Applying Universal Design to College Instruction

We first approached the task of applying Universal Design (UD) to college instruction through the framework of the seven principles of Universal Design developed by the NCSU Center for Universal Design (The Center for Universal Design, 1997). These principles are widely acknowledged and cited as seminal in the field of UD. They delineate considerations for the "usability of an environment" based on a broad spectrum of human abilities, including vision, hearing, speech, body function, mobility, and cognition. Our intent was to examine college instruction in light of these principles, and to take a more in-depth look at what might constitute UD in an instructional environment. We anticipated that many "usability" features of UD would be applicable to the college classroom. However, given the nature of instruction, we also anticipated that UD in this environment would entail a greater expansion of principles in the areas of cognition and learning.

We began with an extensive review of the literature on Universal Design, effective instruction in higher education, and effective instruction with students with learning disabilities in both secondary and postsecondary educational settings. We included the area of learning disabilities because these students, by definition, represent a broad range of learning and cognitive differences that often challenge traditional notions of college instruction. In light of this review, we found the principles of UD to be quite encompassing as a framework for inclusive college instruction. Working with seminal principles identified in higher education by Chickering and Gamson (1987), and emerging guidelines for inclusive education at the K-12

level from the Center on Applied Special Technology (CAST, 1999) and the National Center to

Improve the Tools of Educators (Kameenui & Carnine, 1998), we viewed these four sources in

tandem with particular attention to overlaps across principles as well as gaps in the literature

base.

The Principles of Universal Design for Instruction©

Principle	Definition
Principle 1: Equitable use	Instruction is designed to be useful to and accessible by people with diverse abilities. Provide the same means of use for all students; identical whenever possible, equivalent when not.
Principle 2: Flexibility in use	Instruction is designed to accommodate a wide range of individual abilities. Provide choice in methods of use.
Principle 3: Simple and intuitive	Instruction is designed in a straightforward and predictable manner, regardless of the student's experience, knowledge, language skills, or current concentration level. Eliminate unnecessary complexity.
Principle 4: Perceptible information	Instruction is designed so that necessary information is communicated effectively to the student, regardless of ambient conditions or the student's sensory abilities.
Principle 5: Tolerance for error	Instruction anticipates variation in individual student learning pace and prerequisite skills.
Principle 6: Low physical effort	Instruction is designed to minimize nonessential physical effort in order to allow maximum attention to learning. Note: This principle does not apply when physical effort is integral to essential requirements of a course.
Principle 7: Size and space for approach and use	Instruction is designed with consideration for appropriate size and space for approach, reach, manipulations, and use regardless of a student's body size, posture, mobility, and communication needs.
Principle 8: A community of learners	The instructional environment promotes interaction and communication among students and between students and faculty.
Principle 9: Instructional climate	Instruction is designed to be welcoming and inclusive. High expectations are espoused for all students.