Welcome!

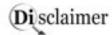


Design for Learning

AOTA Academic Leadership Councils
April 18, 2023
Diana J. LaRocco, Ed.D.
udl@goodwin.edu

The Ideas Presented Here

"There is no such thing as a new idea. It is impossible. We simply take a lot of old ideas need put them into a sort of mental kaleidoscope. We give them a turn and they make new and curious combinations. We keep on turning and making new combinations indefinitely; but they are the same old pieces of calined glass that have been in use through all the ages."



Mort Twoir's Own Autobiography



Institute for Learning Innovation

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Mark Twain's Own Autobiography











The Plan for the Session

Session Goals



- Appreciate what is working well in your teaching and learning practices.
- Engage in critical self-reflection on teaching and learning.
- Identify learning barriers in how you design learning experiences.
- Explore ways to apply the *Universal Design for Learning* (UDL) framework to remove learning barriers and create solutions that optimize learning for *all*.

Options for Getting the Most from the Session

Engagement

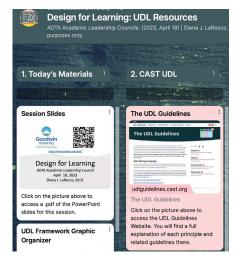
- Consider how Universal Design for Learning might be relevant to you, your teaching practice, and your learners
- Jot down a goal for the session so you can assess your progress
- Offer your attention, be present

Representation

- My presentation and slides
- Resources on Padlet https://padlet.com/UDLGoodwin/Resources

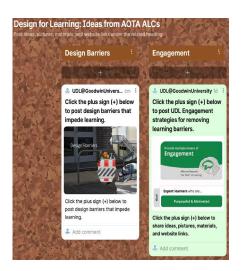
Action / Expression

- Reflect critically on the material and how you might apply UDL to solve problems of practice and optimize learning for all
- Make notes in ways that work for you during Stop-Think-Jot activities
- Post to the Ideas Padlet https://padlet.com/UDLGoodwin/ideas











https://padlet.com/UDLGoodwin/Resources

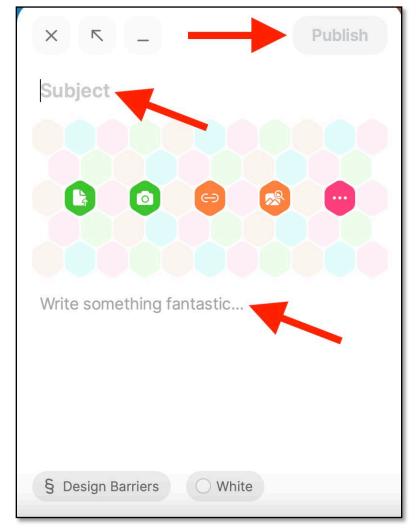
https://padlet.com/UDLGoodwin/ideas

Resources and Activities

To access session each Padlet, scan the QR code or type the URL.

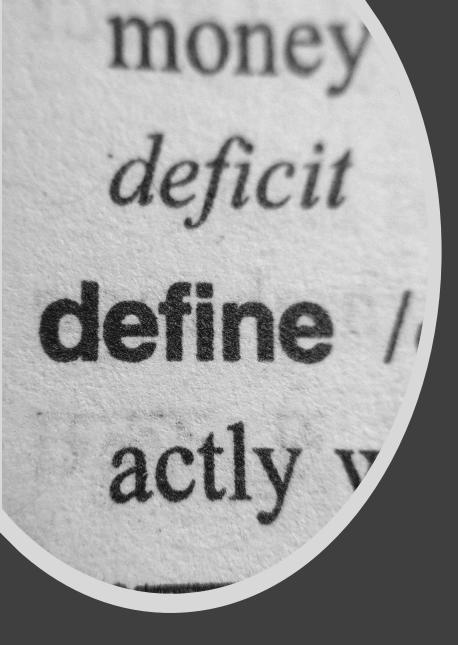
How to Post to Padlet





Contextualize Your Learning

"Learning is not separated from the world of action but exists in robust, complex, social environments made up of actors, actions, and situations" (Stein, 1998, para. 3).



Common Language

Learners: Students or other persons who pursue knowledge and skills thorough any type or number of learning experiences

Learning experiences: Any experience in which learning takes place (e.g., formal, spontaneous, or in between)

Practice: Methodological approaches and the resources used to enact teaching and support learning with specific goals in mind

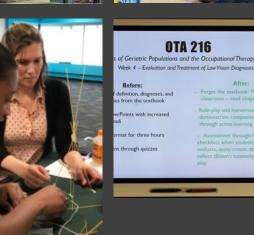
Problems of practice: Challenges that affect teaching and learning and are unlikely to have one best solution

Goal: Intended outcome of a learning experience stated in broad terms

1. Role, Learners, Learning Experience (Stop-Think-Jot, 2 min)

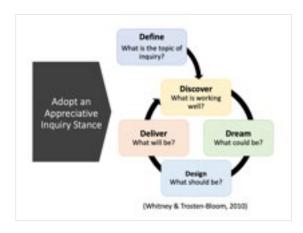
- 1. Consider all the roles you play as an educator.
 - Identify one role to focus on during this session (e.g., dean, faculty, clinical instructor).
- 2. Consider the role you just identified.
 - Who are your learners? Identify one group to focus on for the session.
- 3. Consider your role and your learners.
 - What does a typical learning experience look like for your learners (i.e., goals, assessments, methods, resources)? What do you appreciate most about how you have designed the experience?

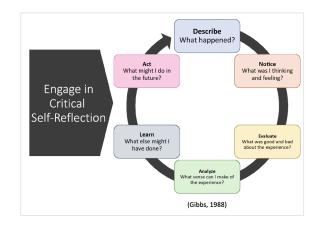


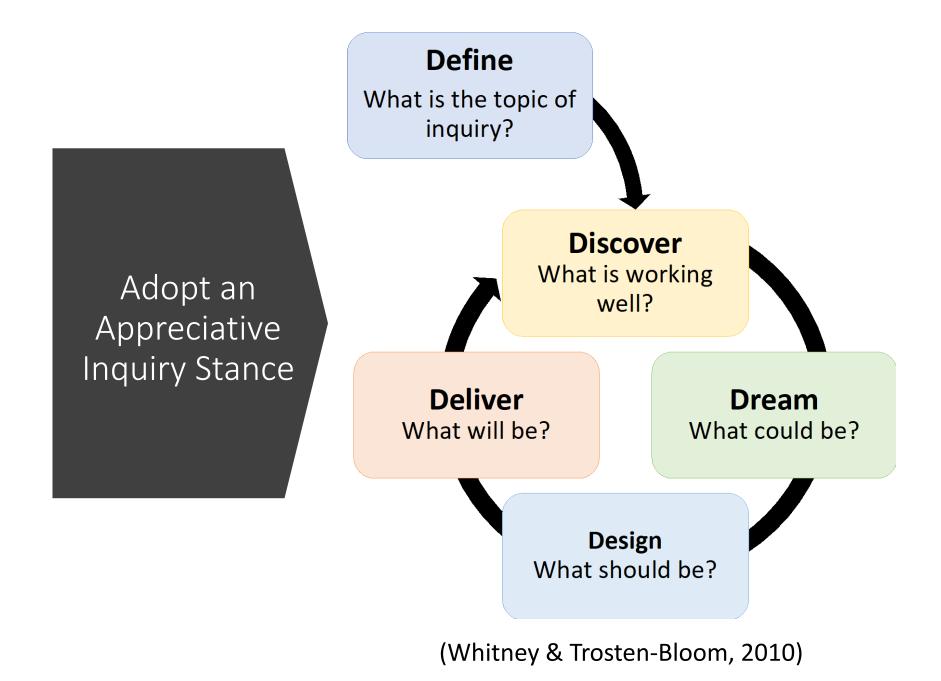


Invitation

Shift your focus away from individual "deficits" to "contextual issues" and pursue equity by transforming "disabling teaching and learning environments" through critique and change.







Describe What happened?

Engage in Critical Self-Reflection

Act

What might I do in the future?

Learn

What else might I have done?

Notice

What was I thinking and feeling?

Evaluate

What was good and bad about the experience?

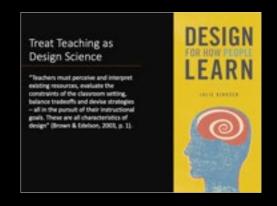
Analyze

What sense can I make of the experience?

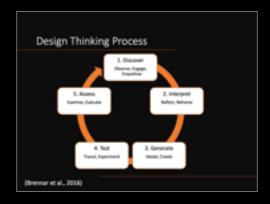
(Gibbs, 1988)

Design Science: Mindset and Process

"Everyone designs who devises courses of action aimed at changing existing situations into preferred ones" (Simon, 1969, p. 130).







Treat Teaching as Design Science

"Teachers must perceive and interpret existing resources, evaluate the constraints of the classroom setting, balance tradeoffs and devise strategies – all in the pursuit of their instructional goals. These are all characteristics of design" (Brown & Edelson, 2003, p. 1).

DESIGN FOR HOW PEOPLE LEARN

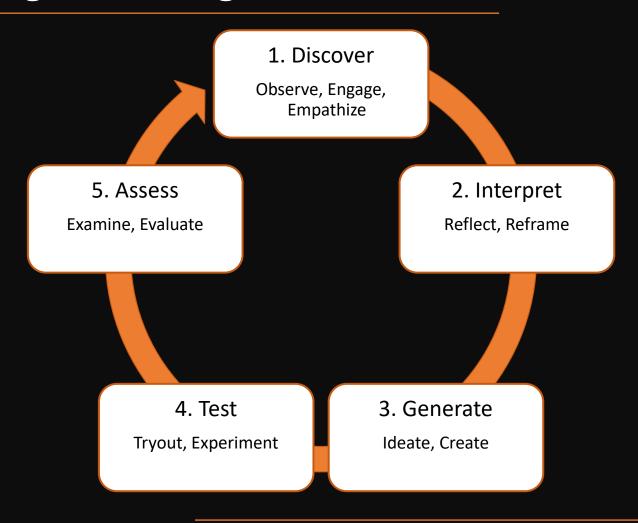
JULIE DIRKSEN



Design Thinking Mindset

Appreciative Adaptable Proactive Curious Mindful Reflective Collaborative creative Empathetic

Design Thinking Process

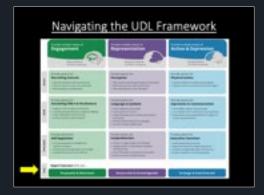


(Brennar et al., 2016)

Universal Design for Learning







What is UDL?

"Universal Design for Learning (UDL) is a framework to improve and optimize teaching and learning for all people based on scientific insights into how humans learn" (CAST, 2018).



UDL Background





- Architecture
- Technology
- Science of Learning
- Public Policy



Public Law 110–315 110th Congress

Aug. 14, 2008 [H.R. 4137]

Higher Education Opportunity Act.

20 USC 1001 note.

To amend and extend the Hi

Be it enacted by the the United States of Amer

SECTION 1. SHORT TITLE;

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Navigating the UDL Framework

Provide multiple means of **Engagement**

Affective Networks
The "WHY" of Learning

Provide multiple means of **Representation**

Recognition Networks
The "WHAT" of Learning

Provide multiple means of **Action & Expression**

Strategic Networks
The "HOW" of Learning

ess

Provide options for

Recruiting Interest

- Optimize individual choice and autonomy
- · Optimize relevance, value, and authenticity
- · Minimize threats and distractions

Provide options for

Perception

- Offer ways of customizing the display of information
- · Offer alternatives for auditory information
- · Offer alternatives for visual information

Provide options for

Physical Action

- · Vary the methods for response and navigation
- · Optimize access to tools and assistive technologies

Provide options for

Sustaining Effort & Persistence

- · Heighten salience of goals and objectives
- · Vary demands and resources to optimize challenge
- · Foster collaboration and community
- · Increase mastery-oriented feedback

Provide options for

Language & Symbols

- Clarify vocabulary and symbols
- · Clarify syntax and structure
- Support decoding of text, mathematical notation, and symbols
- · Promote understanding across languages
- · Illustrate through multiple media

Provide options for

Expression & Communication

- · Use multiple media for communication
- Use multiple tools for construction and composition
- Build fluencies with graduated levels of support for practice and performance

Provide options for

Self Regulation

- Promote expectations and beliefs that optimize motivation
- · Facilitate personal coping skills and strategies
- · Develop self-assessment and reflection

Provide options for

Comprehension

- · Activate or supply background knowledge
- Highlight patterns, critical features, big ideas, and relationships
- · Guide information processing and visualization
- · Maximize transfer and generalization

Provide options for

Executive Functions

- · Guide appropriate goal-setting
- · Support planning and strategy development
- Facilitate managing information and resources
- Enhance capacity for monitoring progress

Expert learners who are...

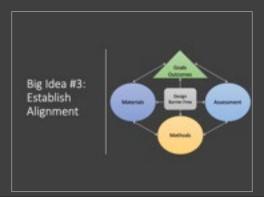
Purposeful & Motivated

Resourceful & Knowledgeable

Strategic & Goal-Directed

oal







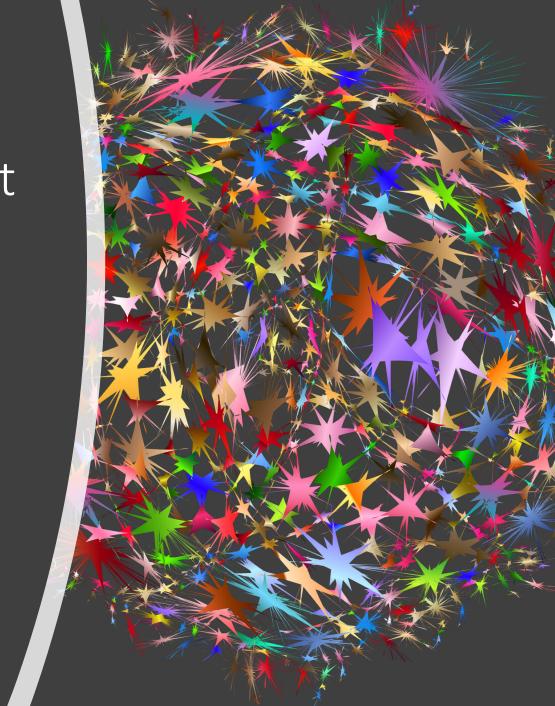


UDL "Big Ideas"

- 1. Expect Learner Variability
- 2. Design for Learning
- 3. Establish Alignment
- 4. Remove Design Barriers

Big Idea #1: Expect Learner Variability

- NO average learner
- Variability is common
- Variability is predictable
- Variability is an asset
- Design for variability



Big Idea #2: Design for Learning



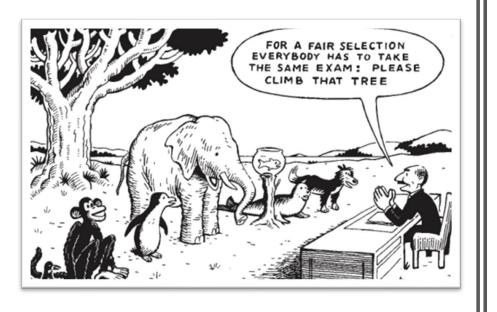
"The devil is often in the details: small oversights can have disproportionate effects on how a learning activity unfolds" (Goodyear, 2015, p. 31).

Big Idea #3: Establish Alignment

Free



Big Idea #4: Remove Design Barriers





Discover Barriers, Think Like a Designer, Generate UDL Solutions









2. Discover Design Barriers That Limit Learning

(Reflect-n-Share, 2 min)



1. Discover — Observe, Engage, Empathize

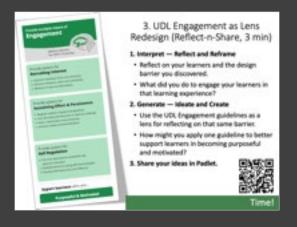
- Reflect on your role, your learners, and the learning experience you made note of earlier.
- Take your learners' perspectives.
- Identify a time when you learners seemed stuck.
 - When they asked more questions than might be expected
 - When you had to re-explain or re-teach something
- 2. Share your ideas in Padlet.



UDL Engagement Redesign Solutions







Engagement Guidelines

Recruiting Interest

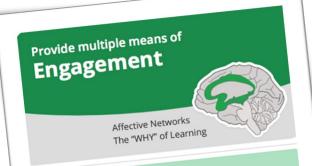
 Build in flexible strategies that connect to learners' funds of knowledge and spark interest for learning.

Sustaining Effort

 Build in flexible strategies to support learners who differ in initial motivation and self-regulation skills.

Self-Regulation

 Build in flexible strategies to support learners in managing their engagement and affect.



Provide options for **Recruiting Interest**

- Optimize individual choice and autonomy
- Optimize relevance, value, and authenticity
- Minimize threats and distractions

Provide options for **Sustaining Effort & Persistence**

- Heighten salience of goals and objectives
- Vary demands and resources to optimize challenge
- Foster collaboration and community
- Increase mastery-oriented feedback

Provide options for **Self Regulation**

- Promote expectations and beliefs that optimize motivation
- Facilitate personal coping skills and strategies
- Develop self-assessment and reflection

Expert learners who are...

Purposeful & Motivated

3. UDL Engagement as Lens Redesign (Reflect-n-Share, 3 min)

1. Interpret — Reflect and Reframe

- Reflect on your learners and the design barrier you discovered.
- What did you do to engage your learners in that learning experience?

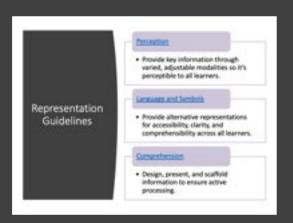
2. Generate — Ideate and Create

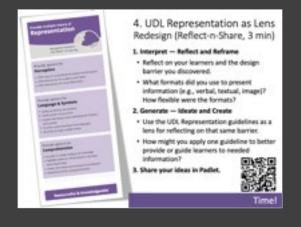
- Use the UDL Engagement guidelines as a lens for reflecting on that same barrier.
- How might you apply one guideline to better support learners in becoming purposeful and motivated?
- 3. Share your ideas in Padlet.



UDL Representation Redesign Solutions







Representation Guidelines

Perception

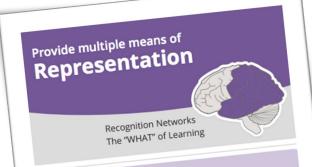
 Provide key information through varied, adjustable modalities so it's perceptible to all learners.

Language and Symbols

 Provide alternative representations for accessibility, clarity, and comprehensibility across all learners.

Comprehension

 Design, present, and scaffold information to ensure active processing.



Provide options for

Perception

- Offer ways of customizing the display of information
- Offer alternatives for auditory information
- Offer alternatives for visual information

Provide options for

Language & Symbols

- Clarify vocabulary and symbols
- Clarify syntax and structure
- Support decoding of text, mathematical notation,
- Promote understanding across languages
- Illustrate through multiple media

Provide options for

Comprehension

- Activate or supply background knowledge
- Highlight patterns, critical features, big ideas,
- Guide information processing and visualization
- Maximize transfer and generalization

Resourceful & Knowledgeable

4. UDL Representation as Lens Redesign (Reflect-n-Share, 3 min)

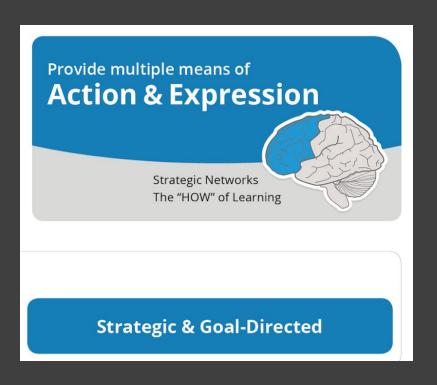
1. Interpret — Reflect and Reframe

- Reflect on your learners and the design barrier you discovered.
- What formats did you use to present information (e.g., verbal, textual, image)? How flexible were the formats?

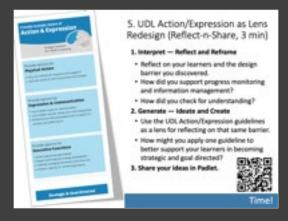
2. Generate — Ideate and Create

- Use the UDL Representation guidelines as a lens for reflecting on that same barrier.
- How might you apply one guideline to better provide or guide learners to needed information?
- 3. Share your ideas in Padlet.

UDL Action/Expression Redesign Solutions







Physical Action

• Facilitate interaction with a variety of materials and tools.

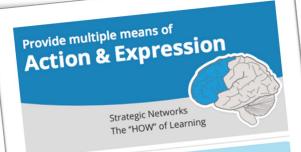
Action/Expression Guidelines

Expression and Communication

 Facilitate composing and sharing ideas with tools that support goal attainment.

Executive Functions

 Facilitate development and implementations of plans for getting the most out of learning.



Provide options for **Physical Action**

- Vary the methods for response and navigation
- Optimize access to tools and assistive technologies

Provide options for **Expression & Communication**

- Use multiple media for communication
- Use multiple tools for construction and composition
- Build fluencies with graduated levels of support for practice and performance

Provide options for

Executive Functions

- Guide appropriate goal-setting
- Support planning and strategy development
- Facilitate managing information and resources
- Enhance capacity for monitoring progress

Strategic & Goal-Directed

5. UDL Action/Expression as Lens Redesign (Reflect-n-Share, 3 min)

1. Interpret — Reflect and Reframe

- Reflect on your learners and the design barrier you discovered.
- How did you support progress monitoring and information management?
- How did you check for understanding?

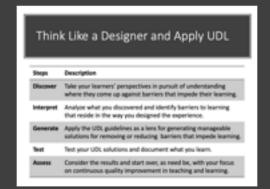
2. Generate — Ideate and Create

- Use the UDL Action/Expression guidelines as a lens for reflecting on that same barrier.
- How might you apply one guideline to better support your learners in becoming strategic and goal directed?
- 3. Share your ideas in Padlet.



In sum . . .









Design for Learning

- Provide *flexible* learning opportunities to all learners
- Frontload flexible teaching and learning strategies that are available to all learners
- Build learners' ability to master learning itself and make choices based on needs and preferences
- Leverage technology to provide flexibility (no, low, high)

Think Like a Designer and Apply UDL

Steps	Description
Discover	Take your learners' perspectives in pursuit of understanding where they come up against barriers that impede their learning.
Interpret	Analyze what you discovered and identify barriers to learning that reside in the way you designed the experience.
Generate	Apply the UDL guidelines as a lens for generating manageable solutions for removing or reducing barriers that impede learning.
Test	Test your UDL solutions and document what you learn.
Assess	Consider the results and start over, as need be, with your focus on continuous quality improvement in teaching and learning.

The Takeaway

"UDL is about design. Design is fundamentally about problem solving. Instructional design is about the efficacy of learning" (Edyburn, 2010, p. 37).



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