Chapter III

Educational Technology and Learning Theories

Because of the changing nature of today’s students, economic pressures, and rapid implementation of distance learning courses and programs, definitions of what constitutes education and learning are changing, too. Whatever years ago instructors viewed their students as blank slates whose minds could be filled with the information they were imparting, current constructivist theory holds that students, through their interaction with one another, the instructor, and their environment, create knowledge and meaning. (Palloff & Pratt, 2001, p. 3)

Educational technology is a theory about how problems are identified and solved, a field involved in applying a complex, an integrated process to analyze, problem solving in human learning, and a profession made up of an organized effort to implement the theory, involving intellectual techniques, and practical application of educational technology (Definition of Educational, 2004). Laurillard’s (1998) book, Rethinking University Teaching, starts with the premise that university teachers “must take the main responsibility for what and how their students learn” (p. 1). Good teaching motivates and engages students in ways that are consistent with teachers’ philosophies of teaching and learning, based on theories of development, motivation, and learning. In today’s...
technologically sophisticated age, “a constant challenge to educators is the chasm between educational technology and teaching practice” (Gorski, 2001, p. 9). Keeping this challenge in mind especially, this chapter focuses on the following:

- Human Learning and Cognition
- Technology Enhanced Teaching and Learning
- Course Syllabi and Effective Teaching

**Human Learning and Cognition**

Cognitive psychology has replaced behaviorism as the dominant school of thought in American psychology. What brought about this cognitive revolution? Why were the early leading advocates of human information processing (HIP) dissatisfied with behaviorism? Which of behaviorism’s assumptions did HIP researchers reject? What evidence and arguments were used against behaviorism? Why did both behaviorists and HIP researchers reject the notion of stages? HIP brands of cognitive psychology take a different view of development than do Piagetians. This section discusses the following:

- Cognitive revolution in American psychology
- The HIP approach
- Methods of behaviorists and HIP theorists
- Piagetians versus the HIP approach
- Knowledge versus mind
- The rejection of the stage theory

**Cognitive Revolution in American Psychology**

The terms *behaviorism* and *learning theory* were used as if they were synonymous for many years in American psychology. This is because early psychologists assumed that people think, have ideas and sensations, and act through the power of free will. As the psychologists observed it, their task was...
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