Building Communities Through Online Spaces: The Shifting Sands of School Library Education

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This paper explores the perceived information learning needs of students registered in the Teacher-Librarianship by Distance Learning (TLDL) program at the University of Alberta. This paper reports on the findings related to two main questions: 1. To understand the perceived information needs of students who are completing a Master of Education degree completely online. 2. To understand students' perceptions of "community" in online spaces. To address these questions, an online survey was distributed to current and former students of this online teacher-librarianship education program. Respondents indicated that they had a strong sense of community through the program and the online courses. Community within the TLDL program is built through student-to-student and instructor-to-student interactions. Respondents' perceived sense of community aligned with the existing literature about building online communities. This study indicates that as more students choose to take courses online, instructors need to carefully consider how to make rich learning experiences that are as good as, or even better than face-to-face learning experiences.

Introduction and Background

Ubiquitous computing has transformed the educational landscape, facilitating a sense of fluidity and flexibility for learners. Burbules (2010) emphasizes that spatial ubiquity has allowed learners to access information to an extent that has never been witnessed before. In fact, "the traditional distinction between formal and informal education is blurred once we recognize that physical location is no longer a constraint on where and how people learn; the processes of learning and memory themselves may be changing as people are less required to carry around in their heads all that they need to know to get through a day effectively" (p. 16). Certainly this ubiquity has altered the very fabric of community learning spaces, as online learners must depend on alternate strategies to build this community of practise. In essence, how can communities be successfully established and maintained to ensure the vitality of online learning spaces.

This study further explores the perceived information learning needs of students registered in the Teacher-Librarianship by Distance Learning (TLDL) program at the University of Alberta. Four main objectives were addressed within this study: 1. To understand the perceived information needs of students who are completing a Master of Education degree completely online. 2. To understand students' perceptions of "community" in online spaces. 3. To understand students' perceptions of their responsibility in accessing information, using information, creating information in online spaces. 4. To understand students' perceptions of their roles in the creation of online community.

The Teacher-Librarianship by Distance Learning (TLDL) program at the University of Alberta has been providing online educational opportunities for teachers and teacher-librarians for 15 years. To be accepted into the Master of Education program, students need to be qualified teachers (Bachelor of Education degree) and have a minimum of one year of successful teaching experience. Most of the students in the program are already working in school libraries and come into the program to gain the knowledge and skills necessary to build successful school library programs. A few students every year come into the program wanting to be teacher-librarians but not working in a library.

As an online program, technology is woven into the fabric of each course, with students completing all of their coursework and assignments online. Courses in the TLDL program build on the ideas of connectivism (Siemens, 2005) and participatory culture (Jenkins, et al., 2006) with students expected to create digital content, connect with others in their classes and in the wider world, and actively participate in their learning. Courses in the TLDL program are designed and assessed in ways which require students to be connected locally and globally through their personal learning networks.

Theoretical Framework and Literature Review

In recent years there has been much research about online learning, online teaching and building online communities in reaction to an exponential increase in the number of courses offered online. This research continues a long tradition of research into pedagogical approaches and learning theories. Vygotsky (1978) and social learning theory are the starting points for much of the thinking about pedagogy in both face-to-face (FTF) and online pedagogical literature. This paper builds on the work of Vygotsky in that the authors believe that knowledge is constructed within social contexts, the environment of the learning, in this case the Learning Management System (LMS), and the learning co-exist and that collaboration in the learning environment is essential for learning to happen.

For this study, we use Conrad's (2005) definition of community which is "a general sense of connection, belonging, and comfort that develops over time among members of a group who share purpose and commitment to a common goal" (p. 2). Conrad continues to explain that "the creation of a community simulates for online learners the comforts of home, providing a safe climate, an atmosphere of trust and respect, an invitation for intellectual exchange, and a gathering place for like-minded individuals who are sharing a journey that includes similar activities, purposes and goals" (p. 2).

Rovai (2002a) posits that there are four dimensions of classroom community: "spirit, trust, interaction and commonality of expectations and goals, in this case, learning" (p. 4). Spirit is the sense of membership in the community and allows members to challenge each other and help each other. Trust represents both credibility and benevolence - both trusting others and trusting others to help. Interaction is essential to developing community. Interaction includes task assigned by the instructor but also social interaction where students get to know each other

and share personal histories. Learning is the "commitment to a common educational purpose" (p. 6). Learners are transformed by participation in the community. In a functioning community of learners, "members of the community grow to value learning and feel that their educational needs are being satisfied through active participation in the community" (p. 6).

For this study, online communities can be identified as "using any form of electronic communication which provides for the opportunities for on-line synchronous/asynchronous two-way communication between an individual and their peers, and to which the individual has some commitment and professional involvement over a period of time (Leask & Younie, 2001, p. 225). Conrad (2005) asks "Who should take responsibility for constructing community in online courses? Is the responsibility taken or is it given?" (p. 8).

Much research on online learning and online communities developed to try understand how to improve completion rates and to retain students. Early reports of online learning (Carr, 2000) found that dropout rates were 10 to 20 percent higher than in FTF classes. Understanding how online communities of learners in this learning environment (LMS) are similar to and different from FTF learners has been a focal point of the work of Rovai and his colleagues (Rovai, 2005; 2004; 2003a; 2003b; 2002a; 2002b; 2002c). Rovai's (2003) *Classroom Community Scale* has been used and adapted by other researchers to better understand sense of community. It consists of 20 items such as: "I feel isolated in this course," "I feel connected to others in this course," and, "I feel uneasy exposing gaps in my understanding." A five-point Likert-type scale of potential responses from strongly agree to strongly disagree follows each statement. In his first study, using the *Classroom Community Scale*, Rovai surveyed 314 study participants from 26 online courses. Rovai suggested that "the common factor affecting both dropout rate and cognitive learning may be a sense of community in online courses and programs" (p. 328). Another interesting finding was that females "felt more connected to the virtual classroom community than did their male counterparts" (p. 329).

Drouin (2008) was interested in the relationship between students' perceived sense of community and satisfaction, achievement and retention in an online course. The researcher surveyed undergraduate students as part of course evaluations. Student-student and studentinstructor interaction happened asynchronously through WebCT (an early LMS) and email. Students' perceived sense of community was "significantly related to nearly every variable measured" (Drouin, p. 276). Interaction with course content, "interaction with other students and interaction with the instructor were all related to student's perceived sense of community" (p. 277). However, "correlations between students' reported sense of community and student achievement and retention were weak or not significant" (p. 278). Interestingly, half of the respondents indicated they did not feel a sense of community, but "only three of these students indicated that they would not take another online course" (p. 280). It would be equally possible that FTF students might not feel a sense of community in a classroom but that would not necessarily suggest they would never take another FTF class. Exter, Korkmaz, Harline and Bichelmeyer (2009) surveyed 29 distance students and 9 residential students to determine their sense of community and to compare the two learning experiences. The researchers found that distance and FTF students had a similar sense of community.

The work of Reinhart (2010) who surveyed students in a graduate program in library and information studies who take courses in a variety of delivery modes - FTF, blended and online, confirmed the work of Exter et al. (2009). The study involved 85 students and findings indicated that there was no difference in sense of community between online and FTF students. However, the respondents did report "a significantly higher sense of learning community than they did a sense of social community" (p. 234).

Shea, Li and Pickett (2006) surveyed a random sample of students enrolled in 32 colleges in the State University of New York system. More than 2000 students were included and 1067 responded. The researchers found that there was a clear connection between perceived teaching

presence and students' sense of learning community. In fact, respondents "were more likely to report higher levels of learning and community when they also reported that their instructors exhibited more salient "teaching presence" behaviours" such a confirming understanding, reinforcing student contributions, injecting knowledge, and setting climate for learning (p. 184). The work of Exter, Korkmaz, Harline and Bichelmeyer (2009) confirmed this finding indicating that "instructors were particularly good at facilitating interaction in their classes, using technologies including videos (recordings of classes or individualized feedback from professors), teleconferencing, voice over IP, chat sessions, discussion forums, and email" (p. 189). Another finding from this study was that "instructors' comfort level with technologies available was a major factor in how well instructors were able to provide meaningful interactions with their courses" (p. 189).

Exter et. al (2009) also included an open-ended survey question about ideas to help students feel more connected. Suggestions included the "use of social networking sites (Facebook, MySpace, or a Website specific to the program with discussion forums and/or blogs, and opportunities for students to post descriptions of themselves)" and social get togethers either online or FTF (p. 191). Reinhart (2010) also found that the program website was the only information source "positively correlated with perceived sense of social community" (p. 235). Email was not positively correlated. These findings suggest that students desire more web-based communication to develop a sense of community.

Methodology

An online survey was distributed to current and former students in the Teacher Librarianship by Distance Learning (TLDL) program. There are currently 70 students enrolled in the Master of Education degree focusing on teacher-librarianship and about 50 recent graduates. Asking graduates of the program to complete the survey helped the authors determine whether graduates continue to access information through these online spaces and what types of information are relevant to graduates. The survey asked participants to reflect on their information needs in terms of the application process, course selection, program management and program completion. Questions on the survey explored if and when students accessed information from the program website, the department website, Faculty of Graduate Studies and Research website and the University of Alberta website. The research also explored the perceived usefulness of the TLDL Facebook group, the TLDL wiki, the TLDL listserv and the TLDL Twitter hashtag as part of the TLDL "community."

Some questions will be open-ended to allow participants to provide detailed written responses and information, while other questions were simple checking off responses. All students currently in the program and recent graduates were sent an email asking them to complete the online survey and providing them with background to the study. Those who chose to participate in the survey were then directed to a link where they were able to access and complete the survey. Students and recent graduates were not required to complete the survey and all responses were anonymous.

The survey was distributed in late April, 2012, after courses are complete. The survey was closed at the end of June, 2012. Twenty-five people responded to the survey, representing a response rate of about 21%. Although the authors had hoped to receive more responses to the survey, the low response rate may be attributed to the fact that May and June are typically very busy months for teachers and teacher-librarians who are finishing the school year.

The survey results were analyzed in July, 2012, by looking for common themes and trends that emerged across questions and throughout the comments (Bogdan & Biklen, 1992;

Miles & Huberman, 1998). The data are presented using representative quotes from the survey responses to support the patterns and themes. This paper will focus on responses from only a portion of the survey questions.

Findings

The survey that was distributed to current and former students in the Teacher-Librarianship by Distance Learning (TLDL) program asked participants to reflect on their information needs related to program information and on their sense of community in an online program. This paper reports only on the findings related to the participants' sense of community in a fully online program. This section presents findings using the survey questions to organize the findings and present representative quotes to support the key ideas and themes from each question.

Participants in this study were asked whether they felt like they belonged to the Teacher-Librarianship by Distance Learning program community. Of the 25 respondents to this survey, 21 people said yes, they did feel like they belonged to the TLDL community, 2 people said no, and 2 others said yes and no. Respondents were then asked: "What does the term community mean to you in terms of Teacher-Librarianship by Distance Learning (TLDL)?" For some participants in the study, community meant being part of a supportive network of people, feeling connected to one another, and being able to share ideas and different perspectives in a safe environment. For example, one person wrote that community "means a group of committed and passionate teacher librarians (or teachers who are striving to be TLs) learning and working together with a shared common interest in school libraries, who are studying to be the best TLs we can be and try to support each other in this endeavour." Another respondent elaborated on this by saying that "community is the group of learners I meet and discuss issues with online during my courses."

For some respondents, community also meant being able to collaborate and work together with others. One person suggested that community meant "having a support network to share ideas and collaborate with", while someone else commented that "the TLDL community is a group of people who mentor and support me in my learning by sharing ideas, opinions and experiences, giving me feedback as I work through new ideas, and collaborating on projects. The frequent online contact, less formal communication in different discussion threads, and supportive atmosphere make this group feel like a community." Finally, another respondent suggested that community in this program "is all about collaborating and sharing of experiences, ideas, and knowledge."

In defining community as it relates to the TLDL program, there was also a sense that community means being around supportive people who share common interests, goals, interests, and concerns. Finding support in an online community was a common theme in this question. One person wrote that community meant "support from people in the same boat. It's a strange occupation being a TL, the only one of your kind in a given school, so to have others online who are in that same position is comforting and helpful." Someone else wrote that community means "being able to connect with a supportive and like minded group of people, with similar interests and concerns, as well as supportive professors and colleagues that share information and collaborate together to improve teacher-librarianship." Finally, "community means a group of people who learn from and with each other. Despite the fact that the TLDL degree is online, I always felt that I was a part of a community of learners in the program. Everyone was terrific about sharing information, participating in conversations, and discussing to make meaning and to collaborate. It is not always easy to foster a sense of community in an online learning situation,

but the professors and instructors did an excellent job of building an excellent learning community in each class."

The next set of questions asked respondents to consider the roles and responsibilities of various groups within the TLDL program in building and maintaining a sense of community. The respondents were asked about the roles and responsibilities of current students, graduates, and the coordinator and instructors in building community and developing and sharing content in TLDL's online spaces.

Respondents suggested that current students in the TLDL program have responsibilities primarily within individual courses rather than within the broader TLDL community. For example, in terms of individual courses, one respondent suggested that students in the program have a responsibility for "keeping current with regards to collaborative responsibilities and posts. If a course requirement is, for example, to read and respond to group members' work, one must be willing to make time to do so." Similarly, another person respondent that "I expect everyone to do their part, to do the readings, to think, to reflect, to participate in a timely way...there have been times when it appears that some students haven't bothered with the readings and simply piggy-back onto prior discussion points." Finally, "students need to be willing to participate in online discussions and to be open to sharing ideas and resources. Discussions also need to be compassionate and thoughtful, remembering to consider the ease of misunderstanding online (without body language and voice to guide us)."

Participants in this study suggested that graduates of the TLDL program should have more of a role in contributing to the program's online spaces, especially since this group would no longer be participating in online classes. There was a sense that respondents would like to be able to continue working with and learning from other members of the TLDL program even after graduation, both as a way of staying connected to the program and as a way of continuing to learn: "once finished the program, I would really like to see my learning continue with other graduates and those still in the program. It could be a discussion forum or space for sharing new ideas or questions that come up. I don't want to stop being part of a well established learning community because I am no longer in the program. The TLDL program pushes me to engage and learn all the time which in turn really helps the people I work with on a daily basis." Another person stated that "I hope to stay a part of the TLDL community as I worry about staying 'cutting edge' when I am not learning from all these great courses." Finally, "graduates should still be using the resources, reading articles that are recommended by instructors, etc. It is a great way to keep current in our field even when we are no longer doing coursework and assignments. We should also endeavour to contribute to these learning communities and share our own knowledge and expertise."

Respondents suggested that graduates could take on a mentorship role as part of their role in building and maintaining the TLDL online community. For example, one respondent suggested that "alumni would continue to provide leadership by sharing their ongoing experiences and mentoring. Realistically [however] time would be an issue." Another respondent suggested that it is "important to help mentor others." There was also a sense that graduates should be careful not to appear too involved in the TLDL program after graduation, either as a mentor or a contributor to online spaces: "I don't feel like it's entirely appropriate to contribute too much. I'm afraid my contributions may be considered too 'keener' inspired [but] I may contribute more if other former grads also participated."

Participants in this study were also asked to identify the roles and responsibilities of the program coordinator and instructors in building community and developing and sharing content in TLDL's online spaces. Responses to this question highlighted the importance of creating a welcoming and inviting atmosphere and modelling the effective use of these online spaces to current and former students. For example: "their role is to oversee the online community and ensure the space is current and welcoming. Being supportive of authentic discussions and also

participating in discussions." Another participant suggested that "as a model of a learner and educator to the students in the TLDL program, I feel that the instructors and coordinator need to be active in the use of online spaces for sharing content and modeling the use of the tool."

Other responses suggested that the coordinator and instructors should ensure that the program's online community spaces are up-to-date and relevant to the needs of current and former students. For example, "keeping blogs and wikis current and active so we want to visit them frequently" was one person's suggestion. Another person responded that "keeping the Facebook and Twitter pages up-to-date and making sure updated and relevant links are on the wiki" were important roles and responsibilities for the TLDL coordinator and instructor.

Finally, participants in this study suggested that the coordinator and instructors in TLDL should use these online spaces to make connections between TLDL students and graduates and the broader school library community. For example, one person suggested that the coordinator and instructors should "engage TLDL students and graduates in discussions around 'hot topics' such as school library advocacy, transliteracy, etc. As instructors, many of you are in contact with school librarians around North America as well and maybe we could have them join in the discussions." Another response stated that the coordinator and instructors "have the time and opportunity to access new studies and ideas...you locate and retrieve ideas...we process and adapt them."

Discussion

This section of the paper will compare and contrast the findings from this study with articles reviewed for the literature review. In the Teacher-Librarianship by Distance Learning (TLDL) program a clear majority of students felt a sense of community. The comments from respondents mirror Conrad's (2005) definition of community. Students highlighted working towards a common learning purpose. They described their community as a collaborative, supportive network/atmosphere, and safe environment where there are opportunities for sharing different perspectives and less formal communication in different discussion threads.

These comments also correspond with Rovai's (2002a) four dimensions of classroom community. Respondents indicate that spirit, trust, interaction and commonality of learning experiences are central to their sense of community in the TLDL program. Since most teacher-librarians do not have opportunities to work closely with another teacher-librarian in their school, the importance of a community of learners in the program is especially important. Not only do respondents talk about the commonality of learning experiences in their online classes, they also talk about the commonality of their work experiences and being able to share issues, challenges, opportunities and successes that happen in their schools and school libraries.

The majority of students in the TLDL program are female and so this may also indicate the importance of building relationships as part of the learning experience. Further research to better understand gender-differences in adult learning is of interest to the researchers. The work of Belenky, Clinchy, Goldberger and Tarule (1986) may help to inform how we support students who have different communication patterns (independent voice and connected voice) in an online learning environment. Rovai (2002c) also notes the importance of supporting a positive learning experience for the students in an online learning community.

Respondents in this study feel they have a strong role to play in building a sense of community. Peer-to-peer interactions are highlighted as key to this building of community. There is an expectation by respondents that students will be prepared (do readings, reflect), participate online in a timely fashion, and do what is expected of them. This confirms the work of Rovai (2002c) about peer-to-peer interactions being related to sense of community.

Current graduates see their role as primarily contributing to community in courses but all students desire that recent graduates stay connected to the program as a whole. The use of the program website, the program wiki, blogs, Facebook and Twitter attempts to help current students and recent graduates stay connected to the program. The use of social media and websites as a way to build a sense of community was suggested by respondents in the Exter et al. (2009) study. Our recent graduates expressed a desire to stay connected and to keep up with new ideas and research in the field of school library learning commons. Current students were looking to recent graduates as mentors and so staying connected to the program was seen as very important.

Respondents to the survey identified key instructor behaviours that helped to build a sense of community. These included making the space welcoming, keeping information current, updating webpages and posting to Twitter and Facebook. The TLDL program creates hashtags for specific courses to share relevant links. One suggestion from respondents that the instructors were excited about was to have discussions about hot topics. A plan for virtual cafés to connect current and recent graduates is in the planning stages for Fall 2012. Like Exter et al. (2009) it is essential to ask students for suggestions and new ideas to improve the sense of community in a course or program.

Implications & Conclusions

This paper presents the findings from a survey of current students and recent graduates of the Teacher-Librarianship by Distance Learning (TLDL) program at the University of Alberta. The study sought to understand students' perceptions: of "community" in online spaces; of their responsibility in accessing information, using information, and creating information in online spaces; and, of their roles in the creation of online community.

Questions in the survey also probed ideas for building community, maintaining community and staying connected to community after graduation. Findings indicate that the majority of students feel connected to the TLDL. Community is very important with these students because they often don't have a similar community that exists in their schools and school districts.

The TLDL program has a very high completion rate and very few students drop out of courses or the program. When they do, the program coordinator does not do an exit interview. Findings from the survey suggest that gaining a clearer understanding of why a student chooses to dropout might inform the types of support that we can provide for new students. Initial readings in the area of adult learner communication styles and women's ways of knowing suggest that there is more to learn about the ways students interact. The researchers were also interested in personality types and the impact this might have on interaction in online communities. Since most of the students in the program also work full-time as teachers or teacher-librarians, it is important to understand the ways that students balance work, family and online courses to better support their needs in terms of community in online spaces.

The roles and responsibilities of current students, recent graduates, program coordinator and instructors also need to be more clearly defined. Tutorials, videos and orientation activities may help students to more clearly understand how they can help build the TLDL community. The current instructors in the TLDL program have been teaching online for more than ten years now so have had much time to learn and grow as online instructors. More research is required to understand how to bring new online instructors into an established online program and how to help them to learn the types of instructor-to-student interactions that can build a sense of community. Courses in the TLDL program have evolved over time to focus much less on content and more on socially constructed understandings through reading, reflection and small

and large group discussions. Understanding more about how instructional design influences sense of community is also important.

As more and more students choose to take courses online, instructors need to carefully consider how to make rich learning experiences that are as good as, or even better thank face-to-face learning experiences. Non-traditional students have made up the majority of students enrolled in online programs but indications are that more and more students on campus will also be engaged in fully online or blended learning experiences. There is still much to learn about how to build a sense of community for all learners.

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