Chapter 1.27
Behavioral, Cognitive, and Humanistic Theories: Which Theories Do Online Instructors Utilize?

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ABSTRACT
This article presents fifteen different design theories from the behaviorism, cognitivism, and humanism schools of psychology. Information about the theories is presented as a response to three research questions. Descriptions and online learning empirical evidence of eight of the theories are illustrated first. Then, descriptions of seven additional design theories which have not yet been researched in connection with online learning are offered. Finally, results from a study that investigates how often online instructors utilize nine of the theories is presented. Conclusions are made in connection to the three research questions, and further research studies related to the topic are suggested.

INTRODUCTION
An increasing number of individuals have chosen distance education when taking a course or earning a degree because it is a flexible alternative that meets their needs (Chu & Hinton, 2001; Course-Management Systems, 2005). An online course is one type of distance education where an instructor and the students interact through an online venue, such as a course management system. When taking an online course, the course may occur at different times from different places, or it can occur at the same time from different places (Course-Management Systems, 2005; Simonson, Smaldino, Albright, & Zvacek, 2000).
There are advantages to taking an online course, and there are challenges that students and instructors must overcome. Synchronous and asynchronous discussion boards are features of a course management system that instructors make use of because these tools can be used to individualize instruction, encourage goal-based exploration, and guide students to construct new schemes of knowledge (Prester & Moller, 2001). Challenges that occur include feelings of isolation, waiting for responses to asynchronous posts, absence of impulsive discussion, and lack of non-verbal isolation (Figueroa & Huie, 2001; King, 2001; Northrup, Lee, & Burgess, 2002; Prester & Moller, 2001).

Designing effective courses is one way that instructors reduce the disadvantages (Collins & Berge, 1996; Makrakis, 1998; Prester & Moller, 2001; Williams, 2001). Instructors often use design theory to guide the development of courses so they can be more effective. Instructors may have problems in mind from past experiences with teaching online that they want to avoid, or they can recognize a problem as it is occurring and implement a strategy to help reduce the difficulty. Instructors may accept the idea of using theory to guide course design and solve problems, but they may have questions that they want answered. The purpose of this article is to answer three of the following questions that online instructors may have: (a) According to empirical evidence, what does the research show about online instructor use of different design theories? (b) According to lack of empirical evidence, which design theories have not been researched in regard to online instructor utilization of theory? and, (c) According to a recent study, how frequently do online instructors use nine of the design theories?

**Behavioral, Cognitive, and Humanistic Theories**

**Behaviorism**

Experimental psychologists William James and Edward L. Thorndike, questioned the use of memorization as a strategy for learning. Experiments showed that memory did not increase after the participants had memorized sets of information. These results guided a turn in research toward stimulus-response behavioral psychology. James and Thorndike believed that the environment served as a stimulus, and it could be used to change the way individuals responded. As behaviorism became more established as a part of the school of psychology, psychologists began to focus on individual’s responses to feedback when they performed a task. Other behavioral psychologists that have made contributions to the field of behavior psychology include Ivan Pavlov, B. F. Skinner, Albert Bandura, and Benjamin Bloom (Joyce et al., 2000; Pinar et al., 1996).

**Cognitivism**

Theories that are cognitive in nature are based on learning tasks that are practical, and they are seen being used in authentic learning environments. Cognitive theorists such as Jean Piaget, Lev Vygotsky, Erik Erikson, and David Ausubel have developed theories that are not only widely accepted, but they have begun the path for the development of other cognitive theories. When instructors utilize theories that are cognitive in nature, they tend to develop learning experiences that help students make connections that are meaningful to themselves (Grabinger, 2004; Tomei, 2007).
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