

MODULE 4: UNIVERSAL DESIGNS FOR LEARNING

Academy 1: Becoming Familiar with Universal
Designs for Learning

Participant Handouts



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Academy 1: Becoming Familiar with Universal Designs for Learning

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:

- Reflect on the differences between Universal Design and Assistive Technology.
- Identify the origin and foundations of Universal Designs for Learning.
- Apply the foundations of Universal Designs for Learning to educational contexts

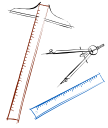


Academy Agenda:

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: Accessibility	30 min
Lecturette 1: What Is Universal Design?	20 min
Activity 2: Designing Physical Space Using Universal Designs	25 min
Break	10 min
Lecturette 2: Universal Designs for Learning	15 min
Activity 3: Creating an Lesson Plan with a Universally Designed Outcome	30 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: Accessibility

Guiding Question: Discuss everyday tasks (in and outside of school) that you do to get through your day, (e.g., balancing your checkbook, getting around, and checking your email). How can such tasks be made more accessible to all people including those who are English language learners, individuals with disabilities, and individuals with diverse learning preferences?

Consider the following to help move your thinking forward:

Physical Accessibility: buildings, recreational activities

Academic Tasks: everyday reading, writing, math

Technology: word processing, email, navigating the internet

Feedback: performance review at work, health care information




Directions: Use the matrix on the following page to help organize your thoughts. Include practices and programs that are already in place and also consider other possibilities. Remember, while a specific design may not be *necessary* for certain individuals to access a task, it may considerably *enhance access*. (e.g., not only people in wheelchairs use wheelchair ramps or elevators). Also include guiding questions you can ask yourself when designing activities that help insure enhanced access for all. As a large group, do the first column (Physical Accessibility). In small groups, jigsaw the remaining columns (Academic Tasks, Technology and Feedback) and then share with the whole group.

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	Physical Accessibility	Academic Tasks	Technology	Feedback
Individuals from Diverse Backgrounds		Example: A community's library materials represent and engage a wide range of interests, languages, and feature individuals from diverse backgrounds.		Question: Does the way I give feedback in match the students' communication style?
English Language Learners	Example: Multi-lingual and pictorial flyers are posted in the community about children's sports leagues.		Question: Do all individuals have the ability to access technology (i.e. computers, internet, calculators) regardless of their primary language?	
Individuals with Disabilities	Example: Do all individuals have the ability to access all space in a particular setting?		Example: Standard computer software packages include voice to text software for word processing and text to voice software for accessing written material	
Individuals with Diverse Learning Preferences		Question: Do all individuals have the opportunity to engage in multiple ways that suit their learning preferences?		Example: Local public access TV channel mails out pre-paid postage survey postcards eliciting viewers' preferences on types of educational programming for future development.

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SLIDE 1



Lecturette 1:
What is Universal Design?

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Universal Design: Foregrounding Equity



People who are considered different by those in the majority have a long history of exclusion & denied access.



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Universal Design: Foregrounding Equity



Universal Design (UD) = Equitable opportunities & access to information & participation



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Universal Design (UD)

Originated in architecture to ensure *equitable access* to spaces and products.

“The design of all products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation of specialist design.” Ron Mace, architect



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Universal Designs (UD): Beyond Retrofitting



- “Considers the needs of the broadest possible range of users from the *beginning*.” Ron Mace, Architect (CAST, 2003 www.cast.org)
- We expand upon this view of UD by emphasizing:
 - UNIVERSAL DESIGN: not a “one-size fits all” approach
- UD addresses issues of inequity in our highly diverse society by...



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...Foregrounding Culture



Our vision of UD is one in which the cultural and historical experiences of diverse individuals promote powerful possibilities for their access and participation in *physical, social, and learning* environments.



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UD: Beyond Assistive Technology (AT)



UD allows for *immediate access* to products & environments, without the need for any special accommodations or assistive technology (AT).

What other forms of access are necessary to think about for all people to be able to be included?

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UD: Expanding Views on Access



SurveyMonkey.com
because knowledge is everything

skype

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UD Promotes Access through 7 Principles:

- Equitable Use
- Flexibility
- Simple, intuitive designs
- Perceptible information
- Tolerance for error
- Minimal physical effort
- Appropriate size and space for approach and use (Center for Universal Design, 1997)

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Equitable Use

Keep in mind our expanded concept of access



- The design is useful and marketable to people with diverse abilities. (Center for Universal Design, 1997).
- Information about and availability and access to the space or place is essential.

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Flexibility in Use

Keep in mind our expanded concept of access

The design accommodates a wide range of individual preferences and abilities.
(Center for Universal Design, 1997).



CC Off



CC On

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Simple & Intuitive Use

Keep in mind our expanded concept of access

Use of the design is easy to understand, regardless of the user's experience, knowledge, language, or current concentration level.
(Center for Universal Design, 1997).



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Perceptible Information

Keep in mind our expanded concept of access

The design communicates necessary information effectively to each user, regardless of ambient conditions or the user's sensory abilities. (Center for Universal Design, 1997).




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Tolerance for Error

Keep in mind our expanded concept of access


The design minimizes hazards and the adverse consequences of accidental or unintended actions. (Center for Universal Design, 1997).




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Low Physical Effort

Keep in mind our expanded concept of access

The design can be used efficiently and comfortably, with a minimum of fatigue. (Center for Universal Design, 1997).

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Size & Space for Approach & Use

Keep in mind our expanded concept of access


Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user's body size, posture, or mobility. (Center for Universal Design, 1997).




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An 8th Principle: Fully Inclusive

Keep in mind our expanded concept of access

The design acknowledges the individual's right to participate as well as the emancipatory impact on both the community and the individual.

(photos taken by Julia Freeman-Woolpert)



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Activity 2: Designing Physical Space Using Universal Designs

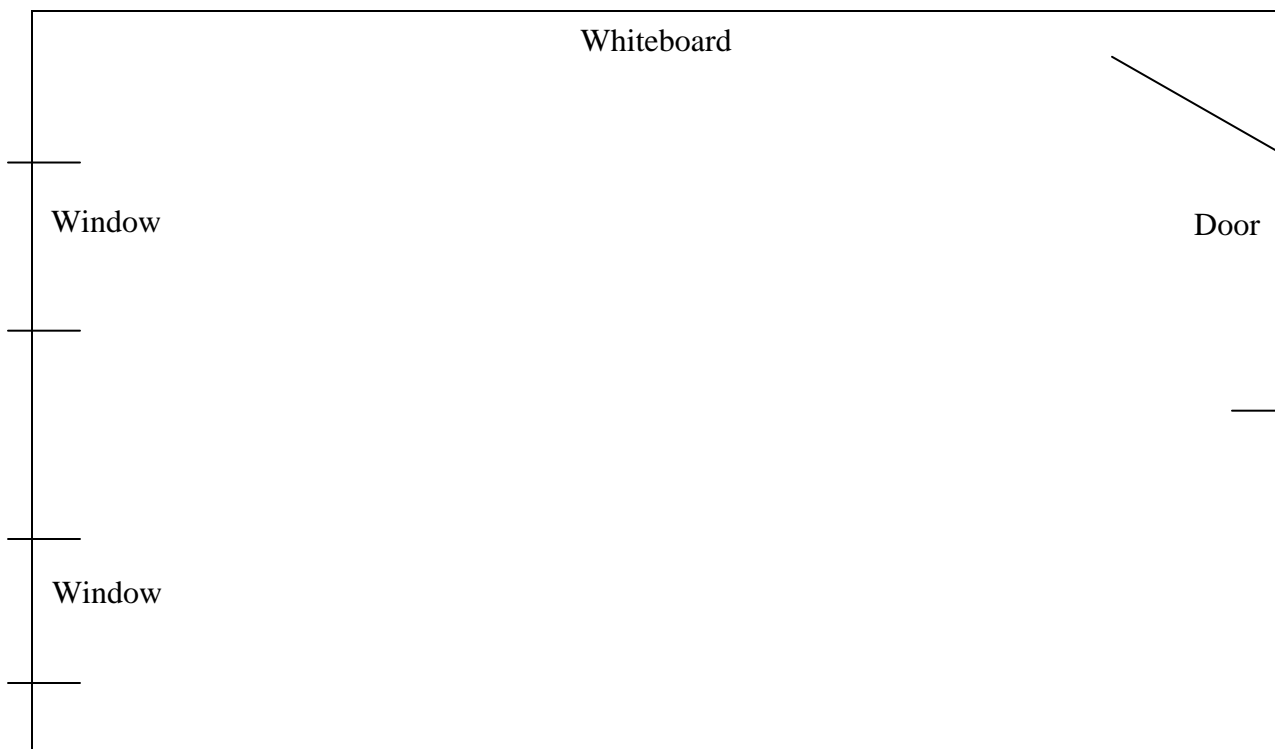


Directions: Within the 33'x30' space on the bottom of this page, universally design the physical layout of a classroom for the students described. Use only the materials you “inherited”. Keep in mind the principals of Universal Designs and be prepared to share how you incorporated them.

<ul style="list-style-type: none"> • Equitable Use • Flexibility • Simple, intuitive design • Perceptible information 	<ul style="list-style-type: none"> • Tolerance for error • Minimal physical effort • Appropriate size and space for approach and use • Fully Inclusive
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Students: 26 students, 3 students with specific learning disabilities, 1 student with a significant cognitive disability and ADHD, and 1 student who is visually impaired.

“Inherited” Materials: 28 desks, 1 teacher desk, 1 large round table, 1 large rectangular table, 3 computers, and 2 bookcases.




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Lecturette 2:
Universal Designs for Learning



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Universal Designs for Learning (UDL)

UDL extends UD to the field of education.

The term **UDL** was coined by the Center for Accessing Special Technology (CAST) in the 1990s, and defined as a **method to minimize barriers** that students may experience when learning new concepts.



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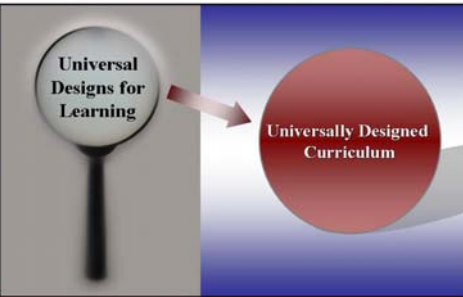
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UDL as a Lens



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Universally Designed Curriculum accommodates a variety of ways in which culture influences and is constructed in the learning community, which in turn, impacts:

- The ways in which information is presented
- The ways in which students respond or demonstrate their knowledge
- The ways in which students are engaged



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Understand and Set Outcomes Broadly

(Rose & Meyer, 2002)



Outcomes should reflect multiple pathways for producing the desired product or performance with consideration of diverse students' backgrounds, experiences, skills and abilities.

Every student will be able to write in cursive → Every student will create an essay



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Media, Materials & Methods



Media & Materials: Alternate and multiple representations, print alternatives, use of digital content.


Methods: Presentation of concepts in multiple ways




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Assessment in an accurate and ongoing form provides teachers and learners with information that helps them adjust:



- Inputs
- Processes
- Student Practice
- Feedback



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Student-Centered Learning Environment



Student centered learning environments are central to UDL curriculum.



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Outcomes should reflect multiple pathways for producing the desired product or performance with consideration of diverse students' backgrounds, experiences, skills and abilities.

Media & Materials: Alternate and multiple representations, print alternatives, use of digital content.

Methods: Presentation of concepts in multiple ways that incorporate culturally responsive ways of knowing, interacting, and understanding.

Assessment in an accurate and ongoing form provides teachers and learners with information that helps them adjust: input, processes, student practice, feedback.

Student-Centered: Focus on student's interest, backgrounds, and input to inform all of the above elements of UDL curriculum, in addition to the social interactions built into the curriculum



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Activity 3: Constructing a Lesson Plan with a Universally Designed Outcome

How can UD be applied to lesson planning? Using backward design,* think about how students with varying strengths/needs may demonstrate the same outcome of *creating* an essay. Using the lesson plan on the following page, move backward through the lesson steps (ending, mediating, exploring, and introducing) & address how the materials and media, methods, & student centered learning environment of each step may be universally designed to include all learners. Keep in mind the 8 principals of UD:

- 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

* Backward design begins with the end in mind: What essential skills will the students develop as a result of this lesson? How will students demonstrate these skills? By beginning with the end in mind, teachers are able to avoid moving forward from activity to activity, only to find that some students have achieved the desired outcomes and some have not. Backward design is based on the idea that both students and the teacher will have a clearer idea of what skills should be gained from the lesson if the outcome is clearly defined from the beginning. It insures that appropriate outcomes for *all* students are considered from the beginning and that lessons are thoughtfully structured to support *all* students in the acquisition of those outcomes.

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<p>1. Content Goal:</p> <p>2. Outcome: Creating a narrative around a particular content goal This may be demonstrated by:</p> <ul style="list-style-type: none"> ○ ○ ○ 			
	Materials and Media	Method	Student Centered Learning Environment
<p>3. Ending Lesson is summarized and purpose of lesson is revisited.</p>			
<p>4. Mediating: Teacher directly links information from the introduction and exploration stages to lesson outcomes. Teacher directed.</p>			
<p>5. Exploring: Through strategically planned opportunities, students independently extend their prior and background knowledge of the lesson content. Student directed.</p>			

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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.

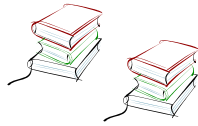
The Center for Applied Special Technology (CAST) <http://www.cast.org>

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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Glossary

Access

A broad view of access is necessary to make UD a truly inclusive concept that addresses bias, considers people's individual and group histories of access. We consider access as people's inclusion, right to participate, and welcomed presence in decision making, and to information, social and recreational spaces, networks and positions, hidden rules and ways of belonging, and material goods.

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>) In other words, individuals with disabilities may utilize these forms of technology to enhance their independence as they engage in day-to-day activities.

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.

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.

(<http://www.thefreedictionary.com/retrofit>)

Universal Design

Universal Design is an approach to the design of products, services, and places to be accessible and usable by 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 equal opportunities 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.