

# Creating Accessible Course Content 8.3 to 8.4.x

**User Guide**  
**Second Edition, November 30, 2009**

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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 that the material is delivered in. Desire2Learn is working with interested clients and accessibility groups in order to improve both the usability and accessibility of our products.

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## What you can do

When teaching a course you should ensure that the Learning Environment is accessible to all users, regardless of their learning needs. Users taking your courses must be able to easily access, assess, and respond to the content contained in your course, therefore, it is important that you understand the impact that your design decisions have on the users enrolled in your courses.

## Organizing your course

All people have different learning styles and needs. This can make finding learning materials that engage, educate, and evaluate people effectively one of the most difficult tasks for an individual teaching a course. It can be even more challenging if there are users with disabilities or alternative learning needs taking your course. You may want to keep in mind the following tips when setting up your course material:

- Use the **Competencies** tool to evaluate users' performances 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 from a variety of assignments in order to obtain that activity. No matter which assignment they complete, you evaluate it using the same activity. Organizing material this way helps users understand how assignments relate to broader skills and knowledge. For more information on competencies, see the *Competencies and Rubrics User Guide*.
- Use the **Discussions** tool rather than instant messaging to encourage 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 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. This also makes it impossible for users to resize the text or graphics. PowerPoint slides are

converted by default which means that you will need to uncheck **Convert Word documents to HTML and PowerPoint slides to images** on the Create File Resource pop-up page. Additionally, use the **Discussions** or **Checklist** tool as a way for users to communicate their requests for the originals so that they can adjust and print them as desired.

- Use the **Content** or **News** tool to create an overview or quick reference page for each week or major project in your course. 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 with an easy way to jump to relevant material.
- Use the **Content** tool to input readings and course material. HTML code is easier for assistive technologies to interpret than application based files like MS Word. Use a simple layout for the material that does not organize the information into tables or columns. Include a table of contents that links users to each section for longer documents. You can 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 of the file.
- 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 course content more accessible to them.
- Use the Equation Editor along with written descriptions of the formulas because the symbols used in equation editors cannot be interpreted by screen readers and some browsers. Written descriptions also help users with different learning styles interpret what they need to do in order to complete the equation.
- Use a vertical layout for quizzes so that every answer or concept appears on a new line, making it easier for screen readers to interpret the order of the material. Adjust text sizes to minimize formatting problems.

## Setting 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 are examples of when you might use release conditions or special access to accommodate certain users. For more information on release conditions see the *Release Conditions User Guide*. For more information on special access for Quizzes, see *Quizzes User Guide*, for Surveys, see *Surveys User Guide*, and for Dropbox, see *Dropbox User Guide*.

- Create a group for disabled users and use release conditions to provide them with additional materials, tasks, work areas, etc. that are not available or visible to other users.

- 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 materials in a 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 that the content is automatically released when requested. This option ensures that users are able to access materials as you intended, while users with other learning needs are still being supported.
- Set up a survey that users with learning disabilities can take to help you assess what special access rights and extra resources to give them.
- Set up quizzes, surveys, or dropbox folders with time restrictions that affect their availability, but give special access to users who need more time because of their technological, physical, or cognitive impediments. Alternatively, leave your quizzes, surveys, and dropbox folders without any time restrictions so as not to potentially impact the quality of answers submitted.

## Meeting web content standards

This section discusses the design decisions you need to consider when creating your actual course 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 that explain what the objects convey. Including a summary of the important trends and statistics in your tables and graphs 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 like 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 suffering from photosensitivity. Use animation when it helps convey a concept but not to draw attention to an unchanging object. Instead, use a combination of size, color, and prominence to draw attention to objects. Likewise, when showing the relation between concepts and objects, use a combination of size, color, and text labels, rather than using a single element to convey meaning.

- Use headings to organize information. Use Heading 1 for titles, Heading 2 for sections, Heading 3 for sub-sections, and so forth. If headings are used correctly, screen reader users can use them to quickly search a page.
- Ensure there is a strong contrast between the foreground and background colors used in your course materials. See the *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 linearly from left to right. Screen readers have difficulty conveying information that reads from top to bottom.
- Present material in HTML format 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 are scanned with optical character recognition (OCR) so that the text can be read by screen readers. Scan pages with multiple columns one column at a time so that OCR will work correctly. Add bookmarks to major sections to make the content easier to navigate.

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

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## User Preferences

The My Preferences tool includes a number of settings that can be adjusted to improve accessibility for individual users. Make sure users enrolled in your courses are aware of options that might benefit them. See *Setting preferences* in the section entitled *Customizing your Learning Environment* in the Introduction to the Learning Environment guide for more information on personal settings.

General Paging Discussions Email Pager Metadata

Online Status: ONLINE

Preferred Language: -- Default -- ( US English ) 1

Navigation bar auto-refresh:  On  Off

Font Settings: Face: Verdana 2 Size: 11 2

Preview:

The quick brown fox jumps over the lazy dog.

- On the **General** tab, set the **Navigation bar auto-refresh** to **Off** if you are using a screen reader or else the screen reader will re-read material every time the page refreshes. (1)
- On the **General** tab, change the font **Face** or **Size** to make it easier to read text in the Learning Environment. (2)
- On the **Paging** tab, set the different paging options to low values if you are using a large font so that your pages are not unnecessarily long. (3)
- On the **Discussions** tab, unselect **Show the discussions topic list** and **Show the preview pane**. Select the **Reading Style** layout to simplify the page for screen readers or large text. (4)
- On the **Email** tab, unselect **Show the Message Preview pane** and **Show the Folder List pane** to simplify the page for screen readers, smaller screen, or large text. (5)
- On the **Pager** tab, set the **Incoming Page Icon** to **On** if you require a visual indication for new pages and select an **Incoming Page Sound** if you require an auditory prompt. Turn off all pager options if you do not want your screen to refresh when you are paged. (6)
- On the Metadata tab, select the **Basic** and **Expanded** options to simplify the page for screen readers, smaller screens, or large text. This tab may not be available depending on your role's permissions. (7)

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## Appendix A: Addendum Learning Environment 8.4

The main source of documentation for Learning Environment 8.4 is the Desire2Learn Resource Center. The Desire2Learn Resource Center is an online help tool for searching for, reading, and printing help documentation on Desire2Learn products.

You can access the Desire2Learn Resource Center through the Desire2Learn Community: <https://community.desire2learn.com/>.

**Note** A username and password is required to log into the Desire2Learn Community.

### Preferences

The Preferences tool has undergone a number of changes, including the addition of an Appearance & Accessibility tab. This tab contains preferences that relate to modifying the appearance of the user interface, such as the font face and size, and preferences that help users with different accessibility related use needs navigate the site easier.

Two new preferences have been added on this page. The first allows users to open secondary windows as pop-ups instead of dialog boxes. This helps users who have assistive technologies that take advantage of link and heading lists, as the dialogs are not separated from the page behind correctly. The second preference allows users to turn off the HTML Editor and replace it with a text field. Users can enter HTML authored in a third-party application in the text field.

### Course Home and My Home page clean up

Learning Environment 8.4 contains the first round of changes to page layouts that will occur over the next few release. The first round of changes included de-cluttering the design of pages that use widgets, fixing the heading structure, reducing page sizes, and removing HTML layout tables.

### Auto-complete

Fields that use auto-complete options are now fully accessible.

### Two-dimensional subjects

We can now support tables and grids that use both a row and column subject to identify a value. For example, in the spreadsheet view of the Enter Grades page the subject information is now "[Grade item name] value for [Username]."

## Validation and error messages

Confirmation and error messages now appear at the top of a page and are easy to identify visibly. The messages are fully accessible by keyboard and readable by screen readers and other assistive technologies. Error messages include links to the areas of the page that caused the error.