# Assessing Online Courses for ADA Accessible Design

Tyler Schaben, MS.Ed. and Kate Johansen, MS.

Follow along at:

https://tinyurl.com/USDLA-ADAppt

21 May 2019



## Introductions

Who are we?



Who are you?



Kate Johansen, MS

Tyler Schaben, MS. Ed

Instructional Designers at Creighton University



## Presentation Outline

- 1. Why worry about accessibility?
- 2. What should I look for when I assess my course for ADA accessible design?
- 3. How can I make my course more accessible?
  - What design elements should I use?
  - What tools are available?



# Can you think of a time when you may have benefited from accessible design?



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https://images.app.goo.gl/qgKspaNhoBYAcYi99



# Why Accessibility?

- All students can benefit from making a course accessible.
- Federal law
  - Between 2011- 2012, 11% of undergraduates surveyed by the US Dept. of Education reported having a disability.



## **Accessibility Laws**

- Sections 504 & 508 of the Rehabilitation Act
  - Prohibits discrimination on the basis of disability in programs and activities that receive federal funding.
- Title II of the ADA
  - Prohibits discrimination on the basis of disability in all public entities, including public colleges and universities, regardless of whether they receive federal funding.
- Title III of the ADA
  - Prohibits discrimination on the basis of disability in places of public accommodation, including private postsecondary institutions.



### **Terms**

 "Accessible" means a person with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner, with substantially equivalent ease of use.

– Source: <u>CAST.org</u>



### **Terms**

- Accommodations:
  - Auxillary aids and services
- Universal Design for Learning:
  - a research-based set of principles to guide the design of learning environments that are accessible and effective for all.



# Assessing Courses for ADA Accessibility Design

- What are we looking for?
- Web Content Accessibility Guidelines (WCAG 2.0)



#### **Perceivable**

"Information and user interface components must be presentable to users in ways they can perceive."



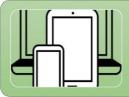
#### **Operable**

"User interface components and navigation must be operable."



#### **Understandable**

"Information and the operation of user interface must be understandable."



#### Robust

"Content must be robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies."

https://webaim.org/articles/pour/perceivable



# Assessing Courses for ADA Accessibility Design

- Course Accessibility Guidelines Quick Reference
  - ADA Accessibility Guide (Web Link)
  - https://tinyurl.com/USDLA-ADAdoc



## Audio/Video

- Provide captions or transcripts for videos
  - Captions better
- YouTube auto captions not good enough



https://images.app.goo.gl/iGJCc8Nc3dDKRagz7



# Font Styles

- Use easy to read fonts and good font size
  - -Good
    - Calibri
    - Arial (this PowerPoint uses Arial font)
  - -Bad
    - Comic Sans
    - · Ravie
    - And many more...

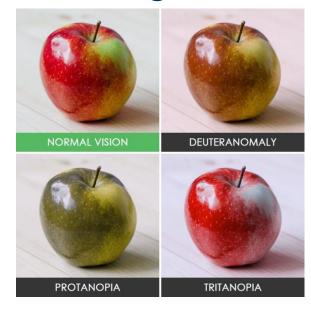


## Font Color

- Ensure good color contrast
- Color should not convey meaning



https://images.app.goo.gl/rghrmF9Er9UyqEVj8



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# Section Headings

Use built in headings and go in order

Heading Level 2

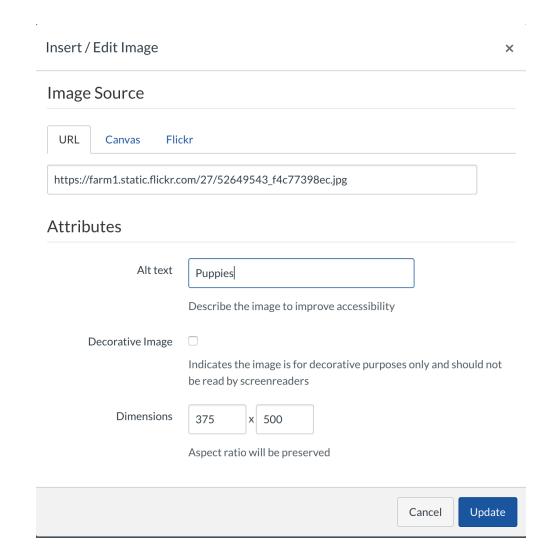
Heading Level 3

Heading Level 4



# **Images**

 Provide alt text for all images (less than 150 words)





## Link Text

- Avoid vague or repetitive link text such as "Click Here"
- Use language that makes sense out of context
  - Example: The <u>CNN Homepage</u> features numerous online news articles.



## Table Captions and Column Headings

- Do not use tables for design purposes
- Use headers and captions for tables

Course Gr	ading	Scale
-----------	-------	-------

Graduate Grade (350 Points)	Percentage
A	100-95%
В	94-86%
С	85-78%
F	<78%



# **Document Types**

- All documents should be accessible
  - Can you highlight text in a PDF?

GALILEO

our substance, which is the affection we call "heat." It will be pleasantly warm or unpleasantly hot depending upon the number and the velocity (greater or lesser) of these pricking, penetrating particles—pleasant if by their penetration our necessary perspiring is facilitated, unpleasant if their penetrating effects too great a divi-

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stone, piece of iron, or a stick, is what heats it, seems like an extreme vanity. But the friction produced when two hard bodies are rubbed together, which either reduces them to fine flying particles or permits the corpuscles of flame contained in them to escape, can finally be analyzed as motion. And the particles, when they encounter our

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# Assessing Courses for ADA Accessibility Design

- Example of bad online course design/set up (Easy level)
- What could be changed to make this page more accessible?



### Wilderness Survival 101- In the Desert!!!!!!!



## Lesson Objective (s):

1. Students, upon being dropped off in the desert for the desert field experience, will demonstrate their ability to survive by not dying after 36 hours.

2. Students will create a PowerPoint, to the best of their ability, that will include at least 5 wilderness survival skills that they used during their desert field experience.

#### Standards:

Click the following link for your standards-

https://drive.google.com/file/d/1M5BLGgXAwc\_Erv47uNOy-jkVZZ80TgrN/view &

#### **Activities:**

- 1. Prepare for your Desert field experience
- 2. Get your parental permission form signed for the Desert field experience
- 3. Collect gear for your Desert field experience... especially hydrating sun screen!
- 4. Read THIS D PDF

#### 7 Tips for Surviving in the Dessert

With summer approaching, many of us are already heading out onto the trails to make up for lost time during the winter.

If you live near a desert climate, or plan or exploring one this year, it's important to understand the environment. Here are a few essential survival skills that'll keep you alive if you get off trail.

#### Wilderness Survival 101- In the Desert

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#### Standards:

#### Activities:

- 1. Prepare for your Desert field experience
- 2. Get your parental permission form signed for the Desert field experience
- 3. Collect gear for your Desert field experience... especially hydrating sun screen!
- 4. Read the following document:

Desert Survival Tips (PDF)

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If you live near a desert climate, or plan or exploring one this year, it's important to understand the environment. Here are a few essential survival skills that'll keep you alive if you get off trail.

#### Make a Fire

While most folks see the desert as a barren wasteland of dry sand and dirt where the temperature never drops below 100 degrees, the truth is, it can get cold out there. In fact, it's not uncommon for desert climates to drop below freezing at night, especially in the spring. Making a fire (Web Link) at night will help you keep warm and also serve as a signal to rescuers trying to find you. Sage and dry brush make for good kindling, as do dry animal droppings.



# Assessing Courses for ADA Accessibility Design

- Example of bad online course design/set up (Designer level)
- What could be changed to make this page more accessible?



#### Overview

#### Topics and Professional Standards/Course Objectives

Topics (most important topics are in red)

- Special Education Processes
  - Screening (response to interventions)
  - Student assistance team
  - Multidisciplinary team
  - Individual educational plan
- Special Education Professionals
- Continuum of Service (Nebraska Levels)

#### Week 2 Objectives

- 1. The Teacher Candidate will understand the process a child must go through in order to receive special education services.
- 2. The Teacher Candidate will understand the professional's role in serving students who have been identified as having a special education label.
- 3. The Teacher Candidate will understand special education services in the State of Nebraska.

#### Standards

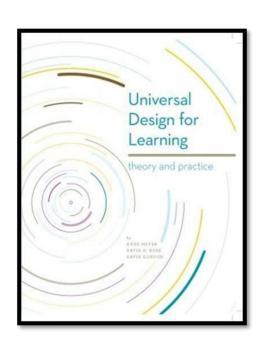
Standard	Lesson Objective
Standard 1	1;3
Standard 2	1;2;3

#### **Activities and Assignments**

- 1. Review- Week 2 Resources
- 2. Read- Chapter 2 from "Including students with special needs: A practical guide for classroom teachers." (7<sup>th</sup> Edition)
- 3. Complete- Construct an IEP Plan- Due Sunday

# Universal Design for Learning

- Universal Design for Learning: Theory and Practice
  - by David Gordon, Anne MeyerEdD, David H Rose EdD
  - Available through <u>Amazon</u> (Web Link)



CAST: <a href="http://udlguidelines.cast.org">http://udlguidelines.cast.org</a>



# Universal Design for Learning

3 primary networks

3 principles of UDL

3 sets of UDL guidelines

Chrissie Butler acknowledges the original images and ideas of Don Glass Creative Commons by-nc-sa/3.0



Representation

ways to present what we teach and learn.

Flexible



Action & expression

Flexible options for how we learn and express what we know.





**Engagement** 

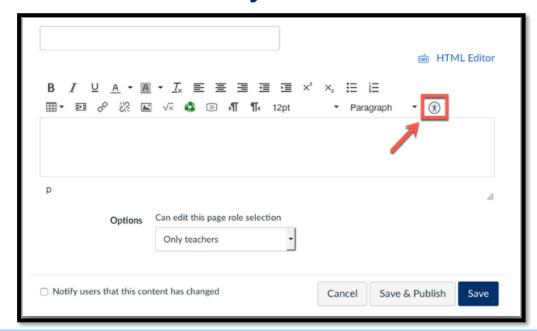
Flexible options for generating and sustaining motivation, the **Why** of learning.

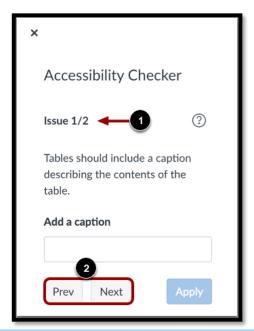
This Photo by Unknown author is licensed under CC BY-NC.



## Canvas Tools

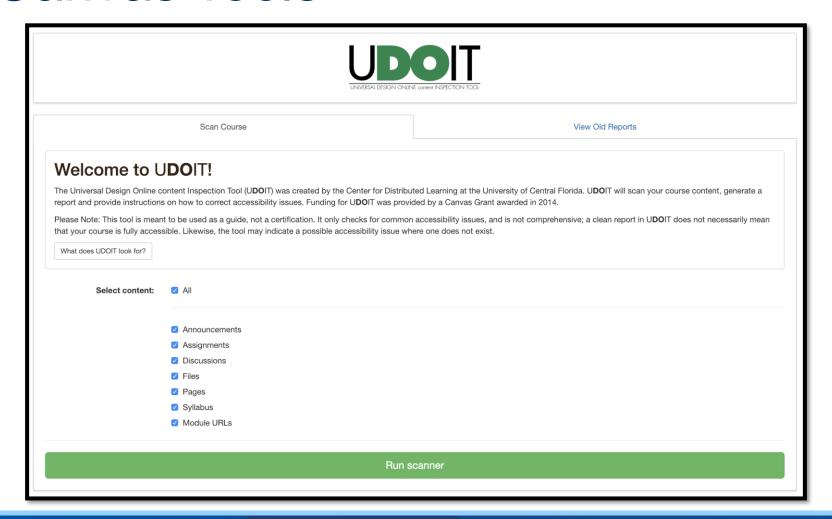
 Rich Content Editor includes an accessibility tool that checks common accessibility errors within the editor.







## **Canvas Tools**



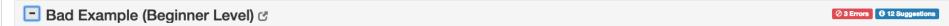


Files 0 of 0 have issues.

✓ No problems were detected in Files!

#### Pages 3 of 3 have issues.

process time: 1.44s





3x Insufficient text color contrast with the background

Text color should be easily viewable and should not be the only indicator of meaning or function. Color balance should have at least a 4.5:1 ratio for small text and 3:1 ratio for large text. Warning: using UFIXIT to fix one section of text may invalidate the contrast in nested sections of text that are not the same color.

View the source of this issue



View the source of this issue



View the source of this issue



12 Suggestions

2x Avoid using styles for document structure



## Canvas Tools

- Accessibility Within Canvas (Web Link)
- Canvas: General Accessibility Design Guidelines (Web Link)
  - Good and bad examples listed.



## Non-Canvas Tools

- Web Contrast Checker:
  - WCAG Contrast Checker (Web Link)
  - WebAIM Checker (Web Link)
- Accessibility within Blackboard (Web Link)
- D2L Brightspace accessibility checker (Web Link)







## Non-Canvas Tools

- CAST <u>Universal Design for</u> <u>Learning</u> (Web Link)
- IT Accessibility Checklist (Univ. Washington)
- <u>Semantic structure of Headers and Links</u> (WebAim website)







# **Key Takeaways**

- Understanding the importance of providing accommodations to make an online course accessible.
- Utilizing Universal Design for Learning principles can help comply with ADA standards and equitably deliver course content for the academic success of every student.
- Application of Canvas tools and freely available online resources can aid in the implementation of UDL into online course materials.



## Final Questions?



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