Abstract

Social presence is the ability of participants in an online learning environment to present themselves as “real people”. It has been identified as a prerequisite for meaningful learning. This study identifies factors that promote or maintain social presence in a graduate MBA program at the University of Guelph through surveying 26 of the program’s students and recent graduates. Our findings and their related recommendations fall into three categories: the importance of a residential component that provides opportunities for formal and informal social interactions among students and faculty; the benefit of face-to-face meetings throughout the online segment of the program in terms of strengthening group cohesion and fostering academic success; and the contribution of non course related, synchronous online interactions. Ways in which the Learning Management System can be leveraged to achieve the latter are also identified.

Key words: social presence, online learning, course design,
The importance of social presence in an online MBA program:

A preliminary investigation

The advent of online education transformed the educational delivery model and continues to shape the direction of learning today. From initial hybrid courses that complemented in-class instruction with online course components starting in the mid-1990s, to courses delivered solely online today, online education continues to grow. Almost 30 percent of U.S. post-secondary students today are enrolled in an online course, a number that quadrupled between 2002 and 2010 (Sloan Consortium 2011). In Ontario 13% of all post-secondary course registrations in 2010 were for the 4,700 online credit courses offered by Ontario universities (MTCU 2011).

All signs point to the online course delivery model playing an increasingly important role in post-secondary education:

- Learner preference: Students today are used to a myriad of technology in their daily lives, and expect a technology-enabled learning environment (Gartner 2011). Post secondary institutions must adapt or risk losing students to competing schools with online course offerings -- even those across the globe, as the importance of geographic proximity diminishes.

- Increased efficiencies: The cost savings potential of online learning is not a given, with some pointing out that offering a pedagogically sound course online may in fact cost more than its in-class counterpart (Mancuso 2005). However, leveraging technical advances to increase online learning opportunities can help institutions realize operational efficiencies and lower the cost per student to deliver a course, enabling enrolment growth (Moodys’ Investor Service, 2012).

- Changing social norms: Society is changing; a worker in today’s knowledge economy often requires ongoing formal education and certifications. The existing physical classroom model was not designed to meet the needs of today’s lifelong learners. Now a student may be a full-time worker, an international student, or a mature student who expects learning resources to be available from anywhere at any time.

- Changing student demographics: The importance of online learning increases as the student population changes from the traditional on-campus domestic student. The 18 – 22 year old demographic is shrinking, and post-secondary institutions are exploring their options to sustain enrolment from other entry
pathways such as college transfers and international students (University of Guelph Board of Governors 2012). The flexibility required to meet the needs of students from other pathways, both domestic and international, is increased by accessible online learning options (Standing Senate Committee on Social Affairs, Science and Technology 2011).

As a result of these pressures, governments, post-secondary institutions and startup companies are taking action to expand the online delivery model:

- The Canadian Federal government has identified the need to develop “a national plan to support online learning and integrate new technologies in post-secondary education” (Standing Senate Committee on Social Affairs, Science and Technology 2011).
- The Ontario government announced the creation of an Online Ontario Institute in 2010 to offer online post-secondary courses (Ontario Office of the Premier 2010). Indeed, Ontario has a history of coordinating access to online courses from educational institutions through initiatives such as Contact North, elearnnetwork and OntarioLearn.
- The rise of MOOCs (Massive Open Online Courses) challenges educators to re-think traditional course offerings. Harvard and MIT joined together in 2012 to form edX, a non-profit foundation to offer online courses and research their effective delivery.
- Udacity and Coursera, two other well-known MOOC providers that originated at Stanford University, now operate as separate for-profit startup company ventures.

Hence, the stage is set for a continued increase in online learning – and an increasingly urgent need for educators to understand the pedagogical approaches that best foster this kind of learning. In particular, educators must understand the factors that influence successful communications and interactions in the online environment. One such factor identified in the literature is social presence: “the ability of participants (in an online learning environment) to project their personal characteristics into the community, thereby presenting themselves to the other participants as ‘real people’.” (Garrison, Anderson and Archer 2000). Studies have shown the importance of all online course participants establishing a social presence as a prerequisite for meaningful discourse and interactions (Adel, 2011; Biasutti, 2011; Garrison & Cleveland-Innes, 2005; Garrison, Anderson, & Archer, 2000). Not surprisingly, therefore, social presence in distance learning programs can result in increased satisfaction levels of both students and professors (Krish, Maros and Stapa 2012).

Further investigating the role of social presence was particularly compelling for the principal author of this study. As a student in the University of Guelph MBA program, she was intrigued by the fact that even with a plethora of technology at their disposal her classmates preferred to meet in person to complete group work. The majority of course participants lived within two hours’ drive of each other, which made in-person meetings possible. Over time, however, the frequency of
face-to-face group work get-togethers declined as groups began to leverage technology for online meetings. But even then their use of the tools changed over time – perhaps because as the group’s comfort level with each other increased, they required different support structures.

In any event, with a marked increase in online learning across academia and the author’s personal interest, the subject seemed worthy of further study. And online MBA programs are a particularly useful place to pursue this further study because of their focus on discourse among participants: case studies that require group work and collaboration are foundational components of many online MBA programs.

**Purpose**

This study examines social presence within the University of Guelph MBA online program from the perspective of the students themselves. We begin with two different types of communication that students engaged in as part of their online MBA program: student to student(s) communication; and instructor to student(s) communications

We discuss factors within these two types of communication that encourage the students’ development of social presence and its impact on student learning. Based on our findings, recommendations on how to establish and strengthen social presence within online graduate programs are provided.

**The Literature: Importance of Social Presence**

The basic premise is simple: the interactions that take place in educational environments affect the learning that takes place (Cleveland-Innes and Emes 2004). The Community of Inquiry framework (Figure 1) developed for use with computer-mediated communication in higher education takes this premise further: meaningful learning requires interaction among the different participants, including the type of interaction that establishes one’s social presence.
In the Community of Inquiry framework, cognitive presence, “the extent to which participants construct meaning ... through sustained communication” (Garrison, Anderson and Archer, 2000) is necessary for critical thinking to take place. Social presence supports cognitive presence and is required for a meaningful learning experience. Interestingly, teaching presence (developing, delivering, and assessing course material), which is often seen by faculty as the centre – and sometimes the sole element -- of educational effort, here shares an equal role with both social and cognitive presence.

The creators of the Community of Inquiry (CoI) framework affirmed the importance of social presence in this triad. In a paper published a decade after the framework’s inception, they write, “to establish a community of inquiry, it (is) essential that some form of social presence ... be developed” (Garrison, Anderson and Archer, 2010, p.7). Social presence helps build a sense of community that allows students learning together online to feel comfortable enough to pose questions, suggest answers and explore solutions together, often without the benefit of working together in person to help further develop their relationships.

The importance of social presence is also implicitly referred to in Cranston’s work on the transformative classroom. She explains that when a student “is engaged in a serious dialogue with someone he or she knows, likes and trusts, the potential for the examination of previously uncritically absorbed values and assumptions is ... much greater” (Cranton, 2006, p.7).

Among the factors that help online participants build social presence is appropriate course design and proper use of the communication tools available (Tu & McIsaac, 2002). Designing the course to increase interactions can help build trust between the participants, which facilitates the formation of social presence, (eg., encouraging informal discussion initially, soliciting examples of the topic under discussion from
the students’ professional experience, and booking instructor office hours to conduct synchronous discussions). The types of communication tools used can also significantly affect the level of social presence established. For example, the use of video has been shown to help build stronger connections in both student-to-student and student-instructor situations (Borup, West and Graham 2012).

Even before the course begins, however, a basic level of interaction can help lay the foundation for online learners to establish a social presence in their learning environment. The rising popularity of social media tools, from blogs and wikis to YouTube and Twitter, means that many online learners have already established an online social presence prior to their participation in an online course. The existence of pre-established online identities lessens the amount of effort required for students to get to know one another and begin to build a social presence in their learning environment.

The Study:

The MBA Program

The University of Guelph MBA program included five courses delivered in three two-week residential components starting in May of each year, with the remaining ten courses delivered online.

The course participants were provided with a Learning Management System (LMS) known as “Open Online”, powered by Desire2Learn software. The LMS setup for each course typically consists of a short video introduction of the instructor, the course information (syllabus, assignments, due dates) and discussion forums. Course participants can communicate using a university-provided email account, and can incorporate other communication tools and methods on their own. Textbooks and course readers are shipped to the students in advance. The majority of coursework consists of group work, with some independent assignments. Online instructor communication is typically textual and asynchronous. Online video lectures and lecture slides are usually not provided. The typical class size ranges from 20 – 30 students, with group sizes ranging from three to five students.

Methods

Seventy-six students and recent graduates enrolled in a two-year Executive MBA program were asked to respond to a 5-point Likert survey. Twenty-six responded, resulting in a 34% response rate.

The survey consisted of questions that focused on communications within the University of Guelph online MBA program. Specifically, we were interested in how the students communicated with each other and with their instructor; and the duration and frequency of those communications. Respondents were also able to
provide open-ended comments on communications within the program.

Data Analysis

Univariate data analysis was used to analyze the results, focusing on social presence. The descriptive analysis methods used on the study data include histograms, calculated rank order and frequency tabulations.

To determine if social presence was established, Garrison et al looked for indicators that demonstrated emotional expression, open communication and group cohesion, such as risk-free expression and collaboration. By analyzing our data for the presence or absence of these indicators, we draw inferences re factors that encourage the development of social presence.

Results and Discussion

Student to student(s) communication: Factors that encourage development of social presence

Residential segment of the online program

The ten-day residential portion of the study participant’s MBA program held at the University of Guelph campus helped the students establish an initial social presence by providing the opportunity for student social interactions to take place in a face-to-face setting before learning together online. These interactions were facilitated in two ways:

1. Structured social events

All the student respondents met in person and attended social events together beyond their classroom academic interactions during the residential portion of their program (Figure 1). The first residential evening included an orientation evening with informal social activities to help the students get to know each other, e.g. scavenger hunts across campus. The majority of meals in residence were served buffet style in one location, with students talking to each other while they got their food and eating together at small round tables that were conducive to conversation. During residence there were a few formal dinners where the students in the cohort naturally gravitated towards each other, sitting together and chatting throughout the evening.

All these structured social events provided the students with opportunities to get to know one another personally as ‘real people’, which has been shown to provide a solid foundation for future online interactions (Conrad 2005).

2. Shared living accommodations on campus
Outside of meals and structured activities, all the student respondents spent the majority of their non-classroom time together. They lived in townhouse style accommodations with four people in each house, with a combined living room/dining room often used for group work. The students spent their evenings working together to complete group work assignments with tight deadlines. Living and working together in close proximity during residence in a high-pressured situation encouraged the students to get to know each other and form close relationships during their residence time together.

| Participation in residential week structured social events: Yes responses |
|---------------------------------------------------|-------------------|
| Did you attend one or more of the residential components of your MBA program? | 100% |
| If yes, did you attend any of the social events for the MBA program (evening events with speeches, dinners) with your peers during the residential component of your program? | 100% |

Figure 2: Participation in residential week structured social events

After the residential portion of the program, the same student cohort who had begun to establish their social presence with each other in person worked together in an online setting. The study data demonstrate they built on the initial social presence established in residence with multiple online interactions each week, strengthening and solidifying the social presence among the student cohort.

**Face to face meetings**

A strong majority of respondents (69%) voluntarily engaged in face-to-face meetings with their classmates – and almost 40% of this group did so for non-course-related reasons (Figure 3). Choosing to meet in person, for course-related work and for personal reasons, both demonstrates and further strengthens group cohesion and is an indicator of social presence (Garrison, Anderson and Archer 2000) (Conrad 2005). And it may also be a predictor of academic success. A recent study on the behavioural factors that contribute to student success in an MOOC concluded that students who worked offline with each other did better in the online course than those who did not – a conclusion which affirms the connection between social presence and academic success (Kolowich & Grossman, 2013).
Online interactions

1. Non-course related and self-sustaining

Most of the respondents (88%) communicated online with their classmates regarding non-course-related matters once a week or more (Figure 4). Close to three quarters of the respondents kept in touch with a “working group” past the completion of that group’s course-related project – suggesting the formation of strong bonds or group cohesion within the working group. The nature of these online interactions (non-course related and self-sustaining) may have had a positive effect on the students’ learning experience with the MBA program. Almost all (96%) agreed that they had learned from their classmates “beyond what was contained in the course material” (Figure 3).

![Student to Student Interactions](image-url)

Figure 3: Student interactions
2. Sustained duration and synchronous communications

The length and type of student to student communication shown in Figure 6 and Figure 7 suggest strong social presence among student group members. The sustained duration and synchronous communications undertaken go beyond the limitations of the LMS functions used in the course design, which only offered an asynchronous discussion forum and a rarely used instant message function. The number one choice for student communication was Skype, a tool that offers both visual and synchronous contact. Studies have shown that video-based communication helps to establish social presence and positively influences students’ perceptions of the interactions (Borup, West and Graham 2012).

Forming a strong social presence gave the students a solid base upon which to build the cognitive presence that allows them to engage in the critical discourse required to form a well-functioning Community of Inquiry. The study findings show that 70% of students felt supported by the other students in their group and 69% of them chose to meet in person to work on assignments, indicating a reasonable level of cognitive presence had been established (Figures 5 and 3).
Figure 5: Student perception of support by fellow students

Figure 6: Student interaction duration
Instructor to student(s) communication: Factors that encourage the development of social presence

In the MBA program studied the same student cohort moves together through a series of courses in succession. Each course has a new instructor who must work to establish a social presence with the students in a short timeframe, with each course typically only six to eight weeks in duration.

The number of instructor-student interactions

The study findings show that students perceive limited instructor to student interactions during the majority of courses (Figure 8). Approximately two-thirds of the respondents answered “sometimes” to the question of whether they “had enough opportunities to interact with your professors”. And an equal number provided the same lukewarm answer when asked if “online class discussions (were) facilitated by the instructor”.

Figure 7: Student communication tools
Of course, it is not the number of interactions but the quality of the interactions that contributes to establishing social presence (Garrison & Cleveland-Innes, 2005). However, the limited instructor to student interaction reported by the majority of respondents may limit the instructor’s ability to develop social presence in the online learning CoI.

This limitation has significant consequences. A well developed social presence for instructors has been shown to correlate to adult students’ learning satisfaction. It is seen as an integral part of their learning experience (Fenafeng 2010). Interestingly, the number of survey respondents who reported being satisfied with their opportunities for instructor to student interactions (Figure 8) closely matches the number who reported they were able to establish rapport with their professors (Figure 9). The definition of rapport used is “communicative acts promoting social concord... increasing the cohesion between members” (Adel 2011). In other words, the number of instructor to student interactions does appear to matter in terms of promoting instructor social presence -- and consequently student learning satisfaction.
Figure 9: Student rapport with professors

**Established Rapport with Majority of Professors**

- Yes: 35%
- No: 65%

**Recommendations**

This study identifies factors within student and instructor communication in an online MBA program that appear to promote social presence and, subsequently, a more enriched learning experience. Formally integrating these factors into the online program makes sense. Following are recommendations on how to achieve that – and how, therefore, to strengthen the online MBA program.

1. **Opportunities for Social interaction**

   Recognize the importance of the residential component within an online MBA program as a way to foster social interactions and therefore social presence.

   Build opportunities for social interactions into each course design, e.g. facilitating introductions; actively (and appropriately) asking students to share personal experiences that relate to the course material.

2. **Pedagogy that connects**

   Increase the frequency of instructor to student interactions, setting standards for quality and quantity of interactions (e.g. mandatory instructor participation in course discussions.)

   Leverage the LMS tools that allow for richer communications beyond the discussion board forum, e.g.:
   - Introduce video communications, from posting online lectures to synchronous video discussions.
   - Institute "virtual" office hours whereby the instructor is available at set times and is capable of synchronous communications.
Flexibility in the professor’s available times offered is required to address the issue of participants in different time zones.

3. Technology’s expanded capabilities

Provide instruction and direction on communication tools for the instructors and students on a common platform, either supported by the program or those available online.

Integrate the LMS with newer social media communication tools (e.g. Twitter) and popular instant messaging platforms (e.g. Google Talk, Jabber).

Conclusion

The study findings demonstrate a strong student to student social presence that has a causal relationship with their cognitive presence, with the students learning from each other beyond the course material. The ability for the students to go beyond the course-based learning together is indicative of a Community of Inquiry. In particular, the residential component of the program, with its opportunities for social interactions, is a foundational component that is key to the success of the student to student formation of a CoI.

The opportunity for additional instructor to student quality interactions may improve the student’s perception of rapport with their online instructors. Research has confirmed there is a relationship between the frequency of instructor to student interactions and building a learning community, linking interactions to social presence that affects academic success (Dawson, 2006), (Garrison, Anderson and Archer, 2010).

Sound pedagogical frameworks such as the Community of Inquiry can help guide the adoption of technology to enhance the online teaching and learning experience. Rather than viewing technology as an impediment to meaningful communications and interactions, we can leverage it to increase the amount of critical discourse between students and instructors by strengthening known contributors such as social presence. The educational delivery model continues to evolve – as evidenced by the rising emergence of MOOCs - and it is imperative that changes to it be based on sound empirical research findings driven from a pedagogical perspective rather than a technical or fiscal perspective. Further study on online learning environments based on pedagogical models is warranted.
References


