The Impact of Mandatory Synchronous Sessions in Graduate Studies

Concerning Flexibility, Convenience, and Overall Success

Chapter 2: Literature Review

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#### **Chapter 2 Literature Review**

#### Introduction

The purpose of this study is to explore how mandatory, synchronous sessions affect the flexibility and convenience of online graduate-level courses. Based on stated purpose of this study, the following research questions will be addressed:

(1) How do mandatory synchronous sessions affect flexibility and convenience?

- (2) How do mandatory synchronous sessions affect a student's choice in program and/or class?
- (3) What are the justifications behind the mandatory synchronous sessions?
- (4) What asynchronous options are available to adult learners that do not interfere with flexibility and convenience?
- (5) Is there a difference in overall success when using mandatory synchronous over synchronous sessions?

This chapter provides a review of the existing body of theory and research as it pertains to the purpose of this study and relates it specifically to theoretical framework involving the Community of Inquiry (COI) model. The first section of this chapter provides a historical overview of web-based education and explores the current trends and advantages promoted to adult learners, including the advantages of flexibility and convenience. The second section introduces the theoretical framework and provides relevant literature pertaining to the impact mandatory synchronous sessions have on flexibility and convenience. The third section examines literacy related to the justifications behind the mandatory synchronous session. The forth section explores asynchronous options that are available to adult learners but do not interfere with flexibility and convenience. The fifth section reviews literature in regards to any differences (if any) in overall student's success when using mandatory synchronous over asynchronous sessions. A summary of the literature review and will conclude this section.

# Web-Based (Online) Distance Education

According to literature, distance education has a history that spans almost two centuries. Although not an old discipline by academic standards, distance education practice and theory has evolved through five generations in its 150 years of existence (Taylor, 2001). Saettler (1968) states that original forms of distance education involved sending course materials through the mail system and provided students with an opportunity to study at a distance from a school or educational institution. For many years, mail correspondence remained the main method for distance education until the technological breakthrough of audio visual forms of media (LeShea, 2013). The last half of the twentieth century has witnessed rapid developments and the emergence of three additional generations, one supported by the mass media of television and radio, another by the synchronous tools of video and audio teleconferencing, and yet another based on computer conferencing (Anderson, 2004). According to Foundations of Distance Education, the possibility of teaching face to face at a distance was achieved by an electronics revolution in the 1980's. The deregulation of the telecommunications industry allied to the speeding up of chips and the introduction of broadband technologies brought about this veritable revolution (Keegan, 1996). The use of broadband allowed teachers and students to communicate more interactively, and was no longer a one sided form of communication. Before broadband, the primary delivery modes were two-way, interactive video and one-way, pre-recorded video (Lewis, Alexander & Ferris, 1997).

As educational technology evolves, so has its definition. Perspectives on the meaning of online learning have changed often and considerably throughout the years due to ever-changing technologies that impact delivery and learning opportunities. Online learning has now become more universal, the focus is not only on the delivery, but on how we teach and learn. Online education is a form of distance education that uses computers and the Internet as the delivery mechanism, with at least 80% of the course content delivered online (Allen & Seaman, 2008; Shelton & Saltsman, 2005). Online learning is defined as any class that is offered entirely online, offers students the opportunity to participate in and access the entire curriculum regardless of their geographic location, and is independent of time and place (Harasim, Hiltz, Teles, & Turoff, 1995). Most researchers have described online learning as one that is described as access to learning experiences via the use of technology, and access to learning experiences with the potential for flexibility and interaction (Benson, 2002; Carliner, 2004; Conrad, 2002).

The journey of distance learning continues into the 21<sup>st</sup> century. In the fall of 2012, 69% of chief academic leaders indicated online learning was critical to their long term strategy, and of the 20.6 million students enrolled in higher education, 6.7 million were enrolled in an online course (Allen & Seaman, 2013; United States Department of Education, 2013). Online education has predominantly grown in the past decade, particularly in higher ed., appealing to and targeting adult learners. It is the fastest growing form of distance education and is valued at both traditional and non-traditional colleges and universities (Kentnor, 2015). Online education has not only grown, but has evolved in order to improve the quality of education obtainable. The primary objective of distance education is to create educational opportunities for the under-represented and for those without access to a traditional educational institution (Jonasson, 2001).

Technologies including applications, software, learning platforms, the Internet, and the World Wide Web, allow for educational opportunities that were once unconceivable, giving access to new opportunities in education, professional growth, learning, and socializing

Strategies for implementing distance learning coursework have also evolved and expanded with the growth and maturation of the World Wide Web (Riesman, Dear & Edge 2001). Technological advances have fundamentally changed the practice of education, transforming how we teach and learn, including modifying pedagogies and changing teaching methods in order to meet the demands of the 21<sup>st</sup> century society. Online education is a different medium for teaching and learning, and therefore requires a different pedagogy (Bernard, Abrami, Lou, Borokovski, Wade, Wozney & Huang, 2004). For example, lectures that can be effective in a traditional face format classroom, do not have the same effectiveness in an online synchronous format. Distractions that are not present in a classroom setting can easily deter a students from gaining and retaining significant information. An alternative to a synchronous lecture is an asynchronous lecture, like video lectures. Video lectures give students control of the lecture and are portable. Students can replay segments and stop the lecture as they study to understand the content. They can skip topic segments they understand. In effect, they can adjust the instructor's delivery speed and topic selection to match their individual learning pace and interests. They can view the lecture when and where they study most effectively (Brecht, 2012).

# **Theoretical Framework**

Community of Inquiry (CoI) will be used as the theoretical framework for this study. The Community of Inquiry (CoI) model describes how learning takes place for a group of individual learners through the educational experience that occurs through the consideration of three core elements: cognitive presence, social presence and teaching presence. Garrison (2000) developed the process model in an attempt to provide a framework for studies of the effectiveness and quality of online learning. The Community of Inquiry model is a conceptual framework that identifies the elements that are crucial prerequisites for a successful higher education experience (Garrison, 2000).

Cognitive presence is characterized by exploration, construction, resolution and confirmation of understanding through practical inquiry (Garrison, 2007). Social presence requires the participants to establish personal and purposeful relationships to foster effective communication (Garrison, 2007). In order to keep interactions focused in a specific direction, teaching presence is seen as essential in balancing cognitive and social issues (Garrison et al., 2000). Teaching presence includes instructional design and organization, facilitating discourse and direct instruction (Garrison & Arbaugh, 2007). The Community of Inquiry model is built on constructivist principles rooted in educational theories of socio-constructivism, reflective thinking, and practical inquiry. Research has proven the validity and effectiveness of the CoI framework in both asynchronous and synchronous learning environments (Garrison & Arbaugh, 2007; Arbaugh, 2008; Tekiner Tolu, 2010). An effective Community of Inquiry will establish an online environment that supports and nourishes teaching, social and cognitive presence to facilitate learning and foster a positive sense of community online (Miller, 2014).

# Mandatory Synchronous Sessions Impact on Flexibility and Convenience

Synchronous sessions allow real-time communications and instructional delivery. Synchronous communication and learning allows students to connect and engage with others at the same time, without being at the same place, satisfying the principles of the CoI model. This primary drawback, same time requirement, is inopportune or a disadvantage in the world of flexibility and convenience. Flexibility for adult learners consists of time and convenience, along with the need to be in control of their own education experiences including the when, where, what, and how. Adult learners adapt well to active roles, as co-creators of the instructional process, a role in selecting content and developing the learning experience and building immediate relevance between learning activities and the necessities of their daily lives (LeNoue et al., 2011).

Mandatory synchronous sessions affect these promised flexibility and convenience by tying a student down to allotted time slots for live lectures and learning. Most adult learners turn to online learning opportunities due to constraints that keep them from attending traditional classrooms. Synchronous session participation can interfere with conflicting time zones, and working or personal schedules. This then creates communication and participation challenges that then have the potential to impact learning, and at times affects a student's grade due to mandatory attendance. While traditional classroom instruction requires learner to follow certain sequence bounded by time, content, and place, online instruction allows flexible learning modes so students can control their learning path, pace, and contingencies of instruction (Hannafin, 1984).The more the learners can control individual learning environment, the greater chances the learners will motivate their own learning (Steinberg, 1989).

Mandatory synchronous sessions can also lead to boredom. Boredom can cause students to multitask during synchronous lectures, especially lectures that require several hours of active listening which does not necessarily equate to learning. This boredom then causes multitasking in order to meet the requirements of the live sessions and the demands of another class while juggling personal and work responsibilities. Boredom is not always the cause, uninteresting pedagogies, long hours of listening to lectures, and distractions not present in a face to face classroom, along with family obligations, make learning difficult. Listening to a lecture face to face is different than listening to a lecture via a computer screen. Attention spans are tested by distractions in an environment that may not be conducive to learning, like ones living room. For many adult learners, their home is their only option due to family responsibilities, which is why they opted for a flexible and convenient online educational experience.

## **Mandatory Synchronous Session Justification**

Previous theoretical and empirical research has identified important learning advantages of face-to-face communications including emotional content and more immediate feedback. Moreover, students frequently cite these learning advantages as things that they like (Daymont, Blau, & Campbell, 2011). Support for the idea that students would prefer, and learn more from, face-to-face communications comes from a variety of theoretical perspectives including social presence (Short, Williams, & Christie, 1976). Meyer (2007) found that the majority of students preferred face-to-face discussions, but they saw advantages for both synchronous and asynchronous mediums. The advantages of face-to-face discussions included the emotional content, the energy, the fluidity, the ease, the ability to read non-verbal signs, and the more immediate feedback.

Immediate feedback is essential for adult earners and students in general. Live lectures and sessions allows for real time learning and addressing misunderstandings and questions immediately. Immediate feedback allows the students to proceed in a timelier manner without having to wait for clarification or instruction. Interaction among participants is also an advantage adding social presence and relieving isolation and disconnections for those who need personal interaction. Synchronous learning also allows for real time discussion and live collaboration which increases motivation and engagement.

Live interaction encourages and motivates students to complete assignments timely and effectively. Personal interaction helps adult learners maintain their interest. Isolation rarely boosts motivation. In Petrides' (2002) study, some participants reported they felt a lack of immediacy in responses in the online context in comparison to what could typically occur in a structured face-to-face class discussion. This appears to be especially obvious in asynchronous online discussions when students have to wait for others to read and respond back to their bulletin board postings or e-mail messages them (Song, et al, 2004).

Learning at one's own pace, although seen as an advantage for most, can be a disadvantage when waiting for responses that are important with proceeding or completing assignments in a timely manner. A learner centered approach using asynchronous methods requires adult learners to be more focused, goal oriented, committed, disciplined, along with the ability to manage time effectively. Self-motivation is essential when learning at your own pace through asynchronous platforms. Procrastination is a trait more likely to occur in an asynchronous learning environment.

## **Asynchronous Sessions**

The delivery of instruction via online learning has increasingly become a popular alternative to traditional instruction. In 2015, "no set class meeting times" was the fifth overall reason out of 25, as to why students selected an online program (Clinefelter, & Aslanian, 2015). Online options can deliver effective instruction through means outside of synchronous formats. Asynchronous sessions allow for communication and learning over a period of time, which involves a different time and different place approach. Through an asynchronous platform adult learners can access information and learning materials as well as communicate through email, discussion boards, and social media message boards, etc..., at their convenience. Resources and learning materials are available day and night, interaction can be tracked, and information posted by others can be used as collective knowledge for future reference. The issues of different schedules and various time zones are not an issue through asynchronous platforms. Aligning a busy schedule with the synchronous learning requirements can be quite challenging. Asynchronous courses can be as effective, and in some cases more effective, as synchronous sessions in creating social, cognitive and teacher presence.

Offering adult learners asynchronous options gives then control over their own learning, and learn at their own pace, it is a more learner-centered approach. Students can learn at their own pace and have full responsibility of their learning by choosing when, how, and where they will interact and learn. Most adult learners have difficulty, or are not able to commit to synchronous sessions therefore asynchronous options are more accessible and feasible to a larger body of students. Asynchronous options also foster a higher level of thinking and interaction as it requires thinking before responding. Asynchronous learning platforms also help introverted learners eliminate social anxiety. Learning independently makes introverted learners feel safe and more comfortable. This advantage also targets a larger body of students and supports various learning styles, while continuing to maintain flexibility and convenience.

**Discussion boards**. Asynchronous options like discussion boards offer adult learners, flexibility with non-traditional course times and locations. Discussion boards, blogs, emails, and social media platforms are always available to ensure that online interaction is effective, and

allows for collaboration and conversation to happen over distance and place. The online format of discussion offers greater flexibility for a student to decide when to construct their contribution to the threaded discussion, but it often takes more time and effort to develop a thoughtful comment or an in-depth analysis (Daymont et al., 2011). Rovai (2004) argues that discussion boards that are often a significant component of asynchronous online courses can be used to facilitate a constructivist learning environment by promoting more reflective interaction than is often the case in the more spontaneous interactions typical in traditional classroom discussions. Online students have the opportunity to reflect on their classmates' contributions while creating their own, as well as to reflect on their own writing before posting it (Garrison, 2003; Ho & Swan 2007). In contrast to synchronous sessions, Meyer (2007) found that the advantages of written online discussions included (1) the opportunity to take time and care to reflect on what response should be made, (2) that the discussions were more reasoned, more informative, and contained deeper analyses, and (3) the opportunity for quieter students to open up online. A study by Poole (2000) examined student participation in a discussion-oriented online course, the results indicated that students participated in online discussions at times most convenient to them, such as on Saturdays. Poole also found that students mostly accessed course materials from their home computers, the place most convenient to them (Song, Singleton, Hill, & Koh, 2004).

#### **Impact on Overall Success**

Allen & Seaman (2015) report that in 2013 there were over 7,000,000 students taking at least one online course. Studies reveal that even the students who are willing to meet synchronously are willing to do so only a few times throughout the course as opposed to a

required weekly meeting. Whether adult learners opt for synchronous of asynchronous methods, overall success does not seem to be impacted. What seems to have more of an impact is the quality of materials, instruction, and interactions activities. The combination of these quality approaches, whether synchronous or asynchronous, are what creates effective learning. Communication is notably one of the most crucial elements to an effective online course. Lehmann (2004) states communication is what separates true online learning from Web-based tutorials.

The growth and popularity of distance education makes communication vital for student success. Research demonstrates that student satisfaction in regards to online learning is based on improper communication and feelings of isolation, anxiety due to limited accessibility to course materials as well as limited and/or improper communication between students and teachers. Research also finds that improper or poor overall online course design leads to lower levels of learning compared to that of a face-to-face classroom.

#### Conclusion

Internet access in fundamental in online education, providing and improving educational opportunities and providing an extent in range of learning, knowledge and educational resources, and by providing opportunities for learning beyond that of an academic perspective. The appeal of online education not only comes from the opportunity to pursue educational endeavors, but the convenience and flexibility that comes with online learning. Prior research shows that the most common reason for students to choose an asynchronous online format appears to be flexibility or convenience (Arbaugh & Frick, 2006; Bocchi, Eastman, & Swift 2004; Hiltz & Shea, 2005; Hirschheim, 2005). What was once a difficult task for those who work fulltime, who have families, adult learners in general, is now achievable through online learning platforms. It

appears that the "anytime" is becoming as important, or more important, than the "anywhere" part of "anytime, anywhere" education for students (Daymont et al., 2011).

Song, Singleton, Hill, and Koh (2004) surveyed 76 online graduate and found that online courses are dynamic on multiple levels: information is received in a variety of formats and different times. When learners are accustomed to learning in more static, real-time contexts, this can create significant time management issues. Effective time management, and a more learner centered approach using asynchronous options assist with the issues of flexibility and convenience. Once a student can manage time effectively, and has more freedom and responsibility of their own learning, they have the ability to learn what strategies work for them. Adult learners are usually working individuals balancing a variety of responsibilities on top of their educational endeavors. Institutions need to structure online courses that meet the needs of the students granting them the promised convenience and flexibility they need to succeed.

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