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 anytime 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, & Mogey, 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
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