Chapter 11 Measuring Success in a Synchronous Virtual Classroom

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ABSTRACT

This chapter will benefit those who teach individuals using the synchronous virtual classroom (SVC). The SVC model will help instructors design online courses that incorporate the factors that students need to be successful. This model will also help virtual classroom instructors and managers develop a systematic way of identifying and addressing the external and internal factors that might impact the success of their instruction. The strategies for empirically researching the SVC, which range from qualitative inquiry to experimental design, are discussed along with practical examples. This information will benefit instructors, researchers, non-profit and profit organizations, and academia.

INTRODUCTION

In the recent decade technology has significantly enhanced education and online courses are increasing in popularity and credibility. In 2008, the Sloan consortium reported that 3.9 million (over 20%) students in the U.S., were taking at least one online course. In just one year, from 2006 to 2007, there was a 12.9% increase in online enrollment (Allen & Seaman, 2008); an increase of 400,000

students. The reason for this growth is that online courses offer "anytime," "anywhere" learning which provides flexibility and convenience for students and instructors. However one of the major challenges that distance educators still face in designing effective online courses is including interactivity (Muirhead, 2004; Keefe, 2003). One of the ways this challenge has been addressed is through the use of synchronous virtual classroom technology.

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Synchronous Virtual Classrooms

Synchronous Virtual classrooms are online environments that enable students and instructors to communicate synchronously using text chat, audio, and video. They enable faculty and students to interact as if they were face-to-face in a classroom by permitting instructors and students to share presentations on an interactive whiteboard, express emotions through emoticons, participate in group activities in break out rooms, etc. Synchronous Virtual Classrooms are software applications that bring human interaction into the virtual classroom through facial expressions, vocal intonations, hand gesticulation, and real-time discussion (Wimba, 2009a).

There are a variety of synchronous virtual classrooms (Adobe Connect, Saba Centra, Elluminate Live, Horizon Wimba, Dim Dim, Learn Linc, Microsoft Live Meeting, Webex, Wiziq, etc.). They are also referred to as synchronous learning systems or collaborative electronic meeting rooms (Table 1).

Virtual Classroom features can be grouped into three categories based on their application: (1) discussion and interaction facilitated by breakout rooms, emoticons, chats, videos, presentations,

Table 1. Synchronous virtual classroom products

| Product | Website |
|------------------------|--|
| Adobe Connect | http://www.adobe.com/products/acrobatconnectpro/ |
| Saba Centra | http://www.saba.com/products/centra/ |
| Elluminate Live | www.elluminate.com |
| Horizon Wimba | www.horizonwimba.com |
| Dim Dim | http://www.dimdim.com/ |
| LearnLinc | http://www.ilinc.com/products/suite/learnlinc |
| Microsoft Live Meeting | http://office.microsoft.com/en-us/ livemeeting/ |
| Webex | www.webx.com |
| Wiziq | http://www.wiziq.com/ |

polls, quizzes, and surveys; (2) instruction and reinforcement implemented through the electronic whiteboard, application sharing, and the content area; and (3) classroom management tools that include the ability to upload and store documents, an auto-populated participant list, usage details, and archive options. The software can be integrated into course management systems such as Blackboard. Additionally, it accommodates diverse learners (e.g. it is accessible to the hearing and visually impaired) and types of learning (e.g., auditory, visual, tactile). There is also a telephone number for participants to dial-in, which increases its reach/functionality (Wimba, 2009b).

Advantages of Synchronous Virtual Classroom Technologies

Researchers have found that one of the major challenges in online education is including interactivity (Muirhead, 2004; Keefe, 2003). This need for interaction has resulted in developing guidelines for online courses. Adding synchronous components to online courses can enhance meaningful interactions (Repman, Zinskie & Carlson, 2005). With the introduction of virtual classroom technologies in the market, there is a cost-effective synchronous delivery in online courses which were initially made possible only with video conferencing technologies.

Student-Student interactions and Student-Instructor interactions both provide the learner with guidance and support. Students feel the need to be part of a learning community where they feel involved and have a social presence. They are motivated by receiving immediate feedback from the instructor as well as their peers. Collis (1996) lists motivation, telepresence, good feedback and pacing as the four major advantages of using synchronous systems. Park and Bonk (2007) list the following as the major benefits of using a virtual classroom: providing immediate feedback, encouraging the exchange of multiple perspectives, enhancing dynamic interactions

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