Accessibility Support Model: How a Large University Supports Diverse Learners Taking Online Courses

John Raible
Nancy Swenson

EDUCAUSE Learning Initiative
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Poll Question

What situation best describes your institution's online course accessibility support model?

• We have a working online course accessibility support model.
• We are in the process of creating a model.
• We are considering a model.
• No formal model in place for online. Handling on case by case basis as occurs.
Today we will be discussing:

- Online Learning at UCF
- Accessibility support model for online courses
- Tools to improve accessibility of online courses
Who We Are – CDL
Growth: Enrollment and Online Courses

- Fall 2010 – enrollment 56,241
  - 24,000 took at least one web or video-based course
  - 21% of UCF’s SCHs generated online
- Fall 2016 – enrollment 64,209
  - 44,000 took at least one web or video-based course
  - 39% of UCF’s SCHs are generated online
University Headcount: 64,209

- 97% Non Connected Students
- 3% Connected Students with Disability Office
University Course Sections: 7,072

- 60% Non Connected Students
- 40% Connected with Disability Office

Fall 2016
Fall 2016

All Faculty: 2,054

- Faculty teaching students connected with Disability Office: 71%
- Faculty without connected students: 29%
Fall 2016

Number of Students Per Course Section

Sections = 2816

<table>
<thead>
<tr>
<th>Students in a Course Section</th>
<th>Number of Course Sections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 10</td>
<td>45</td>
</tr>
<tr>
<td>7 to 10</td>
<td>87</td>
</tr>
<tr>
<td>3 to 6</td>
<td>569</td>
</tr>
<tr>
<td>2</td>
<td>624</td>
</tr>
<tr>
<td>1</td>
<td>1491</td>
</tr>
</tbody>
</table>
Course Modality Breakdown:
Sections = 2816

- Face-to-Face: 71%
- Online: 16%
- Blended: 11%
- Lecture Capture: 2%
Q & A Break
Need for Support Model

- Accommodations
  - Face to face – clear plan and procedures
  - Online – new way of providing accommodations
    - How and by whom was no longer clear
    - Requests handled on case-by-case basis
    - Increase in multimedia elements
    - Systematic process was needed
Campus Wide Initiative

- Senior level campus administrators
  - Meetings to identify roles and responsibilities
  - Message from Provost
- CDL
  - Researched what others were doing
  - Created a CDL Accessibility “Big Picture” Group
  - Identified media used by faculty online and typical accommodations requested
  - Identified internal workflow
- Student Accessibility Services (SAS)
  - Involved and consulted throughout
Online Course Accessibility Support Model

ACCESSIBILITY

UNIVERSAL DESIGN FOR LEARNING

PROACTIVE REQUESTS

IMMEDIATE NEED

Faculty Centric
Services Centric

UCF
Center for Distributed Learning
Universal Design for Learning Pillar

- Enable faculty to apply Universal Design for Learning (UDL) principles when developing new online courses
  - Address the needs of diverse learners
  - Less time spent retrofitting courses when accommodation requests are received
  - All students benefit (e.g., ESOL students benefit from video captions)
Integrate UDL in Professional Development

• Required
  • IDL6543 - to design and develop an M or W course
• Optional
  • Faculty Seminars in Online Teaching
  • Faculty Multimedia Workshop Series
  • Faculty Center for Teaching and Learning sessions
    • Course Improvement Project – UDL
  • Tech Time
  • Instructional Design Consultations
Integrate UDL in IDL6543

• Addressed throughout the course
• Online module on accessibility and UDL
• Project based course: Build Your Course Activity
  • Content, interaction, assessment
  • Accessible Content Formatting Guidelines
• One-on-one consultations with instructional designer
• Module and Course rubrics
• Peer Review
Proactive Requests

• Legacy Courses and Faculty
  • Attended faculty development years ago
  • Designing and developing courses for years
  • Adding their own content including media
Proactive Requests

• Address in two ways:
  • Faculty member requests course review for accessibility
  • Instructional Designer recommends course review for accessibility
Proactive Requests

- Services offered
  - **UDOIT** (Universal Deign Online Content)
    - Inspection Tool) for Canvas Users
  - Accessibility Evaluation of Content
    - Performed by Techrangers
    - Report provided to ID
    - ID and Faculty develop plan
  - IDL7000
Immediate Need

- CDL developed accommodation workflow
  - Identified responsibilities of CDL, SAS, faculty
  - Identified one team to coordinate all accommodation efforts (within CDL and with SAS)
  - Identified a point person within CDL coordinate all efforts inside and outside the unit
CDL Online Accessibility Accommodation Workflow

1. SAS emails faculty 4 weeks before classes begin to provide notice that a registered student with a disability is enrolled in the faculty’s online course. Email includes the following:
   a. The student’s accommodation(s).
   b. Link to appropriate online form for faculty to complete:
      i. Checklist for Accessibility Accommodation of Online Course Materials (Form B).
      ii. Checklist for Accessibility Accommodation of Online Course Materials (Form D).

2. Faculty responds to SAS and completes the online form by identifying course content.

3. CDL and SAS review the online form.

4. CDL screens online course materials for possible accommodations.

5. CDL consults with faculty and SAS to determine accommodation priorities.

6. CDL contacts faculty with proposed action plan and copies SAS.

7. CDL and SAS implement action plan:
   a. CDL contacts appropriate internal teams to review or modify documents and/or media that need to be made accessible e.g. CDL provides captions for videos.
   b. SAS provides transcripts or SRT files for media.

8. CDL sends faculty a summary of completed course accommodations and copies SAS.

9. Faculty reviews changes and submits follow-up requests as needed.

Center for Distributed Learning
Benefits of Online Course Accessibility Support Model

- Improved Communication Across Campus
  - Regular meetings
    - Within CDL
    - All units who support faculty to discuss accessibility
      - SAS, CDL, Faculty Center, and Office of Instructional Resources
- Benefits of meetings
  - Identify potential problem areas
  - Improve processes
  - Increase efficiency
- Increased Faculty Awareness
Q & A Break
Poll Question

What type of tools are available to assist faculty with online course accessibility? (Check all that apply)

- Individual off the shelf vendor products
- Institution-wide vendor software
- Open source software
- In-house created software
Tools To Improve Accessibility of Online Courses

- Executive Information System
- Proactive Captioning
- Quiz Extensions
- UDOIT
Executive Information System (EIS)

• Add accessibility information to existing reporting system (see resources slide)

• SAS provided access to data in student information system

• Paired enrollment, faculty records, student disability/accommodation information
Executive Information System (EIS)

- Ability to generate charts/graphs and track over time
- Efficient and secure transfer of sensitive information
<table>
<thead>
<tr>
<th>Name</th>
<th>Subject</th>
<th>Catalog</th>
<th>Section</th>
<th>Mode</th>
<th>Designer</th>
<th># Students</th>
<th>Accommodations(#)</th>
<th>Diagnoses(#)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abdallah, Nazih</td>
<td>CGS</td>
<td>2100C</td>
<td>0W61</td>
<td>WW</td>
<td></td>
<td>9</td>
<td>Test Accommodations (9) Notetaker (6) Other Special Needs (2)</td>
<td>Attn Deficit Hyperactivity Dis (2) Specific Learning Disability (6) Blind/Low Vision (1) Psych/Emotional/Behavioral (2) Speech/Language (1)</td>
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<tr>
<td>Ackley, Timothy</td>
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<td>4603</td>
<td>0W61</td>
<td>WW</td>
<td>Howard, Wendy</td>
<td>2</td>
<td>Test Accommodations (2) Alternative Reading Formats (1) Absence Letter (1)</td>
<td>Attn Deficit Hyperactivity Dis (1) Psych/Emotional/Behavioral (1) Other Health Disabilities (1)</td>
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<tr>
<td>Adams, Kenneth</td>
<td>CCJ</td>
<td>4054</td>
<td>0W61</td>
<td>WW</td>
<td>Swenson, Nancy</td>
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<td>Test Accommodations (1) Notetaker (1) Alternative Reading Formats (1) Tape Recorder for Class Notes (1)</td>
<td>Blind/Low Vision (1)</td>
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<tr>
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<td>AMH</td>
<td>2020</td>
<td>0W58</td>
<td>WW</td>
<td>Bauer, Sue</td>
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<td>Test Accommodations (2) Notetaker (1) Tape Recorder for Class Notes (2) Alternative Reading Formats (1) Other Special Needs (1)</td>
<td>Specific Learning Disability (1) Attn Deficit Hyperactivity Dis (2)</td>
</tr>
</tbody>
</table>
Proactive Captioning

• Contracted with 3Play media to caption existing online course videos hosted on Vimeo. Paid by DL fee.

• Used Vimeo API to check for captions, calculate length of video, download, and upload caption track

• Bulk upload to 3play via FTP

• Download text transcripts, captions in .SRT and .VTT

• Upload captions to Vimeo via API.
Quiz Extensions

- 5 students, 15 quizzes
- Calculate “double time”
- 5-7 clicks per student, per quiz
- Minimum 375-400 clicks to add all extensions to course
- Quiz Extensions reduces to 7-10 clicks
Quiz Extensions

• One stop shop to add more time to all existing quizzes/tests

• Custom LTI developed for Canvas

• Pilot Spring 2016, launched Summer 2016

• Overwhelming positive faculty response

• Licensing available (free to public institutions): francisca@ucf.edu
Quiz Extensions

This tool will apply extra time to all existing quizzes/exams. For example, Suzy Johnson and Stephen Smith need double time. Select the students below and choose the appropriate amount of extra time e.g., double (2x).

If additional quizzes/exams are added after, please repeat the process. This will replace any individual existing time extensions. Additional help can be found at the Webcourses@UCF Support website.

Selected Students

Armato, Michael
Ash, Konstantin
Atkins, Danielle
Bencaz, Nic
Bricker, Todd
Buckingham, Gregg
Bush, Mark
Cheong, Caroline
Diaz, Desiree
Douglas, Pamela
UDOIT

- Scans a course and generates a report of HTML accessibility issues based off of WCAG 2.0 standards
- UFIXIT: provides an ease way for faculty to correct common accessibility errors
- Released open-source May 2015
- Only works for Instructure Canvas
- http://online.ucf.edu/udoit
Welcome to UDOIT!

The Universal Design Online content Inspection Tool (UDOIT) was created by the Center for Distributed Learning at the University of Central Florida. UDOIT will scan your course content, generate a report and provide instructions on how to correct accessibility issues. Funding for UDOIT was provided by a Canvas Grant awarded in 2014.

Please Note: This tool is meant to be used as a guide, not a certification. It only checks for common accessibility issues, and is not comprehensive; a clean report in UDOIT does not necessarily mean that your course is fully accessible. Likewise, the tool may indicate a possible accessibility issue where one does not exist.

What does UDOIT look for?

Select content:  
- All
- Announcements
- Assignments
- Discussions
What accessibility issues does UDOIT look for?

**Errors**
- Links should contain text
- No Alternative Text found
- Alternative Text should not be the image filename
- Alternative Text is more than 100 characters
- Alt text for all img elements used as source anchors should not be empty
- No table headers found
- No row or column scopes declarations found in headers of the table
- Insufficient text color contrast with the background
- Multimedia objects should have text equivalents (e.g., transcripts)

**Suggestions**
- Avoid the use of animated GIF’s
Welcome to UDOIT!

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What does UDOIT look for?

Select content:  
- All

  - Announcements
  - Assignments
  - Discussions
  - Files
  - Pages
  - Syllabus
  - Module URLs

Run scanner
Welcome to the Test Course!

6 Errors

1. Image elements should have an "alt" attribute
   Alternative Text (Alt Text) is an alternative (non-visual) way to describe the meaning of an image. Please provide a brief (under 100 characters) description of the image for a screen reader user. Note: It should not be the image file name.
   1. View the source of this issue
   U FIX IT!

2. No table headers found
   Add a table header because it provides a description of the table structure for sighted and screen reader users.
   1. View the source of this issue
   U FIX IT!

3. Links should contain text
   Because many users of screen readers use links to navigate the page, providing links with no text (or with images that have empty 'alt' attributes and no other readable text) hinders these users.
   1. View the source of this issue
   U FIX IT!

4. 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
Image elements should have an "alt" attribute

Alternative Text (Alt Text) is an alternative (non-visual) way to describe the meaning of an image. Please provide a brief (under 100 characters) description of the image for a screen reader user. Note: It should not be the image file name.

1. Close this view

Source

**Links should contain text**

Because many users of screen readers use links to navigate the page, providing links with no text (or with images that have empty 'alt' attributes and no other readable text) hinders these users.

1. **Close this view**

**Source**

Line 9: `<a href="https://techrangers.cdl.ucf.edu/"></a>`

**Close this view**

**Delete this Link completely instead**

Submit

---

**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.

1. **View the source of this issue**

---

**Synchronized captions** should be provided for prerecorded web-based video

Captions should be included in the video to provide dialogue to users who are hearing impaired.

1. **View the source of this issue**

2. **View the source of this issue**
1. **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.

   1. Close this view

   **Preview**
   ask them after the presentation.

   **Source**
   Line 6: <span style="color: #ff0000;">ask them after the presentation.</span>

   Close this view

   **Replace Foreground Color #ff0000 X Ratio Invalid (4.00:1)**
   
   #ff0000
   
   □ Make this text bold □ Make this text italicized

   **Foreground Color Palette**

   ![Color Palette]

   Submit

2. **Synchronized captions should be provided for prerecorded web-based video**
   Captions should be included in the video to provide dialogue to users who are hearing impaired.

   1. View the source of this issue
   2. View the fix of this issue
UCF Resources

- UCF Provost letter
- EIS Paper
- Accessible Content Formatting Guidelines
- Faculty Seminars in Online Teaching
- Faculty Multimedia Workshop Series
- CDL's Professional Development Offerings
- UDOIT
UDL Resources

- **DO-IT**
  - Universal Design in Education: Principles and Practices
  - Checklist for Inclusive Teaching
  - The Center for Universal Design in Education
- **CAST**
  - UDL Wheel
  - UDL Guidelines Version 2.0
- **WebAim**
- **CANnect**
- **EnACT UDL Syllabus Rubric**
- **IT Accessibility Policies in Higher Education**
- **UDL: A Systematic Approach to Supporting Diverse Learners**
Contact

• John Raible
  • John.Raible@ucf.edu
  • @rebeleade

• Nancy Swenson
  • Nancy.Swenson@ucf.edu