Accessible Cyberlearning: What You Need to Know

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Presentation content

- Introduction, approaches to access
- Accessibility strategies
- Relevant legislation
- Resources
- Q&A
Terminology

• online learning
• digital learning
• e-learning
• online education
• cyberlearning
• computer-based learning
• distance learning
• hybrid, flipped classes …
Student characteristics:

- Communication skills
- Marital status
- Culture
- Learning abilities
- Ability to attend
- Sexual orientation
- Ethnicity
- Intelligence
- Sensory abilities
- Interests
- Social skills
- Physical abilities
- Values
- Learning styles
- Family support
- Socioeconomic status
- Age
- Religious beliefs
- Race
- Gender
Consider ability on a continuum

- see
- hear
- walk
- read print
- write
- communicate verbally
- tune out distraction
- learn
- manage physical/mental health
Approaches to access:

1. Universal design
2. Accommodations

Both are Important!
“When you plant lettuce, if it does not grow well, you don't blame the lettuce. You look for reasons it is not doing well. It may need fertilizer, or more water, or less sun...”

-Thích Nhất Hạnh, Vietnamese Buddhist Monk
Universal design =

“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
Terminology

- accessible design
- usable design
- inclusive design
- universal design
- barrier-free design
- design for all
- …
<table>
<thead>
<tr>
<th>Assistive Technology:</th>
<th>Therefore:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emulates the keyboard, but may not emulate the mouse</td>
<td>Design website, software to operate with keyboard alone</td>
</tr>
<tr>
<td>Cannot read content presented in images</td>
<td>Provide alternative text</td>
</tr>
<tr>
<td>Can tab from link to link</td>
<td>Make links descriptive</td>
</tr>
<tr>
<td>Can skip from heading to heading</td>
<td>Structure with hierarchical headings</td>
</tr>
<tr>
<td>Cannot accurately transcribe audio</td>
<td>Caption video, transcribe audio</td>
</tr>
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</table>
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.

- uw.edu/doit/20-tips-teaching-accessible-online-course
- 9 tips for web pages, documents, images, videos; 11 tips for instructional methods with references
- accompanied by training video
Examples

• Provide multiple ways to gain knowledge, demonstrate knowledge & interact
• Use clear, consistent layouts & organization schemes.
• Use large, bold fonts on uncluttered pages with plain backgrounds.
• Use color combinations that are high contrast & can be read by those who are colorblind.
• Address a wide range of language skills (e.g., spell acronyms, define terms.
• Make instructions & expectations clear.
Relevant federal legislation: 
Americans with Disabilities Act (ADA)

Title II of the Americans with Disabilities Act of 1990, as amended ("ADA"), 42 U.S.C. §§12131-12134, and its implementing regulation ("Title II regulation"), 28 C.F.R. pt. 35, prohibit public entities, from discriminating on the basis of disability, and from excluding qualified individuals with disabilities from participating in, and denying such individuals the benefits of, their services, programs, and activities.
Relevant federal legislation:
Section 504 of the Rehabilitation Act of 1973

Definition of “accessible”

“Accessible” means a person with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, & enjoy the same services as a person without a disability in an equally effective & equally integrated manner, with substantially equivalent ease of use. The person with a disability must be able to obtain the information as fully, equally & independently as a person without a disability.

Office of Civil Rights, U.S. Department of Education
Common OCR/DoJ findings

1. Lack of alternative text for images
2. Documents not posted in an accessible format
3. Lack of captions on videos & the inability to operate video controls using assistive technology
4. Improperly structured data tables
Common OCR/DoJ findings

5. Improperly formatted & labeled form fields
6. Improper contrast between background & foreground colors
7. Frames not titled with text that facilitates frame identification & navigation
References to cases

• 2016 Wichita State U Resolution Agreement (OCR)
• 2016 Dudley v Miami Consent Decree (DoJ)
• Winn-Dixie 2017 (on appeal)
Resources

• **AccessCyberlearning**
  uw.edu/doit/programs/accesscyberlearning/overview

• **AccessComputing**
  uw.edu/accesscomputing

• **Center for UD in Education**
  uw.edu/doit/cude

• **CIRCL Accessibility Resources**
  circlcenter.org/resources/accessibility/

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