

# Universal Design in Online Instruction

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Dawn Hunziker

IT Accessibility Consultant, Sr.

Disability Resource Center, University of Arizona

# Learning Outcomes

At the end of this workshop participants will be able to:

- Define accessibility and Universal Design
- Give examples for the principles of Universal Design
- Describe benefits of universal design for all learners

# Let's think about universal design (UD)....

- Concept of UD started in the physical environment.
- Universal design for learning (UDL) is a method for designing your course to optimize teaching and learning for all.
- UD exists in many of our daily activities.

## Activity: Universal design in our environment

- Think about your daily interactions and activities – can you describe elements that might be considered universal design?

# Benefits of UD

- All students benefit from good course design and implementation of UD/UDL
- Think about:
  - Mobile device users
  - English as another language (EAL) students
  - Students who are parents or care-givers
  - Students living in rural areas or without good Internet provider services

## Universal Design

The design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

### **Our Responsibility:**

- Identify and remove barriers to access
- Incorporate access into design initially

### **Impact:**

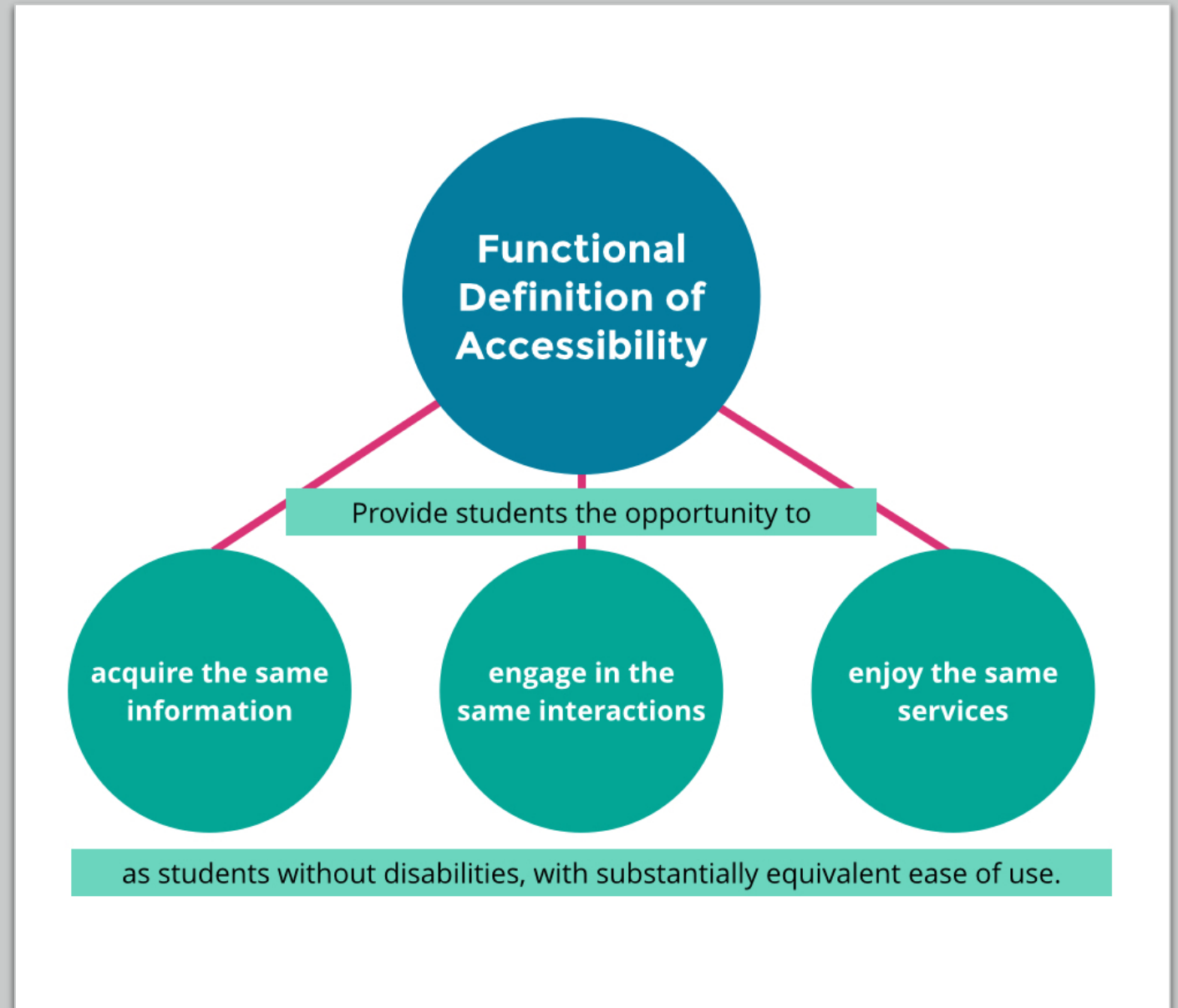
- Inclusive and welcoming environments
- Sustainable design
- Equitable, respectful experience for all

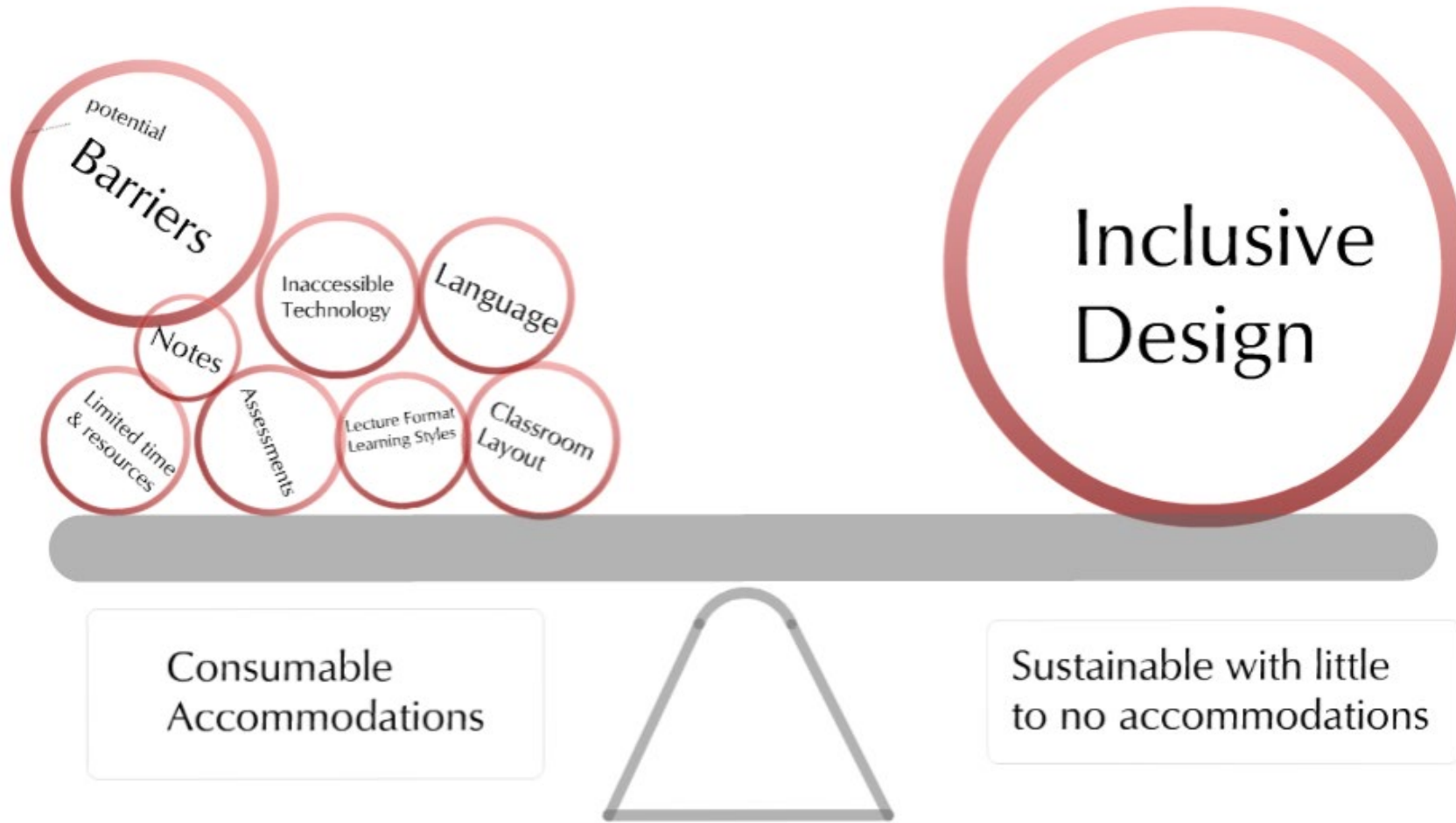
# Defining accessibility

## Legal:

- Section 504 of the Rehabilitation Act (1973)
- Americans with Disabilities Act (ADA) (1990, 2008)
- State laws
- Institutional policies

From [http://udloncampus.cast.org/page/policy\\_legal](http://udloncampus.cast.org/page/policy_legal)





# Creating UDL Environments

# Accessibility for All – Universal Design

- Design...
  - Includes or excludes
  - Advantages or disadvantages
  - Is a series of choices!

Permanent

Temporary

Situational

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One arm



Arm injury



New parent

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# UDL and Inclusive Design...

Universal Design for Learning (UDL) and Inclusive Design are NOT about:

- Accommodations
- Changing course expectations and outcomes

Inclusive design is...

- Proactive
- Inclusive
- Flexible
- A continuum

# UDL Guidelines

# UDL Guidelines

Tool to assist in discovering strategies for implementing UDL – this is not a checklist.

Provide multiple means of

- Engagement
- Representation
- Action and Expression

- Webinar about UDL Guidelines: <https://www.3playmedia.com/resources/recorded-webinars/wbnr-07-30-2020-syllabus>
- <https://udlguidelines.cast.org>

**CAST**

UDL GUIDELINES ENGAGEMENT ▶ REPRESENTATION ▶ ACTION & EXPRESSION ▶ MORE... ▶

## Universal Design for Learning Guidelines

	<b>Provide multiple means of Engagement</b> ▶ Affective Networks The "WHY" of learning	<b>Provide multiple means of Representation</b> ▶ Recognition Networks The "WHAT" of learning	<b>Provide multiple means of Action &amp; Expression</b> ▶ Strategic Networks The "HOW" of learning
<b>Access</b>	<b>Provide options for Recruiting Interest (7)</b> ▶ <ul style="list-style-type: none"><li>• Optimize individual choice and autonomy (7.1) ▶</li><li>• Optimize relevance, value, and authenticity (7.2) ▶</li><li>• Minimize threats and distractions (7.3) ▶</li></ul>	<b>Provide options for Perception (1)</b> ▶ <ul style="list-style-type: none"><li>• Offer ways of customizing the display of information (1.1) ▶</li><li>• Offer alternatives for auditory information (1.2) ▶</li><li>• Offer alternatives for visual information (1.3) ▶</li></ul>	<b>Provide options for Physical Action (4)</b> ▶ <ul style="list-style-type: none"><li>• Vary the methods for response and navigation (4.1) ▶</li><li>• Optimize access to tools and assistive technologies (4.2) ▶</li></ul>
<b>Build</b>	<b>Provide options for Sustaining Effort &amp; Persistence (8)</b> ▶ <ul style="list-style-type: none"><li>• Heighten salience of goals and objectives (8.1) ▶</li><li>• Vary demands and resources to optimize challenge (8.2) ▶</li><li>• Foster collaboration and community (8.3) ▶</li><li>• Increase mastery-oriented feedback (8.4) ▶</li></ul>	<b>Provide options for Language &amp; Symbols (2)</b> ▶ <ul style="list-style-type: none"><li>• Clarify vocabulary and symbols (2.1) ▶</li><li>• Clarify syntax and structure (2.2) ▶</li><li>• Support decoding of text, mathematical notation, and symbols (2.3) ▶</li><li>• Promote understanding across languages (2.4) ▶</li><li>• Illustrate through multiple media (2.5) ▶</li></ul>	<b>Provide options for Expression &amp; Communication (5)</b> ▶ <ul style="list-style-type: none"><li>• Use multiple media for communication (5.1) ▶</li><li>• Use multiple tools for construction and composition (5.2) ▶</li><li>• Build fluencies with graduated levels of support for practice and performance (5.3) ▶</li></ul>
<b>Internalize</b>	<b>Provide options for Self Regulation (9)</b> ▶ <ul style="list-style-type: none"><li>• Promote expectations and beliefs that optimize motivation (9.1) ▶</li><li>• Facilitate personal coping skills and strategies (9.2) ▶</li><li>• Develop self-assessment and reflection (9.3) ▶</li></ul>	<b>Provide options for Comprehension (3)</b> ▶ <ul style="list-style-type: none"><li>• Activate or supply background knowledge (3.1) ▶</li><li>• Highlight patterns, critical features, big ideas, and relationships (3.2) ▶</li><li>• Guide information processing and visualization (3.3) ▶</li><li>• Maximize transfer and generalization (3.4) ▶</li></ul>	<b>Provide options for Executive Functions (6)</b> ▶ <ul style="list-style-type: none"><li>• Guide appropriate goal-setting (6.1) ▶</li><li>• Support planning and strategy development (6.2) ▶</li><li>• Facilitate managing information and resources (6.3) ▶</li><li>• Enhance capacity for monitoring progress (6.4) ▶</li></ul>

# Simple changes you can make

- Presentation techniques
  - Microphones, repeating questions, describing slides, color contrast, font size, captioned videos.
- Course content
  - Multiple formats, accessible text, don't rely on scanned images of text, create accessible information.
- Media – captioning (including live, auto-generated transcripts)
  - English as another language, mobile devices, students with lives outside of college.
- Assessments
  - Consider multiple methods for students to demonstrate learning, change timed exams to take home or untimed exams.

# Benefits of UD

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The “walk-away” idea to remember:

**Flexibility**

Questions?

# Stay Tuned – Future Workshops

- Making Your Live Zoom Class Accessible - March 4<sup>th</sup>
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- Quick Tips for MS Word and PowerPoint Accessibility - March 23<sup>rd</sup>
  - Creating Accessible MS Word Documents - A Deeper Dive - March 26<sup>th</sup>
  - Creating Accessible MS PowerPoint - A Deeper Dive - March 30<sup>th</sup>
  - Understanding PDF and Accessibility - April 1
  - Remediating PDFs - April 6<sup>th</sup>



# Resources - Books

- Universal design in higher education: from principles to practice. Sheryl Burgstahler, 2015  
<https://union.discover.flvc.org/permalink.jsp?52SN002543858>
- Reach everyone, Teach everyone: Universal design for learning in higher education by Thomas Tobin, 2018  
<https://union.discover.flvc.org/permalink.jsp?52SN003229664>
- Creating inclusive learning opportunities in higher education: a universal design toolkit. Sheryl Burgstahler, 2020  
<https://union.discover.flvc.org/permalink.jsp?52SN003750131>

# Resources – Online content

- Faculty Reading – Santa Fe College: <https://sfcollege.libguides.com/faculty-reading/accessibility>
- Center for Academic Technologies, Teaching Resources: <https://www.sfcollege.edu/cat/teaching-resources/accessibility/index>
- CAST: <https://www.cast.org>
- CAST - UDL Guidelines: <https://udlguidelines.cast.org>
- CAST – UDL on Campus: <http://udloncampus.cast.org>
- Inclusive teaching and accessibility strategies – University of Arizona <https://drc.arizona.edu/instructors/inclusive-teaching>
- Automatic, machine-generated captions – University of Arizona <https://itaccessibility.arizona.edu/content/auto-generated-captions>
- 20 Tips for teaching an accessible online course – DO-IT, University of Washington <https://www.washington.edu/doit/20-tips-teaching-accessible-online-course>

# Contact Information

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University of Arizona, Disability Resource Center

[Hunziker@arizona.edu](mailto:Hunziker@arizona.edu)

<https://drc.arizona.edu>

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