

FAST FACTS FOR FACULTY

An educational tool for faculty on the go.

Designed to offer practical information to facilitate teaching & interacting with diverse learners, including students with disabilities.

Fall 2006

Did you know?

The most common users of closed captioning on televisions include couples and those working out in gyms!

Closed captioning represents one innovation initially designed for persons who are deaf or hard of hearing but benefits everyone. In other words, closed captioning is an example of universal design!

Featured In this Issue

Access the annotated text by clicking the links below.

- How to enhance learning for ALL students through Universal Design for Learning (UDL)?
- Suggestions for considering creative approaches for group work.
- Section 508 of the Rehabilitation Act (modified 1998). What professors need to know?
- How to handle student disruption during or following a classroom discussion.

Universal Design for Learning (UDL) centers on context-changing rather than person fixing (Linton, 1998).

What is UDL?

UDL is a process of making course concepts accessible and skills attainable regardless of learning style, physical or sensory abilities (ASC Project-Utah State University). UDL does not ask faculty to give up the rigor of their curriculum, rather it asks faculty to be thoughtful about teaching and learning. UDL is not a magic bullet. Instead, UDL lessens a dependence on the traditional approach of making individual accommodations for students with disabilities and more on designing instruction at the front-end to be inclusive of students with disabilities and other diverse learners, including second language, non-traditional, and elderly learners. In other words, UDL calls us to design products and environments to be usable by **all** people, to the greatest extent possible without the need for adaptation or specialized design (The Center for Universal Design, North Carolina State University).

UDL derives from the Universal Design movement that emerged in the 1970s at the University of North Carolina. One universal design example is the curb cut. While designed to allow persons using wheelchairs access to sidewalks and streets, curb cuts also facilitate travel for persons pushing strollers, shopping carts, and riding bicycles. The curb cut is not a special accommodation only for those with disabilities, but rather is an essential element of the design that permits all people similar access (Lightfoot and Gibson, 2005). Analogous to the curb cut, various curriculum design elements increase student accessibility of content and knowledge demonstration of essential course components. *(Continued on next page).*

"If we can capture and optimize the effectiveness of our students, everybody benefits... [Look at] what little bits and pieces may need to be done differently so we optimize the learning environment for students. Everybody benefits. We need to plant seeds about how we all benefit when everybody has an optimal experience." (SJSU faculty member, March 2005).



Teaching & Learning

Continued from the cover page.

Universal Design for Learning (UDL) features three key principles:

1. **Multiple means of representation** to give learners various ways of acquiring information and knowledge
2. **Multiple means of expression** to provide learners alternatives for demonstrating what they know, and
3. **Multiple means of engagement** to tap into learners' interests, challenge them appropriately, and motivate them to learn. (Source: Center for Applied Special Technology (CAST)).

How can UDL be useful for me as a professor?

UDL invites professors to anticipate a variety of needs when designing curriculum. UDL prompts professors to consider what are the essential components of the presentation, speech, or classroom lecture?

- What do I want my students to know? (What are the essential components?)
- What do I want my students to be able to do?
- What lasting impact do I want to have?

UDL also asks professors to examine how can I present course information without compromising the essential components identified and in the *most inclusive* way possible?

- What challenges to inclusion might my presentation style make?
- How can I plan my presentation to provide meaningful access to all members of my audience and minimize the need for individual accommodations? (Association on Higher Education And Disability (AHEAD) brochure).

Example: Social work professors Elizabeth Lightfoot and Priscilla Gordon (2005) suggest that the key to UDL "is to anticipate accommodation needs inherent in course components and to include a variety of instructional methods that meet these needs" (p. 274). Lightfoot and Gordon (2005) point to a human behavior course in which the professor allows student to demonstrate knowledge of child development theories in a variety of ways, including writing a paper, making a professional presentation, or developing a multi-media presentation.

In what ways will ALL my students benefit from UDL?

Dr. David H. Rose incorporates UDL into a graduate education course at Harvard. According to Rose, "one of the significant attractions of the class is its attempt to respond to individual differences, providing multiple ways of presenting information and allowing students to respond. Of particular importance, especially for adult learners, is the ability to make choices" (Rose, Harbour, Johnston, Daley, & Abarbanell, 2006).

What does UDL research indicate? How will UDL improve student learning?

The Institute for Inclusion at U-Mass, Boston, examined 50 courses in which professors adopted UDL. Research findings indicate that students appreciated the course and improved their grades in the course. In addition, faculty evaluations in these courses improved (Data from 1999-2005, UMASS, Boston, Equity and Excellence).

WHY UDL?

4 reasons!

1. To address current instructional challenges including increased diversity in classrooms; high expectations for all students; and high stakes testing and learning outcome accountability for all students (<http://www.cast.org>)
2. Colleges and universities have seen a dramatic increase in the number of postsecondary students with disabilities participating in higher education
 - 1978: 2.3% were identified as disabled
 - 1998: 9.8% were identified as disabled
3. A completion rate disparity exists between students with disabilities (SWD) and those without disabilities (SWOD).
 - 1994: 53% of SWD remained enrolled
 - 1994: 64% of SWOD remained enrolled
4. Research findings indicate that students in courses featuring UDL elements appreciated the course and saw grades improve. In addition, faculty evaluations in these courses improved. (Data from 1999-2005, UMASS, Boston, Equity and Excellence).

Source: National Center on Education Statistics

Universal Design for Learning Guidelines

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If you prefer to access this information in a non-table format, click on the table below to access an alternate format of the information presented.

	Objectives & Benchmarks	Instructional Materials	Teaching Methods	Assessment Methods
	To provide optimal challenge for all students:	To ensure equal access for all students:	To provide effective instruction for all students:	To accurately measure progress for all students:
1 Representation	Describe objectives in ways that every student can understand	Provide options in the way information is presented	Provide options in scaffolds for building knowledge	Use assessments that accurately measure knowledge development
Use Multiple means of representation	Alternative representations of objectives Alternative examples of success	Perceptual options Linguistic options Cognitive and background knowledge options	Highlight critical features Highlight "big ideas" Highlight critical relationships Multiple examples and non-examples	Presentation options to accurately measure knowledge Presentation options to optimally inform instruction
2 Expression	Set objectives that every student can reach	Provide options in the way that students can express what they know	Provide options in scaffolds for building skills and strategies	Use assessments that accurately measure skill development
Use multiple means of expression	Specify ends, not means Alternative entry points and paths to success Identify appropriate tools and scaffolds	Motor skills required for action Tools and media for expression Levels of scaffolding for learning	Multiple models and mentors Gradually realizable supports and scaffolds Options in the contexts required for performance	Response options to accurately measure learning Scaffolding options to optimally inform instruction
3 Engagement	Set objectives that can motivate every student to learn	Provide options in the ways that students are motivated or engaged	Provide options for scaffolding emotional skills development	Use methods that accurately measure emotional development
Use multiple means of engagement	Alternative levels of challenge and support Alternative contexts for performance Articulate long-term goals into reachable objectives	Alternatives for recruiting interest Alternatives for sustaining engagement Alternatives for rewarding achievement	Alternative models of emotional competence Graduated supports for developing self-regulation Comprehensive systems of positive behavior supports	Motivational options to accurately measure learning Motivational options to optimally inform instruction
Optimizing UDL in the Classroom		Use flexible materials to increase opportunities for individualization	Use classroom strategies to increase opportunities for individualization	Use assessments to optimally inform individualized instruction
		Individualized display Individualized selection Individualized sequences	Use flexible grouping Encourage peer support Practice collaborative teaching Use customizable instructional media and materials	Assess early and often to monitor progress Provide timely feedback Provide feedback on instructional options

✓ Visit the Universal Course Design website developed by **instructors for instructors**. This website can be accessed at <http://campusranch.com/tools/index.htm>

✓ A second website to explore, <http://www.communityinclusion.org/udl> provides tools for instructors interested in Universal Course Design (UCD). UCD is a concept developed by the **Institute on Disability** at the **University of New Hampshire** in partnership with the **Institute for Community Inclusion** at the **University of Massachusetts Boston**. This website is a product of the **Equity and Excellence in Higher Education** project.

Communication & Interaction

VOICES OF SJSU STUDENTS WITH DISABILITIES...

Q: What do you want your SJSU professors to know about you?

"I have to ask a lot of questions -I want to not be seen as stupid and not be prejudged."



"I am not just my disability."



"I am not using my disability as a crutch."



"Don't look at me differently."



"We all have different learning styles."

SJSU student focus groups,
March 2005

GROUP WORK RE-EXAMINED

The rising number of students with psychiatric disorders including autism, bipolar, and schizophrenia, among others, has prompted an examination of group projects and class participation. Some challenges regarding group work and class interaction may present themselves for certain student populations, and thus for some professors. SJSU professor and student ingenuity has produced some creative approaches to group work, turning a problem into a rewarding task, while still allowing the student with a disability to fulfill the essential components of the assignment. Here are some practices employed that have been helpful for students whose functional limitations interfere with working easily and comfortably in groups.

ANNOUNCE GROUP WORK IS A COURSE REQUIREMENT-

Clearly outline that group work will be an expectation of the class. If possible, post the green sheet on-line in advance of the start of the class to allow students to prepare themselves for this aspect of the course.

CONSIDER THE ESSENTIAL COMPONENTS OF THE CURRICULUM

- If one objective of the course does not involve students' ability to work collaboratively in groups, consider offering an alternative to a group project or paper that would allow the student to accomplish the objective individually and including this in the syllabi.

DISSEMINATE A LIST OF GROUP RULES AND CONDUCT

- Students with ADHD, asperger, autism, auditory processing deficits, and students from other cultures, may be unfamiliar with group norms, experience difficulty reading nonverbal cues, struggle recognizing and interpreting ambiguous remarks or jokes, or fail to understand a spoken message when uttered in a loud environment with competing noises and distractions. If the class involves group projects, pass out a list of group rules and expectations for group conduct and include a brief role playing exercise. While disseminating such a list or guide may appear trivial or childish, it represents a way to teach students how to interact with others; lessons students can carry with them in the work arena.

CLASSROOM DISCUSSION

If a student gets upset during a discussion of a particular illness, the topic of illness in general or misses class after such a discussion, it may be a sign that she or he is personally affected by the topic in some way. Just as you would with any student who displays signs of distress, ask to speak to the student privately and ask whether something is wrong. The student may share the problem with you. However, if the student does not, abandon the discussion or refer the student to SJSU's Counseling Services rather than trying to force the matter. In order to help such students in the future, consider announcing the topics ahead of time so that the student can be emotionally prepared or list the various topics in the green sheet.

Legal Corner

Equal Access & Disability Legislation

What is Section 508 & how does it apply to my role as a professor?

The Department of Education stipulates that those who receive funds through the Assistive Technology Act State Grant Program must comply with Section 508 of the Rehabilitation Act as amended in 1998. The California State University is a recipient of Assistive Technology funds.

As a result, CSU campuses are thus required to comply with Section 508 standards by ensuring that electronic and information technology, including software applications, web-based information, and videos, are accessible to students with **disabilities**. (www.access-board.gov/sec508/guide/1194.22.htm)

How can one meet Section 508 accessibility standards?

- ❑ Refer to the tips on the right
- ❑ Visit <http://www.cew.wisc.edu/accessibility> for a myriad of resources including Section 508 on-line tutorials, examples, guidelines, and more.
- ❑ Visit <http://www.doit.wisc.edu/accessibility/index.asp> for 508 information, links, and resources useful in making materials and web-based information accessible.

Q: Do you ever wonder if your MS Word, PowerPoint, or PDF documents are accessible to all students in your courses?

Students who are blind or who have a visual impairment rely upon screen reading software (Experience a screen reader demonstration at <http://www.doit.wisc.edu/accessibility/video/intro.asp>) to access a PowerPoint presentation or pdf file. Additionally, students who are deaf or hard of hearing depend upon the use of closed captioning to access videos. Required materials such as films or videos may already be captioned. To view the captions contact Video Services at 924-2867. Captioned videos are more beneficial to deaf and hard of hearing students than watching an Interpreter or Real-time Captioner since students cannot view the TV and the service provider at the same time; the DRC encourages using this service whenever possible.

Here are some helpful tips to test if MS Word documents are accessible.

Check to see that:

- ✓ Styles and formatting were used to format text, not just bold, italics, and font size
- ✓ Graphics were described using alternative text
- ✓ Hyperlinks are descriptive

Here are some helpful tips to make sure that PowerPoint presentations are accessible.

Check to see that:

- ✓ Graphics were described using the Notes Pane and alternative Text
- ✓ Audio and video files are captioned
- ✓ All text is visible in the outline pane. If it is not, the slide needs to be reformatted using Auto Layouts.
- ✓ Color alone is not used to convey information and that the text and background are appropriately contrasted.

Here are some helpful tips to determine if PDF (Portable Document Format) documents are accessible.

Check to see that:

- ✓ There is real text in your document by selecting text using the cursor tool. If you can select text, the document is accessible.
- ✓ Magnify the text many times. If it does not become pixelated, it is real text.
- ✓ The PDF is tagged by checking the document properties
- ✓ Use the Accessibility Checker in Adobe Professional 6 or 7.

Tutorials are available at
<http://www.cew.wisc.edu/accessibility/tutorials/default.htm>

DISABILITY RESOURCE CENTER

Location:

ADM 110

Hours:

M & T - 9 am-5pm

W - 10 am-5pm

Th & F - 8 am-4pm

Phone:408.924.6000

TTY: 408.924.5990

Fax: 408.924.5999

Website:www.drc.sjsu.edu



DEAF & HARD OF HEARING PROGRAM

Location:

IS 222

Hours:

M & T - 9 am-5pm

W - 10 am-5pm

Th & F - 8 am-4pm

Phone: 408.924.6542

TTY: 408.924.5990

Fax: 408.924.1714



ADAPTIVE TECHNOLOGY CENTER & ALTERNATIVE MEDIA CENTER Call 808-2124 to set up a tour!

Location:

Dr. Martin Luther King, Jr. Library, 2nd Floor

Hours:

Daily 8am-10 pm

(Hours subject to change)

Phone: 408.808.2123

Contact us at info@drc.sjsu.edu with any Q's OR "Fast Facts" topic ideas.

Universal Design for Learning (UDL) Guidelines

www.cast.org

1. REPRESENTATION: Use multiple means of representation

Objectives & Benchmarks: Describe objectives in ways that every student can understand: Alternative representations of objectives and alternative examples of success.

Instructional Materials: Provide options in the way information is presented: Perceptual options; linguistic options; cognitive and background knowledge options.

Teaching Methods: Provide options in scaffolds for building knowledge
Use multiple means of representation: Highlight critical features; highlight "big ideas"; Highlight critical relationships, multiple examples and non-examples.

Assessment Methods: Use assessments that accurately measure knowledge development: Presentation options to accurately measure knowledge; Presentation options to optimally inform instruction

2. EXPRESSION: Use multiple means of expression

Objectives & Benchmarks: Set objectives that every student can reach.
Specify ends, not means: Alternative entry points and paths to success; identify appropriate tools and scaffolds.

Instructional Materials: Provide options in the way that students can express what they know: Motor skills required for action; tools and media for expression; levels of scaffolding for learning

Teaching Methods: Provide options in scaffolds for building skills and strategies: Multiple models and mentors; gradually realizable supports and scaffolds; options in the context required for performance.

Assessment Methods: Use assessment that accurately measure skill development: Response options to accurately measuring learning; scaffolding options to optimally inform instruction

3. ENGAGEMENT: Use multiple means of engagement

Objectives & Bookmarks: Set objectives that can motivate every student to learn: Alternative levels of challenge and support; alternative contexts for performance; articulate long-term goals into reachable objectives

Instructional Materials: Provide options in the ways that students are motivated or engaged: Alternatives for recruiting interest; alternatives for sustaining engagement; alternatives for rewarding achievement.

Teaching Methods: Provide options for scaffolding emotional skills development: Alternative models of emotional competence; graduated supports for developing self-regulation; comprehensive systems of positive behavior supports.

Assessment Methods: Use methods that accurately measure emotional development: Motivational options to accurately measure learning; motivational options to optimally inform instruction.

OPTIMIZING UDL IN THE CLASSROOM

- **Instructional Materials:** Use flexible materials to increase opportunities for individualization: Individualized display; individualized selection; individualized sequences.
- **Teaching Methods:** Use classroom strategies to increase opportunities for individualization: Use flexible grouping; encourage peer support; practice collaborative teaching; use customizable instructional media and materials.
- **Assessment Methods:** Use assessments to optimally inform individualized instruction: Assess early and often to monitor progress; provide timely feedback; provide feedback on instructional options.

[Back to the Article](#)