Chapter 8
Synchronous and Asynchronous Interactions:
Convenience and Content

Anthony S. Chow
University of North Carolina – Greensboro, USA

ABSTRACT

This chapter explores similarities and differences between synchronous and asynchronous communication in online learning through the lens of both instructor and student using social communication, usability, and learning theory as conceptual frameworks. Each construct is defined and explored, with a discussion of how each is experienced by instructors and students. Online activity and user preferences are explained using concepts from usability and how the interactions, communications, and information processing differences lead to student learning as defined by contemporary learning theory. Best practices, within the context of available technology, are recommended.

INTRODUCTION

Well, I got to attend my first live class session this week, as opposed to watching the recording. I really prefer being there for the class. It's easy for the mind to wander when watching a recording, but being there live to interact and ask questions helped the material sink in more." –An anonymous student, 2011

Synchronous and asynchronous communication in online learning can be understood via two seminal variables: *space* and *time*. Synchronous communication reflects two or more people being in the same real or virtual *space* at the same *time*; that is, *real-time interaction* (Falloon, 2011; Hrastinski, 2009; Maushak & Ou, 2007; Ward, Peters, & Shelley, 2010). Asynchronous communication does not require either variable be present (i.e., people do not have to be together in the same space or time (Hrastinski, 2009; Küçüka, Genç-

Kumtepe, & Tasci, 2010; Picciano, 1998; Ward, Peters, & Shelley, 2010)) and can be defined as "learning at anytime or in anyplace using Internet and World Wide Web software tools (e-mail, electronic bulletin boards, and Web pages) as the main vehicles for instruction" (Picciano, 1998, p. 2). While the differences appear subtle in terms of human communication and interaction, being in the same place at the same time as another person, as opposed to being somewhere on your own, creates significantly different experiences in terms of instructional delivery, information processing, and overall interaction and dialogue.

Having been involved in distance—and now online—learning over the past decade, I have seen the various facets of each. The debate over whether synchronous or asynchronous methods are preferable is akin to those about qualitative versus quantitative methods, brands of colas or smart phones, and public versus private education. 'Beauty' in this context is certainly in the eye of the beholder because providing online learning means, first and foremost, being able to meet the unique circumstances, contexts, and preferences of learners. To understand this more clearly, we need to first examine why online learning is so popular and effective.

Overview of Distance and Online Learning

Online learning creates access to educational opportunities for students otherwise unable to pursue a degree. An increasing number of students, faculty, and institutions are gravitating to online learning; the number of college students who had taken at least one online course doubled from 2.3 million in 2004 to 4.6 million in 2008 (Allen & Seaman, 2010; Ward, Peters, & Shelley, 2010). In 2009, 73% of higher education institutions reported growth in demand for online courses and programs (Allen & Seaman, 2010; Chow, Oguz, Martin, Chu, & Smith-DeCostner, 2011) and 58% of university chief academic officers "perceive that online learning is critical to the long-term

instructional strategies of their institutions" (Ward, Peters, & Shelley, 2010, p. 58).

The primary reason why online education and online programs are successful is because students do not have to quit their jobs or be physically close to a college or university. Other factors include affordability, tailor-made courses and learning opportunities, and availability of asynchronous instruction (Islam, Kunifuji, Hayama, & Miura, 2011). Students are willing to pay more for this convenience and tend to be older, employed, and otherwise engaged with life beyond being a student (Rabe-Hemp, Woollen, & Humiston, 2009). Online education allows them the opportunity to maintain their lives while pursuing an education that they anticipate will enhance it. However, this characterization does not define all students, as even full-time, younger, traditional students like online learning and the convenience it represents.

A recent survey of graduate students concerning the importance of online classes seems to support previous research findings (Figure 1): 46% of respondents (n=96) selected their main reason as "My work schedule is heavy and an online class is more convenient", followed by 35% for "Personal circumstances", and 34% chose "I thought online courses were self-paced and I could go at my own speed" (Hans, 2011).

The quality and effectiveness of online learning has also been researched heavily and shown to be comparable and at times better than traditional face-to-face (F2F) learning (Allen & Seaman, 2010; Picciano, 2006). As Allen and Seaman write in their 2010 study of 2,500 U.S. universities and colleges: "In the first report of this series in 2003, fifty-seven percent of academic leaders rated the learning outcomes in online education as the same or superior to those in face-to-face. That number is now sixty-six percent, a small but noteworthy increase. Over three-quarters of academic leaders at public institutions report that online is as good as or better than F2F instruction (compared to only 55.4% of private nonprofits and 67.0% of for-profits)" (Allen & Seaman, 2010, p. 3).

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