10 Tips for Creating Accessible Course Content
Presentation Overview

• Explore different ways to make your course more accessible
• Complete a series of action items to promote accessibility in your course
• Locate resources on CELT’s Accessibility in Your Course webpage (http://bit.ly/celt-access)

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Anticipate your students’ needs

Accessibility is not just about providing accommodations when requested. Accessible courses and course content anticipate the potential needs of diverse learners and remove barriers or provide alternatives in advance.

Be proactive, not reactive.
It’s not just about providing accommodations when requested. Waiting to react may be too late. Accessible courses and materials anticipate the possible needs of diverse learners and remove barriers or provide alternatives in advance.
Questions to Inform Course Design

• How do the course format and the course content support accessibility or limit accessibility?

• What prior technology knowledge/skills will the learner need to be successful?
Now, what you have been waiting for... 10 Tips for Creating Accessible Content
Tip 1: Plan an Online Teaching-Learning Strategy

Tip 1: Plan your Online Teaching-Learning Strategy - what questions will you ask when designing your online course content.
Use the Backwards Design method – consider the learning goals – what should students learn/take away from this course? When developing your feedback and assessment – how will I know if students are learning what they need to know? And finally – determine your teaching approach – planning the learning experiences and instruction

From *Understanding by Design* by Wiggins and McTighe
Start with the end in mind

Consider including this type of flowchart, specific to your course, in the course syllabus to help students see the connections between course assignments and learning outcomes. This is often called a graphic syllabus and also supports the concept of transparent teaching. You want students to see the alignment between the coursework and the course goals.

What are the overall course learning outcomes? Another way to think of the outcomes is to consider them as “enduring understandings”. If you had the chance to ask students six months after completing your course what they learned from the course, ideally they would be related to the course learning outcomes.

This can serve as design scaffold that you can apply as you are redesigning an existing course or designing a new course from scratch.
Course elements (activities, assessments, etc.) follow a consistent structure/routine throughout the course.
Universal Design for Learning (UDL)

AFFECTIVE NETWORKS: THE WHY OF LEARNING
RECOGNITION NETWORKS: THE WHAT OF LEARNING
STRATEGIC NETWORKS: THE HOW OF LEARNING

Student activities are varied and considering different learning styles.

Ask yourself:

How am I considering different learning styles?

Student activities should be varied and consider different learning styles.
To learn more about the Universal Design for Learning, visit the Center for Applied Special Technology (CAST) website at http://www.cast.org.
Since 2015 CELT has been working to provide faculty and staff (who have a teaching role) with a voluntary process for designing/developing their courses using Quality Matters (QM) a nationally recognized program. Quality Matters is a learner-centered course framework with a faculty peer review process that’s designed to certify the quality of online and blended courses.
How does Quality Matters help?

1. Course Overview Introductions
2. Learning Objectives (Competencies)
3. Assessment and Measurement
4. Instructional Materials
5. Course Activities and Learner Interaction
6. Course Technology
7. Learner Support
8. Accessibility and Usability


All the 8 QM course components work together to ensure that students achieve the desired learning outcomes. When aligned, each of these components is directly tied to and supports the course learning objectives.

Quality Matters promotes and improves the quality of online education and student learning through the development of research-supported and practice-based quality standards and evaluation tools and procedures. The use of the eight QM general standards can help improve student learning and retention.
Questions? If you have questions contact Lesya Hassall, CELT Quality Matters Program Coordinator via email lesya@iastate.edu or call at 515-294-5357.
Tip 2: Provide adequate time

Providing adequate time
Ask yourself:

How am I ensuring students have adequate time to complete activities/assessments?

Students have adequate time to complete activities and assessments.

Consider using: Rice University’s Course Workload Estimator: http://cte.rice.edu/workload
Tip 3: Use both assessment and evaluation

Tip 3: Developing Assessments and Evaluation
Once learning objectives are established, the next step is to create assessment and evaluation tools that will allow you to determine if students have accomplished/achieved a learning objective. This visual representation illustrates the relationship between assessment and evaluation. Using a combination of assessment (not graded) and evaluation (graded) approaches provides students a variety of opportunities to show their mastery of the course content.
Tip 5: Use Consistent Page Titles and Headings. For users who rely on screen readers to interact with content, this step is crucial. Consistent and clear page titles help to orient visually impaired users who are unable to see the full layout of the site.
Example: Not formatted with headings
Lack of headings, section divisions inhibit scanning and reading


Nori grape silver beet broccoli kombu beet greens fava bean potato quandong celery. Bunya nuts black-eyed pea prairie turnip leek lentil turnip greens parsnip. Sea lettuce water chestnut eggplant winter purslane fennel adzuki bean earthnut pea sierra leone bologi leek Soko chicory celtuce parsley jicama salsify.

Celery quandong Swiss chard chicory earthnut pea potato. Salsify taro cutsear garlic gram celery bitterleaf wattle seed collard greens nori. Grape wattle seed kombu beetroot horseradish carrot squash Brussels sprout chard.
Examples: Properly formatted headings

Headings created properly in Word will transfer when exported to a PDF
Properly formatted headings - magnified
Tip 5: Use Alt-Text, Captions, and/or Long Descriptions on All Images

Every image must have alt-text, which can be set in Canvas on the Insert Image pop-up window. This alt-text should be a concise description of the information conveyed by the image.
When writing alt-text, consider the context of the image. What information is the image conveying to users? (Sometimes the answers is none, if the image is purely decorative, and this is acceptable! The alt-text can be left empty if it serves no informational purpose.)
Tip 6: Carefully consider color choices

Ensure color is not the sole means of conveying important information
**Color Coding**

**Example: Red Team and Green Team Office Hours Provided Below**

<table>
<thead>
<tr>
<th>Not Accessible Color Coding</th>
<th>Accessible Color Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Without labels, people with color blindness may not be able to distinguish between the two teams)</td>
<td>(Coding with descriptive labels and colors)</td>
</tr>
<tr>
<td><strong>Mon.-Wed.</strong></td>
<td><strong>Red Team</strong></td>
</tr>
<tr>
<td>12-1 p.m.</td>
<td>Mon.-Wed.</td>
</tr>
<tr>
<td><strong>Tues.-Thurs.</strong></td>
<td><strong>Green Team</strong></td>
</tr>
<tr>
<td>3-4 p.m.</td>
<td>Tues.-Thurs.</td>
</tr>
</tbody>
</table>

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**IOWA STATE UNIVERSITY**

**Center for Excellence in Learning and Teaching**

**10 Tips for Creating Accessible Course Content**

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What makes this red team and green team example accessible?
Example: Not accessible - Insufficient Contrast
Use a color analyzer to see if the colors you are choosing for your website or PowerPoint will pass the contrast ratio.

This Colour Contrast Analyser application, available from the Paciello Group, demonstrates how this PowerPoint with the white on the red does pass with large text and would fail with normal text size. It does pass AA though – which is the minimum.
Check using the WebAIM’s Color Contrast Analyzer tool (http://bit.ly/2xTZ47n)
Tip 9: Use descriptive and unique hyperlinks. This is another strategy to help screen reader users. When providing a link, the link text should describe where it is going...
Examples of Hyperlinks

Accessible examples

• For a website or email newsletter: For information about creating an accessible course, visit CELT’s Accessibility in Your Course webpage.

• For a printed material: For information about creating an accessible course, visit CELT’s Accessibility in Your Course webpage (http://bit.ly/celt-access).

Not Accessible examples

• Create an accessible course click here.

• For information about creating an accessible course https://www.celt.iastate.edu/teaching/effective-teaching-practices/accessify-your-course/

Links should make sense when read out of context. Also, the distinguishing information of the link should be at the beginning of the link.

Try reading the full URL out loud and imagine having to listen to that every time an article contained a link!
Tip 8: Include the accessibility statement in the syllabus
Iowa State University is committed to assuring that all educational activities are free from discrimination and harassment based on disability status. Students requesting accommodations for a documented disability are required to work directly with staff in Student Accessibility Services (SAS) to establish eligibility and learn about related processes before accommodations will be identified. After eligibility is established, SAS staff will create and issue a Notification Letter for each course listing approved reasonable accommodations. This document will be made available to the student and instructor either electronically or in hard-copy every semester. Students and instructors are encouraged to review contents of the Notification Letters as early in the semester as possible to identify a specific, timely plan to deliver/receive the indicated accommodations. Reasonable accommodations are not retroactive in nature and are not intended to be an unfair advantage. Additional information or assistance is available online at www.sas.dso.iastate.edu, by contacting SAS staff by email at accessibility@iastate.edu, or by calling 515-294-7220. Student Accessibility Services is a unit in the Dean of Students Office located at 1076 Student Services Building.
Tip 10: Create Accessible Multimedia.
When using multimedia

Audio only
- Text Transcript (of spoken word)

Video only
- Video Description (of key visual elements)

Audio and Video
- Closed Captions
- Text Transcript
- Video Description

All video recordings must have captions that describe all relevant sound on screen, not just dialogue. If you have audio only - there should be a text transcript. If it is video only - include a video description of the key visual elements. If it is audio and video include closed captions, text transcript, and a video description.
Here you can see the difference between audio description and closed captioning – the captioning states what the person is saying, whereas the audio description states what the person is doing while speaking. In this example, the audio description states: The professor gestures to four bullet points on the screen. The captioning reads, “We’ll start with a quick overview of the four essential characteristics of effective thesis statements before...
PDF files, MS Word documents and PowerPoint are all popular tools used when presenting information to students. These files need to in an accessible format, or content must be provided to students in an alternative format. Accessibility Checkers are available for each of these software programs.
Example: A Syllabus Overview

- Walk through your syllabus in a video using Panopto, Zoom, Arc (Canvas video tool), etc.
- Create a script for the video
- Caption the video using the script (YouTube)
- Post the video in your Canvas course
- Post your syllabus as an accessible PDF and DOCX

An Example of making your course accessible may include a walk-through syllabus. A syllabus is a necessary task at the beginning of every class. Students need to know where to find resources, how you’ll be evaluating them, and to hear you set the tone for the learning ahead. But often it takes up a good portion of the first class – valuable time that could be spent learning.

Instead of using class time, create a video that explains your syllabus. Your students can watch and re-watch it as many times as they need to. You can be certain that everyone hears and/or read the same message, even those who add the class later.
Tip 10: Build in course feedback
### Student feedback

<table>
<thead>
<tr>
<th>Plus</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is helping me to learn in this course?</td>
<td>What changes are needed in this course to improve learning?</td>
</tr>
<tr>
<td>What am I doing to learn in this class?</td>
<td>What do I need to do to improve my learning in this course?</td>
</tr>
</tbody>
</table>

The plus-delta model asks students to consider what is helping them to learn in your class, and how they are engaged in their own learning. It also asks them to consider what changes in this course might improve learning, and how students might improve their own efforts.

After receiving the feedback, you would summarize the results and share them back with the class.

The process sends a powerful message to students that they have responsibility for their learning. But you are also sending the message that you as an instructor have a
growth mindset and can (and are willing to) learn from feedback and incorporate changes.

Who can speak to doing this and the effect on your class?
Next steps and resources

Next steps
Furthermore, the Iowa State University Digital Access website hosts many resources for the University community to learn how-to incorporate and implement accessibility in web design, online courses and more. You may access the website http://digitalaccess.iastate.edu/
Call for Proposals: $5000 Teach Access Grants (due June 1)

Teach Access just announced that they will be offering another round of the Teach Access Faculty Grants this year! All information can be found on the Faculty Grants page.

Awards of $5,000 each will be given to faculty to develop modules, presentations, exercises or curriculum enhancements or changes that introduce the fundamental concepts and skills of accessible design and development into their existing courses.

As long as you are a faculty or instructional staff member who teaches a course in technology design/development, you are eligible to apply for this $5,000 grant.

Questions? Contact Cyndi Wiley (ISU Digital Accessibility Coordinator) via email at clwiley@iastate.edu

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Questions? Contact Cyndi Wiley (ISU Digital Accessibility Coordinator) via email at clwiley@iastate.edu
This presentation adapted from:

- Center for Excellence in Learning and Teaching (CELT). (n/d). Basic course design: Aligning course objectives with class assignments and your teaching approach. Iowa State University. Retrieved from http://www.celt.iastate.edu
- Office of Distance Education and eLearning. (n/d). UDL in Course Design. The Ohio State University. Retrieved from https://odee.osu.edu/udl-course-design
Tools cited:

Colour Contrast Analyser (CCA) from Paciello Group website: https://www.paciellogroup.com/resources/contrastanalyser/

Iowa State University's Digital Access website: http://digitalaccess.iastate.edu/

Quality Matters rubric standards from the QM Higher Education rubric, fifth edition from Quality Matters website: http://www.qualitymatters.org

Rice University's Course Workload Estimator website: http://cte.rice.edu/workload

Universal Design on Campus website: http://udloncampus.cast.org/

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