

Technology and Universal Design for Learning

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A decorative graphic at the bottom of the slide consisting of several overlapping, wavy, horizontal lines in a bright yellow color. The lines have a soft, glowing appearance and are set against a dark background.



What we're doing today...

- Quick (re)introduction to UDL, what it is, and what it is not.
- Technology for all.. Implications....
 - Your philosophy, your teaching, your approach.
- Knowing, Doing, Believing – Owning
- Issues for Technology and UDL

Universal Design for Learning Guidelines

I. Provide Multiple Means of Representation

1. Provide options for perception

- Options that customize the display of information
- Options that provide alternatives for auditory information
- Options that provide alternatives for visual information

2. Provide options for language and symbols

- Options that define vocabulary and symbols
- Options that clarify syntax and structure
- Options for decoding text or mathematical notation
- Options that promote cross-linguistic understanding
- Options that illustrate key concepts non-linguistically

3. Provide options for comprehension

- Options that provide or activate background knowledge
- Options that highlight critical features, big ideas, and relationships
- Options that guide information processing
- Options that support memory and transfer

II. Provide Multiple Means of Action and Expression

4. Provide options for physical action

- Options in the mode of physical response
- Options in the means of navigation
- Options for accessing tools and assistive technologies

5. Provide options for expressive skills and fluency

- Options in the media for communication
- Options in the tools for composition and problem solving
- Options in the scaffolds for practice and performance

6. Provide options for executive functions

- Options that guide effective goal-setting
- Options that support planning and strategy development
- Options that facilitate managing information and resources
- Options that enhance capacity for monitoring progress

III. Provide Multiple Means of Engagement

7. Provide options for recruiting interest

- Options that increase individual choice and autonomy
- Options that enhance relevance, value, and authenticity
- Options that reduce threats and distractions

8. Provide options for sustaining effort and persistence

- Options that heighten salience of goals and objectives
- Options that vary levels of challenge and support
- Options that foster collaboration and communication
- Options that increase mastery-oriented feedback

9. Provide options for self-regulation

- Options that guide personal goal-setting and expectations
- Options that scaffold coping skills and strategies
- Options that develop self-assessment and reflection



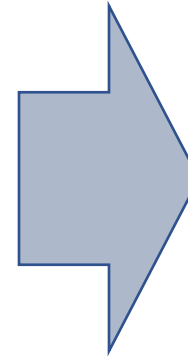
Principles of Universal Design For Learning

- Principle 1: Equitable use
- Principle 2: Flexibility in use
- Principle 3: Simple and intuitive use
- Principle 4: Perceptible information
- Principle 5: Tolerance for error
- Principle 6: Low physical effort
- Principle 7: Size and space for approach and use

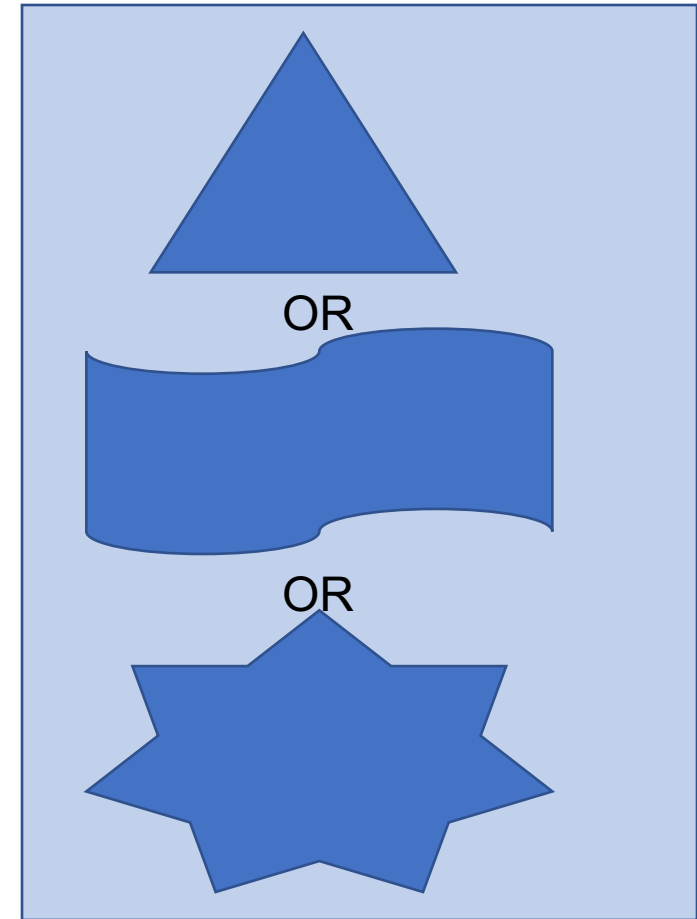
'Inclusive' technology for All students

Learning
Outcomes

Assessment
Criteria



MODULE ASSESSMENT CHOICE





Knowing

- teaching strategies
- disability and special education needs
- how students learn
- what students need to learn
- classroom organisation and management
- where to get help when necessary
- the best ways to assess and monitor students' learning
- the legislative and policy context.
 - UN CRPD (Convention on the Rights of Persons with Disabilities) Article 24, IADT Strategic Plan 2019-2023
 - Elitism vs. Inclusion



Doing

- turning knowledge into action
- using evidence to improve practice
- learning how to work with colleagues as well as with students
- using positive rewards and incentives.



Believing

- that all students are worth educating
- that all students can all learn
- that they have the capacity to make a difference to students' lives
- that such work is their **responsibility** and not only a task for specialists.



Owning

- You are the solution
- Very unlikely anyone will be pushing this more than you
- Responsibility for UDL, for change, is very complex
- Mirrors 'wicked problem' theory (Rittel and Webber)



Issues for Access

- The lens through which we can assess barriers and supports to access:
 - Innovations... lag / lead ?
 - Policy... responsibility?
 - Theory... readiness, effectiveness



Expectation Management

- Student vs Learner enthusiasm
- Access, on site and at home.



Failure Analysis

- The 5 Whys
- Fail together
- Fail forward
- “No access, no use, no impact” (Norris, et al. 2003)

- Norris, C., Sullivan, T., Poirot, J. and Soloway, E., 2003. No access, no use, no impact: snapshot surveys of educational technology in K# x2013; 12. *Journal of research on technology in education*, 36(1), pp.15-27.



Cases and Examples

- My experiences
 - Gamification of Strategy
 - Thesis by video
 - Innovative Assessment
- Your experiences?
- Questions?