People differ

- Disabilities
  - Vision
  - Hearing
  - Motor skills
Section 508  www.section508.gov

- 1998 US Congressional amendment to Rehabilitation Act of 1973
- Requires Federal agencies to make EIT (Electronic and Information Technology) accessible to people with disabilities
- Federal agencies must procure EIT that gives disabled employees and members of the public access that is comparable to that available to others
  - Except where it imposes a documented “undue burden” (significant difficulty or expense)
  - In that case, “alternative means of access” must be provided
  - Except for intelligence, command & control, weapons,…

Section 504

- Section 504 of US Rehabilitation Act of 1973
  - “No otherwise qualified handicapped individual in the United States…shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.”
ADA

  - Equal opportunity law for people with disabilities
  - Issues with screen readers
    - http://www.columbiaspectator.com/2012/02/09/exclusion-google-docs-avoids-ada-challenges
      - Notably, while LionMail Drive will be available for classroom use, because of the lack of access for certain types of disabilities, the University prohibits faculty from requiring it for any academic interaction. Requiring its use might exclude some students from full class participation and access to the full academic environment.

—Email from LionMail Team, July 9, 2014

ADA

EdX Online Accessibility Settlement Reached

By TAMAR LEWEN
APRIL 3, 2015

EdX, the nonprofit online-learning venture M.I.T. and Harvard formed in 2012, agreed to a settlement with the Department of Justice under which it will make its 450 massive open online courses accessible to blind and hard-of-hearing students, and to those with other disabilities, such as a tremor that makes it difficult to operate a mouse.

EdX did not admit any wrongdoing, and maintains that its online operations are not covered by the Americans With Disabilities Act. The settlement underscores the government’s policy of ensuring that online education is accessible to those with disabilities as on-campus education is.

http://www.nytimes.com/2015/04/03/us/online-accessibility-settlement-reached.html
Website Accessibility

- Website accessibility
  - Standards
    - Web Content Accessibility Guidelines (WCAG) 2.0
      - http://www.w3.org/TR/WCAG20/
    - Accessible Rich Internet Applications Suite
      - http://www.w3.org/WAI/intro/aria
  - Compliance analysis
    - http://wave.webaim.org

Situations differ

- Work ↔ Play
- Routine ↔ Emergency
- Individual ↔ Group
- Stationary ↔ Mobile
- Indoors ↔ Outdoors
Devices differ

- Old ↔ New (e.g., slow ↔ fast, less memory ↔ more memory)
- Disconnected ↔ High bandwidth connectivity
- Size, weight, shape, look, feel
- Display/Interaction
  - Small ↔ Large
  - One ↔ Many
  - Low res ↔ High res
  - Vertical ↔ Horizontal (↔ Wearable)
  - No touch input ↔ Multitouch (↔ 3D)
  - ...

Motorola Moto 360  Apple iPhone 6s  Apple iPad Pro  Samsung SUR40 for Microsoft Surface  

[External Link: http://www.dezeen.com/2014/01/31/google-glass-prototype-interview-lead-designer-isabelle-olsson/]