

Chapter 3.7

Adopting Tools for Online Synchronous Communication: Issues and Strategies

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ABSTRACT

This chapter considers some of the issues related to the adoption of online synchronous communication tools and proposes strategies to help deal with these issues. Two contrasting contexts of use of online synchronous tools are described. In one context, audio-conferencing using Elluminate Live™ is highlighted, in the other, video-conferencing using iVisit™. Issues related to use of these tools for synchronous communication are considered from the perspective of relative advantage, compatibility, and complexity. The advantages included the immediacy, spontaneity, intimacy, efficiency, and convenience of communication. Complexity manifested itself in relation to time management, shifting and evolving technical and pedagogical needs, and changes in instructors' roles. Compatibility issues included the demands

on instructors, lack of freedom from temporal constraints, and difficulties with communication across time zones and when multi-tasking.

INTRODUCTION

For many students and teachers, the transition to e-learning or online learning has involved moving from a form of communication that is synchronous, real-time, and face-to-face, to one that is asynchronous, in delayed time, and text-based (Zemsky & Massy, 2004). This transition has resulted in flexibility related to any-time any-place learning (Oblinger & Maruyama, 1996), increased opportunities for reflection (Harasim, 1993; Heckman & Annabi, 2003; McComb, 1993), equality of participation (Ortega, 1997; Warschauer, 1997), and easy archiving of communications (Collis &

Moonen, 2001; Harasim, Hiltz, Teles, & Turoff, 1995). Likewise, the transition has been accompanied by challenges such as loss of non-verbal cues (Burge, 1994; Kuehn, 1994; McIsaac & Gunawardena, 1996; Weatherley & Ellis, 2000), possible decrease in social presence (Anderson, 1996; Tu, 2002), lack of interaction (Guzdial & Carroll, 2002; Oliver & Shaw, 2003), lack of spontaneity and immediacy in communication, and feelings of isolation (Abrahamson, 1998; Badger, 2000; Besser, 1996; Brown, 1996; Tiene, 2000).

To avoid, compensate for, or overcome these challenges, institutions can complement the asynchronous aspects of e-learning with an online synchronous component. Synchronous communication occurs in real time with participants simultaneously, remotely connected to one network. In the past, this form of communication has typically privileged text-based chat. More recent synchronous learning environments combine features and tools such as audio, video, chat, whiteboards, polling features, and breakout rooms.

Text-based forms of synchronous communication have been the focus of numerous studies (see Baron, 2004; Jacobs, 2004; Murphy & Collins, 2000; Nicholson, 2002; Schwier & Balbar, 2002). There have also been a number of studies of video-conferencing (see Alexander, Higgison, & Mogy, 1999; Hearnshaw, 2000; Gage, Nickson, & Beardon, 2002) and of audio-conferencing (see Hampel & Hauck, 2004; Moore & Kearsley, 1996). However, the newer synchronous learning environments have yet to receive equal attention in the literature.

Knolle (2002) argues that investigation of contextual use of real-time technologies is necessary to provide guidance to instructors who are struggling to use these technologies. Online synchronous communication has the potential for numerous benefits including real-time interaction (Hoffman & Novak, 1996), perception of social presence (Blanchard, 2004), and sense of community (Schwier & Balbar, 2002) and immediacy (Garrison, 1990). The potential for benefits or

advantages, however, does not guarantee that they will actually occur. For example, Rafaeli and Sudweeks (1997) noted that while interactivity might be possible, it was not always exercised. Even in cases where the advantages may actually be realized, there may be other disadvantages depending on the tools used for synchronous communication. These tools may be quite complex and require extensive support. In other cases, their integration into existing courses or other contexts may result in incompatibility with the teaching and learning activities or strategies already in place.

This chapter considers some of the issues related to the adoption of online synchronous communication tools. It also proposes strategies to help deal with these issues. Two contrasting contexts of use of online synchronous tools are described. In one context, audio-conferencing using Elluminate *Live*TM (EL) is highlighted, in the other, video-conferencing using iVisitTM. Both technologies will be of interest to postsecondary institutions considering using synchronous communication tools either as an addition to asynchronous learning or to support remote collaboration among geographically-dispersed individuals. Both technologies operate in low-bandwidth environments, which will be of benefit in cases where the student users do not have high speed access. In addition, iVisit allows for compatibility between Mac and PC users and supports multi-party desktop conferencing. EL is also Mac and PC compatible and will be of particular interest to institutions considering replacing teleconferencing with a Web-based alternative.

The EL case, although only a small pilot, provides insights into the experiences of university instructors who are experimenting with new online technologies for the first time. The case of iVisit, although situated in an elementary and secondary context, provides an illustrative case of a large-scale implementation with 432 hours of video-conferencing activities in one year, including involvement by 13 school districts, four universities, 50 schools, and more than 11,000

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