

Exploring social immediacy/intimacy in fully online learning communities through synchronous tools.

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Abstract: Facial expressions and body language lie at the heart of the way we convey the emotional content of our interactions. The degree to which these aspects are negated in online learning environments is currently a point of debate in the field. In Fully Online Learning Community (FOLC) based programs, the closeness that students report (Childs, van Oostveen, Clarkson & Flynn, 2015) is proposed to be the result of a combination of: (a) the use of synchronous video/audio; (b) decreased transactional distance (Moore, 1993); and (c) the types of interactions that are cultivated in the online environments used in FOLC-based programs. This paper reports on initial findings from an investigation that examined an aspect of social presence, specifically the role of facial expressions, body language and words in supporting a collaborative online environment that fostered closeness and addressed the “dialog” component of transactional distance in FOLC-based programs. The role of synchronous experiences in online courses and programs is discussed and implications for students and educators of using synchronous tools to foster online collaboration and connections are examined.

Introduction

Higher education (HE) is increasingly being called upon to modify and adapt in response to the complexity of the issues faced by contemporary society. With increased pressure to enhance learner access to educational opportunities and address issues of equity regardless of physical location or socioeconomic status (Rohs & Ganz, 2015), HE institutions are increasingly turning to online learning as part of their response. Allen and Seaman (2014) report that in the U.S., in 2013, 33.5% of higher education students took at least one online course; in Canada “approximately 12% of college coursed enrolments are online, and 16% in universities” (Bates, 2018, para. 5).

However, the way in which online courses are constructed is highly variable, ranging from blended learning environments involving face-to-face and online components to fully online courses, where students never physically come on campus but interact with each other using a variety of synchronous and asynchronous tools and affordances. Due in part to this variability, limitations of distance learning (e.g., student isolation, low completion rates), and assumptions about learning as the “delivery” of expert information to the masses (Miller, 2014) permeate the literature. Conversely, it has been noted that the use of video and audio (webcams and mic/headsets) can support the development of a feeling of closeness between students in fully online environments (van Oostveen, Childs, Clarkson, & Flynn, 2015) and that the use of synchronous tools in particular fosters connection between learners.

Several authors (Christen, Kelly, Fall, & Snyder, 2015; Kelly & Claus, 2015) have examined the role of facial expressions in contributing to building these social connections and a sense of intimacy in the online environment and have noted a positive relationship between students' visualization of their peers and their perceived social presence. Kelly & Claus (2015) noted that a facial expression activity early in the semester improved participation in online discussion forums and may have reduced the transactional distance (Moore, 1993) between students. However, it has also been noted that in both online and face-to-face environments, humans are challenged to accurately identify facial expressions and the associated emotion (Kelly & Claus, 2015; Kanade, Cohn & Yingli, 2018). One of the attributes that is particularly noticeable in fully online environments which utilize audio-video conferencing software is the marked decrease of behaviors such as raising of voice volumes and using aggressive body positions. This research examines an aspect of social presence, specifically the role of facial expressions, body language and words in addressing the "dialog" component of transactional distance in FOLC-based programs.

The FOLC model (Figure 1) is grounded in the constructivist view that all efforts to understand "reality," including virtual reality, involve the social creation of knowledge and not just individual "ingestion" of information. The FOLC model is grounded in the GTCU (Desjardins, 2014), and is a modification of the Community of Inquiry model (Garrison, Anderson & Archer, 2000), recognizing social and cognitive presence, and introducing collaborative learning which co-created between instructors, students, teaching assistants and is an integration of social presence and cognitive presence within a digital space. This investigation addresses the "dialog" component of the transactional distance (Moore, 1993) concept, which suggests that transactional distance is a psychological and communication space that exists between individuals within learning environments. Accordingly, if learning outcomes in fully online environments are to be met, transactional distances need to be minimized.



Fully Online Learning Community Model

Figure 1. The Fully Online Learning Community Model. The synergistic dimensions of the Fully Online Learning Community (FOLC) model are conceptualized as *Social Presence* (SP) and *Cognitive Presence* (CP) occurring primarily within a *Digital Space* comprised of community-selected, asynchronous and synchronous affordances. Successful *Collaborative Learning* occurs at the intersection of these dimensions as the learners develop their sense of community and requisite digital competencies are applied to support critical inquiry. Recognizing that not all social and cognitive interactions are digitally mediated, even in fully online environments, FOLC may be adapted to hybrid-learning environments by strategically resizing/repositioning the *Digital Space* in relation to SP and CP.

Methodology

This investigation used simulated, small group (3-4 participants) tutoring sessions hosted in the synchronous environment of Adobe Connect, with a researcher assuming a series of personas that exhibited the following characteristics: extreme compliance, aggressiveness, introduction of inappropriate topics, using excessive body movement, non-participation, using collaboration-building questioning practices, or using authoritative

language. All interactions were captured on video and analyzed using Noldus FaceReader software for reactions, particularly those that indicate changes in the quantity and quality of collaboration and of the transactional distance. The expressions that the software is calibrated to identify include happy, sad, angry, neutral, scared, and disgusted (Noldus Information Technology, n.d.).

Viewing a sub-set of the data that focused on the provocative statements presented by the researcher during the tutoring session, a research team member developed a series of codes that reflected the instances where there were measurable changes in the facial expression of participants in relation to the provocative statements being introduced. These codes were used to narrow the analysis of FaceReader data to six events that evoked noticeable reactions from the participants. The four researchers reviewed this initial analysis resulting in one preliminary theme supported by a sub-theme discussed below.

Preliminary Theme

The role, co-construction and navigation of social norms by participants in the synchronous environment was a consistent theme throughout the data analyzed. For example, where provocative statements were introduced there was a subdued reaction to controversial topics, which resulted in facial expressions that were neutral and signifying potential tacit agreement. However, shortly after the initial smile or neutral expression, there was a consistent downturn to sadness in response to the controversial topic, but there was no disagreement or opposition to it voiced by participants.

A sub-theme of engagement emerged as well, with the participant who participated the least remaining the most neutral in their facial expression. It would appear that in this context, there is a tension between the perceived expected social norm and the experienced emotive state.

Discussion/Conclusions

This investigation examined an aspect of social presence, specifically the role of facial expressions, body language and words in supporting a collaborative online environment that fostered closeness and addressed the “dialog” component of transactional distance in FOLC-based programs. The role, co-construction and navigation of developing social norms in a virtual synchronous environment emerged as a theme from the initial analysis. This initial investigation appears to illustrate that facial expressions may assist in the understanding of the ideas being communicated; however, they may also create confusion or miscommunication as a result of social obscuration of our emotions due to perceived social norms in combination with our inherent poor ability to interpret facial expressions. Based on this initial analysis, the latter may be magnified in a synchronous environment.

This investigation offers insight into the dynamic that appears in a FOLC-based fully synchronous learning environment where social presence and cognitive presence occur inside a virtual environment that is premised upon social negotiation, shared knowledge construction and the development of a learning community. However, there is a tension between students and educators of using synchronous tools to foster online collaboration and engagement in FOLC-based programs with the aim of decreasing the transactional distance in order to achieve a sense of connection and closeness, and the lack of alignment between facial expression and emotive state.

Further understanding of the development and process of co-creation of social norms in the synchronous virtual environment has implications on the dialogic and autonomy aspects of transactional distance (Moore, 1993) and the resulting clarity of communication between individuals in the synchronous context. Subsequent data analysis is underway to further examine the role of social norms in synchronous spaces; their development, co-creation and negotiation; and the impact of those co-created social norms on the learning experience for participants.

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