

## Best Practices for Accessible Online Course Design

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## About the DRC

### DRC Mission:

Montclair State University is committed to the full inclusion of students with disabilities in all curricular and co-curricular activities as mandated by Section 504 of the Rehabilitation Act of 1973. The Disability Resource Center (DRC) will assist students in receiving the accommodations and services necessary to equalize access. The DRC provides assistance to students with physical, sensory, learning, psychological, neurological, and chronic medical disabilities. The mission of the DRC is to unite the Montclair State University community in an effort to provide students with disabilities the excellence and equity in education to which they are legally entitled.

### DRC Statistics (5 years)

Blind/Low Vision: 38 students  
Deaf/HOH: 47 students  
Motor Impairment: 68 students  
Seizure Disorders: 19 students  
Learning Disabilities: *hundreds*



## What is Accessible Design?

Accessible course design allows students of various abilities to access course materials and components without the need for assistance or modification.

Web accessibility means that people with disabilities can perceive, understand, navigate, and interact with the Web, and that they can contribute to the Web. (W3C)

Accessible course design includes anything used to facilitate a course, including: PowerPoint slides, videos, textbooks, articles, evaluation tools, blogs, chats, etc.



## Why is Accessible Design Important?

**Ethical:** It's the right thing to do. We do not want to exclude persons with disabilities from accessing our courses.

**Legal:** Students with disabilities should have **equal access** to programs and activities within the institution. (ADA-AA)

- Americans with Disabilities Amendments Act (2008)
- Section 504 of the Rehabilitation Act
- Section 508 (currently only applies to procurement by the federal government; however, many states have adopted 508 guidelines)
- 21<sup>st</sup> Century Communications and Video Accessibility Act (2010) (relates to captioning and audio description of videos)

The Departments of Justice and Education have recently upheld students rights to **equal access** and an **equivalent experience** to information on the Web and educational technologies.



## Adaptive Technologies

• An accessible interface means that your computer interface will work for people with disabilities, many of whom use an assistive technology to access software, operating systems, and Web sites. (Lazar & Jaeger, 2011)

- Commonly used assistive technologies include:
  - a screen reader, which provides computer-synthesized speech output of what appears on the screen
  - speech recognition, which allows for hands-free input
  - various alternative keyboards and pointing devices.

- [Screen reader simulation exercise](#)



## What Types of Disabilities Impact Course Design?

**Blind/Low vision:** Users access electronic text using specialized software. This adaptive software will not work unless materials are formatted appropriately to allow access.

**Deaf/Hard of Hearing:** Users cannot access audio content or audible signals.

**Motor Impairments:** Users may have difficulty inputting information and navigating, as well as completing timed tasks.



**Visual Processing Deficits/Learning Disabilities:** Users may find densely packed information to be confusing.

**Seizure Disorders:** Image flicker rates may trigger a seizure in some individuals with a specific type of seizure disorder.



## What is Problematic for Students?

- Videos without captions
- Audio without transcripts
- Images without "ALT tags"
- PDFs
- Timed assignments/tests in Blackboard
- Cluttered pages with too much text or graphic
- Lack of clear navigation
- Links to inaccessible websites
- PowerPoint slides
- Colorful fonts without enough contrast



## Accessibility Standards for Course Design

- The Quality Matters Rubric includes standards on accessibility.
- 8.1 The course employs accessible technologies and provides guidance on how to obtain accommodation.
- 8.2 The course contains equivalent alternatives to auditory and visual content.
- 8.3 The course design facilitates readability and minimizes distractions.
- 8.4 The course design accommodates the use of assistive technologies.



## What Can You Do?

- Post an accessibility statement in your syllabus
- Learn how to extend time on Blackboard exams and assignments for individual students
- Add captions to your videos and create transcripts for audio recordings
- Follow a visual design that is high-contrast and easy to read
- Ensure materials are accessible – Microsoft Word documents, PDF files, PowerPoint presentations, tables and spreadsheets
  - Create document structure using style sheets with header markup
  - Use a simple, crisp font, such as Verdana or Arial
  - Use a reasonably sized font for your purposes (10-12 point is the norm)
  - Don't use color alone to convey information
- Provide alternative text for images
- Create a table of contents for long documents to improve navigation
- Collaborate to find solutions to obstacles (faculty, student, DRC, and OIT)



## Resources

- Accessibility and Usability at Penn State: <http://accessibility.psu.edu/>
- CAST is a nonprofit research and development organization that works to expand learning opportunities for all individuals, especially those with disabilities, through Universal Design for Learning: <http://www.cast.org/>
  - UDL Guidelines Checklist: <http://udlonline.cast.org/guidelines>
- Disability Resource Center: <http://www.montclair.edu/drc/>
- Disabilities, Opportunities, Internetworking, and Technology (DO-IT) Center promotes the success of individuals with disabilities in postsecondary education and careers, using technology as an empowering tool: <http://www.washington.edu/doit/>
- The Faculty Room is a space for faculty and administrators at postsecondary institutions to learn about how to create classroom environments and academic activities that maximize the learning of all students, including those with disabilities: <http://www.washington.edu/doit/Faculty/>



## Resources

- GRADE project at Georgia Tech with tutorials on how to make e-learning accessible for individuals with disabilities: <http://www.accessiblelearning.net/>
- How to create accessible documents: [http://bit.ly/profhacker\\_accessibledocs](http://bit.ly/profhacker_accessibledocs)
- Web Accessibility in Mind (WebAIM) has a great resources tab with many how-to's, accessibility checklists, and Web Accessibility Evaluation Tool (WAVE): <http://webaim.org/>
- Web Accessibility for Online Learning: How-to Guide for Creating Accessible Online Learning Content: <http://projectone.cannect.org/>
- World Wide Web Consortium (W3C) Web Accessibility Initiative. Available online: [www.w3.org](http://www.w3.org)



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## Questions

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