

Creating Accessible Course Content v8.3.0

User Guide
May 23, 2008

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Accessibility

Desire2Learn is dedicated to developing technology that meets the teaching and learning needs of all clients. We believe that instructional practices should focus on helping people learn, and should not be limited by the learning environment the material is delivered in. We are working with interested clients and accessibility groups to improve both the usability and accessibility of our products.

What you can do

As a person teaching a course you hold a pivotal role in ensuring that the Learning Environment is accessible to all users, regardless of their learning needs. It is your content that users taking a course must access, assess, and respond to, therefore, it is important that you understand the impact your design decisions have on your the users enrolled in your courses.

Organizing your course

Among the many factors that pedagogical theory tries to address is the diverse learning styles and needs of users. All people learn differently; finding learning materials that engage, educate, and evaluate people effectively can be one of the most difficult and important considerations for someone teaching a course. It can be even more challenging if there are users with disabilities or alternative learning needs involved. The following tips are ideas that you may want to keep in mind when setting up your course material.

- Use the competencies tool to evaluate a user's performance so that different assignments can be tied to the same learning objective. For example, set up an activity related to a particular learning objective and let users choose the assignment they want to complete to obtain that activity. For example, they could write a reflection, prepare an interview, or create a slide show presentation to demonstrate what they've learned. No matter which assignment they complete, you would evaluate it using the same activity. Organizing material this way helps users understand how assignments relate to broader skills and knowledge, and puts the onus of learning on the person learning. (For more information on competencies see the *Competencies and Rubrics User and Reference Guide*.)
- Use the Discussions tool rather than instant messaging for user participation and reflection. Instant messaging tools can be difficult for users with visual, motor, or cognitive disabilities because they require users to process and respond to information quickly using technology that does not match their needs. Discussion areas give all users time to reflect. If you use instant messaging, be aware that some users may require an alternative solution such as phone or face-to-face contact.

- Do not convert PowerPoint presentations to images in LiveRoom if you have visually impaired users because screen readers won't be able to read the content and users won't be able to resize the text or graphics. PowerPoint slides are converted by default; you will need to uncheck **Convert Word documents to HTML and PowerPoint slides to images** on the Create File Resource pop-up page. Alternatively, make it easy for users to request the originals so they can adjust and print them as desired.
- Use the Content tool or News tool to create an overview, or quick reference page, for each week or major project. Provide links to all applicable content, discussion areas, dropbox folders, quizzes, etc. This is a great way to ensure users in your course don't miss important tasks and it provides screen reader and keyboard users an easy way to jump to relevant material.
- Use the Content tool for readings and course material. HTML code is easier for assistive technologies to interpret than application based files such as MS Word. Use a simple layout for the material that does not organize information in tables or columns. Use headings to communicate the relationships between sections. Use Heading 1 for the title, Heading 2 for major sections, Heading 3 for subsections, etc. Include a table of contents that links to each section for longer documents. Also include links back to the table of contents at the end of each section and a skip table of contents link at the beginning. Simply organized material is easier for users to read and understand; assistive technology to interpret and present; and mobile and handheld devices to resize.
- If your readings and lecture materials use a lot of graphics, tables, videos, or audio recordings, provide a text-only alternative. Text-only material should supplement, not replace, other delivery methods. Videos, graphics, and audio files are a great way to generate interest in a topic, present material from different perspectives, and help cognitively disabled users through redundancy. Make the text-only alternatives easy to compile for print so that all users can use them as study aids at their leisure.
- Set up a special discussion area where users with disabilities can post questions and seek extra help. Encourage users to provide specific information on how you can make content more accessible to them, and to collaborate and aid each other. Keep notes on valuable comments and tips and use them in subsequent classes.
- Use the Equation Editor in combination with written descriptions of the formulas. The symbols used in equation editors cannot be interpreted by screen readers or some browsers. Written descriptions also help users with different learning styles interpret what they need to do to complete the equation.
- Use a vertical layout for quizzes so that only one answer/concept appears per line. Screen readers will interpret the order of the material easier; it will minimize formatting problems when text sizes are adjusted; and most users will interpret their options quicker.

Setting release conditions and special access

In addition to organizing your course in a way that benefits all users, you can also set release conditions and special access. Release Conditions and special access allow you to set criteria for the availability of content, which can be useful for accommodating users with different needs. The following tips are examples of when you might use release conditions or special access to improve accessibility. (For more information on release conditions see *Release Conditions User Guide*. For more information on special access for Quizzes, see *Quizzes User Guide*, for Surveys, see *Surveys User Guide*, for Dropbox, see *Dropbox User Guide*.)

- Create a group for disabled users and use release conditions to provide them with material, tasks, work areas, etc. that are not available to other users. This is a great option if you do not want other users to see or have access to the additional items.
- If you are teaching a large course you may not know the individual needs of all of the users enrolled. Set up a checklist that users can use to request extra resources, help, or material in different format. For example, for each week or major assignment create checklist items for text-only versions of material, an extra help discussions forum, additional reading materials, and alternative formats for multimedia. Set release conditions for the checklist items so the requested content is automatically released. This option ensures that the majority of users access material as you intended, yet users with other learning needs are supported.
- Set up a survey that users with learning disabilities can take to help you assess their learning needs. Use the survey to determine what special access rights and extra resources to give the users.
- Set up quizzes, surveys, or dropbox folders with time restrictions (availability), but give special access to users who need more time because of technological, physical, or cognitive impediments. Alternatively, many people creating quizzes prefer not to set time restrictions because they can impact the quality of answers.

Meeting web content standards

In the previous topics we discussed how to organize your course and set criteria for releasing content in particular tools. This section discusses the design decisions you need to consider when creating your actual content. Most of the tips provided here are web content standards proposed by the World Wide Web Consortium, the leading body for setting accessibility standards.

- Include alternative text descriptions (alt text) for all graphics. Use double quotes "" as the alt text if the object is a decorative element that does not add meaning. If the graphic is a link, begin the alt text "Link to..."
- Include detailed captions below all graphics, tables, and graphs. These captions should explain what the objects convey. For tables and graphs, also include a summary of the important trends and statistics. This will help all users interpret the objects.

- Use the same text onscreen and in the alt text for links. Make sure the text is descriptive of the action that will occur. Never use text such as “Click Here” as the link. Screen reader users often use a list of links to quickly navigate actions on a page; this is not possible if links are not descriptive.
- Include text versions of multimedia content, such as audio or video files. If you do not have the time to create a complete text alternative, include a descriptive label that summarizes the content.
- Do not use blinking or flashing multimedia as it can cause seizures in users due to photosensitivity. Use animation when it helps convey a concept and not to draw attention to an unchanging object. Use a combination of size, color, and prominence to draw attention to objects.
- Never use only color to convey meaning. If you want to show how concepts and objects relate to each other use a combination of size, color, and text labels.
- Use headings to organize information. Use Heading 1 for titles, Headings 2 for sections, Heading 3 for sub-sections, etc. If headings are used correctly, screen reader users can quickly search a page by heading.
- Ensure there is a strong contrast between the foreground and background colors used in your course materials. (See *Editing Course Tools and Properties User Guide*, for more information on setting course colors.)
- If you use tables, make sure they make sense when read from left to right (linearization). Screen readers have difficulty conveying information that reads from top to bottom.
- Present material in HTML where possible. If you need to use other file formats (such as video files), choose formats that are recognized by most browsers and/or offer the material in multiple formats.
- If you use PDF files, make sure they were scanned with optical character recognition (OCR) so the text can be read by screen readers. Scan pages with multiple columns one column at a time so that OCR works correctly. Add bookmarks for major sections to make the content easier to navigate.

If you create PDF documents from Microsoft Word or another word processor, make sure you format titles and sections using headings so they are tagged correctly in the PDF.

- Use relative font sizes and make sure the text and page layout adjusts when font sizes are changed. Users should not have to scroll horizontally.

User Preferences

The My Preferences tool includes a number of settings that can be adjusted to improve accessibility. These settings are controlled by individual users. Make sure users enrolled in your courses are aware of options that might benefit them.

- Set the **Navigation bar auto-refresh** to **Off** if you are using a screen reader or else the screen reader will begin reading material over again every time a page refreshes.
- Increase the **Size** of the **Font Setting** if you have difficulty seeing text in the Learning Environment.
- Set the different **Paging** options to low values if you are using a large font so your pages are not unnecessarily long.
- Set your **Discussions** options to hide the discussion topics list and use the **Reading Style** layout if you are using a screen reader.
- Set your **Email** options to hide the **Folder List** and **Message Preview** panes.
- Set the **Incoming Page Icon** to **On** if you are deaf or hard of hearing and select an **Incoming Page Sound** if you are blind or visually impaired.
- Set your Metadata options to **Basic** and **Expanded**.