

## Chapter 25

# Establishing Considerations for Universal Design for Learning and Accessibility in Online Courses

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### ABSTRACT

*Students with and without disabilities are enrolling in online courses. Universal design for learning (UDL) and accessibility strategies should be implemented proactively when designing and developing online courses. Quality assurance and accessibility standards, university support, professional development, and instructional designers are important for instructors to successfully design online courses and teach online. The purpose of this chapter is to provide educators with strategies for implementing UDL and accessibility in online courses.*

### INTRODUCTION

Online courses are becoming increasingly popular in educational institutions. Enrollments in online college courses are growing at a rapid pace (Allen & Seaman, 2014) and diversity is increasing (Ingram, Lyons, Bowron, & Oliver, 2012). Online courses have the potential to attract students who may not be able to attend traditional face-to-face courses (Allen & Seaman, 2014). Distance courses require students to be disciplined, proficient with technology and work independently (Rao, Edelen-Smith, & Walehau, 2015). As colleges and universities move toward offering more online courses, students with special needs may get left behind (Catalano, 2014). Online course accessibility and Universal Design for Learning (UDL) are important as institutions of higher education extend their reach and course offerings to a variety of students near and far. Many students, including those students with disabilities, are opting for online versions of courses.

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According to Tobin (2013), UDL is an educational framework for designing multiple ways for learners to interact, engage and experience content. UDL was initially developed to provide equal learning opportunities for students in face-to-face courses, but the framework has been adapted for online courses (Tobin, 2013). UDL goes beyond being beneficial for students with disabilities. The principles often benefit all learners (Tobin, 2013). Universal design strategies are being researched as ways to create curriculum that is more global and diverse (Ingram, Lyons, Bowron, & Oliver, 2012). When launching a technology-driven international university, considerations for UDL and accessibility should be established.

A study was conducted on an *Introduction to Women's and Gender Studies* course at the University of South Carolina (UofSC) – Columbia. The following research question guided the study: What impact does universal design for learning (UDL) and accessible course design have on student learning experiences in an online course? The *Introduction to Women's and Gender Studies* course is an academic foundation course at the university. Academic foundation Carolina Core courses support study in program majors and beyond the classroom experiences. Carolina Core courses develop competency in values, ethics, global citizenship, multicultural understanding and social responsibility. The courses are a shared experience for UofSC students regardless of their majors or fields of study. The objective of this chapter is to determine the impact of UDL and accessibility on online courses and to provide educators with strategies for implementing UDL and accessibility in online courses.

## **BACKGROUND**

### **Online Course Design**

College and universities have reported an increase in the demand for online courses – greater than the demand for face-to-face courses (Allen & Seaman, 2010). As students in higher education institutions are enrolling in more online courses, concerns about the quality of online courses has been raised (Newby, Eagleson, & Pfander, 2014). Educational environments are searching for ways to evaluate the quality of the experiences of students enrolled in online courses (Schmidt & Stowell, 2017).

Quality online course design incorporate student-student, student-instructor and student-content engagement (Tobin, 2014). Chickering and Gamson (1987) provides seven good practices for undergraduate education. The guidelines are applicable to more than just undergraduate education. The seven principles also relate to graduate education and corporate learning environments (Robertson, Grant & Jackson, 2005). The principles include:

1. Encourages contact between students and faculty
2. Develops reciprocity and cooperation among students.
3. Encourages active learning.
4. Gives prompt feedback.
5. Emphasizes time on task.
6. Communicates high expectations.
7. Respects diverse talents and ways of learning.

The seven principles crafted by Chickering and Gamson (1987) can be used to create and deliver quality online courses. Frequent student-instructor communication is the most important factor in stu-

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