Chapter 14

Student Attitude and Online Learning:
The Impact of Instructional Design Factors upon Attitudes toward the Online Learning Experience

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ABSTRACT

After defining “attitude” and reporting on the impact attitudes have in general, this chapter presents different instruments which have been used to measure students’ attitude toward online education, and reports on studies which have used these instruments to assess attitudes toward online education. In addition, design factors affecting attitudes toward distance education were studied. The chapter presents research associated with different models which were used to study the impact of impact of design factors upon attitude, focusing upon learning environment research. More broadly, research associated with process and causal models was presented. These models examine a multitude of factors associated with student attitudes. The chapter concludes by discussing the importance of factoring in attitude when designing distance education courses.

INTRODUCTION

Concerns about Distance Education

Increasingly, universities are developing distance education programs either to supplement face-to-face programs or to completely transform themselves into distance education universities. In 2006, the Online Learning Consortium reported that approximately 3.5 million students in Higher Education in the United States were taking at least one online course, approximately a 10 percent increase from the previous year (Allen & Seaman, 2007). That number in 2011, five years later, jumped to over 6.7 million students.

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That jump represented an increase of 9.3 percent over the previous year. Within five years, from 2006 to 2011, the number of students taking online courses almost doubled (Allen & Seaman, 2013). Roughly a third of students in higher education take at least one online course.

Because of the speed at which universities are developing such programs, their quality has been mixed. Some programs have focused upon quality, while others have not. As with any instruction, the quality of teaching has varied within institutions. Some of it has been poor because of the quality of the instructors. Other teaching has been poor because the instructors are trying to figure out how to best instruct using new technology. While much has been learned about how to teach online effectively, much has yet to be learned. (Parker, 2004)

Quality control issues are still a concern with online learning, which result in doubts about its effectiveness (Hashem, 2011). According to Allen and Seaman (2013), the percentages of American academic leaders who believe that online education is as good as or better than face-to-face instruction, has increased from 57.2 percent in 2003 to 77 percent in 2012. However, there was still a significant percent of academic leaders, 23, who believe that online learning is inferior to face-to-face learning.

Doubts about the effectiveness of online learning derive from the higher number of students dropping out of online programs compared with face-to-face instructional programs (Bell & Federman, 2013; Patterson & McFadden, 2009; Tyler-Smith, 2006). According to Allen and Seaman (2013), high percentages of academic leaders when surveyed reported low retention rates as a barrier to the growth of online learning. Patterson and McFadden (2009) report that students are significantly more likely to drop out of online programs than are student in face-to-face programs.

One of the major differences between online and face-to-face learning is the need to use technology to interface between students and instructor, since the instructor is not in the same room as the students. By its very nature, this technology introduces an element of distance between students and instructor. Although there are ways to compensate for the use of technology, such as using synchronous sessions to teach, the technology is still impacting the interaction. Interfacing with students via videoconferencing can never be quite the same as talking with students face to face (McGettigan, 1999). As Beard, Harper, and Riley (2004) state, “many students learn best from direct interaction with their instructors and other students. Distance education often prohibits this interaction making learning and direct involvement less personal” (p. 29). This sense of disconnection is made worse by instructors who do not design courses which allow for student interaction.

The Impact of Student Attitudes

Assessing attitudes toward courses, during or after the course, is important to determine how well one is teaching so as to improve the course. With face-to-face classes, the instructor can often see problems as they are developing – simply by observing in the classroom or talking to students. These problems can then be rectified immediately. With online classes, assessing student attitudes toward an online course is particularly critical, as there is a physical distance between instructor and students, which makes it less likely that instructors will be able to perceive problems so easily. Thus, problems may fester of an instructor is not paying attention, resulting in a negative attitude toward the course. In addition, there are problems which occur in an online class which may not be present in a face-to-face class. Besides the physical distance between instructor and students, there are also issues of technology which may negatively impact the experience of the learner, as well as potential feelings of isolation. The accumula-