Universal Design for Learning & The Expert Learner
PEAL 2015
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WHAT IS UNIVERSAL DESIGN FOR LEARNING?

UDL: THE THREE PRINCIPLES IN ACTION

Session 1:
WHAT IS UNIVERSAL DESIGN FOR LEARNING?

Session 2:
UDL: THE THREE PRINCIPLES IN ACTION

UDL
UDL is a framework for all learners - this includes learners with special needs
The question is: HOW does UDL improve school for students?
How does the UDL framework and practice lead to more meaningful learning for all?

Supporting Learner Variability
Cyrus

Supporting Learner Variability
Leanne

Supporting Learner Variability
Heidi
Why UDL?

- Diversity and Variability in Classrooms
- Learning and Expertise in the 21st Century
  - Industry to Knowledge Society
- Standards & Accountability
  - IDEA 2004: Access, participation, and progress in the general education curriculum
  - Common Core State Standards

Where is UDL?

- ESEA reauthorization bill?
- Common Core
- USED's National Education Technology Plan
- Race to the Top Applications - 23 states included UDL
- Maryland's UDL Learning Bill (HB 59/SB 467)

What is UDL?

A framework for teaching and learning that addresses the needs of all learners, especially those from diverse backgrounds and those with disabilities or support needs

"The design isn’t special for one group of people over another. It works for “everyone” to the greatest extent."

Architect, Ron Mace

Neuroscience

Architecture

Education
PHILLY RETROFIT – Arch Street Meeting House

Universal Design

- Universal is not one size fits all - it is flexible alternatives
- Designed from the beginning - not retrofitted
- Increases access opportunities for everyone – not just the average user
Zero Step Home

Photo from: http://www.zerostep.org/

Video: http://youtu.be/MbGkL06EUJ0

Why is this UDL?

The ball bearing on the side tells the hours


UDL Conceptual Shift

What is disabled?

By Maksud at en.wikipedia (Own work) Licensed under Creative Commons Attribution-Share Alike 4.0 International (licence deed): see Wikimedia Commons
What is UDL?

**Universal**: considering all learners from the start

**Design**: considering elegant design decisions to maximize supports and minimize barriers from the start

**Learning**: considering knowledge, skills, and affect

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A Disabled Curriculum

Goals – not focused on authentic learning

Instruction – one size fits all, no options

Materials – present barriers to learning

Assessment – doesn’t match the learning goals

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A Disabled Curriculum

Change the Burden

- Goals
- Materials
- Methods
- Assessment

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UDL Conceptual Shift

What is disabled?

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UDL and the Learning Brain

- Strategic
- Affective
- Recognition
The Recognition Networks
• the “what” of learning
• to identify and interpret patterns of sound, light, taste, smell, and touch

Audio of David Rose explaining the Recognition Networks:

Strategic Networks
• the “how” of learning
• to plan, execute, and monitor actions and skills

Audio of David Rose explaining the Strategic Networks:

Affective Networks:
• the “why” of learning
• to evaluate and set priorities, influences motivation and preferences

Audio of David Rose explaining the Strategic Networks:

“Individual differences are the kind that we need to pay attention to identify both the strengths and weaknesses of each student.”
– David Rose

Neurobiology to Learning

Multiple Means of Representation
To increase recognition

Multiple Means of Action and Expression
To expand strategic output

Multiple Means of Engagement
To enhance involvement in learning

3 Principles
9 Guidelines
Many Checkpoints
Multiple Means of Representation

1. Options for perception
2. Options for language, mathematical expressions, and symbols
3. Options for comprehension

Multiple Means of Action and Expression

4. Options for physical action
5. Options for expression and communication
6. Options for executive function

Multiple Means of Engagement

7. Options for recruiting interest
8. Options for sustaining effort and persistence
9. Options for self-regulation

Principles

Expert Learner

I. Provide Multiple Means of Representation → Resourceful, knowledgeable learners
II. Provide Multiple Means of Action and Expression → Strategic, goal-directed learners
III. Provide Multiple Means of Engagement → Purposeful, motivated learners

Universal Design for Learning Guidelines

Provide multiple means of engagement
Provide multiple means of representation
Provide multiple means of action and expression

Picture from CAST at UDLcenter.org

Picture by Don Glass – Used with permission
Who Benefits?

Leane

Who Benefits?

Leane

UDL is the Answer

• Instead of text – images, video, simulations
• Digitized media
• Other options for assessment
• Choice of topic

Cyrus

UDL is the Answer

• Tactual representations - objects of reference
• Communication supports
• Routine and structure – with a little bit of challenge

Heidi
UDL is the Answer

- Math manipulatives in context
- Use of Korean to clarify English notation
- Digitized media
- Choice of language

Who Benefits?

Universal Design for Learning

Teachers need to reach everyone. This includes:
- English Language Learners
- Learners with Special Needs
- Learners who are Average
- Learners who are Gifted/Talented

ALL LEARNERS

UDL in Conclusion

- UDL helps us to consider diversity and variability from the beginning
- Flexibility is the key to authentic learning
- What are your concluding thoughts?

Apply and Try: UDL in Action

UDL in Action

- Look for elements of UDL in this video
- What UDL guidelines do you see reflected in the lesson?