Accessibility in Distance Education Training

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Today’s Agenda

• Overview of Distance Education, Accessibility and Universal Design
• Overview of Asynchronous Tools
• Overview of Synchronous Tools
• Overview of Collaboration Tools
• Overview of Document, Presentation and Simulation Tools
• Questions
So Many Terms

- Distance Education / E-Learning
- Universal Design for Learning
- Accessibility (Accessible/Adaptable)
- Assistive Technology
Distance Education

- The instructor and student(s) are separated by distance
- The instruction is delivered via print, voice, video, and/or computer technologies
- The communication is interactive in that the student receives support and feedback from the instructor. The feedback may be immediate or delayed.

From: http://fcit.usf.edu/distance/chap1.htm
Types of Instruction

• Synchronous: instruction occurs in real time
  – Video conference
  – Web conference
  – Audio conference

• Asynchronous: instruction that does not occur in real time, available at time/location of students’ choice.
  – Correspondence courses (CD’s, print)
  – Email
  – Web-based
Universal Design

Universal Design for Learning (UDL) is an approach to teaching, learning, curriculum development and assessment that uses new technologies to respond to a variety of individual learner differences. IDEA 2004 defines Universal design using the same definition as the Assistive Technology Act of 1998, as amended, 29 U.S.C. 3002. (34CFR§ 300.44):

“The term `universal design' means a concept or philosophy for designing and delivering products and services that are usable by people with the widest possible range of functional capabilities, which include products and services that are directly accessible (without requiring assistive technologies) and products and services that are interoperable with assistive technologies.” (Section 3(19) of Assistive Technology Act as amended in 2004)
Who Benefits from Curb Cuts?

- A blind woman waiting to cross the street.
- A woman with a stroller walking up a sidewalk.
- Children crossing the street at the corner.
- Wheelchair accessible walkway and steps.
- An accessible playground.

Slide taken from UDL Module Presentation developed by Dr. Brown and Dr. Conway from U. of Hawaii
What Do You Notice that May Pose a Problem When Viewing this Footage?

A male news anchor telling of a wanted rapist. He shows a composite of the fugitive in the background that looks like the news anchor.

A female news anchor reporting the news.

Randy, Paula, and Simon from American Idol TV show are having a discussion.

Slide taken from UDL Module Presentation developed by Dr. Brown and Dr. Conway from U. of Hawaii
Who Benefits from Closed Captioning?

A singer performing a song with closed captioning of the song.

A man signing.

Cartoon with closed captioning.

Slide taken from UDL Module Presentation developed by Dr. Brown and Dr. Conway from U. of Hawaii
Accessibility

Accessible

1. providing access

2. a : capable of being reached <accessible by rail>; also : being within reach <fashions at accessible prices>
b : easy to communicate or deal with <accessible people>

3. capable of being influenced : OPEN <accessible to new ideas>

4. capable of being used or seen : AVAILABLE <the collection is not currently accessible>

5. capable of being understood or appreciated <the author's most accessible stories> <an accessible film>

http://www.merriam-webster.com/dictionary/accessibility
Assistive Technology

(A) In general.--The term `assistive technology device' means any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of a child with a disability.

(B) Exception.--The term does not include a medical device that is surgically implanted, or the replacement of such device.

http://idea.ed.gov/explore/view/p/,root,statute,l,A,602,1
Assistive Technology - Examples

• **No Tech/Low Tech:** Typically low cost, non-electronic devices that are easy to use
  – Bathtub grab bars
  – Manual communication boards
  – Large print books
  – Pencil grips

• **Mid-Tech:** Typically low to moderately priced, battery-operated or "simple" electronic devices that are easy to program and require minimal training
  – Digital recorders
  – Adapted keyboards
  – Talking watches
  – Special lighting

• **High-Tech:** Fairly expensive devices that contain microcomputer components for storage and retrieval of information. They typically require extensive training and to successfully operate.
  – Screen reading software
  – Computer systems
  – Note-taking devices
Advertised Benefits of Distance Education

- Flexibility to take courses at your leisure and at any time of day or night (Class in your PJs)
- Self paced to learn at your comfort level
- Options to earn a full degree, become certified in a specific area or simply attend a class
- Time saved with no commute or hassles of parking
- Multiple styles to learn in a way that’s best for you, whether you are a “visual learner” or prefer a traditional “lecture style”
- Knowledgeable instructors who not only teach the latest in [content area], but do so in a way that’s practical and easy to apply professionally

Benefits of Accessibility within Distance Education

- Allowing students to work at their own pace and in their own environment makes them more comfortable even when using AT.

- Not having to self disclose and still be a equal participating student.

- Large amount of resources can be found and used in one location.

- Electronic Resources – ease of use with AT (more accessible than a paper copy)

- More independent for those needing alternative modes of transportation.

- Equivalent interaction of all individuals (ex: someone who is deaf could still actively participate in the same manner without an interpreter for class discussion)

- Increased physical and emotional comfort.
Why Distance Education Should Be Made Accessible

• Cliché, but correct answer: Because it’s the law!!
  – ADA/Section 508
  – Helps Mason comply with Federal, State, and Local government standards (i.e., Penn State, Arizona State, Google Apps for Education)
    • Penn State – library’s online database, Angel LMS, departmental websites, “smart” podiums, ATMs
    • Arizona State (settled Jan. 2010) – Kindle Reader pilot
    • Google (initiated March 2011)
    • About a year ago DOJ under ADA created a settlement agreement with Fairfax County, VA to ensure accessibility of both physical and online material.

• Other reasons:
  – Reaches a wider audience (i.e., captioning, non-traditional users, ESL)
  – Search engine optimization favors accessible websites
  – Mobile phone access
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<tr>
<th>Law</th>
<th>Applies to</th>
<th>Mandates</th>
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<tr>
<td>Section 504</td>
<td>Federal, State and Local government, Educational agencies, Companies (Corporate – Private), any facility receiving Federal funds</td>
<td>No otherwise qualified individual with a disability shall, solely by reason of his/ her disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity of a public entity.</td>
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<tr>
<td>Section 508</td>
<td>Federal entities and States that have adopted similar regulations</td>
<td>Requires that any electronic and information technology (EIT) procured, developed, used or maintained by Federal agencies must be accessible to employees and members of the public with disabilities, unless an undue burden would be imposed on the agency. Section 508 was enacted to: 1) eliminate barriers in information technology, 2) make available new opportunities for people with disabilities, and 3) encourage development of technologies that will help achieve these goals.</td>
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### ADA/VITA

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<tr>
<td>Americans with Disabilities Act (ADA)</td>
<td>Unlike section 504 of the Rehabilitation Act of 1973, which only covers programs receiving Federal financial assistance, title II extends to all the activities of State and local governments whether or not they receive Federal funds.</td>
<td>May not refuse to allow a person with a disability to participate in a service, program, or activity simply because the person has a disability. Must provide programs and services in an integrated setting, unless separate or different measures are necessary to ensure equal opportunity.</td>
</tr>
<tr>
<td>Virginia Information Technology Accessibility Standard (GOV 103-00)</td>
<td>All Commonwealth of Virginia Executive Branch agencies and institutions of higher learning.</td>
<td>Outlines the minimum accessibility requirements for procurement, development, or maintenance of electronic and information technology systems. The Standard also requires that Commonwealth of Virginia (COV) employees with disabilities and members of the public with disabilities have access to and use of information and data comparable to the access and use of Commonwealth employees and the public who do not have disabilities.</td>
</tr>
</tbody>
</table>

Find out about your state: [http://accessibility.gtri.gatech.edu/sitid/stateLawAtGlance.php](http://accessibility.gtri.gatech.edu/sitid/stateLawAtGlance.php)
## Accessibility: Face-to-Face vs. Distance

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<th>Face-to-Face</th>
<th>Distance</th>
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<tr>
<td>Accommodations are given on individual basis</td>
<td>Courses are considered online and fall under Web Accessibility standards</td>
</tr>
<tr>
<td>Students must self disclose to receive alternative material</td>
<td>Universal Design includes accessibility as a whole – not individual</td>
</tr>
<tr>
<td>Physical Classroom accessibility</td>
<td>Application accessibility is a must for class participation</td>
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</table>
Overall Usability Considerations

- Ensure the application being used is accessible (for example AT users need to access all areas of the course – screen sharing, document camera, audio, etc.)

- Ensure you use videos that are captioned and/or audio described.

- Create Accessible Documents
  - Text should be legible and re-sizeable
  - 14 point font size is ideal
  - Using a clear sans serif font such as Helvetica or Arial
  - Images should be labeled/described
Disability Specific Design Considerations

- **Visual**
  - Images should be optimized and include descriptive “alt” tags
  - Description of the file you have uploaded
  - Text description provides access to understanding what is being conveyed
  - Brief, clear, and contextual
  - Use of color should add interest and indicate interface choices, but should not disadvantage those with color blindness
    - White text on a black background is usually best

- **Learning/Mobility/Visual/Other**
  - Alternative formats of materials for students who require them (e.g. optional print packet of extensive online reading materials, CD of audio clips)
  - OCR provides students an accommodation to receive these materials in an accessible electronic format
    - We cut, scan, and re-format!

- **Hearing/ESL/Learning**
  - Captioned video or transcribed audio
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Asynchronous Web Conferencing Tools

- Blackboard
- Moodle
- Desire2Learn
- Canvas

- Designed for self-paced, long-term instruction and content management
Blackboard

• Blackboard® is usable and accessible. The National Federation of the Blind (NFB) recently awarded Blackboard Learn™, Release 9.1 with a Nonvisual Accessibility Gold Certification, making it the first learning management system to achieve certification. Blackboard measures and evaluates accessibility levels using two sets of standards: the Web Content Accessibility Guidelines (WCAG) issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the Untied States federal government.
Moodle

• Moodle has an accessibility specification that has been developed by accessibility experts and Moodle developers at the Open University (OU), UK. The OU has adopted Moodle as a core component of its VLE and is contributing to the continued Open Source (OS) development of Moodle. Accessibility is an important for the OU because: it currently has over 9,300 disabled students; it has long standing aspirations to promote widening participation in higher education; and because of its legal obligations. Further, it is important for the whole Moodle community.

• http://docs.moodle.org/dev/Moodle_Accessibility_Specification
#Moodle_Accessibility_Specification
The **Web Accessibility Initiative (WAI)** led by the World Wide Web Consortium (W3C) is widely regarded as the leading standard on web accessibility. At Desire2Learn we use WAI guidelines, such as the **Web Content Accessibility Guidelines 2.0 (WCAG 2.0)**, **Authoring Tool Accessibility Guidelines 2.0 (ATAG 2.0)** and **Accessible Rich Internet Applications Suite (WAI-ARIA)** to ensure our designs are consistent with international objectives. Focusing on international standards ensures that we are part of a greater accessibility initiative aimed at improving support across platforms and assistive technologies.

- [http://presentations.cita.illinois.edu/2011-03-csun-lms/desire2learn.html#login](http://presentations.cita.illinois.edu/2011-03-csun-lms/desire2learn.html#login)
The National Federation of the Blind (NFB), the nation's leading advocate for Internet access by blind Americans, has awarded the Gold Level NFB-NVA Certification to Instructure for its learning management system, "Canvas." The NFB applauds Instructure's commitment to ensuring equal access to its Web-based learning management system for blind students and commends the company for its leadership in Web accessibility.

http://www.instructure.com/canvas_vpat/
Asynchronous Web Conferencing Features

• Structure and organization for content and learning activities
• Assignments and assessments
• Gradebook and feedback
• Discussion board
A professor worked all summer to record their entire 15 week course – embedded video and documents included.

The professor hoped to focus more time on student questions and answers throughout the course.
Barriers Found in Asynchronous Distance Education

• All Disabilities:
  – The application itself may not be accessible to user of assistive technology.

• Cognitive Disabilities:
  – Participation may be more difficult when allowed to be done on your own time.

• Deaf and HOH:
  – Videos may not be captioned.

• Blind and Visually Impaired:
  – Documents, journals and presentations may not be accessible.
  – Videos may not be audio described

• Mobility
  – Fine motor skills could make it difficult to select small buttons.
Some Benefits of Universal Design in Asynchronous Courses

• Ability to reach a diverse population without needing to modify course requirements/expectations.
  – Non-traditional or working students know ahead of time all due dates and lecture info, so anticipated appointments or "busy" moments can be worked around

• Different learning styles can be accommodated easily
  – Students who need more time to think and respond don’t have to worry about real time speed of synchronous or face-to-face courses

• Usability of Template
  – Bb, PPT

• Management of course
  – Content can be easily updated and structured to provide different ways of learning
Case Study: Asynchronous Solution

- If the professor included captioning in either the PPT, or the post-produced video this would ensure full accessibility for individuals who are deaf or hard of hearing and help cognitive disabilities and those with ESL.

- If more examples and details were given when recording, this helps give more audio description for blind and low vision.

- If embedded videos were selected based upon the most accessible, then we can ensure captioning and audio description.

- If documents were made accessible and provided in original format, this would allow students to review documents outside the recorded lecture, using their AT.
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Synchronous Web Conferencing Tools

• Adobe Connect
• Microsoft Live Meeting
• Blackboard Collaborate (formerly Elluminate)
• GoToMeeting
• WebEx

Designed for real-time, finite instruction and content sharing
Adobe Connect v.8

Known Accessibility Issues:

- **Limitations for individuals with vision impairments:**
  - For screen reader users, the browser-based Adobe Connect meeting room is necessary to follow content of shared PPT file. User will not be able to access the content from the desktop plug-in version.

- **Limitations for individuals with hearing impairments:**
  - In synchronous courses, deaf and hard of hearing students should be provided with interpreters and/or real-time captioning support.
  - Have the student contact the Deaf and Hard of Hearing Services Coordinator with the Office of Disability Services to initiate the service.

**Adobe Acrobat Connect Captioning Extension** adds a new captioning pod to your Acrobat Connect Professional environment. It provides real-time captioning of audio content and can be easily integrated into meetings and events delivered via Acrobat Connect. This extension ensures that participants who are deaf or hard of hearing may fully participate in online meetings and events.
Known Accessibility Issues:

• Limitations for individuals with vision impairments:
  – Application is accessible to screen-reader users; however, success for the user depends on their technical proficiency, which screen-reading application they will be using (i.e., Jaws, WindowEyes, or VoiceOver), and the stability of Java Access Bridge plug-in.
  – Jaws and WindowEyes require installation of this plug-in to work with the application.
  – In our tests, both Jaws and VoiceOver worked well, but had some limitations (i.e., Application Sharing, notifications, etc.).

• Limitations for individuals with hearing impairments:
  – In synchronous courses, deaf and hard of hearing students should be provided with interpreters and/or real-time captioning support.

Helpful Documentation:

• For more information, review the Blackboard Collaborate Web Conferencing Accessibility Guide [PDF]. This guide will provide faculty with step-by-step information on supporting learners with disabilities.
Synchronous Web Conferencing Features

• One-way (webinar) and two-way (discussion) audio and video chat capability

• View remote content (PowerPoint, websites, software demo)

• Text chat and moderated Q & A

• Polling

• Whiteboards

• Real time sharing of content and files

• Archival of recorded sessions for future playback
Case Study: Synchronous Challenge

• A student who is hard of hearing, but does not know sign language, wants to take a DE class.

• This is a web conferencing course where real time audio and video is being used.
Barriers found in Synchronous Distance Education

- All Disabilities:
  - The application or video player may not be accessible to user of assistive technology.

- Mobility
  - Input method could be slow due to fine motor or AT causing problems not allowing student to effectively participate in real-time “chat”

- Blind and Visually Impaired:
  - Description of visuals may not be described (i.e. whiteboard)
  - Documents, journals and presentations may not be accessible.
  - Videos may not be audio described

- Cognitive Disabilities:
  - The pace of the class may move too fast to process all the information.

- Deaf and HOH:
  - The lecture/training may not be captioned.
  - Videos may not be captioned.
Some Benefits of Universal Design in Synchronous Courses

• Dynamic information
  – Good for current events, able to change gears based on where the class is at

• Real-time class can provide live interaction
  – Ability to answer/respond in real time

• Ensures pace of course is consistent and not too fast

• Technology savvy student population
Case Study: Synchronous Solution

(Assuming the student is registered with the Office of Disability Services and has notified the professor prior to class)

- The professor would work with the Office of Disability resources to coordinate Captioned Audio Real Time (CART) services to be used via web-based, allowing the student to essentially have a captioned course.
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Web Collaboration Tools

• 1 on 1, Small Group Conferencing
  – Google Plus
  – Skype
  – Google Video Chat

• File Sharing
  – Dropbox
  – Microsoft Sky Drive
  – Google Docs
Web Collaboration Features

• Free (for basic services)

• Conferencing
  – Connect one or more users with audio and/or video
  – View remote content, real time sharing

• File Sharing
  – Central location for documents shared between multiple users
  – Access files from any location with internet connection
## Helpful Web Collaboration Tools for 1-on-1 or Group:

<table>
<thead>
<tr>
<th>Tool</th>
<th>Pros</th>
<th>Cons</th>
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<tbody>
<tr>
<td>Google +</td>
<td>Allows multiple users such as a group format – great for Deaf or Hard of Hearing</td>
<td>Not accessible to Screen Readers</td>
</tr>
<tr>
<td>Skype</td>
<td>Accessible to Screen Readers</td>
<td>Doesn’t allow multiple users</td>
</tr>
<tr>
<td>Google Video Chat</td>
<td>Has been updated and made fairly accessible, it depends more on how advanced your user is with AT</td>
<td>???</td>
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</tbody>
</table>
## Helpful Web Collaboration Tools for File Sharing

<table>
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<tr>
<th></th>
<th>Pros</th>
<th>Cons</th>
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</thead>
<tbody>
<tr>
<td>Dropbox</td>
<td>Allows sharing of documents within groups or public</td>
<td>Doesn’t allow real-time chat or document viewing</td>
</tr>
<tr>
<td></td>
<td>Accessible to AT</td>
<td></td>
</tr>
<tr>
<td>Microsoft Skydrive</td>
<td>Allows sharing of documents within groups or public or public Accessible to AT.</td>
<td>Doesn’t allow real-time chat or document viewing</td>
</tr>
<tr>
<td>Google Docs</td>
<td>Reasonably accessible, allows sharing of various documents within groups and allows for real time viewing.</td>
<td>Google is still making accessibility updates. Doesn’t allow real-time chat.</td>
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Case Study: Collaboration Challenge

• A student who is deaf and a student who is blind are in the same course.

• They were inadvertently put into the same group that needed to collaborate on outside projects for the class.

• Students were expected to use available online collaboration tools - these tools were student selected.
Case Study: Collaboration Solution

• First solution – put them in separate groups.

• If that isn’t possible:
  – The solution for the deaf student was to use Google +, allowing him to lip read or have an interpreter with him via video or he could independently use chat and still work as a group.
  – The solution for the blind student was to use Skype due to a more accessible program, allowing her to both video/audio and text chat.
  – Skype allowed multiple audio, but not video. Skype however did not distinguish between the different speakers or typists. Students can type or speak their name, prior to their group response.
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Document, Presentation and Simulation Accessibility

• Increasing number of distance education courses…
  – Number of electronic documents posted on websites are not accessible

• Common technologies used:
  – Adobe Reader
  – Adobe Professional X
  – Adobe LiveCycle Designer
  – Microsoft Word
  – Microsoft PowerPoint
  – Adobe Captivate
  – TechSmith Camtasia
Adobe Reader Accessibility Features

• There are some helpful accessibility features in the free Adobe PDF reader. For example, any PDF file open in Adobe reader can be read aloud with the "Read Out Loud" option.

• Under the 'View' menu, select 'Read Out Loud', then 'Activate Read Outloud'.

• The Read Out Loud feature of Adobe Reader can be accessed with Keyboard Commands, as listed below.

  – Activate Read Out Loud: Shift + Ctrl + Y
  – Read This Page Only: Shift + Ctrl + V
  – Read To End of Document: Shift + Ctrl + B
  – Pause/Resume: Shift + Ctrl + C
  – Stop: Shift + Ctrl + E
Features for making PDF files accessible for reading:

• Ability to add text to scanned pages to improve accessibility

• Tools for creating accessible PDF forms

• Conversion of untagged to tagged PDF files

• Tools for editing reading order and document structure

• Security setting that allows screen readers to access text while preventing users from copying, printing, editing, and extracting text

• Action Wizard to make PDF Accessible
Where to Find Accessibility in Adobe X

1. Click on the 'View' tab in the top menu bar.
2. Under 'Tools', click on 'Accessibility'.

Options available under 'Accessibility':
- Change Reading Options
- Quick Check
- Full Check
- Open Accessibility Report
- Add Tags to Document
- Run Form Field Recognition
- Add Form Fields to Tags
- TouchUp Reading Order
- Setup Assistant
Adobe LiveCycle Designer

- Accessibility Palettes
- Support for Screen Readers
- Adding Structural Navigation to Forms
- Tabbing Order for Accessible Forms
- Accessible Form Properties
- Accessibility of Imported Content
- Accessibility for Authors

http://www.adobe.com/accessibility/products/livecycle/overview.html
Before starting any document, Right click, scroll to Palettes and select Accessibility. This will continue to show up throughout the document.

When choosing a text box selection look to the far right of the screen to accessibility. Select “Caption” to tag the text box name.
Including Accessibility in LiveCycle

Livecycle allows designers to specify the embedding of accessibility information within files that are saved in PDF.

You can check the tab/reading order and change it as needed.
Microsoft Office 2010: Word and PowerPoint

- Add alt text to images and objects
- Specify column headers information in tables
- Use styles in long documents
- Use short titles in headings
- Ensure all heading styles are in the correct order and are unique
- Use hyperlink text that is meaningful
- Use simple table structure
- Ensure that the reading order of each slide is logical
- Increase visibility for colorblind viewers
- Avoid using blank cells for formatting
- Structure layout tables for easy navigation
- Avoid using repeated blank characters
- Avoid using floating objects
- Avoid image watermarks
- Include closed captions for video
Microsoft Built-In Accessibility Checker

- When you go to file, you’ll see on the left side a “Check for Issues” and when selecting that you’ll find “Check Accessibility”

Third Party Solutions

- **PDF Accessibility Wizard (PAW)**
  - Plug-in installs directly into MS Office 2007 and 2010
  - Allows document creators to convert a scanned PDF document into a tagged, accessible PDF document

- **Accessible Wizard for MS Office**
  - Plug-in installs directly into any MS Office app (2007 - i.e., Word, PPT)
  - Walks document creator through issues within document and how to make them accessible
Simulation and Capture Software

- Adobe Captivate
- TechSmith Camtasia
- Adobe Presenter
Adobe Captivate

Latest Accessibility Updates:

• PROVIDE DESCRIPTIONS FOR MOVIES AND SLIDES
  – You to easily provide text descriptions for your simulations. These descriptions provide details about the movie or slide to users of screen readers and other assistive technology.

• CREATE KEYBOARD-ACCESSIBLE CONTENT
  – You can make sure that all buttons and clickable areas are accessible by keyboard. This allows individuals who have difficulty using the mouse to view your movies, even if they use clickable areas in simulations.

• CREATE ACCESSIBLE QUIZZES
  – Includes a set of accessible question types including multiple choice, true and false, and Likert scale. These questions allow you to create simple, accessible quizzes quickly and easily.

• PROVIDE CLOSED CAPTIONS FOR AUDIO CONTENT
  – Closed captions are the standard means of accommodation for users who are deaf or hard of hearing. Adobe Captivate features straightforward captioning tools to help you make presentations accessible to these users.
  – For faculty/presenters who do not want to record their own voice, a computer generated voice can speak text and can equally be used as closed caption.
Known Accessibility Issues:

• Limitations for individuals with vision impairments:

• Captions needed in order to provide an individual with hearing impairment equivalent access.

• NOTE: Author would need to add captions and text descriptions to ensure equivalent access for individuals with sensory impairments (i.e. vision, hearing).

Video on How to Create and Accessible Captivate Presentation
Known Accessibility Issues:

• Limitations for individuals with vision impairments:

• There is very limited keyboard access (only play, pause, and slider positioning can be accessed). Screen readers do not read buttons, which impacts accessibility for blind users.

• Camtasia Player - None of buttons like Play, Pause, Rewind, etc. are available in high-contrast mode, which impacts some users with low-vision.

• Limitations for individuals with vision impairments:

• Captions needed in order to provide an individual with hearing impairment equivalent access.

• NOTE: Author would need to manually add captions to ensure equivalent access for individuals with hearing impairments.

Video on How to Create an Accessible Camtasia Presentation
Adobe Presenter

Works as a plug-in to Microsoft PPT
Adobe Presenter

• If the faculty member follows the steps for creating an accessible PowerPoint presentation, the Adobe Presenter presentation should be accessible as well.

• More information on Publishing your Adobe Presenter presentation to ensure accessibility
Let's Review

Distance Education Accessibility
Principles of Universal Design for Instruction

• What you may need to look for ........
1. The distance learning home page is accessible to individuals with disabilities (e.g., it adheres to Section 508, World Wide Web Consortium or institutional accessible-design guidelines or standards).

2. A statement about the distance learning program's commitment to accessible design for all students, including those with disabilities, is included prominently in appropriate publications and websites along with contact information for reporting inaccessible design features.

3. A statement about how distance learning students with disabilities can request accommodations is included in appropriate publications and web pages.

4. A statement about how people can obtain alternate formats of printed materials is included in publications.

5. The online and other course materials of distance learning courses are accessible to individuals with disabilities.

http://www.washington.edu/doit/Brochures/Technology/equal_access_uddl.html
10 Indicators of DE Program Accessibility cont...

Course Designers:

6. Publications and web pages include a statement of the program's commitment to accessibility, guidelines or standards regarding accessibility, and resources.
7. Accessibility issues are covered in course designer training.

Instructors:

8. Publications and web pages for distance learning instructors include a statement of the distance learning program's commitment to accessibility, guidelines or standards regarding accessibility, and resources.
9. Accessibility issues are covered in training sessions for instructors.

Program Evaluators:

10. A system is in place to monitor the accessibility of courses and, based on this evaluation, the program takes actions to improve the accessibility of specific courses as well as update information and training given to potential students, actual students, course designers, and instructors.
Principles of UDI for Online and Blended Courses

**Principle**
**Examples**

- **Equitable use**
  Providing students with multiple options to demonstrate mastery of the subject (web design, oral presentations, research papers); using alternate sources to explain complex concepts.

- **Flexibility in use**
  Using varied instructional methods (mind/concept maps, group activities, outlines) to provide different ways of learning and experiencing knowledge.

- **Simple and intuitive**
  Providing grading rubrics that clearly lay out expectations for exam performance, papers, or projects; including a syllabus with links to reading materials; adding animated icons to the course website that pop up to remind students of deadlines.

- **Perceptible information**
  Selecting reading material and other instructional supports, including websites that are accessible via screen readers, text formatting, zoom text.

Developed by the UDI Online Project team at the University of Connecticut
Principles of UDI for Online and Blended Courses cont...

Principle
Examples

• **Tolerance for error**
  Capturing logs of threaded discussions for students to reference over the course of the semester; providing the option of turning in multiple drafts of an assignment in order for the student to demonstrate his/her learning progress; provisioning of “practice” exercises or tests.

• **Low physical effort**
  Fostering maximum attention to learning by being aware of screen structure and layout of website features (breaking down a construct into multiple pages with headings).

• **Size and space for approach and use**
  Being aware of diverse communication needs in deciding to incorporate examples and graphics (moderately combine visuals with text).

• **A community of learners**
  Fostering communication among students in and out of class by structuring study groups, discussion groups, project groups, chat rooms; making a personal connection with students through video or phone (Skype, Adobe Connect).

• **Instructional climate**
  Including a statement in the class syllabus affirming the need for class members to respect diversity in order to establish the expectation of tolerance as well as encourage students to discuss any special learning needs; highlighting diverse thinkers who have made significant contributions to the field; providing direct feedback on and share innovative approaches developed by students in the class.
Questions?

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