs, you feel like more of a community. It is reassuring to read about issues and struggles that classmates are going through." Conversely, other students felt less connected with their peers. One student wrote, "I only used this to complete my assignments. I didn't try to connect with people."

Table 4. Use of Social Features of The SJSU School of Information Community Site ($N = 67$).

Answer	Responses	Percentage
@username replies	14	21%
Participation in groups	26	39%
I created a group for others	2	3%
I commented on blog posts written by other students in my section of INFO 200	66	99%
I commented on blog posts written by other students outside my section INFO 200	13	19%
Other	0	0%

Feeling Connected to Instructors

For the question “I felt connected to my instructor in the SJSU School of Information Community Site,” 69 students responded. 55% (*n* = 38) of respondents stated that they felt connected to their instructors when using the SJSU community site and 45% (*n* = 31) respondents stated that they didn’t feel connected to their instructors while using the site. An open-ended follow up question (Describe your feelings about connection to your instructor . . .) yielded various responses. One student described a positive feeling: “My instructor made me feel that my contribution to the class through my blog was important and that he actually read what I wrote.” Another did not feel connected: “I don’t recall much interaction at all, so I have a lack of connection in the blogging space.”

Overall Effectiveness of the Community Blogging Site

The next question sought to gauge student perception of the overall effectiveness of the community site on learning experi-

ence via a series of statements rated with a Likert scale. For this question 69 students responded. Where the community site seemed to excel was in improving learning performance and enhancing learning competence. For these statements, 30% (*n* = 21) respondents said that they Strongly Agree and 32% (*n* = 22) respondents Agree that the community site improved their learning performance. Similarly, 30% (*n* = 21) respondents Strongly Agree and 35% (*n* = 24) respondents Agree that the community site increased their learning competence.

The most strongly agreed upon aspect of the community site was that it increased the student’s learning productivity (32%, *n* = 22). While the overall responses for the majority of statements were overwhelmingly positive, the “feeling of connectivity to other students” fell a bit short. For this measure, 29% (*n* = 20) of respondents provided below average responses to the question, “The Community Site improved my learning performance . . . with 13% (*n* = 9) neither agreeing or disagreeing, 10% (*n* = 7) somewhat disagreeing, 3% (*n* = 2) disagreeing and 3% (*n* = 2) strongly disagreeing.

Table 5. The SJSU School of Information Community Site . . . (*N* = 69).

	Strongly Agree (%)	Agree (%)	Somewhat Agree (%)	Neither Agree nor Disagree (%)	Somewhat Disagree (%)	Disagree (%)	Strongly Disagree (%)
Improved my learning performance	21 (30)	22 (32)	10 (15)	10 (15)	3 (4)	0 (0)	3 (4)
Improved my learning performance through connectivity with other students	16 (23)	17 (25)	16 (23)	9 (13)	7 (10)	2 (3)	2 (3)
Enhanced my learning competence	21 (30)	24 (35)	12 (17)	8 (12)	1 (2)	1 (2)	2 (3)
Increased my learning productivity	22 (32)	17 (25)	13 (19)	8 (11)	4 (6)	2 (3)	3 (4)
Helped me think through problems and issues	19 (28)	16 (23)	16 (23)	10 (15)	3 (4)	3 (4)	2 (3)

Discussion

The research questions used in this study provide insights into how a student blogging community can be used to enhance student learning experiences. Overall students found the site easy to use, user-friendly, attractive in appearance, interactive, and effective. They described what worked well, what impeded their experience with the blogging platform, and their perceived connections across the community. Three common themes and some associated caveats appeared in the qualitative data related to these questions that LIS instructors may find useful for their own blogging communities.

Customizable & Experiential

Students respond positively to an environment that is customizable and allows an expression of individuality. This might include freedom to choose a WordPress theme, to add personal photos or other media, and to create their own information architecture via blog post categories or tagging. One student noted a positive aspect of blogging was “the ability to make it my own - I could create anything I wanted.” Incorporating media easily was another factor that contributed to student positive perception of the blogging experience: “The ability to easily add videos, gifs, and pictures to my blogs” was a positive part of one student’s experience.

Students also reported feeling satisfied and encouraged by learning WordPress itself. The experience of reflective blogging also offered a chance to learn hands on. One student noted: “I learned a lot about integrating different media into my posts. Previous academic work was very traditional, while this had implications for communication in more real world terms.” Another said: “I loved blogging. I thought it was a great way to get comfortable with blogging and allowed you to be a little more creative with your work.”

The highly customizable and experien-

tial environment created through a WordPress-based student blogging community can also cause frustration and other impediments. LIS instructors should provide links to tutorials and other mechanisms to provide assistance for those students who may require it. Students requested helpers such as “Better instructions on features and uses for a first time user” and “Maybe a few quick video tutorials on common stumbling points for beginners.”

In response to concerns such as these issues of support and troubleshooting, the SoI offers an independent study course each semester for students interested in being “Learning Guides” for the student blogging community. The Guides offer technical support for blogging questions in a group available to all students. In the spring of 2016, the Guides worked on extensive updates to the site’s “How To” pages as response to questions from students during the previous semester. See Appendix C for an overview of these pages.

Instructors should also communicate often about various avenues for help and support. A student should never feel “alone,” as one respondent said. Another approach may also be to communicate to students that reflective blogging should be about “thinking out loud” and applying the ideas encountered in readings and less about perfect formatting. Several students expressed frustration with not being able to format their posts the way they felt they should be formatted, including one who stated: “It was sometimes difficult to get the formatting right. Like when listing references at the bottom of our posts, it was impossible to get a decent hanging indent!”

Connected Sharing & Discourse

The next thematic area from the data concerns student perception of connections created or enhanced by the site, both with other students and instructors. The breakdown of 61% reporting feeling a

sense of connection and 39% not feeling a sense of connection demonstrates that while a majority felt they were connected to others within the community, others felt more alone or disconnected.

Students reported that introductory posts, photos and other personalizations enhanced the feeling of connection, especially early on. As the work of the course ramped up, some students reported engaging with others who were researching similar communities as a means of making connections, mainly through commenting on posts. One noted: "The blogs made it easier to get to know other students, and it felt easier and less obtrusive to comment on posts on others' blogs, as opposed to the discussion functionality in Canvas, which felt more limiting and clunky."

For those who did not feel connected, some perceived they weren't findable ("Since I didn't get many hits from students, I didn't feel very connected to my peers.") or felt overwhelmed ("Because it was so difficult to keep track of everyone's blogs and I had a limited amount of time to comment, I had to 'blindly' choose a blog to read and comment on it.") Some simply expressed more interest in face-to-face learning instead: "I read other blog posts and commented, but this created no real connection. I feel a classroom setting and not a virtual setting is a better method of connecting."

Instructors should seek to use all of the social features within student blogging communities to alleviate any feeling of disconnection. This might include creating groups for further discussion, posts highlighting various students' research topics, or offering synchronous "Social Hour" web conferencing opportunities to help students engage with each other. Bringing in outside interests, focusing on events or holidays, and sharing photos can be a positive experience as well. One respondent summed it up with:

"I appreciated having connections to other students. We were able to learn from each

other's questions, share fun life events (like fun Halloween costumes), learn more about the field through reading each other's assignments and blog posts. In an entirely online program, I can sometimes feel as if I'm going through the ups and downs of study all alone. Having a connection to other students through sites like this helped alleviate that isolated feeling."

Instructor Presence & Engagement

The last thematic area highlighted in the qualitative data concerns that of instructor presence and engagement within student blogging communities. It could be argued that instructor presence and use of the student blogging community can make or break the student experience. One student mentioned their instructor "was very personable and posted lots of things on the Community Site to help us feel like a part of that community," while another said "My instructor graded our blog posts but made no comments on the blog posts via the blog." Another stated: "He graded our assignments and answered our emails promptly, but other than that engaged with us very little. I was disappointed to feel isolated in this class which I was initially excited for."

Students responded well to instructors who were visible and present within the student blogging community and who shared insights about themselves and their interests. One student acknowledged that the instructor's presence also served as a connection point to the School itself: "... comments and responses were VERY instrumental in feeling connected to the school and other students."

If LIS educators are seeking to engage with students in online learning environments, such as blogging communities or learning management systems, these sentiments may be useful for understanding ways to do so. It could be argued that today's LIS students, and students in online programs of all kinds, expect to interact with and "see" their instructor beyond the

gradebook to learn about them as people. “Luckily, my instructor was very active and open,” one student wrote. “I felt like he guided and led our class really well. He cultivated an atmosphere of trust and sharing, and that helped to keep class discussions going.” Another stated: “Our instructor was readily available whenever we had questions or needed to discuss ideas. He participated in the social aspects of the site. I appreciated getting to know him as an individual.”

Implications for LIS Educators

The aim of this study was to investigate the benefits of a community blogging platform for students in an online LIS program. Analysis demonstrates that students have positive perceptions of the effectiveness and usefulness of student blogging communities. Instructors seeking to create communities such as this for students should make the sites usable, customizable, and attractive. A high degree of personalization and the freedom to embed and include media enhance the experience. All of these concepts yielded a markedly positive level satisfaction with the platform from students as proposed in the model by Wang & Tang (2012) and Wang, Li, Li & Wang (2014).

It is important to note that there needs to be a supportive, helpful infrastructure (tutorials, helpers/guides, etc.) to fully integrate this type of structure. Instructors should work with IT support to create a friendly, accessible, customizable and usable site for group blogging. It could be argued that LMS platforms such as Blackboard and Canvas are less conducive to a student’s ability to fully express themselves when the ability to customize and embed multiple media in a platform like WordPress is so straight forward. This customization and outlet for creativity furthers the development of connectedness in the on-line learning environment.

The data also supports that to a certain degree student blogging communi-

ties create connections to other students and instructors across multiple sections of a course. These connections, however, depend on utilizing the social features of a blogging community such as one built with WordPress and BuddyPress. It also relies on clearly communicated options for support, clearly presented methods to “keep up” with the flow of site or course activity, and a focus on bringing students together in ways that might foster sharing and discourse. This supports Morville’s ideas (2012, *The Architecture of a Class* section, para. 3) to create engaging spaces and opportunities for students to explore ideas in new ways and with new technologies.

It should also be noted that teaching students early to interact with fellow students can set the stage for future professionals to participate in networking in the field. Networking with peers is critical to our profession. For many professionals in practice, connecting with peers beyond locally is a daily occurrence. For example, knowledge and practice in the blogosphere is an excellent base for being able to leverage the many discussion platforms out there, even if as simple as knowing how to get RSS address for a library association’s news feed can be beneficial to new professionals.

Finally, the third aim of this study was to gauge the extent that student blogging communities enhance student perceptions of learning performance. Overall, students reported the blogging community and blogging assignment created a positive impact on their learning performance, particularly with productivity and competence. It could be argued that the positive feedback concerning usability and connections to others in the system noted above lead to an overall positive perception of learning impact within the blogging community and for the core course. This supports the findings of Wang, Li, Li & Wang (2014) that “quality attributes positively affect user satisfaction, which in turn positively influences learning performance di-

rectly or indirectly through the mediation of system use” (p. 984).

Further Research

This study will be replicated further to address a limitation of the research: the data set is from one semester of use of the new system. Including course instructors in the data collection via interviews or questionnaires will also provide a wider view of the experience of student blogging communities. It would also be interesting to study other examples of student blogging assignments in other programs, both online and blended, to further reveal the benefits and issues surrounding student reflection via blogging.

Conclusion

Utilizing a student blogging community within a completely redesigned core LIS course is a daunting task. The benefits, as noted in this study, provide students a feeling of ownership of their blog-space, a feeling of connection with fellow students in the course and in the larger program, and a feeling of competence and accomplishment. Students also self-reported perceptions of a higher degree of learning performance because of their blogging experience within the community site. Promoting a space that encourages creativity, thoughtful reflection on course materials shared openly with peers, and a means to forge networks of soon-to-be professionals should be a goal of instructors within our field.

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Appendix A

Blogging Assignment for INFO 200

The purpose of this assignment is to promote reflection and consideration of course content throughout the semester. Using blogs allows you to gain experience with the tool as well as “think out loud” about course content. Let your blogging be a reflection of your own curiosity and ideas about our course. Follow your thoughts where they go. Work toward finding your “blogging voice.” Writing in the first person is encouraged! Ponder, for example, how the concepts you are encountering might inform your practice as a librarian or information professional. With the guided topics listed on the syllabus, your blogging reflections can ultimately become drafts of various sections of your research paper.

Requirements

You will use your blog on the Community Blogging platform for School of Information students in this class. Five posts will include substantial content, citations, and reflective thinking. Two posts—an introduction and final reflection—will count as part of participation for 200. Blog posts #2–#6 should form the basis of parts of your research paper and are worth 20 points.

Note: You will be writing on the open Web within the community blogging site. Be mindful of balanced, well-articulated arguments, statements and sharing. This assignment also serves as a way for students to find their professional, online voice.

Blog Assignment Requirements

Students will author seven blog posts of 300 words minimum. The posts have a guided topic for students to explore. For example, you will write a post describing the information community you have chosen as your focus for the semester that may become the foundation of your description in the final research paper. Other posts require you to detail further insights about this chosen community, such as use of emerging technologies, the community's perception of information services, and the community's information seeking behaviors. Most posts will require research. Be sure to cite your sources at the end of your post. Link out to other URLs when appropriate and add images or embed media when appropriate.

Blog Post #1: Introduce yourself. Share whatever you'd like about your goals in our school and the profession as well as your background and interests. (Participation)

Blog Post #2: Describe the Information Community you are choosing to explore for the course and the research paper. Utilize Durrance and Fisher's definition and characteristics of Information Communities to describe your choice to the class.

Blog Post #3: Report on the information-seeking behavior and information needs of chosen community. Utilize theories covered in the lectures and assigned readings. Cite the research you've found so far concerning your chosen community.

Blog Post #4: Summarize one of the peer-reviewed articles relating to your information community you've found. Briefly describe the author's credentials, the scope of the study, the methodology, and findings of the piece. What insights will

inform your literature review and research paper?

Blog Post #5: Report on an ethical or legal issue pertaining to your information community. Use your research and the modules on ethical issues and intellectual freedom as resources to define and reflect on the issue.

Blog Post #6: Create a media-based artifact (infographic, video, audio, etc) from your research and explorations of your community's use of emerging technologies. How do they use technology to advance the community or share information? Be as creative as you'd like!

Blog Post #7: Personal reflection on information communities. What are you taking away from your explorations and research? What will inform your practice as an information professional? (Participation)

Appendix B

Survey Questions

Please rate the following statements:
(Likert Scale)

- _____ The SJSU School of Information Community Site is easy to use.
- _____ The SJSU School of Information Community Site is user-friendly.
- _____ The SJSU School of Information Community Site has attractive features.
- _____ The SJSU School of Information Community Site provides interactive features.
- _____ The SJSU School of Information Community Site was effective for my class blogging.

What enhanced your work on the SJSU School of Information Community Site?

What impeded your work on the SJSU School of Information Community Site?

What would improve the experience of the SJSU School of Information Community Site?

I participated in The SJSU School of Information Community Site: (Choose one)

- _____ For my assigned blog posts with required comments only
- _____ Weekly to see what was happening
- _____ Daily to see what was happening

I utilized the following features of the SJSU School of Information Community Site: (check all that apply)

Blogging at the Community Site:

- _____ Hyperlinking to articles and other sites in my blog posts
- _____ Scheduled posts
- _____ Images and media in my blog posts
- _____ "About Me" or other Pages
- _____ Personalized image headers
- _____ Tagging
- _____ "How to's" and Helper pages

Other:

Social Features of The SJSU School of Information Community Site:

- _____ @username replies
- _____ Participation in groups
- _____ I created a group for others
- _____ I commented on blog posts written by other students in my section of INFO 200
- _____ I commented on blog posts written by other students outside my section INFO 200

Other:

RSS Feeds of the site and student blogs

Connected Learning

I felt connected to other students in the SJSU School of Information Community Site Yes/No

Describe your feelings about connection to other students.

I felt connected to my instructor
in the SJSU School of Information
Community Site Yes/No

Describe your feelings about connection
to your instructor.

Please rate the following statements:
(Likert Scale)

_____ Using the SJSU School of Informa-
tion Community Site improved my
learning performance.

_____ Using the SJSU School of Infor-
mation Community Site improved
my learning performance through
connectivity with other students.

_____ Using the SJSU School of Informa-
tion Community Site enhanced my
learning competence.

_____ Using the SJSU School of Informa-
tion Community Site increased my
learning productivity.

_____ Using the SJSU School of Informa-
tion Community Site helped me
think through problems and issues.

Appendix C

How To Page for Community Site

Example of Tutorials and Questions

How to . . .

Below are commonly asked questions
about how to customize the look of, create
new content for, and socialize with your
peers on your new blog. If you have ad-

ditional questions that are not answered
by one of the links on this tutorial page,
please post them in the Community Site
Tech Support group on this site.

How do I . . .

Getting Started with WordPress

- Get started with my WordPress site and blog?
- Decide what privacy options to use?
- Learn more about WordPress (PDF overview)?

Administration & Customization

- Change my site's theme (i.e., appear-
ance)?
- Change my avatar and cover image?
- Think about and craft the taxonomy of
my site?
- Approve comments on my blog?
- Deal with spam comments?
- Create an additional site?
- Export course content to personal
WordPress site?

Creation

- Create a blog post?
- Add pages to my site?
- Add media to my posts?
- Cite references on my site using online
tools?

Socializing

- Use @username in conversations to
auto-notify others you're talking to
them?
- Add someone as a friend?
- Create a group?
- Send someone a private message?
- Find my activity stream?
- Post status updates to the class?