Best Practices in Accessibility for Online Learning

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Overview

• Laws Related to Accessibility
• Challenges/Opportunities
• Accessibility Support Model
• Best Practices
• Future Trends
Laws Related to Accessibility

- Rehabilitation Act of 1973
  - Section 504 and Section 508
- Americans with Disabilities Act 1990
  - Title II and Title III
    - Includes Programs offered on the Internet (e.g., Online Courses)
Challenges/Opportunities
Growth

- Over 59,000 students in 2013
- 34% of all student credit hours are online
- Increased number of students with disabilities
  - Entering UCF
  - Taking online courses
Diversity of Learners at UCF

Number of Students Registered with SDS at UCF by Year

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>359</td>
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<tr>
<td>2005</td>
<td>591</td>
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<tr>
<td>2006</td>
<td>620</td>
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<tr>
<td>2007</td>
<td>641</td>
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<tr>
<td>2008</td>
<td>609</td>
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<tr>
<td>2009</td>
<td>748</td>
</tr>
<tr>
<td>2010</td>
<td>806</td>
</tr>
<tr>
<td>2011</td>
<td>800</td>
</tr>
<tr>
<td>2012</td>
<td>907</td>
</tr>
</tbody>
</table>
Challenges

- Increased
  - Number of online courses
  - Use of media
  - Number of students with disabilities
  - Need for Accommodations
- Limited Resources
  - Funding and services
Need for Support Model

- Face to Face
  - clear plan and procedures
- Online
  - How and by whom was no longer clear
  - Requests handled on case-by-case basis
  - Increase in multimedia elements
  - Systematic process was needed
Senior level campus administrators
  - Meetings to identify roles and responsibilities
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
SDS
  - Involved and consulted throughout process
Provost letter (August 2011)

- Faculty Responsibility
  - Provide ADA compliant course materials
- Student Disability Services
  - Provide transcripts for audio portions of media
- Center for Distributed Learning
  - Provide captions for video materials (copyright)
  - Continued support to provide accessible course pages
Online Course Accessibility Support Model

- Faculty Centric
- Services Centric
- Universal Design for Learning
- Proactive Requests
- Immediate Need
Universal Design for Learning
UDL Defined

- A set of principles for curriculum development that give all individuals equal opportunities to learn.

- UDL provides a blueprint for creating instructional goals, methods, materials, and assessments that work for everyone—not a single, one-size-fits-all solution but rather flexible approaches that can be customized and adjusted for individual needs.

cast.org
Applying UDL Principles

- 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)
Why Apply UDL?

- Addresses diverse student population
  - Physical differences
  - Visual differences
  - Cognitive differences
  - Hearing differences
  - Learning differences
  - Attention differences
  - Age differences
  - Language differences
## Diversity of Learners at UCF

<table>
<thead>
<tr>
<th>Disability Category</th>
<th>Fall 2004</th>
<th>Fall 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attention Deficit</td>
<td>129</td>
<td>338</td>
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<tr>
<td>Learning Disability</td>
<td>125</td>
<td>317</td>
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<tr>
<td>Hearing Disability</td>
<td>20</td>
<td>41</td>
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<tr>
<td>Mobility Disability</td>
<td>42</td>
<td>39</td>
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<tr>
<td>Physical Disability</td>
<td>27</td>
<td>97</td>
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<tr>
<td>Speech Disability</td>
<td>4</td>
<td>7</td>
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<tr>
<td>Visual Disability</td>
<td>23</td>
<td>40</td>
</tr>
<tr>
<td>Multiple Disabilities</td>
<td>68</td>
<td>262</td>
</tr>
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Integrate UDL in Professional Development

• IDL6543
  • Online module on accessibility and UDL
  • Project based course: Build Your Course Activities
  • One-on-one consultations with instructional designer
  • Module and Course rubrics
Integrate UDL in Professional Development (Cont’d)

- Supplemental
  - Faculty Seminars in Online Teaching
  - Faculty Multimedia Workshop Series
  - Tech Time
  - Instructional Design Consultations
  - Faculty Center for Teaching and Learning sessions
Proactive
Proactive Requests

Legacy Courses and Faculty

- Attended professional development years ago
- Designing and developing courses for years
- Adding their own content including media that has developed over the years
Proactive Requests

Address in two ways

- Faculty member requests course review for accessibility
- Instructional Designer recommends course review for accessibility

Services offered

- Accessibility Evaluation of Content
  - Performed by Techrangers
  - Report provided to ID
  - ID and Faculty member develop a plan
Immediate Need Pillar

ACCESSIBILITY

UNIVERSAL DESIGN FOR LEARNING

PROACTIVE REQUESTS

IMMEDIATE NEED

Faculty Centric

Services Centric
Immediate Need

• Students that need accommodations for the upcoming semester.

• UCF Online Accessibility Accommodation Workflow
  • Identified tasks and responsibilities of CDL, SDS, faculty
UCF Online Accessibility Accommodation Workflow

1. SDS emails faculty 4 weeks before classes begin to provide notice that a student with a disability is enrolled in the faculty’s online course. Email includes the following:
   a. The student’s disability
   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 SDS and completes the online form.

3. CDL reviews the online form.

4. CDL screens online course materials for possible accommodations.

5. CDL consults with SDS to determine accommodation priorities.

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

7. CDL and SDS implement action plan:
   a. CDL contacts appropriate internal teams to review or fix documents and/or media that need to be made accessible
   b. SDS provides transcripts for media

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

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

More efficiency in meeting the needs of Students with Disabilities

Improved Communication Across Campus
  • Regular meetings
    • Within CDL
    • All units who support faculty to discuss accessibility
      • SDS, CDL, Faculty Center for Teaching and Learning, and Office of Instructional Resources
  • Benefits of meetings
    • Identify potential problem areas
    • Improve processes
    • Increase efficiency

Increased Faculty Awareness
Best Practices
“Ensuring equal access to emerging technology in university and college classrooms is a means to the goal of full integration and equal educational opportunity for this nation’s students with disabilities.”

DCL
Electronic Book Reader
Always…

- Create accessible course pages
- Add/create accessible media
- Provide professional development opportunities
Accessible Course Materials

- Course Pages
  - HTML
  - MSWord
  - PDF documents

Accessible Media

- PowerPoint
  - Add alternative text to graphs, photos, other images
- Narrated PowerPoints/Screencasts
  - Use Camtasia, Captivate, or other accessible software
  - Create transcripts/add captions
- Video Conferencing Tools
  - Caption live (e.g., Adobe Connect)
  - Caption later (e.g., Tegrity)
Accessible Media: Videos

• Self-Created Videos
  • Create transcripts
    • Ensures important points are covered
    • Easy to make updates/edits
    • Easy to add captions
Free Captioning Programs

- Do-It-Yourself Caption Systems
  - YouTube Self-Captioning Service/Amara
    - http://amara.org/en/
- Automatic Captioning
  - YouTube Auto Captioning
    - https://support.google.com/youtube/answer/3038280?hl=en
Accessible Media: Videos

- Commercially Available
  - Search for videos with captions
  - Check your Library for captioned resources (e.g., Swank Motion Pictures)
Future Trends
“Technological innovations have opened a virtual world of commerce, information, and education to many individuals with disabilities for whom access to the physical world remains challenging.”

DCL
Electronic Book Reader

Center for Distributed Learning
Continued Increase In...

- Overall Student Enrollment
- Students with Disabilities
- Need for Accommodations
- Use of Complex Media/Technology
Continued Increase in Use of...

- Mobile Smart Phones
  - iPhone, Android, Windows Phone
- Tablet Computers
  - iPad, Android Tablet, Surface
- E-book Readers
  - iPad, Kindle, Nook
Web Accessibility

- HTML5
  - Makes it possible to embed video, audio, charts, animations without using any plugins or third party programs
  - Turns the browser into a media player
  - Native controls (in browser) so they are accessible
- ARIA
  - Improves the way screen readers read the information to the user
  - Increases overall web accessibility for screen reader users
Adaptive Learning Products

- Infrastructure - No Content Provided
  - Realizeit
  - KNEWTON (Pearson)
- Infrastructure - Content Provided
  - Adaptcourseware (Pearson)
  - ALEKS (McGraw Hill)
  - MindEdge
Internet Trends

- MOOCs
- Flipped Classrooms
- Cloud Programs
  - Google
  - MicroSoft Office 365
Social Media

• Facebook
• Twitter
• LinkedIn
“...the Department encourages schools to employ innovative learning tools. Because technology is evolving, it has the capability to enhance the academic experience for everyone, especially students with disabilities. Innovation and equal access can go hand in hand.”
Tips and Strategies

- Develop a plan to address accessibility
- Assign a Coordinator
- Provide resources for faculty
- Reach out to faculty by providing training
- Promote UDL
- Hire a student to help as a Usability Checker
- Search and purchase accessible software/technology
- Include accessibility seamlessly into research, conferences, pilot studies
- Provide short professional development opportunities
UCF Resources

- Provost letter
- Accessibility Tips
- Creating Accessible Course Content
- Document Formatting Guidelines
- IDL6543 Module and Course rubrics
- Faculty Seminars in Online Teaching
- Faculty Multimedia Workshop Series
- Professional Development Pathways
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
  - Seven Principles of Universal Design
- EnACT UDL Syllabus Rubric
Adaptive Learning Resources

- RealizeIT
  - http://realizeitlearning.com/
- Knewton
  - http://www.knewton.com/platform/
- Adapt Courseware
  - http://adaptcourseware.com/
- ALEKS
  - http://www.aleks.com/
- MindEdge
  - www.mindedge.com/
Questions?
Thank you & Contact us!

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