

# Engaging People with Disabilities: Barriers & Best Practices

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# 2 Units in Accessible Technology Services

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## IT Accessibility Team

- 1984–
- Funded by UW

## DO-IT Center

- USA, 1992–  
Supported with federal, state,  
corporate, private funds
- DO-IT Japan, 2007–
- Center on UD in Education, 1999–



**DO-IT**

Disabilities  
Opportunities  
Internetworking  
Technology

# Basic approaches

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- When we are working with students, we promote  
**SELF DETERMINATION**
- When we are working with faculty, staff, institutions, technology companies, we promote  
**UNIVERSAL DESIGN (UD)**

# In an “inclusive” environment everyone

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- who meets requirements, **with or without accommodations**, is encouraged to participate
- feels welcome
- is fully engaged in accessible & inclusive environments & activities



# Common/expensive accommodations for online courses

- Making inaccessible documents accessible, mainly reformatting PDF files
- Captioning videos



# Universal design (UD) =

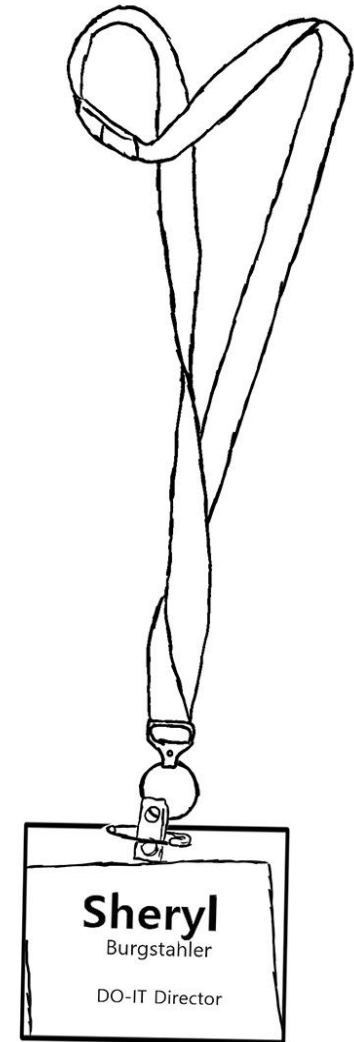
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"the design of products & environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design."

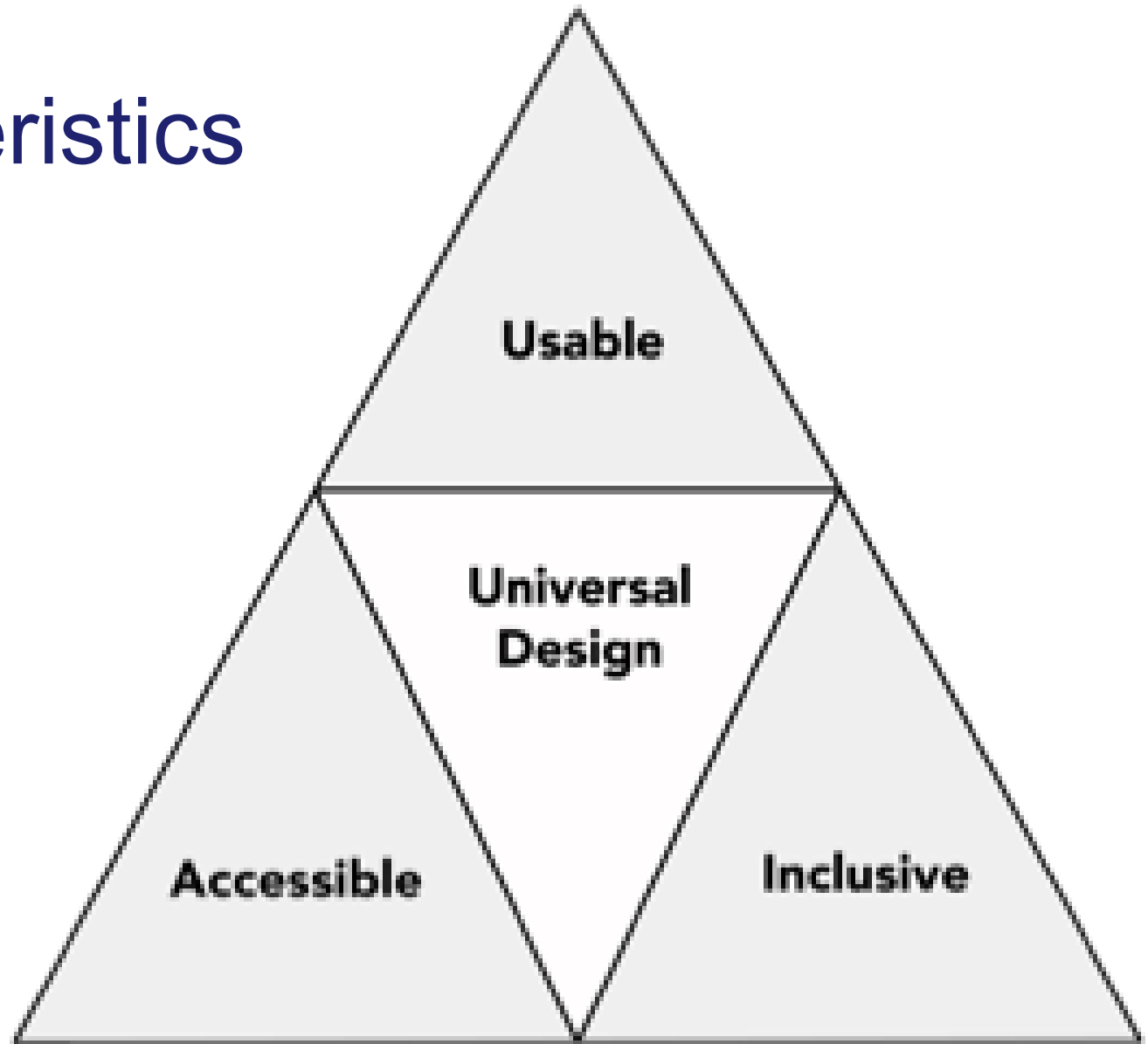
The Center for Universal Design

[www.design.ncsu.edu/cud](http://www.design.ncsu.edu/cud)

UNIVERSITY of WASHINGTON



# Characteristics of UD



# *Ramp The Curbs*



UD of physical  
spaces

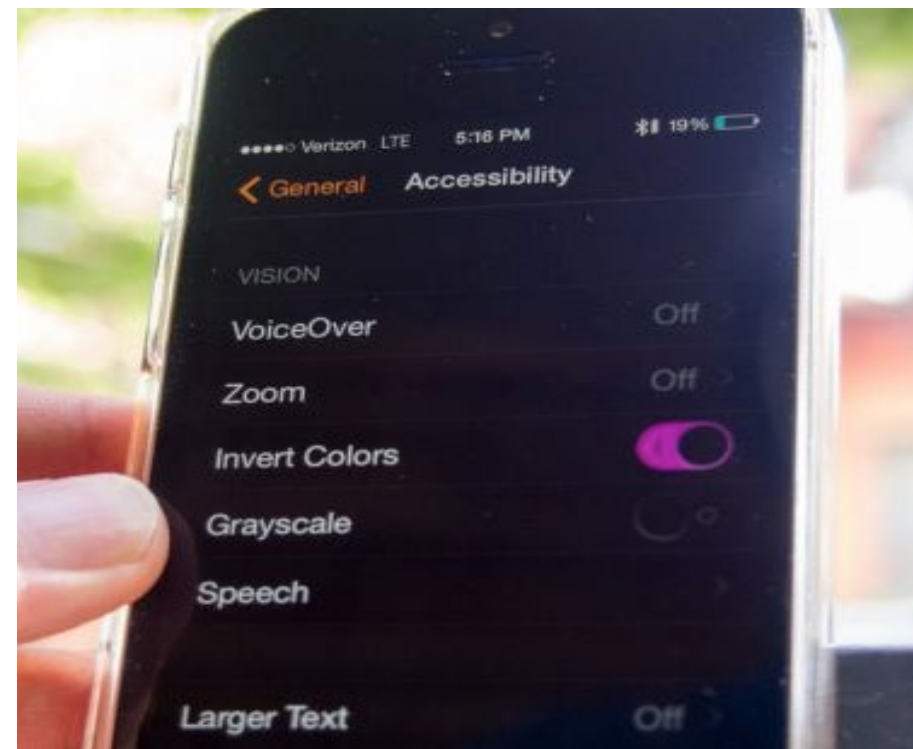
“The Daily”  
UW

1970

**Forging** a stream of humanity, this silent protester carries his campaign on his back. His goal: to end high-rise sidewalks.  
(photo by grant haller)

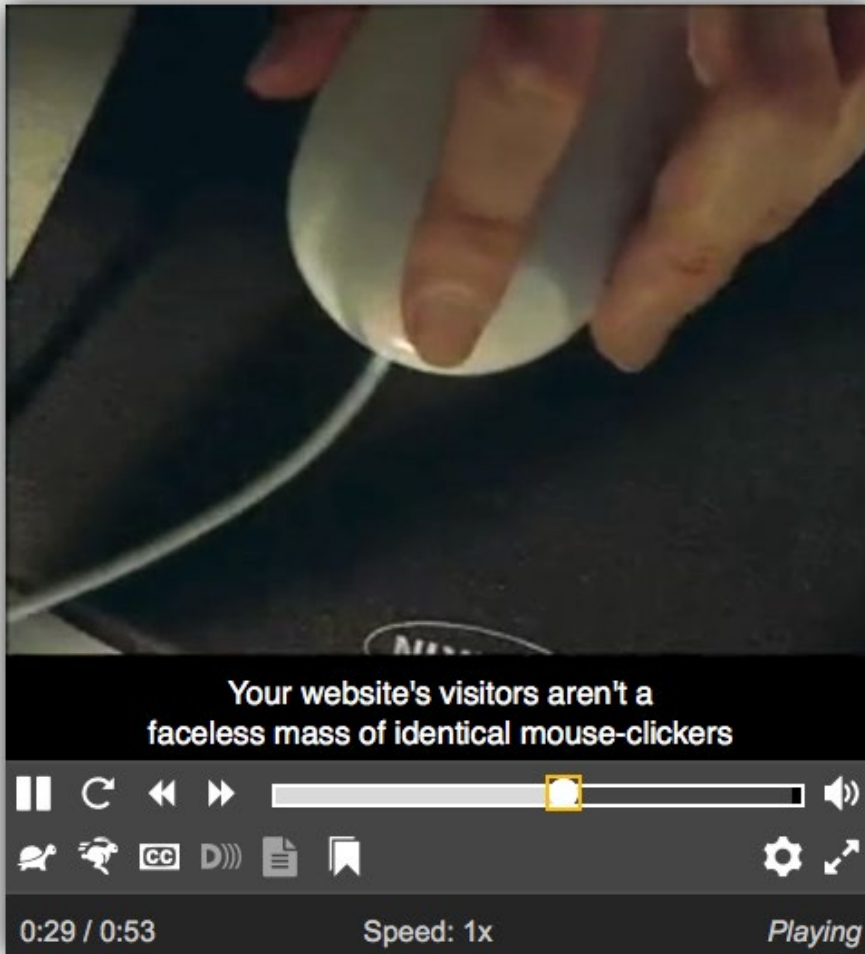
# UD of technology

- builds in accessibility features



- ensures compatibility with assistive technology

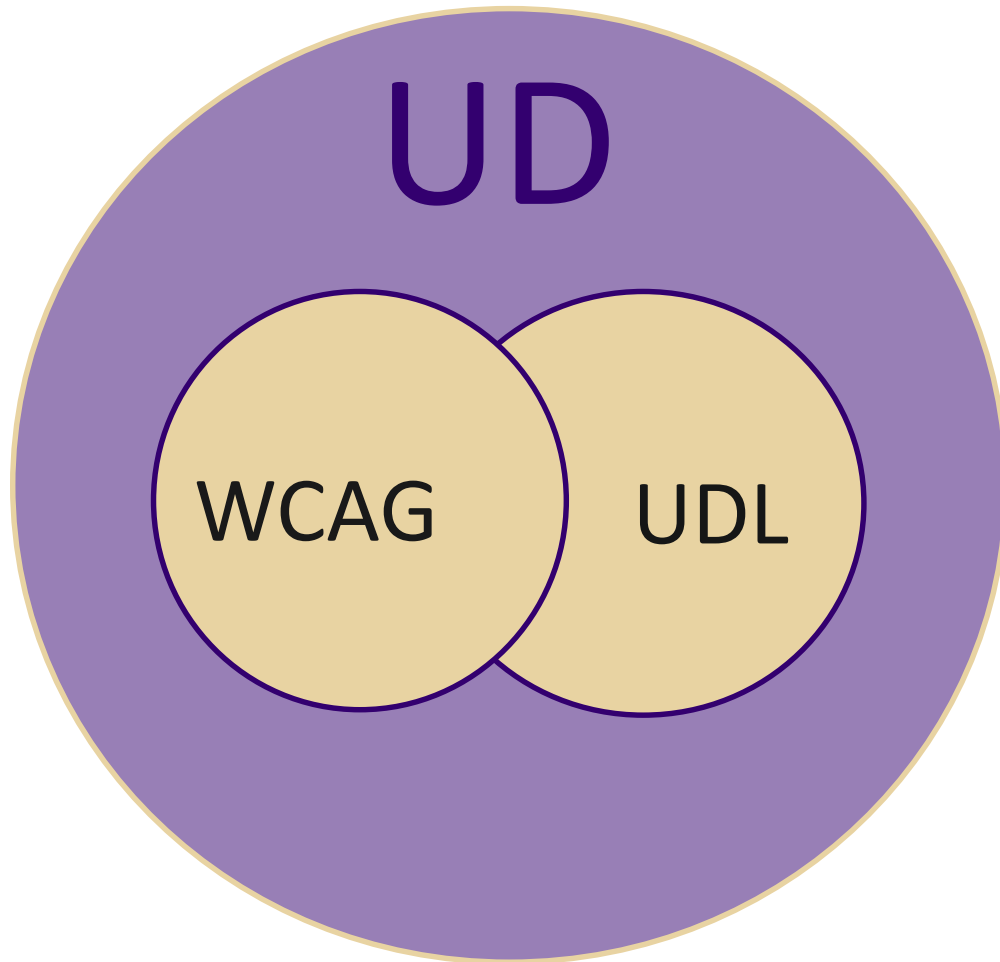
# Beneficiaries of captions on videos...People who:



- are unable to hear the audio
- are English learners
- are in a noisy or noiseless location
- have slow Internet connections
- want to know the spelling of words
- need to find content quickly

# 3 sets of principles underpin UDHE guidance for all aspects of education

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- 7 Universal Design
- 3 Universal Design for Learning
- 4 Web Content Accessibility Guidelines

# In a nutshell,

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1. Provide multiple ways for participants to learn & to demonstrate what they have learned.
2. Provide multiple ways to engage.
3. Ensure all technologies, facilities, services, resources, & strategies are accessible to individuals with a wide variety of disabilities.

# AccessCyberlearning 20 Tips for Teaching an Accessible Online Course

By Sheryl Burgstahler, Ph.D.

I taught the first online learning course at the University of Washington in 1995. My co-instructor was Dr. Norm Coombs, who was, at the time, a professor at the Rochester Institute of Technology. We designed the course to be accessible to anyone, including students who were blind, deaf, or had physical disabilities.



- With references
- Additional video & tutorial
- Developed from literature review & reports from online instructors & students

# Course materials

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- Use text-based written materials; avoid PDFs, especially scanned images
- Structure headings, lists
- Provide descriptive text for hyperlinks & images
- Use large fonts, plain backgrounds
- Caption videos

# Instructional methods

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- Make instructions & expectations clear
- Provide options for communicating, learning, & demonstrating learning
- Provide options for demonstrating learning
- Use plain English, spell out acronyms, define jargon

# An attitude; a framework, goal, process—UD:

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- Values diversity, equity, & inclusion
- Promotes best practices
- Does not lower standards
- Is proactive
- Can be implemented incrementally
- Benefits everyone
- Minimizes the need for accommodations

# Resources

- *Center for Universal Design in Education* [uw.edu/doit/cude](http://uw.edu/doit/cude)

**20% book discount with code INLEHE**

*20 Tips for Teaching an Accessible Online Course*

- *AccessINCLUDES*  
[uw.edu/doit/programs/accessincludes](http://uw.edu/doit/programs/accessincludes)
- Email [sherylb@uw.edu](mailto:sherylb@uw.edu) to join the UDHE online community of practice

