### Universal Design: The spoon

7 simple tips for more accessible Elearning

New: relevant links Google Doc

# What can we learn from universal design?

### Universal design

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.

NCSU v2.0: Bettye Rose Connell, Mike Jones, Ron Mace, Jim Mueller, Abir Mullick, Elaine Ostroff, Jon Sanford, Ed Steinfeld, Molly Story, and Gregg Vanderheiden

### **UD Principles**

- 1. Equitable
- 2. Flexible
- 3. Simple and Intuitive
- 4. Perceptible Information
- 5. Tolerance for Error
- 6. Low Physical Effort
- 7. Size and Space for Approach and Use

# Universal Design: Myth

"motivating fiction or tantalizing impossibility"

-Disrupting DH, Rick Godden and Jonathan Hsy, 1/6/2016

"Universal design is a process, a means rather than an end.

There's no such thing as a universally designed text.

There's no such thing as a text that meets everyone's needs.

That our webtext falls short is inevitable."



### Web accessibility

inclusive practice of **removing barriers** that prevent access to websites by people with disabilities.

#### Identity

As Robert McRuer notes, disability does not designate a subset of humanity but a spectral prospect that haunts everyone:

"If we live long enough, disability is the one identity that we all inhabit"

#### ...wait, let's enhance this.

### Identity

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### Activity

In your browser, try pressing control-minus or command+minus to make the text one level smaller.

Are you straining to read the text?
You may need to improve text readability.

## 1. Student advocates: Equitable use and empathy

### "I did then what I knew how to do. Now that I know better, I do better."

- attributed to Maya Angelou

### Change

"If you don't like something, change it. If you can't change it, change your attitude."



# "Empathy requires vulnerability, and vulnerability is what connects us most to each other in this world."

- Brené Brown

### Vulnerabilty

Empathy requires it



### Empathy

### The importance of listening



Activity (2 min): Think of one or two solutions with your neighbor:

How would you create an equitable learning environment for students with low internet access?

#### 2. Ask students about barriers

Use Qualtrics surveys, Google Forms, SurveyMonkey duke.qualtrics.com and use Embed code

Forums: Use the forums tool to promote discussion about ways to make the course more accessible

Suggest asking students at office hours

#### 3-5. Test and interact with your content

Keyboard test

Color contrast test

Captions test

Test, test, test!

### Testing: Keyboard support

Interaction on the site should be possible with Tab, Spacebar, and Enter.

### Activity (2 min)

Keyboard test
Try using Tab, Spacebar and Enter keys on your keyboard to navigate a website

### Testing: Color contrast

Interaction on the site should be possible with Tab, Spacebar, and Enter.

### Activity (2 min)

Colorblind test
Use http://www.checkmycolours.com/
to test your favorite website

### Other testing tools

https://validator.w3.org/

Add-ons: ChromeShades

http://www.checkmycolours.com/

Built-in accessibility tools

### 6. Provide missing information

Fill in the gaps!

Alt-text for images and hyperlinks

SensusAccess: Alternative media conversion from Duke SDAO

http://access.duke.edu/alternative\_media/

### The [blank] app

### Project Naptha



### The Blank App

Navigate to theblankapp.com



### "Our life is frittered away by detail... simplify, simplify."

- Henry David Thoreau

### 7. Remove unnecessary information

Eliminate distractions - reduce cognitive load

Remove tools you aren't using

In Sakai, Site Info-> Tools

Simplify resources: Consider pedagogical goals and edit content to support those goals

### **Example: News for Betty**

newsforbetty.com

#### News for Betty









Local



**Politics** 

Sports

#### **NY Times: Local**

U.S.

#### Metropolitan Diary: An Announcement at Fairway

**Business** 

A grocery shopper on the Upper West Side was amused when the store's loudspeaker broadcast a message to a customer from his wife.

Read more

World

### 7 simple tips

- 1. Speak up for equitable use and empathy
- 2. Ask your students about barriers
- 3. Test and interact with your content
- 4. Test and interact with your content
- 5. Test and interact with your content
- 6. Provide missing information
- 7. Remove extraneous tools and content



It isn't about the spoon, however... It is about solving problems. Let's make things possible together.

#### Thanks!

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...wait, let's fix this.



#### Thanks!

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much better!

