

**Synchronous Communication and Immediacy in the Online Classroom:  
A Call for Research and Practice**

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Much of the recent public discourse around higher education has focused on the “disruptive innovation” that online education introduces to existing models and systems. Nowhere has the potential for disruption been more evident than in the behemoth of higher education innovation, the MOOC, or massively open online course. Two years ago, MOOCs were poised to change the landscape of higher education permanently; less than a year ago, *The New York Times* declared 2013 “the year of the MOOC”. However, examination of data surrounding these innovative classrooms has proved disheartening: completion rates rarely rise above 15%, (Waldrop, 2013) student engagement drops rapidly after the first few weeks of the class, and there is little evidence that the strategies adopted by MOOC classrooms lead to learning for most of the students who enroll (Drake, 2014). The problems of MOOCs are not unfamiliar to anyone who has taught online: students are often under prepared for the experience, completion rates can be low, and maintaining student engagement can be challenging. Even staunch advocates of the benefits of online education admit, “There is no substitution for conversation” (Waldrop, 2013).

It is clear that new technologies, funding issues, and policy directives are challenging higher education institutions to change to meet the demands of the 21<sup>st</sup> century economy. However, it is our position in this paper that there remains much of value in current models of learning. Rather than disrupting higher education wholesale, we argue that we must adapt our existing models to the reality of increasing use of blended and online learning.

This paper argues for the importance of synchronous interaction in online learning. Specifically, we believe that one of the major innovation challenges for higher education is how to improve the quality of interpersonal connections in online learning. We propose that strategic use of synchronous technologies, such as web conferencing and real-time chat, can aid in this

goal. We focus specifically on the concept of immediacy, or the feeling of personal and psychological closeness between communicators. Immediacy behaviors have been shown to be a positive force on a variety of educational outcomes in the literature on face-to-face (FTF) instruction (see O'Sullivan, Hunt, & Lippert, 2004 for a review). While researchers have begun to examine immediacy behaviors in online classes, much of that work focuses on asynchronous, verbal communication (e.g. Conaway, Easton, & Schmidt, 2005), with less attention paid to synchronous chat (Pelowski, Frissell, Cabral, & Yu, 2005) or real-time audio/visual technologies. The recent rise in popularity of video conferencing technologies in the consumer realm, such as Skype, and their incorporation into learning management systems, such as Blackboard Collaborate, positions web conferencing as the next phase of innovation in online learning. We draw from existing literature and our own experiences in online teaching to elaborate three propositions related to immediacy and synchronous online interaction. We will sketch out a research agenda to test these propositions, and discuss the need to train faculty in online communication skills, with the ultimate goal of arguing for a vision of innovation as successful adaptation.

### **Immediacy, Synchronous Interaction, and Online Learning**

Despite the significant attention paid to immediacy in the scholarship on FTF teaching, there is comparatively little research on immediacy and online pedagogy. In a survey of graduate students taking asynchronous online classes, Baker (2004) found a strong, positive correlation between perceived instructor immediacy and affective learning, and a moderate, positive correlation between immediacy and cognitive learning. Similarly, instructor immediacy behaviors were shown to be a significant predictor of perceived learning in a study of online MBA courses (Arbaugh, 2010). This research has generally been based on studies of

asynchronous online classes, however, with less attention paid to synchronous interactions. One exception is a Pelowski et al.'s (2005) case study of an online introductory psychology class. They found that greater participation synchronous chat and greater use of some types of immediacy behaviors in the chats was positively associated with learning. Other research has focused on the concept of social presence, which usually includes immediacy as one component. In an experimental study, higher social presence was related to greater perceptions of teacher competence and perceived and actual learning (Frisby, Limperos, Record, Downs, & Kerckmar, 2013). Ultimately, the research on both social presence and immediacy in online learning is demonstrating that what we know to be true in the FTF classroom still holds – both relational and topical communication is necessary for learning (Kehrwald, 2008).

### **Propositions**

As noted earlier, online learning continues to rely heavily on asynchronous computer-mediated communication (CMC) channels such as threaded discussion boards as a primary source for student-teacher and student-student interactions. We believe, however, that there is increasing evidence for the important role of synchronous CMC in online learning. To that end, we discuss three propositions for the improved adaptation of online learning.

**Synchronous online interaction can increase feelings of immediacy between students and professors and among students.** Survey research has shown that online students feel that a mix of synchronous and asynchronous CMC tools can help create an optimal online learning environment (Menchaca & Bekele, 2008). Although Baker (2004) studied immediacy in asynchronous online courses, he noted that synchronous CMC channels had the potential to enhance perceptions of immediacy in online classes. In one of the few experimental studies in this area, Schutt, Allen and Laumakis (2009) manipulated both audio/visual cues and instructor

immediacy behaviors in synchronous online instruction. They found that the video enhanced condition with high immediacy behaviors produced the highest perceptions of instructor immediacy, however having video did not enhance immediacy if the instructor did not practice immediacy behaviors. In other words, Schutt et al. demonstrated that it is the combination of instructor behaviors and a richer cue environment that contributes to perceptions of immediacy, and not just the medium itself. However, Schutt et al. compared only different forms of synchronous CMC, rather than including a baseline asynchronous condition. Ko (2012) examined social presence, which includes both immediacy and intimacy, in various synchronous CMC channels used by undergraduate language learners in an online class. Perceived social presence was highest when students used webcams with video and audio enabled. However, some degree of social presence was achieved in a text-only environment, primarily through the use of emoticons.

In our own experiences of teaching online courses using video conferencing, students have noted that the synchronous sessions gave them a better sense of “who the instructor was” and contributed to feeling like “being in a real class.” Given that immediacy behaviors include both verbal (self-disclosure, use of humor, use of examples, etc.) and non-verbal (gestures, smiling, vocal expression, etc.) elements (O'Sullivan et al., 2004), we believe that these experiences and the available literature point to the strategic use of synchronous CMC as a key factor in adapting our teaching styles to the online environment. For instructors adept at the use of immediacy behaviors in FTF classes, synchronous CMC can help to replicate that experience in the online classroom. It also is important to note that synchronous CMC can improve perceptions of immediacy not just of the instructor (Schutt et al., 2009), but also among students as peers (Ko, 2012).

**Immediacy can foster engagement, which in turn may improve retention rates in online classes.** Russo and Benson (2005) found a positive relationship between instructor presence (including immediacy) and students' attitudes towards the class and learning satisfaction in an online class that included asynchronous and synchronous CMC. They also speculated that the impersonal nature of online classes lacking in teacher presence could be a cause for attrition, although they did not directly study this issue. In a study of a fully online course that included asynchronous and optional synchronous CMC modes, Oztok, Zingaro, Brett & Hewitt (2013) found that the students who were most active in the synchronous channel were also most active in the asynchronous channel, and were also more active overall in the course. They also found qualitative differences between the types of synchronous vs. asynchronous messages sent. They argued that synchronous CMC can help fill the social gap in online courses. Given that Oztok et al. found a relationship between synchronous CMC and activity, this would support the proposition that more immediate channels can help foster engagement. Similarly, meeting the interpersonal needs of students is important for learner satisfaction in online courses, and synchronous meetings can contribute to this goal (Dennen, Darabi, & Smith, 2007). Research has also shown that the use of channels that are higher in social presence helps learners feel more connected to instructors (Frisby et al., 2013). Teacher immediacy behaviors have also been shown to significantly predict satisfaction with the online learning delivery medium in MBA courses (Arbaugh, 2010), and satisfaction with the medium may help foster student engagement.

**Synchronous learning fosters a sense of teacher identity (for the teacher) and a sense of traditional student identity for the students, which in turn can lead to greater commitment to the process, responsibility to fellow students, and a sense of community.**

Despite the significant body of research devoted to the study of online instructional practices and the assessment of online learning, much less attention has been paid to what it means to be a teacher when moving to the online environment. Additionally, while the development of teacher identity has been studied extensively with regard to K-12 instruction, limited attention has been paid to higher education, with the exception of non-native English speaking faculty. We are currently seeking to address this gap with an ongoing study of teacher identity formation in online learning.

In a series of interviews conducted with instructors during in the first six weeks of their first online teaching experience, the inherent difficulty in establishing personal and professional identity in the online classroom strictly through the written word proved frustrating. One instructor spoke about the loss of his physical voice in the classroom, noting that it was a key way that he established his expertise. He further noted the difficulty in communicating with humor or subtlety that came naturally to him in the face-to-face classroom, stating that no matter how much effort he put into his written material “nuance within written communication is hard to decipher.” He was even more frustrated by the lack of hearing his student’s voices, and the lack of immediate feedback, which can allow student confusion to breed. Another instructor commented that the disconnect inherent in asynchronous learning made him feel disembodied, out of control and estranged from “teaching moments” that he relied on in the face-to-face classroom. He expressed concern about the lack of truly interactive moments in the online classroom.

The lack of ability to perform the role of teacher in personal ways can result in a flat classroom presence that does little to encourage student participation. Research has shown that the lack of student involvement is a major contributor to faculty dissatisfaction with online

learning (Wasilik & Bolliger, 2009). Given that participation in synchronous CMC has been shown to increase overall student participation in online courses (Oztok et al., 2013), it seems clear that the use of synchronous CMC can also aid faculty satisfaction, by helping to increase student engagement in the course. In addition, just as immediacy is important to student success and satisfaction, the dissatisfaction shown by our interviewees is caused, in part, by the loss of immediacy that they were accustomed to in their FTF teaching. Synchronous learning allows the instructor to build in teaching moments in real time discussion and establish themselves as individuals with unique voices and authority. By encouraging faculty to include synchronous CMC in their courses, particularly richer channels such as audio and video conferencing, we can help faculty learn how to develop their sense of teacher identity online, so that they too feel more connected and more engaged in the process.

### **Proposed Research Agenda**

Based on the research reviewed above, one fruitful area for research is in the construction of teacher identity in online learning environments. In particular, it would be useful to explore the link between experience with computer-mediated communication and adaptation to online teaching. It is possible, for example, that teachers who have less experience with, or are less comfortable with CMC have a reduced sense of teacher identity in online learning. Lowered teaching identity might then lead to a reduction of the use of immediacy behaviors, which would reduce the sense of social presence and have a negative impact on students' engagement and learning. By establishing any linkages between CMC experience, teacher identity, and behavior, we can also design better training programs for novice online teachers to help them better adapt to the challenges of teaching online.



A second challenge for research in this area is to study a wider range of students and courses/programs. A significant slice of the existing literature uses graduate classes and graduate students, particularly in MBA or education programs. As such, it is representative of a student body that is likely more motivated and more organized, and thus more likely to be successful in online learning. Given that much of the expansion in online learning has happened at the undergraduate level, and particularly at community colleges (where retention issues are already common), it is vital that we look at how synchronous technologies can potentially improve online learning experiences for this population of students. We also need to look specifically at the issue of engagement, and conduct research in the early parts of the semester, in order to better determine what effect the use of different technologies can have on engagement. By focusing only on learning outcomes, we are necessarily focusing on students who successfully stayed in the course. More work needs to be done to address those students who drop out early in online classes, and what can be done to retain them so that they, too can learn. Relatedly, it is important to look at voluntary vs. mandatory use of synchronous tools in online courses, as this may also impact engagement.

Finally, more research needs to be done in the area of immediacy behaviors and the range of different tools. While online learning continues to be dominated by text-only channels, synchronous web conferencing has become a more viable option for online learning as broadband penetration has increased. Given that experimental research has shown that audio may have an advantage over text in fostering social presence, but that video may not add appreciably to audio (Frisby et al., 2013), it is important to carefully tease out how different combinations of technologies can produce better outcomes with regard to perceptions of immediacy. This call for research on specific synchronous CMC technologies goes hand-in-hand with our call for research

on a wider range of student populations and disciplines. It is possible, for example, that required synchronous interaction may have a larger affect on engagement among higher-risk students, but this needs to be tested.

### **Conclusion**

In this paper, we have argued that research on online learning should focus more on pedagogical techniques that have been shown to be successful in FTF learning, specifically on communicating immediacy. We put forth this argument because we believe that the challenge to innovating in higher education is to find ways to adapt proven strategies to the exigencies of online delivery. The rapid rise and fall of MOOCS as the savior of higher education points to the continued importance of interpersonal relationships in learning, both online and off. Interpersonal relationships cannot, by their very definition, be automated away. Innovative strategies in higher education will take into account that some elements are not optional, but rather essential to successful learning, and will find ways to meet those needs in new environments. In particular, we believe that the literature shows that immediacy is as important to successful online learning as it is to FTF, and that synchronous CMC, particularly richer-cue channels such as videoconferencing, can enhance perceptions of immediacy and lead to an increased sense of interpersonal connection to both instructors and students in online classes. We believe that truly innovative online classes will use synchronous CMC to enhance this sense of connectedness, especially early in the course, in order to keep students committed, engaged, and ultimately, to help them learn. The disruptive nature of new technologies can and should be mitigated and balanced by incorporating what is valid, effective and necessary from the traditional classroom.

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