Is Your Course Content Accessible?

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“Accessible” to whom?
Everyone!
Ability on a continuum

Not able

See
Hear
Walk
Read print
Write with pen or pencil
Communicate verbally
Tune out distraction

etc.

Able
Old School Technologies
Today: Technological Diversity
We All Have Choices
Can *everyone* access your course content?
The Computer Science Collaboration Project aims to efficiently increase participation of underrepresented groups in computer science opportunities and activities by effectively building collaborations between K-12, community-based organizations, higher education and industry.

The Computer Science Collaboration Project uses the most successful elements of the [National Girls Collaborative Project (NGCP)](https://www.nationalgirlscollab.org) to connect the various alliances and K-12 outreach organizations that are part of the [Broadening Participation in Computing (BPC)](https://www.broadeningparticipation.org) community, specifically focusing on outreach to and collaboration with persons with disabilities, African Americans, Hispanics, American Indians, Alaska Natives, Native Hawaiians, Pacific Islanders, and women.

**Current Reports**

Basics About Disabilities and Science and Engineering Education

by Ruta Sevo
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Current Reports

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Design Tip: Don't assume users have mice!
There are no mice on this slide.
Example: Inaccessible CAPTCHA
Type the RED WORD from above

ANSWER: |
This content requires Flash

To view this content, JavaScript must be enabled, and you need the latest version of the Adobe Flash Player.
Example: Is this webinar accessible?

What about electronic documents?
An accessible electronic document:

• Has good structure
  – For headings, use headings
  – For lists, use lists
  – Provide details about each item
    • For images, add alternate text
    • For all content, identify the language

• Is created in a way that communicates structure to assistive technology

• HTML, Word, & PDF all support accessibility
HTML

• The most accessible document format
  – Alt text for images
  – Structure (e.g., headings, lists)
  – Document language (e.g., “en”, “es”, “fr”)
  – Accessible markup for forms
  – Accessible markup for tables
  – Accessible math (MathML)

• Accessibility is not automatic—Authors must know to use these features
It is possible to create a *reasonably* accessible Microsoft Word document.
An Accessible Word Doc Includes:

• Alt text for images
• Heading styles (Heading 1, Heading 2, etc.)
• Lists, created using Word’s list buttons
• Simple tables, with column headers identified
• Language identified
Adobe PDF

• Three general types:
  – Image
  – Image with embedded fonts
  – Tagged (optimized for accessibility)
To Create an Accessible PDF

• Use an authoring tool that supports:
  – Creating documents with headings & subheadings
  – Adding alt text to images
  – Exporting to tagged PDF

• Use these accessibility features anytime you create a document
It is possible to create an accessible tagged PDF from Microsoft Word (Windows only)
It is possible to create an accessible tagged PDF from Adobe InDesign
Other Authoring Tools that support Tagged PDF

And maybe a few others:
http://lists.w3.org/Archives/Public/w3c-wai-gl/2011AprJun/0061.html
With Adobe Acrobat Pro, you can make an accessible PDF from an inaccessible one.
PDF Accessibility Workflows

• http://uw.edu/accessibility/pdf.html
Always Consider Accessibility

• When creating websites
• When creating documents
• When considering which technologies to use
Questions to Always Ask When Choosing Technologies

• Is it accessible?
• Can users perform all functions without a mouse?
• Has it been tested using assistive technologies such as screen readers?
• If it supports audio, does it support captions?
• Is accessibility documentation available?
• If it’s an authoring tool, how does one create accessible content with it?
Web Accessibility CBI Proceedings

The Web Accessibility Building Institute

November 29 - December 3, 2010
Hotel Andra, Seattle, WA

The ultimate goal of this initiative is to improve accessibility of software and information to users with disabilities. It will focus on both technical and administrative web applications, including

The Web Accessibility Building Institute was funded by the National Science Foundation (cooperative agreement number 0749731) and directed at the University of Washington. The purpose of the grant is to develop strategies that lead to systemic change.

Successful participation of people with disabilities in STEM careers is a critical issue for our nation's economic competitiveness. Higher education institutions are exploring and beginning to implement innovative strategies for enhancing access to STEM programs, inclusive of students and employees with disabilities. It is critical that these efforts include technologies such as AJAX, Flex, and Flash.

The World Wide Consortium (W3C), IBM, Google, Yahoo, Adobe, and others have formed a new initiative called the 

Agenda

The agenda for the CBI was as follows:

1. Welcome and introduction
2. Overview of the initiative
3. Current landscape of accessibility in STEM
4. Challenges and opportunities
5. Emerging technologies
6. Case studies and best practices
7. Future directions
8. Q&A and wrap-up
For more information...

- Terrill’s slides and other resources  
  http://staff.washington.edu/tft
- AccessComputing  
  http://uw.edu/accesscomputing
- University of Washington IT Accessibility  
  http://uw.edu/accessibility
- Terrill’s blog  
  http://terrillthompson.com
TO-DO

Add accessibility to my everyday document authoring process