Universal Design for Learning (UDL)

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Session Objectives

Participants will be able to:

- Explain the history and purpose of Universal Design
- Recognize the three principles of Universal Design for Learning in practice
- Identify valuable resources available for UDL implementation in the classroom
Universal Design (UD)

UD originated in architecture and urban planning, as part of a movement to begin designing building and other structures that would accommodate the widest spectrum of users, including those with disabilities, right from the start.

UD Assumptions

✓ Not one size fits all – but *alternatives for everyone*.

✓ Not added on later – but *designed from the beginning*.

✓ Not access for some – but *access for everyone*.
Choose one & discuss

How does the item reduce barriers?
How does designing for margins benefit many?

Universal Design History/Purpose
Session Objectives

Participants will be able to:

• Explain the history and purpose of Universal Design
What is UDL?

Universal Design for **Learning** is a proactive design of curricula (educational goals, methods, materials, and assessments) that enable all individuals to gain knowledge, skills, and enthusiasm for learning.
UDL and the Learning Brain

All learners are unique and universal does not mean “one size fits all.”
Learner Variability

http://www.youtube.com/watch?v=8WClnVjCEVM 1:04-7:56

Universal Design for Learning
Reflect

• What resonated?

• Discuss Todd’s argument: The design of Rubik cube & options for strategy lead to engagement and mastery.

• How do ideas of variability & context relate to your practice (curriculum or classroom)?

Universal Design for Learning
Definition

• Universal design for learning is a scientifically valid framework for guiding educational practice that:

  (a) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and

  (b) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient.

(Higher Education Opportunity Act)
What is Universal Design for Learning?

• More than lecture format (one delivery method).
• Designing quality instruction from the onset of the lesson.
• Providing multiple opportunities for students to learn, acquire and demonstrate understanding of the material presented.
• Creating experiences for students regardless of disability to participate in the lesson through a variety of mediums.
Universal Design for Learning

COULD YOU PLEASE SHOVEL THE RAMP?

ALL THESE OTHER KIDS ARE WAITING TO USE THE STAIRS. WHEN I GET THROUGH SHOVELING THEM OFF, THEN I WILL CLEAR THE RAMP FOR YOU.

BUT IF YOU SHOVEL THE RAMP, WE CAN ALL GET IN!

CLEARING A PATH FOR PEOPLE WITH SPECIAL NEEDS CLEAR THE PATH FOR EVERYONE!
Why encourage UDL?

• Benefit to all learners (ELL, gifted, special ed).
• Healthy learning environment (respect).
• Positive experiences conducive to learning.
• Learners acquire skills in a medium of their strength/interest.
• Lessons are designed with integrity from the onset. Long term benefit. Purposeful planning for all rather than consideration of a few for short term.
Brain Research

What of learning
See, hear, read

How of learning
Task performance

Why of learning
Motivation to learn

Universal Design for Learning
Center for Applied Special Technology (CAST)
Recognition Networks

List the objects you recognize in this picture.

"Unexpected Visitor" Ilya Repin
Strategic Network

1. Ages? 2. Tasks?

Universal Design for Learning

“Unexpected Visitor” Ilya Repin
Eye Movements

Identifying the ages of the people

Determining what the people were doing before the visitor arrived

Universal Design for Learning
Affective Network

What grabs your attention?

Universal Design for Learning

“Unexpected Visitor” Ilya Repin
Activity Summary

- All three brain networks are working when you do something as simple as view an image.
- Each network contributes something vital to the task.
- This is true of everything we do and everything we learn.

Universal Design for Learning
Three Principles of UDL

Universal Design for Learning

http://www.cast.org/library/video/udl_guidelines/index.html 0:00-6:22
UDL Principles

Provide Multiple Means of Representation
• Options for Perception
• Options for Language/Symbols
• Options for Comprehension

Provide Multiple Means of Action and Expression
• Options for Physical Action
• Options for Expressive Skills/Fluency
• Options for Executive Functions

Provide Multiple Means of Engagement
• Options for Recruiting Interest
• Options for Sustaining Effort/Persistence
• Options for Self-Regulation

Universal Design for Learning
http://www.cast.org
Provide Multiple Means of Representation

- Options for Perception
- Options for Language/Symbols
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Universal Design for Learning
Provide Multiple Means of Representation

- Options for Perception
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http://www.edutopia.org/masterful-teacher-jonathan-winn-calculus-video 0:00-6:33

Universal Design for Learning
Supporting Recognition Learning

Provide alternative formats for presenting information.

- Provide multiple examples
- Highlight critical features
- Provide multiple media and formats
- Support background context

Universal Design for Learning

http://www.cast.org
Provide Multiple Means of Action and Expression

- Options for Physical Action
- Options for Expressive Skills/Fluency
- Options for Executive Functions

http://www.youtube.com/watch?v=dTxFYf50I-4 0:00-6:58
Supporting Strategic Learning

Provide alternative means for action and expression.

- Provide flexible models of skilled performance
- Provide opportunities to practice with supports
- Provide ongoing, relevant feedback
- Offer flexible opportunities for demonstrating skill
Provide Multiple Means of Engagement

- Options for Recruiting Interest
- Options for Sustaining Effort/Persistence
- Options for Self-Regulation
Universal Design for Learning

Provide Multiple Means of Engagement

- Options for Recruiting Interest
- Options for Sustaining Effort/Persistence
- Options for Self-Regulation

https://www.teachingchannel.org/videos/increase-engagement-and-understanding 0:00-4:44
Supporting Affective Learning

Provide alternative means for engagement.

- Offer choices of content and tools
- Offer adjustable levels of challenge
- Offer choices of rewards
- Offer choices of learning context
Universal Design for Learning (UDL)

- All 3 UDL principles are not intended to be incorporated into every lesson plan. Rather, they guide instruction over time.

- Some students may need additional support to meet individual needs. Accommodations are still appropriate (i.e. Braille text).
Differentiation & UDL

For specific learners in the classroom based on knowledge of who those learners are.
Always based on data

Planning for all, even though future students are unknown

http://www.gpb.org/education/common-core/udl-part-1
Session Objectives

Participants will be able to:

• Explain the history and purpose of Universal Design

• Recognize the three principles of Universal Design for Learning in practice
Change begins with you: One Lone Nut

http://www.youtube.com/watch?v=fW8amMCVAJQ

Resources
The term **universal design for learning** means a scientifically valid framework for guiding educational practice that:

(A) provides flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged; and

(B) reduces barriers in instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students, including students with disabilities and students who are limited English proficient.

<table>
<thead>
<tr>
<th>Multiple Means of:</th>
<th>Action &amp; Expression</th>
<th>Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Representation</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Physical Action</td>
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<td>Language, Expression, and Symbols</td>
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<td>Sustaining Effort and Persistence</td>
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**Key Components:**

- Universal Design for Learning (UDL) refers to the process of making course concepts and skills attainable to a greater number of students, regardless of their differing learning styles, physical, sensory organizational and linguistic abilities.
- Rather than the “one-size-fits-all” approach, UDL stresses flexible delivery of content, assignment, and activities.
- Designed from the beginning to be accessible and valid for the widest range of students.
- UDL allows the learning process to be more accessible without singling out students with disabilities. Not all of our lowest performing students are on an IEP. Using the principles of UDL helps all students.
- Provide optimal standard assessment conditions.
Universal Design for Learning Guidelines

I. Provide Multiple Means of Representation
1. Provide options for perception
   1.1 Offer ways of customizing the display of information
   1.2 Offer alternatives for auditory information
   1.3 Offer alternatives for visual information
2. Provide options for language, mathematical expressions, and symbols
   2.1 Clarify vocabulary and symbols
   2.2 Clarify syntax and structure
   2.3 Support decoding of text, mathematical notation, and symbols
   2.4 Promote understanding across languages
   2.5 Illustrate through multiple media
3. Provide options for comprehension
   3.1 Activate or supply background knowledge
   3.2 Highlight patterns, critical features, big ideas, and relationships
   3.3 Guide information processing, visualization, and manipulation
   3.4 Maximize transfer and generalization

II. Provide Multiple Means of Action and Expression
4. Provide options for physical action
   4.1 Vary the methods for response and navigation
   4.2 Optimize access to tools and assistive technologies
5. Provide options for expression and communication
   5.1 Use multiple media for communication
   5.2 Use multiple tools for construction and composition
   5.3 Build fluencies with graduated levels of support for practice and performance
6. Provide options for executive functions
   6.1 Guide appropriate goal-setting
   6.2 Support planning and strategy development
   6.3 Facilitate managing information and resources
   6.4 Enhance capacity for monitoring progress

III. Provide Multiple Means of Engagement
7. Provide options for recruiting interest
   7.1 Optimize individual choice and autonomy
   7.2 Optimize relevance, value, and authenticity
   7.3 Minimize threats and distractions
8. Provide options for sustaining effort and persistence
   8.1 Heighten salience of goals and objectives
   8.2 Vary demands and resources to optimize challenge
   8.3 Foster collaboration and community
   8.4 Increase mastery-oriented feedback
9. Provide options for self-regulation
   9.1 Promote expectations and beliefs that optimize motivation
   9.2 Facilitate personal coping skills and strategies
   9.3 Develop self-assessment and reflection

Resources

http://www.udlcenter.org/sites/udlcenter.org/files/updateguidelines2_0.pdf
### UDL Guidelines – Educator Worksheet - v. 2

#### I. Provide Multiple Means of Representation:

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#### II. Provide Multiple Means for Action and Expression:

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Resources
Interactive Wheel

http://udlwheel.mdonlinegrants.org/

Resources

This graphic was designed by the Maryland State Department of Education and Howard County Public Schools. These guidelines were developed at CAST with support from the U.S. Department of Education, The National Science Foundation, and private foundations.

For more detail, examples, and research, visit the National Center on Universal Design at http://www.udl-center.org/
Paper Wheel

Universal Design for Learning DIY Template

1. Cut out figure A

2. Cut out figure B

3. Fasten figure A on top of figure B with a mini round safety pin


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