# Chapter 52

# Synchronous Online Learning: The Experiences of Graduate Students in an Educational Technology Program

#### Amy L. McGinn

Loyola University Maryland, USA

### **ABSTRACT**

This chapter explores graduate students' experiences with synchronous online learning at a private liberal arts university in the U.S. With the increasing popularity of online learning in higher education in the last decade, in-depth studies focusing on teaching and learning in a synchronous environment are needed. The author seeks to develop an understanding of synchronous learning from the perspective of students using the community of inquiry model to frame students' experiences. The students surveyed for this chapter were practicing K-12 teachers enrolled in a graduate program in educational technology. Because of students' practical knowledge of teaching, learning, and best practices for instruction, their experiences in online courses provide valuable information about the impact of synchronous online learning. This chapter sheds light on the learning needs of graduate students in a synchronous environment. This chapter also provides recommendations for how synchronous tools can be leveraged for maximum positive influence on student learning within a community of inquiry.

#### INTRODUCTION

In the last decade, as technologies have allowed for improved interaction between teachers and students, online learning has become increasingly popular in higher education (Martin, Ahlgrim-Delzell, & Budhrani, 2017). There has also been an influx of fully online programs and courses, particularly for graduate studies (Wagner, Enders, Pirie, & Thomas, 2016). The most recent data from the National Center for Education Statistics shows that in 2016, more than one third of students enrolled in graduate programs at degree-granting postsecondary institutions had taken at least one fully-online course during their programs of study (NCES, 2018). Over 75% of these students were enrolled in programs taught exclusively online. There is also a growing number of courses being taught in a hybrid format,

DOI: 10.4018/978-1-6684-7540-9.ch052

#### Synchronous Online Learning

also known as a blended learning environment. In these courses, learning takes place in the traditional face-to-face classroom *and* within an online learning environment, typically hosted on a learning management system (LMS) such as Blackboard or Moodle (Maxwell, 2016).

Considering the recent growth in terms of the quantity and variety of online graduate program offerings, it is essential that the higher education community focuses on the quality of blended and online courses. Preparing to teach in an online setting requires more than the basic transfer of content delivery from a face-to-face format to an online format using video or audio recorded lectures and uploaded slides. A helpful model to use in the development of online courses is Garrison, Anderson, and Archer's (2001) seminal work introducing their Community of Inquiry (CoI) framework. This framework focuses on the development of three areas in an online learning environment: cognitive presence, social presence, and teaching presence. These three elements work together to create a successful online learning experience, as illustrated in Figure 1 (Garrison et al., 2001). A brief overview of the three elements of Community of Inquiry (CoI) will provide a foundation for this chapter.

Teaching presence is defined as the design of the learning experience - such as the selection of content, learning activities, and assessments for a course - and the facilitation of the learning experience (Garrison et al., 2001). Teaching presence is often the first element instructors consider during the development of an online course or when planning online activities. As subject matter experts and experienced educators in higher education, teaching presence may seem like second nature. While this is certainly the central element of any learning experience, it works effectively in an online environment when cognitive presence and social presence are deliberately planned and executed. Cognitive presence is the extent to which the participants in a community of inquiry are able to construct meaning through sustained communication and reflection (Garrison, Anderson, & Archer, 2001). The specific goal of cognitive presence is to encourage higher order thinking skills. A fully online course offers multiple means of developing meaning, communicating, and reflecting, however unlike face-to-face courses there is no body language or other non-verbal communication to supplement written discourse. When the majority of communication and reflection are text-based, the sheer amount of text can be overwhelming for both students and instructors. Cognitive presence in an online learning environment relies on effective teaching presence and social presence to prompt the development of those higher order thinking skills.

Rourke, Anderson, Garrison, and Archer (2001) define social presence as the ability of learners to present themselves as "real people" by projecting their personal characteristics into a learning environment. Text-based social interactions occur regularly in online courses, and various online tools, such as VoiceThread, can extend the social exchanges beyond the text by incorporating audio and video into asynchronous learning environments. The challenge in an online setting is that instructors must deliberately plan activities to encourage the social presence of all members of the community. These kinds of exchanges between students, as well as between students and instructors, are much simpler to integrate in a face-to-face learning environment.

The addition of synchronous elements to online courses provides a way to bridge some of the gaps in an online learning environment to ensure effective teaching presence, cognitive presence, and social presence. Instructors can use synchronous class meetings to establish their teaching presence, to communicate expectations for asynchronous learning, to facilitate learning activities that encourage higher order thinking skills, and to promote the social interactions that help build a community of inquiry. As educational technologies have improved in recent years, particularly technologies that offer video conferencing, synchronous learning has become easier to implement for instructors and easier to access for

17 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/synchronous-online-learning/312769

### Related Content

### Towards Automated Specifications of Scenarios in Enhanced Learning Technology

A. Rius Gavidia, M. Sicilia Urbán, E. García-Barriocanaland G. Macarro Palazuelos (2010). *Novel Developments in Web-Based Learning Technologies: Tools for Modern Teaching (pp. 294-304).* www.irma-international.org/chapter/towards-automated-specifications-scenarios-enhanced/40545

### Civic Engagement: Modeling an Online Deliberative Collaboration

Anita Chadha (2022). *International Journal of Web-Based Learning and Teaching Technologies (pp. 1-13)*. www.irma-international.org/article/civic-engagement/316158

## Exploring the Influence of Affiliation Motivation in the Effectiveness of Web-Based Courses

Maurício Gregianin Testaand Edimara Mezzomo Luciano (2011). *International Journal of Web-Based Learning and Teaching Technologies (pp. 19-38).* 

www.irma-international.org/article/exploring-influence-affiliation-motivation-effectiveness/62851

#### Opportunities for Open Source E-Learning

Fanuel Dewever (2008). Web-Based Education and Pedagogical Technologies: Solutions for Learning Applications (pp. 252-265).

www.irma-international.org/chapter/opportunities-open-source-learning/31287

#### A Case Study of One-to-One Video Conferencing Education over the Internet

Hock C. Chan, Bernard C.Y. Tanand Wei-Ping Tan (2000). Web-Based Learning and Teaching Technologies: Opportunities and Challenges (pp. 327-346).

www.irma-international.org/chapter/case-study-one-one-video/31395