

MODULE 4: UNIVERSAL DESIGNS FOR LEARNING

Academy 2: Building UDL into Curriculum and
Instruction

Participant Handouts



2008 National Institute for Urban School Improvement™
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Academy 2: Building UDL into Curriculum and Instruction

Academy Abstract:

The purpose of this academy is for participants to familiarize with the basic principles of Universal Design and Universal Designs for Learning. Emphasis will be made on the paradigm shift behind the philosophy of both approaches: instead of providing solutions for deficits, and make adaptations to provide accessibility, Universal Design considers accessibility for all users and students at the initial stages of planning design and curriculum.

Academy Outcomes:



As a result of the activities and information shared at this Leadership Academy, module participants will:

- Identify applications of UDL in different content areas.
- Be able to design a classroom learning environment based on an UDL approach.

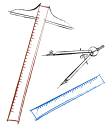


Academy Agenda:

Review the agenda, noting the structure of the academy (lecture, activities, question-answer period, break time, assessment), and process for answering participant questions.

Introductions, Greetings, & Warm-Up	15 min
Activity 1: Jigsaw a Lesson Plan	30 min
Lecturette 1: Applying UDL to Instruction	20 min
Activity 2: Completing and Improving Your Lesson Plan	30 min
Break	10 min
Lecturette 2: UDL and the Social Learning Environment	15 min
Activity 3: Presentation, Expression, and Engagement	25 min
Leave-taking and Feedback	30 min

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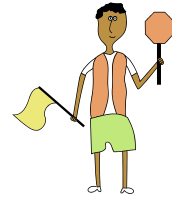
Academy Materials

You should have these materials prior to conducting the Academy:

- FACILITATOR'S MANUAL
- ACADEMY POWERPOINTS and access to a PowerPoint presentation system
- FACILITATOR LESSON PLANS: Lesson plans are provided as Appendix A.
- PARTICIPANT HANDOUTS. Handouts are provided as Appendix B and contain the Leadership Academy overview and agenda, paper for note-taking, activity handouts, self-assessment and academy evaluations and resources. (Handouts can be copied double sided and in black and white).
- NAME TAGS (Make sure you have broad tipped felt pens for name tags so that people write their names in large print that can be read from a distance).
- CHART PAPER
- MARKER
- TAPE

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Activity 1: Jigsaw a Lesson Plan



Individually read the attached vignette.

As a small group use the following outline to develop one part of a 55 minute lesson plan for the students and classroom described. Keep in mind the 8 principles of UDL.

As a whole group discuss how you developed your part of the lesson plan and how it reflects the 8 principles of UDL.

- Equitable Use
- Flexibility
- Simple, intuitive designs
- Perceptible information
- Tolerance for error
- Minimal physical effort
- Appropriate for size and space for approach and use
- Fully inclusive

Topic	Math in Our Daily Lives
Grade/Age Level	Combined 6th-7th grade, inclusive classroom for students in general and special education, and who are learning English. See Vignette.
Outcomes	
For All What will all students be able to do as a result of this lesson? (The roots and trunk of the tree)	
For Most In addition to the above outcomes, what will most students be able to do as a result of this lesson? (The branches of the tree)	

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For Some In addition to the above outcomes, what will some students be able to do as a result of this lesson? (The leaves of the tree)	
Media and Materials	
Student Centered Learning Environment	
Methods	
Introducing Activate students' interest and prior knowledge of lesson content. Provide students background knowledge and link to students' lives.	
Exploring Through strategically planned opportunities, students independently extend their prior and background knowledge of the lesson content. Student directed.	
Mediating Teacher directly links information from the introduction and exploration stages to lesson outcomes. Teacher directed.	

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Ending

Lesson is summarized and purpose of lesson is revisited.

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Activity 1: Vignette

On the northwest side of a dense metropolis surrounded by timeworn homes, historic churches, and a rich cultural community resides Sunny Middle School. Four years ago the school became a neighborhood school, drastically changing the make up of the student population. Since then the administration, teachers, and other school personal have had difficulty accepting and meeting the needs of the changing demographic. Parents, students and others in the community are feeling confused about the identity of the school. Sunny Middle School currently serves about 600 students, 55% Hispanic, 40% African American, 10% European American and 5% other. Two years ago a new administration team began to implement a more inclusive approach within this school. Some within the school community are excited about these changes, some are not.




You are a 6th and 7th grade general education math teacher at Sunny Middle School. Over the past four years there have been significant changes in the student population served within your classroom, each year becoming more and more diverse. With the change to neighborhood schools came students learning English from a variety of cultural backgrounds much different than your own. With the new administration and their inclusive approach came students with a variety of disabilities who in the past had been served in resource and self-contained classrooms. This approach also increased the amount of culturally and linguistically diverse students in your classroom who in the past had been served in ELL classrooms.


During 3rd period you have 26 students in your class. 14 of whom are Hispanic, 7 are African American, 3 are European American and 2 are Asian. Of these students, 6 are English language learners who seem to be able to communicate socially with their peers, but are struggling with academic language and 1 student who speaks very limited English. During 3rd period you also have 4 students identified for special education services. One of these students has a Specific Learning Disability in the areas of math and reading, 1 student has a Specific Learning Disability in the areas of math and writing, one student has a significant cognitive disability, and one student has with chronic asthma and misses school frequently.

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SLIDE 1




Lecturette 1:
Applying UDL to Instruction

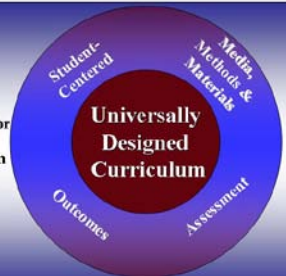


SLIDE 2


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A Review: UDL Curriculum



Provides flexibility for access & participation



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Components of a UDL Lesson Plan

- Topic
- Grade/ Age Level
- Outcomes
- Student-centered focus
- Media and Materials
- Methods
- Assessments



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Applying the Components of UDL Lesson Plans: For All, For Most, For Some




All students in any given classroom have access to the components of the lesson plan. This is represented by the underground roots and the tree trunk. Some students will choose or require additional elements (tree branches) and finally, some students will require the components leaves.





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Applying Standards to Outcomes of UDL Curriculum: Transcending the Constraints of Predetermined Standards

Relevant Standards

- National, state & local
- Relevant to students in context (TESOL, multicultural education, standards of cultural responsiveness).



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UDL Outcomes

Desired Outcomes should include:

- Engagement of all students
- Students applying understanding of content to a task observable by the teacher




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UDL Media, Materials & Methods

The "Backbone" of UDL Curriculum: **Medium & Materials**

Media: the means of symbolic or physical representation through which knowledge is communicated.
Materials: Students are able to see themselves and their viewpoint in physical objects utilized in the curriculum.

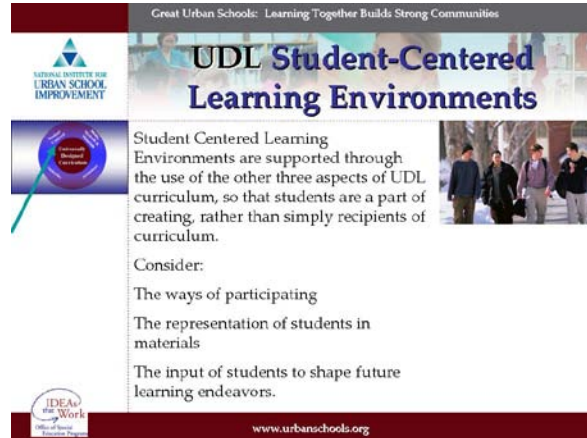
The "Delivery" of UDL Curriculum: **Methods**

Methods: the instructional approaches teachers take to facilitate students' learning. These include the social organization of the classroom around participation in learning and inquiry.

IDEA of the Work
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UDL Student-Centered Learning Environments

Student Centered Learning Environments are supported through the use of the other three aspects of UDL curriculum, so that students are a part of creating, rather than simply recipients of curriculum.

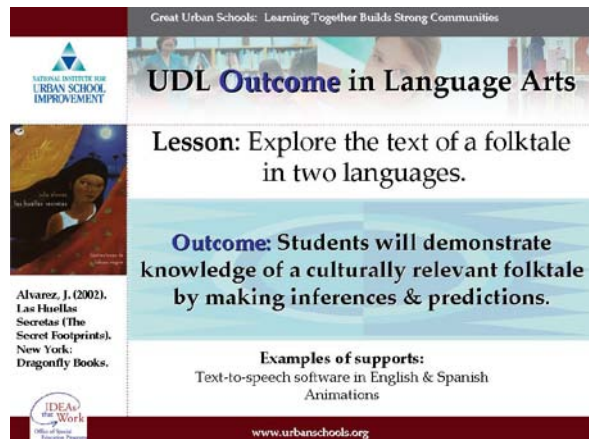
Consider:

- The ways of participating
- The representation of students in materials
- The input of students to shape future learning endeavors.

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UDL Outcome in Language Arts

Lesson: Explore the text of a folktale in two languages.

Outcome: Students will demonstrate knowledge of a culturally relevant folktale by making inferences & predictions.

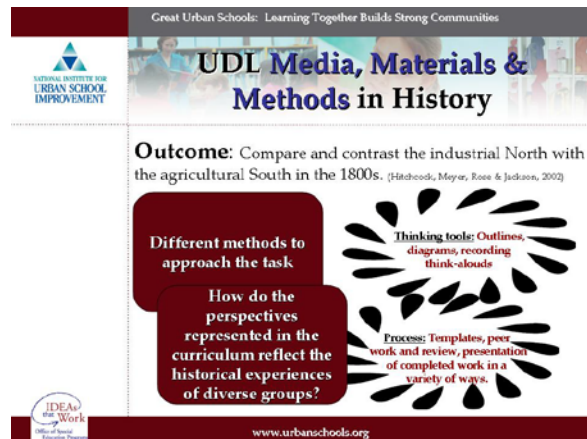
Examples of supports:
Text-to-speech software in English & Spanish
Animations

Alvarez, J. (2002). *Las Huellas Secretas (The Secret Footprints)*. New York: Dragonfly Books.

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UDL Media, Materials & Methods in History

Outcome: Compare and contrast the industrial North with the agricultural South in the 1800s. (Hatchood, Meyer, Rose & Jackson, 2002)

Different methods to approach the task

How do the perspectives represented in the curriculum reflect the historical experiences of diverse groups?

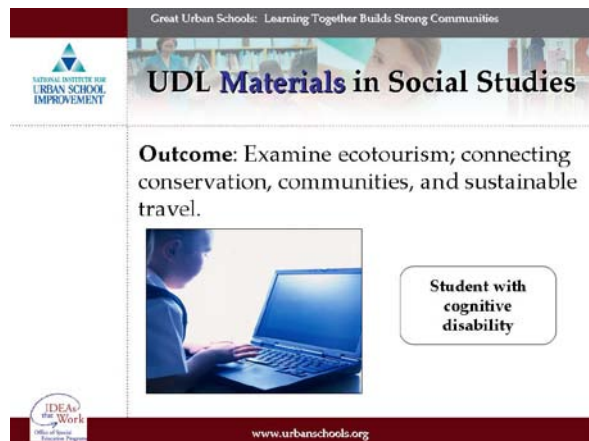
Thinking tools: Outlines, diagrams, recording, think-alouds

Process: Templates, peer work and review, presentation of completed work in a variety of ways.

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UDL Materials in Social Studies

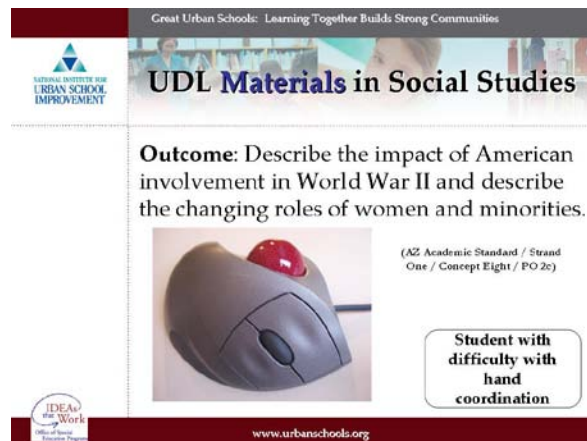
Outcome: Examine ecotourism; connecting conservation, communities, and sustainable travel.

Student with cognitive disability

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UDL Materials in Social Studies

Outcome: Describe the impact of American involvement in World War II and describe the changing roles of women and minorities.

Student with difficulty with hand coordination

(AZ Academic Standard / Strand One / Concept Eight / PO 2c)

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UDL Materials in Social Studies

Outcome: Examine what events increase tourism and why?




Student learning English



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UDL Materials in Social Studies

Outcome: Discuss connections between African American youth culture and advertising, fashion, and pop culture.




Student with Attention Deficit Hyperactivity Disorder




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A UDL Curriculum Tool



THINKING READER®
Center for Applied Special Technology


Founded in 1984, CAST has earned international recognition for its development of innovative, technology-based educational resources and strategies based on the principles of Universal Design for Learning (UDL).



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Applying the Components of UDL

Lesson Plans: For All, For Most, For Some

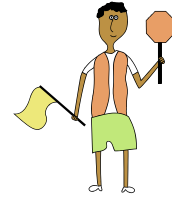



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Activity 2: Completing and Improving Your Lesson Plan

- Review the sample lesson plan on the following page.
- Review the lesson plan you began in activity 2.
- Identify strengths and areas in need of improvement for your current lesson plan and practices.
- Develop specific suggestions to improve your lesson plan which reflect the 8 principals of UDL and complete your lesson plan.
- Think, Pair, Share



Prior Practices	Improved Practices

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Media and Materials	
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<p>Exploring Through strategically planned opportunities, students independently extend their prior and background knowledge of the lesson content. Student directed.</p>	
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<p>Ending Lesson is summarized and purpose of lesson is revisited.</p>	

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SLIDE 1




Lecturette 2:
UDL and the Social Learning Environment

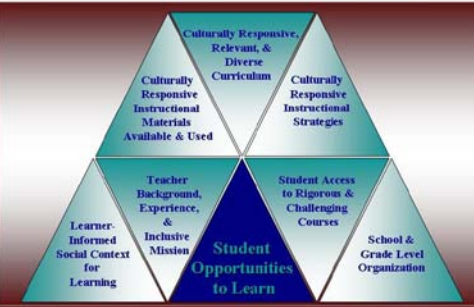


SLIDE 2


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UDL is Culturally Responsive




Culturally responsive, appropriate, quality instruction ensures that students have adequate opportunities to learn.




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Applying the UDL Framework to an Inclusive Social Learning Environment



Expression
Strategic Learning
Affective Learning
Engagement
Inclusive Social Learning Environment
Recognition Learning
Presentation

(Rose and Meyer, 2002)



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Applying the UDL Framework to the Social Learning Environment

Space
Communication
Participation
Feedback
Engagement
Motivation
Regard



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Applying the UDL Framework to the Social Learning Environment

Digital Text Features:
Size
Color
Read Aloud
Conversion to



Presentation
Recognition Learning

(Rose and Meyer, 2002)



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Applying the UDL Framework to the Social Learning Environment

Digital Text Student Responses



Drawing software



Expression
Strategic Learning



Note-taking Alternatives



Voice Recording



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Applying the UDL Framework to the Social Learning Environment





Affective Learning Engagement



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UDL: Focus on Multiple Means for Action and Expression

How does the social environment in your classroom or school support multiple means of student participation?

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UDL: Focus on Multiple Means of Engaging Your Students




PLAY



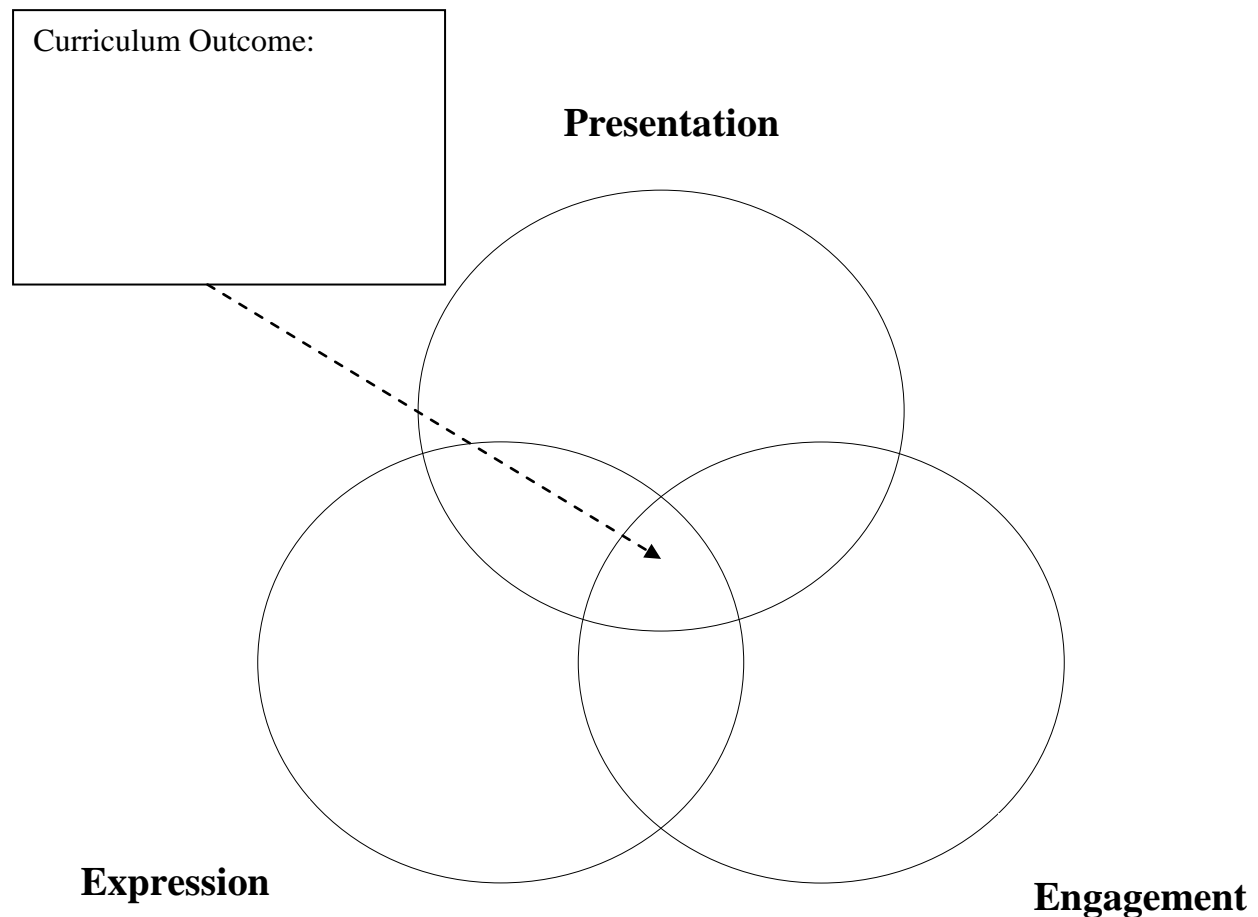
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Activity 3: Presentation, Expression, & Engagement



Directions: Universal Design for Learning is grounded on these three features to create an inclusive learning environment. Include your curriculum outcome as a foundation for your ideas, which should include possible ways for information to be presented, for students to express their knowledge, and for students to be engaged in the learning process.



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Academy Evaluation

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I am a

- General Ed Teacher
- Administrator
- Special Ed Teacher
- Parent
- Paraprofessional
- Other

I am affiliated with a(n):

- Elementary School**
- Middle School**
- High School**

Please let us know how useful you found the topics:

Activity 1

Poor					Great
1	2	3	4	5	

Activity 2

Poor					Great
1	2	3	4	5	

Activity 3

Poor					Great
1	2	3	4	5	

Self evaluation

Poor					Great
1	2	3	4	5	

Three things I learned that made me go ... AH HAH!

If I were on the next academy team I would...

As a result of participating in this academy, I am going to...

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Resources

Center for Universal Design—Universal Design <http://www.design.ncsu.edu>

This website outlines the initial approach of Universal Design for architecture. It contains the seven principles of Universal Design in several format, and updated information on this model.

The Center for Applied Special Technology (CAST) <http://www.cast.org>

The CAST website contains a series of theoretical and applied resources to Universal Design for Learning.

Teaching Every Student TES Website <http://www.cast.org/teachingeverystudent>

Specific applications of Universal Design for Learning to the classroom, case studies, and theoretical resources are found in the TES website.

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References Cited

Center for Applied Special Technology, The (CAST) (2003) <http://www.cast.org>

Center for Universal Design—Universal Design (1997) <http://www.design.ncsu.edu>

Center for Universal Design, The (2007). About universal design. Retrieved on July 1, 2007 from http://www.design.ncsu.edu/cud/about_ud/about_ud.htm

Hitchcock, C., Meyer, A., Rose, D. & Jackson, R. (2002). Providing New Access to the General Curriculum: [Universal Design for Learning](#). *Teaching Exceptional Children*, 35(2), 8-17

Hitchcock, C. & Stahl, S. (2003). [Assistive Technology, Universal Design, Universal Design for Learning: Improved Learning Opportunities](#). *Journal of Special Education Technology*, 18(4), 45-52.

Mace, R., The Center for Universal Design (2007). About universal design. Retrieved on July 1, 2007 from http://www.design.ncsu.edu/cud/about_ud/about_ud.htm

Rose, D. & Meyer, A. (2002). Teaching every student in the digital age: Universal design for learning. Retrieved on June 30, 2007, from <http://www.cast.org/teachingeverystudent/ideas/tes/index.cfm>

Teaching Every Student TES Website <http://www.cast.org/teachingeverystudent>

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Glossary

Affective Learning

Affective refers to the emotional elements of learning with the desired outcome that one feels a sense of positive emotion as a result of being engaged in the learning process.

Assistive Technology

According to the Assistive Technology Act of 1998, Assistive Technology is "...products, devices or equipment, whether acquired commercially, modified or customized, that are used to maintain, increase or improve the functional capabilities of individuals with disabilities..." (<http://www.rehabtool.com/at.html>)

Barriers (in terms of UD philosophy)

Barriers can be anything that inhibits a student's access to participating in activities and learning content in the school environment.

CAST

Founded in 1984, the Center for Applied Special Technology has gained international recognition for excelling in achieving their mission "To expand learning opportunities for all individuals, especially those with disabilities, through the research and development of innovative, technology-based educational resources and strategies" particularly in the area of Universal Designs for Learning.

(<http://www.cast.org/about/index.html>)

Culturally Responsive

To be culturally responsive is to value, consider, and integrate individuals' culture, language, heritage and experiences leading to supported learning and development.

CUD

The Center for Universal Design (CUD) is a national information, technical assistance, and research center that evaluates, develops, and promotes accessible and universal design in housing, commercial and public facilities, outdoor environments, and products. Their mission is to improve environments and products through design innovation, research, education and design assistance.

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Retrofit

To add parts, devices, equipment, or strategies not in existence or available at the time of original design for use in or on an existing structure, which includes not only concrete structures such as a building or classroom, but also the structure of the educational setting, environment and delivery of information.

Universal Design

Universal Design is an approach to the design of products, services and places to be accessible and usable for as many people as possible regardless of age, ability, or circumstance.

Universal Designs for Learning

UDL provides a blueprint for creating flexible goals, methods, materials, and assessments that accommodate learner differences, so that all students have an equal opportunity to learn and participate. This is done using *multiple means of representation*, to give learners various ways of acquiring information and knowledge; *multiple means of expression*, to provide learners alternatives for demonstrating what they know; and *multiple means of engagement*, to tap into learners' interests, offer appropriate challenges, and increase motivation.