

Teaching College Students with Learning Disabilities

from *Principles of Universal Design for Instruction*

by Stan F. Shaw, Sally S. Scott, and Joan M. McGuire

During the last quarter century, the concepts of mainstreaming, least restrictive environment and inclusion encouraged public schools to serve more students with disabilities in K-12 general education classes, and there has been a corresponding increase in the number of students with disabilities who attend college.

At the college level, issues in educating students with disabilities are often different than those affecting K-12 education, and the instructional climate is changing. Taken together, these trends call for a more systematic method of accommodating diverse learning needs. This digest presents the issues and offers a practical approach to improving instruction for students with learning disabilities (LD).

Disability Law at the College Level is Not as Prescriptive At the college level, the prescriptive Individuals with Disabilities Education Act (IDEA) is not applicable. While two civil rights laws, Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA), provide for equal access for "otherwise qualified" students with disabilities, exactly how equal access applies to instruction is less clear (Brinckerhoff, McGuire & Shaw, 2002).

The Instructional Climate in Higher Education is Changing Traditionally, many college professors have emphasized content over pedagogy, raising concerns about their knowledge of effective instructional strategies, especially for students with disabilities. In the 21st century an increased emphasis on pedagogy in higher education is creating opportunities to improve instruction for college students with LD. A high rate of faculty turnover has been projected for this decade (Magner, 2000), offering an opportunity for new faculty to enter academia at a time when teaching skills are valued.

Additionally, information technology can support instructional approaches previously not feasible in the college classroom. Effective instruction by faculty is now viewed as a critical element in the accessibility of learning environments (Scott & Gregg, 2000). In many colleges a major role of Disability Services personnel is to collaborate with faculty to help students become self-determined, independent learners (Shaw & Dukes, 2001).

With more students with LD attending college and a mixed level of pedagogical expertise among faculty, expecting faculty to make individual modifications and accommodations can be problematic. A more systematic method of meeting the needs of diverse learners is required, and Universal Design for Instruction (UDI) is such a model.

Universal Design for Instruction The general concept of Universal Design (UD) includes a specific set of principles to systematically incorporate accessible features into a design instead of retrofitting changes or accommodations. As applied in the field of architecture, UD results in the creation of environments and products that are as usable as possible by a diverse range of individuals.

Building on the framework of UD and its principles (Follette, Story, Mueller, & Mace, 1998), UDI anticipates the needs of diverse learners and incorporates effective strategies into curriculum and instruction to make learning more accessible. By focusing on methods and strategies that promote learning for all students, UDI embraces an inclusionary approach that enables students with disabilities to overcome some of their barriers to learning.

When the principles of UD are adapted to reflect the instructional practices that have been acknowledged as effective with students with LD, a more inclusive paradigm for teaching emerges. UDI provides a conceptual framework for thinking about access and inclusion for diverse individuals.

Principles of Universal Design for Instruction

The UDI framework consists of nine general principles (Scott, McGuire, & Shaw, 2001) to guide faculty in thinking about and developing instruction for a broad range of students.

- 1. Equitable use:** Instruction is designed to be useful to and accessible by people with diverse abilities. It provides the same means of use for all students, identical whenever possible, equivalent when not. Example: Using web-based courseware products with links to on-line resources so all students can access materials, regardless of varying academic preparation, distance from campus, etc.
- 2. Flexibility in use:** Instruction is designed to accommodate a wide range of individual abilities. It provides choice in methods of use. Example: Using varied instructional methods (lecture with a visual outline, group activities, use of stories, or web-based discussions) to support different ways of learning.
- 3. Simple and intuitive instruction:** Instruction is designed in a straightforward and predictable manner, regardless of the student's experience, knowledge, language skills, or current concentration level. It eliminates unnecessary complexity. Example: Providing a grading scheme for papers or projects to clearly state performance expectations.
- 4. Perceptible information:** Instruction is designed so that necessary information is communicated effectively, regardless of the student's sensory abilities. Selecting text books, reading material, and other instructional supports available in digital format means students with diverse needs can access materials through print or by using technological supports (e.g., screen reader, text enlarger).
- 5. Tolerance for error:** Instruction anticipates variation in individual student learning pace and requisite skills. Example: Structuring a long-term course project with the option of turning in individual project components separately for constructive feedback and for integration into the final product.
- 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. Example: Allowing students to use a word processor for writing and editing papers or essay exams.
- 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. Example: Using a circular seating arrangement in small class settings to allow students to see and face speakers during discussion-important for students with attention problems.
- 8. A community of learners:** The instructional environment promotes interaction and communication among students and between students and faculty. Example: Fostering communication among students in and out of class by structuring study and discussion groups, e-mail lists, or chat rooms.
- 9. Instructional climate:** Instruction is designed to be welcoming and inclusive. High expectations are espoused for all students. Include a statement on the syllabus affirming the need for students to respect diversity, underscoring the expectation of tolerance, and encouraging students to discuss any special learning needs with the instructor.

Examples of UDI in Practice

Example #1: Equitable Use: As Dr. Smith reflected on adjustments to her lecture course, she realized that for the last three semesters she had had at least one student with a learning disability who had requested a notetaker. In planning for the next semester, Dr. Smith anticipated this need by posting class notes on the class web site, making the notes available in the same form to all students (Principle #1, Equitable Use).

Any student with a learning disability would have immediate access to a complete set of lecture notes and would no longer need a notetaker. Informal discussions with students and end-of-semester course evaluations indicated that many students found this a useful instructional feature, including students whose primary language is not English, students with attention deficits, and students wanting to preview the day's instruction. This instructional support resulted in a more "usable" environment for students with diverse learning needs.

Example #2: Flexible Use: As Dr. Hagan prepared his class syllabus for English Composition, he thought about his previous semester. All students were required to submit four papers. He had provided clear due dates, but was constantly bombarded with requests for extended deadlines. "I need extra time on writing assignments." "I have two other tests on the same day." In thinking about the schedule for the next semester, Dr. Hagan changed his scheduling procedure: He would allow students to set their own due dates for the four papers (Principle #2: Flexibility in Use).

Since students set their own schedules and could adjust the submission dates to fit other demands on their time, no late papers were accepted. In the course of the semester, Dr. Hagan found that having papers come in at different times enhanced his teaching. With one or two papers submitted each class session, he could grade the work and get feedback to students more promptly while being responsive to other demands on students' time.

A Step Toward the Future: As college instructors learn to implement these principles, they will be able to more effectively teach all students, including those with learning disabilities, with reduced reliance on accommodations. To do this, college faculties need support for responding to student diversity and a means of sharing their knowledge. A website, facultyware.com, is being built to offer such support.

Resources

- Brinckerhoff, L.C., McGuire, J.M., & Shaw, S.F. (2002). *Postsecondary education and transition for students with learning disabilities* (Second Edition). Austin, TX: PRO-ED.
- Follette Story, M., Mueller, J.L., & Mace, R.L. (1998). *The universal design file: Designing for people of all ages and abilities*. Raleigh, NC: North Carolina State University, The Center for Universal Design.
- Magner, D.K. (2000, March 17). The imminent surge in retirement. *Chronicle of Higher Education*, 46(28), A18-A20.
- Scott, S.S., & Gregg, N. (2000). Meeting the evolving needs of faculty in providing access for college students with LD. *Journal of Learning Disabilities*, 33, 158-167.
- Scott, S., McGuire, J.M., & Foley, T.E. (2001). *Universal design for instruction: An exploration of principles for anticipating and responding to student diversity in the classroom*. Storrs, CT: Center on Postsecondary Education and Disability.
- Scott, S., McGuire, J., & Shaw, S. (in press). *Universal design for instruction: A new paradigm for adult instruction in postsecondary education*. Remedial and Special Education.
- Scott, S., McGuire, J.M., & Shaw, S. (2001). *Principles of universal design for instruction*. Storrs, CT: Center on Postsecondary Education and Disability.
- Shaw, S.F., & Dukes, L.L. (2001). Program standards for disability services in higher education. *Journal of Postsecondary Education and Disability*, 14(2), 81-90.

* Note: Adapted from *Principles of Universal Design for Instruction* by Scott, McGuire and Shaw (2001). Center on Postsecondary Education and Disability, University of Connecticut. Users of this digest may copy and disseminate this information with the provision that they credit Scott, McGuire and Shaw.