Web accessibility in civil society: Persons with disabilities in today’s educational environments

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The Web has Transformed our Society

What are its effects on persons with disabilities?
Our Brief Time Today . . .

- Context
- User Experience
- Laws
- WebAIM’s Journey
- Discussion
The Context

Individuals with Disabilities in an Online World
Who Does this Affect?

- Those with difficulties in
  - Vision
  - Hearing
  - Motor function
  - Cognition
  - Seizure activity
  - Age related processes

How is the Web used in Education?

How do you use it in your lives?
Web in higher education

- Recruitment
- Admission & financial aid
- Registration & payment
- Employment
- Courses, assignments, research, assessment
- Social aspects of campus
Web in higher education

- 21st Century Learning
- LMS / CMS
- Open Source
- Web 2.0
- Mobile
- Gaming & immersive environments
- Emerging markets
- Collaborative
- International
Education engaged and on the move
National Context

Your Web users (including staff) have disabilities

- Almost one in 5 Americans report the presence of a disability
- 9% of incoming freshman report a disability
- 8.5% of the general population have a disability that affect computer and Internet use (approximately 4.8 million users)

Source: U.S. Census 2000: Disability Status
There but for the grace of God go I...

Could I, my family, or friends, access powerful, necessary, web content tomorrow if any of us acquired a disability?
The User Experience

Individuals with Disabilities in an Online World
What is the User Experience?

Those who are BLIND, color blind, or have low vision:

Article - [www.webaim.org/articles/visual](http://www.webaim.org/articles/visual)

Kyle’s experience

Screen reader simulation - [www.webaim.org/simulations/screenreader.php](http://www.webaim.org/simulations/screenreader.php)
What is the User Experience?

- Those who are blind, COLOR BLIND, or have low vision:
- The green mushrooms listed here are OK to eat.
- The red mushrooms will kill you.
  - Amanita
  - Chanterelle
  - Porcini
  - Shitake
  - Tylopilus
What is the User Experience?

- Those who are blind, COLOR BLIND, or have low vision:
  - The green mushrooms listed here are OK to eat.
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    - Amanita
    - Chanterelle
    - Porcini
    - Shitake
    - Tylopilus

*Resource*
Vischeck.com
What is the User Experience?

Those who are blind, color blind, or have LOW VISION:

Low vision simulation -
www.webaim.org/simulations/lowvision.php
What is the User Experience?

Those who are deaf or hard of hearing:

Article - [www.webAIM.org/articles/auditory](http://www.webAIM.org/articles/auditory)

Curtis’ experience
What is the User Experience?

Those who have difficulty with **MOTOR SKILLS**:

- Article - [http://www.webaim.org/articles/articles/motor/](http://www.webaim.org/articles/articles/motor/)
- Gordon’s experience

*Don’t rely on the use of keyboard or mouse*
If You Can Use a Mouse, You Can Get a House
Click here to see our mortgage and refinance options

Click here to start banking online
What is the User Experience?

Those who have difficulty with COGNITIVE SKILLS:

- Article - www.webaim.org/articles/cognitive
- Distractibility simulation http://www.webaim.org/simulations/distractability.php
Cognitive load vs Functionality
What is the User Experience?

• Those who have difficulty with SEIZURES

• Those with AGE RELATED PROCESSES
Data on Web Accessibility

Persistent high rates of inaccessible web content in education

- **97%** of postsecondary home pages had errors in 1998
- **99%** of K-12 pages drawn one level down in 2004
- **97%** of postsecondary pages drawn one level down in 2008
So, what happens when content is not accessible?

Accommodations
Problems with the accommodation model

- Reactive, rather than proactive
- Native access can be achieved in most cases, yet the model reinforces “accommodation”
- Mindset of many is to go to DSO or SpEd and they’ll take care of it. Often they do not have the expertise.
The Law

Individuals with Disabilities in an Online World
Web Accessibly

- **US Laws**
  - U.S. Sections 504 & 508
  - Application of ADA
  - State laws (26 states)

- **International laws**
  - UNCRPD
  - Country specific
Issues under Section 504, ADA, & State Laws

• Timeliness
• Effective Communication
• Reasonableness of Accommodation
• Affirmative Obligation
A public entity violates its obligations under the ADA when it only responds on an ad-hoc basis to individual requests for accommodation. There is an affirmative duty to develop a comprehensive policy in advance of any request for auxiliary aids or services.
...the subsequent substantial expense of providing access is not generally regarded as an undue burden when such cost could have been significantly reduced by considering the issue of accessibility at the time of the initial selection.

Undue Burden
Recent Inertia on Accessibility

• Kindle DX controversy

• Depts of Education and Justice
  “It is unacceptable for universities to use emerging technology without insisting that this technology be accessible to all students” (Perez 2010)

• ANPRM on ADA and Internet (closed 1/24/11)

• US as a signatory to the UN CRPD
Let’s talk
Thank you!

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