





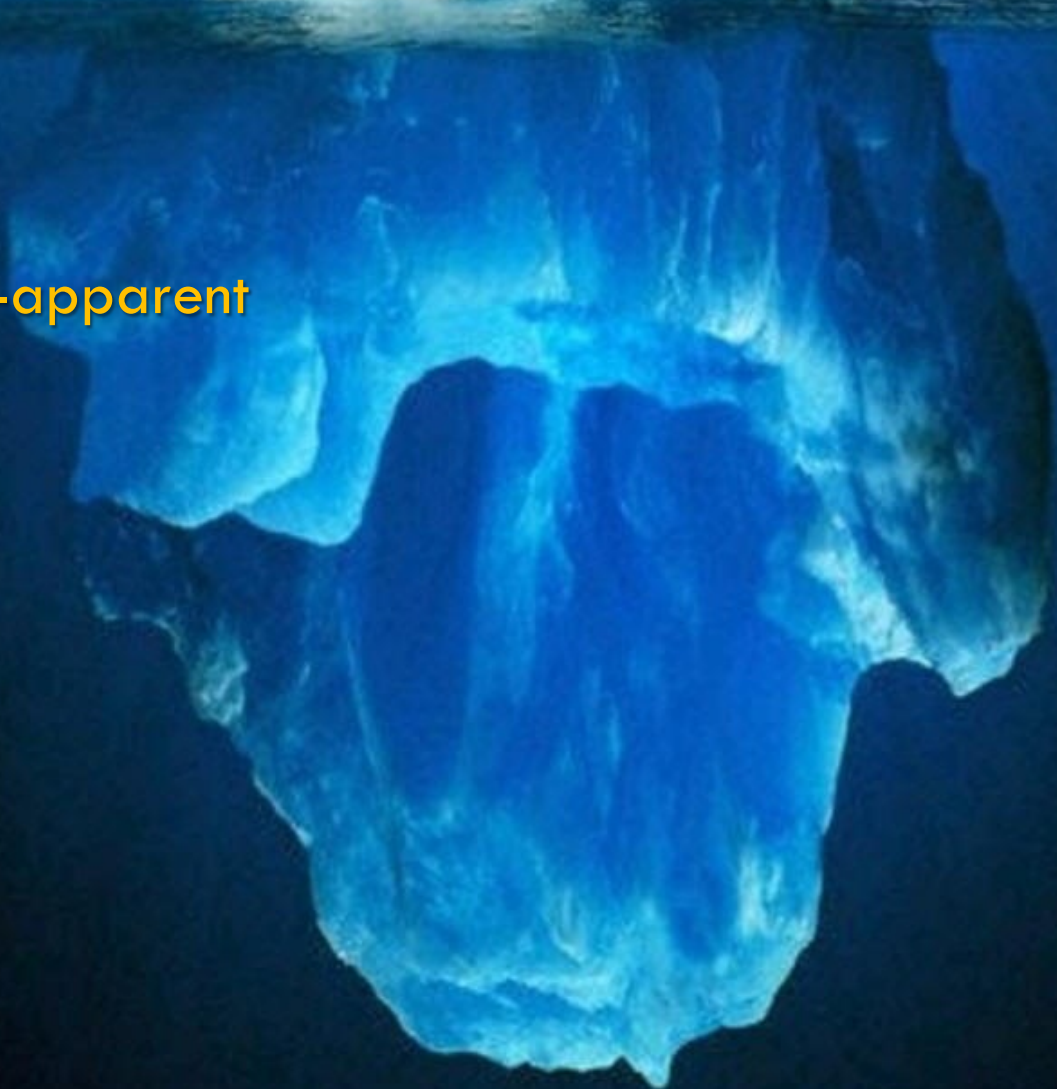




- Apparent disabilities



- Non-apparent



$\frac{2}{3}+$

# Types of Disabilities

- Apparent
- Mobility Impairments
  - Visual Impairments / Blindness
  - Hearing Impairments / Deafness

Non-  
apparent

- Learning Disabilities
- Attention Deficit Disorder (ADD/ADHD)
- Autism Spectrum Disorder
- Traumatic Brain Injury (TBI)
- Post Traumatic Stress Disorder (PTSD)
- Mental Illness

# Disabilities in Higher Education

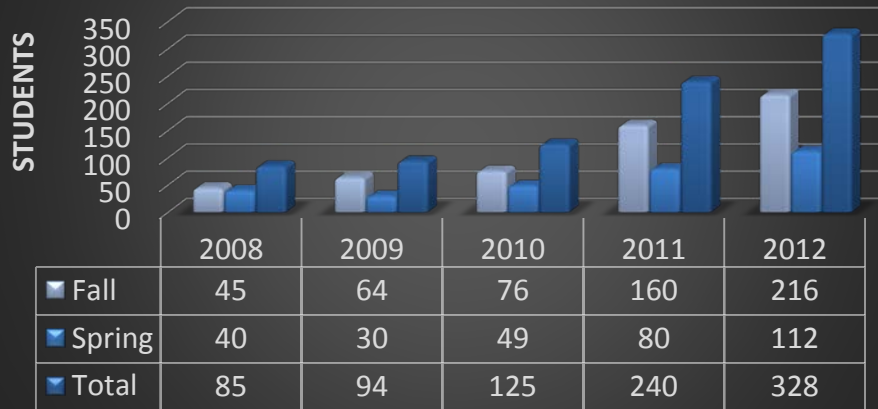
- Nationally, 11.3% of undergraduates report some type of disability<sup>1</sup>
- At Colorado State University<sup>2</sup>
  - 8%–11% report a disability
  - Non-apparent disabilities are the largest proportion and growing
  - Even among students who say they have a disability, many do not seek accommodations

• <sup>1</sup>National Center for Education Statistics, 2008; U.S. Government Accountability Office, 2009

• <sup>2</sup>Schelly, Davies & Spooner, *Journal of Postsecondary Education and Disability* (Feb. 2011)

# Students Seeking Services at CSU

## Students Identifying with RDS



## Students Identifying with the ATRC





# Department of Justice (DOJ): Setting a Standard

- We have a legal mandate to ensure electronic accessibility (ADA, as amended, Sections 504 & 508 of the Rehabilitation Act)
- Several universities recently faced legal action for course or other electronic materials that are not accessible, including
  - Penn State
  - UC Berkley
  - University of Colorado (2014)
  - Harvard & M.I.T. (2015)
- DOJ is setting standards for website and electronic materials in current settlement agreements (WCAG 2.0)

# Growing Need for Campus Involvement

- Steadily growing population of students with disabilities
- Diverse ways that students access electronic content, including
  - Course and Instructional Materials (Word documents, PDFs, PowerPoints, videos, podcasts, etc.)
  - Electronic Textbooks or Online Textbook Components
  - Electronic syllabi, quizzes, exams, homework, discussion boards
  - Websites
  - Content Management Systems (WordPress, etc.)
  - Mobile Devices
- Assistive technology is only as good content it must interact with
- It's going to take all of campus working together

# CSU Approach

- CSU is committed to being proactive in improving access to all electronic materials
- Electronic Accessibility Guidelines – Adopted by Faculty Council
  - Universal Design For Learning Strategy – benefits to all
  - Commitment to training for any and all individuals who create and work with websites and digital information, including faculty
  - Resources and tutorials made readily available at CSU website:  
[Accessibility By Design \(http://accessibility.colostate.edu/\)](http://accessibility.colostate.edu/)
- Guidelines are in the process of becoming Policy
  - Now is the time to prepare

# Universal Design

Universal design is the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

—Ron Mace, [UD Institute](#)



# Students Use Diverse Technology

- Mobile Devices
- Text-to-Speech Software (Listening to text)
- Voice Recognition Software (Dictation)
- Literacy Support Software (Study skills, highlighting, dictionaries, etc.)
- Screen Magnification (Low vision, Mobile devices)
- Screen Reader Software (Used by students who are blind)

# Universal Design in the Electronic World

- Can a wide variety of technologies interact with the electronic content?
  - **Not Automatically!**
- Content must be specifically designed to work with technology
- Adding steps to your workflow now is better than scrambling to fix a problem afterwards

# Top Steps for Materials that Work with Technology

## 1. Scanned PDFs – Image vs. Text

- Make PDFs Searchable
- Add Tags for Document Structure
- Check Reading Order

## 2. Use Headings & Layouts to Create Outline Structure

- Word
- Canvas
- Web Content
- PowerPoint

# More Steps for Materials that Work with Technology

## 1. Check Reading Order

- PDF
- PowerPoint

## 2. Provide Descriptive Alternate Text for:

- Images, Graphs, Charts
- Links
- Video or Content (Captions)



# Resources

CSU Online Resource featuring today's materials and more:

[Accessibility By Design Website](http://accessibility.colostate.edu)

<http://accessibility.colostate.edu>

## Other Online Tutorials and Resources

[The Access Project \(Step-by-Step Tutorials\)](http://accessproject.colostate.edu/udl)

<http://accessproject.colostate.edu/udl>

[WebAIM Tutorials](http://webaim.org)

<http://webaim.org>

[Atomic Learning](http://www.atomiclearning.com/highed/)

<http://www.atomiclearning.com/highed/>

Short Video Tutorials – Login Required (Contact ATRC for Access)

## Information on ATRC Services and Presentations

[ATRC Website \(http://www.atrc.colostate.edu\)](http://www.atrc.colostate.edu)

# Thank You!

Questions:

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