

Institution-Generated Content

Faculty and staff members are the final barriers in the online learning usability dilemma. But, of the three barriers, they are the most easily influenced. Before we can influence change, it is important to recognize how faculty members often create online content in the absence of assistance or training. In the early days of online courses at Suffolk University, most faculty members simply cut and pasted their lecture notes, narrated PowerPoint slides, and image-only PDF documents into the university's LMS and called it a day. A few who had taught online before began exploring the tools within the LMS to see how they could teach differently from their face-to-face interactions, and a few who had never taught online but were excited to try contacted the faculty development office.

Those faculty members who had taught online previously found the switch from face-to-face to online courses smoothest. They had an idea of how to structure their courses in an online environment, and they knew what kinds of tools they wanted to use. Their very experience with technology was problematic, however. Their desire to incorporate shiny new mobile devices and apps—without first considering their accessibility and usability—got a few of them into individual-accommodation trouble when they began to teach online. The experience reminded them of the need to design a course first and then select a few pieces of technology to incorporate, in the plus-one model, later on.

Those who sought assistance were excited to try new things but naïve about the amount of work it took to get courses in reasonable shape, especially for the first time they were taught. They also struggled conceptually, trying to figure out how to engage learners remotely. Largely, their enthusiasm and willingness to try new things led to success and a reframing of their mind-set. They started to look at courses as a series of interactions rather than series of content items. The UDL plus-one mind-set helped them to make their interactions as open and easy to use as possible.

Finally, the cut-and-pasters had the least initial success. Their courses tended to look like online hoarding environments, in which

course materials seemed to be dumped in with little rhyme or reason. Once these faculty members sought help from the teaching and learning center, they, too, were able to get the hang of designing their course interactions with UDL quickly. Kirsten Behling created the “Best Practices for Ensuring Accessibility in Courses with Online Components” worksheet (below) to offer faculty members a fast and easy way to check whether their materials are accessible.

BEST PRACTICES FOR ENSURING ACCESSIBILITY IN COURSES WITH ONLINE COMPONENTS

Instructor: _____

Department: _____

Course: _____

The following should be present in all hybrid and online courses. Answer yes or no to each criterion, and provide comments for all “no” responses.

BEFORE THE COURSE BEGINS

- Students have been provided with your course textbook/media requirements before the class starts.
- You have contacted the Office of Disability Services to discuss your use of multimedia tools before you decide to use them.
- You have listed a statement about disability services on your syllabus.
- You have provided students with the URL for accommodations in the learning management system your institution uses.

- Course textbooks were selected at least six weeks prior to the start of the semester and posted online for students to see.
- Textbook information includes the correct ISBN numbers and editions to be used. If electronic copies are mentioned, they correspond to the paper versions.
- When possible, you have chosen materials from publishers and journals that provide electronic content.
- Textbooks have been made available at the library's reserve desk.

Learning Management System (LMS)

- The syllabus is provided in a Microsoft Word format.
- If you include links on your LMS pages, they have accompanying text that has a meaningful description.
- Buttons in your LMS menu have descriptive text alternatives.
- If your LMS page includes redirects or timed actions (such as clicking OK to continue), provide adequate response time for users to navigate the page.
- If your LMS site includes timed actions (such as quizzes), ensure that you can adjust response time, if needed.
- Type styles, sizes, and orientations are consistent throughout the LMS (consider using the preset *Styles* function).
- Color combinations are used that provide sufficient contrast between foreground and background.
- You have avoided flickering texts or animations.
- For HTML table-based layouts, provide appropriate headers and data cell designations.
- Acronyms and abbreviations are spelled out (screen readers pronounce these as single words).
 - Auditory and Visual Content

Microsoft Word Documents

- The preset *Styles* feature in Word has been used to apply headers to all documents.
- There are no ornate fonts (use standard fonts such as Arial or Times New Roman).
- Headers are larger font sizes than the body of the text.
- No fonts smaller than 10-point type.
- 1.5 line spacing should be used, when possible.
- For documents over six pages in length, a table of contents has been created (use the *References* tab in Word).
- All images, graphs, and figures have ALT-text (alternative text) tags (right-click on image, select *Format Picture*, and click *ALT Text*).
- All tables have clear labels for rows and columns and no empty cells.
- No documents have been *Saved as Web*.
- All hyperlinks have been added using the *Insert Hyperlink* feature, and all hyperlinks are spelled out in the text.

Microsoft Excel Spreadsheets

- All tables have row and column headings.
- All graphs have ALT-text tags (right-click on image, select *Format Picture*, and click *ALT Text*).
- All hyperlinks have been added using the *Insert Hyperlink* feature, and all hyperlinks are spelled out in the text.
- Color and highlighting are not the only means of providing information.
- Each worksheet is labeled appropriately (not just *Sheet 1* and *Sheet 2*).

PDF Files

- All words can be individually highlighted with your cursor (i.e., the text will not be read as a picture; when in doubt, create a text-only HTML version of the content).
- All Word documents have been made accessible before conversion to PDF.
- Tag PDF documents whenever possible. For specific instructions, visit the Pennsylvania State University's AccessAbility site: <http://accessibility.psu.edu/pdf>.
- PDFs that cannot be made accessible have been provided in an alternative format.
- No text files with multiple columns have been converted to PDFs (screen readers might still read the text across columns).

Images

- ALT-text tags have been used on all visual elements, including charts, graphs, mathematical/scientific notation, and photos (right-click on image, select *Format Picture*, and click *ALT Text*).
- Extended text descriptions are provided for all complex images, including charts, graphs, mathematical/scientific notation, and photos.

Microsoft PowerPoint Files

- All slides have simple layouts and avoid busy, themed backgrounds.
- Content is organized in a logical structure.
- Fonts are larger than 14-point type, and a sans serif font is used.
- Color combinations provide sufficient contrast between foreground and background.
- Ample white space is provided on each slide.

- ALT-text tags have been used on all visual elements, including charts, graphs, mathematical/scientific notation, and photos (right-click on image, select *Format Picture*, and click *ALT Text*).
- All audio narration discusses slide contents in relation to the larger themes or ideas of the course.
- A transcript of narration for each slide has been added to the Notes section of that slide.
- All hyperlinks have meaningful descriptions.
- No slide transitions or automatic timing functions are used.
- Slides have been designed with a slide layout format provided in the software.

Video and Audio

- Captioning or written transcripts have been provided for all video or audio files.
- Video files are embedded into one of the following players: QuickTime, RealPlayer, iTunes, YouTube.
- Videos with visual information critical to comprehension include a description of events or images.

Flash

- Written descriptions are provided for all content offered in Flash files.
- Ensure that all Flash content is accessible. For more information, see <https://www.adobe.com/accessibility/products/flash/author/html>.

Conferencing Tools

- All content in web conferencing tools is typed and selectable by a cursor and adheres to the guidelines above for Word, PDF, PowerPoint, and Excel.