

The ABC's of Accessible Design

Using word processors and HTML editors for accessible documents



Always Choose a Style

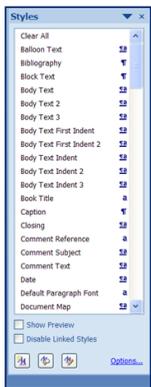
Microsoft® Word 2007 is used as an example of word processing. SoftChalk™ is used as an example of a commercial HTML editor, although there are free HTML editors available (see [Useful Resources](#) and [Useful Downloads](#) at the end of this document).

Word Processors

If you're using Word 2007, begin by selecting *Change Styles* from *Home* ribbon to view *Style Set* options (see the curved green arrow in Figure 1, labeled *Change Styles*).



1 Styles Pane in the Home Ribbon



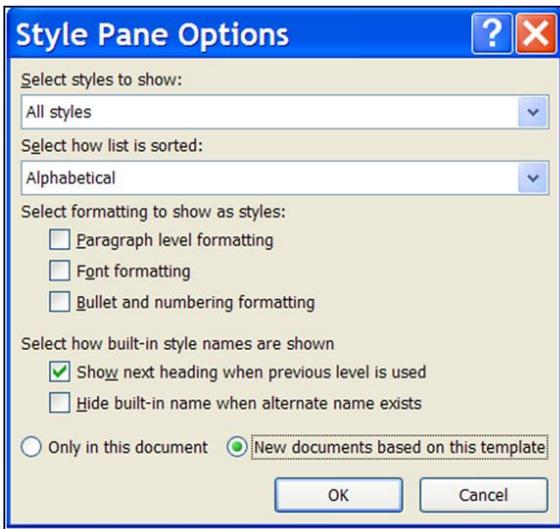
You can customize a style by changing color themes or fonts within a document or permanently for that style, either by modifying each option as it shows up in the *Styles* pane shown in Figure 1 or by viewing a list of style options (see the straight blue arrow above in Figure 1). Figure 2 shows the list in the Styles window. Clicking on the symbol to the right of each heading will allow you to modify settings for that heading, either for a single document or for all future documents.

2 Styles Window in the Home Ribbon

sherry.lindquist@northlandcollege.edu

You can also modify headings in the **Styles pane** by right-clicking on the specific heading you'd like to change.

To get the most out of styles, I suggest you make a few changes to the **Style Pane options**. Click on *Options* at the bottom right of the *Styles* window (Figure 2) to see the options

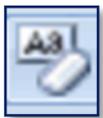


displayed in Figure 3.

Consider choosing *All styles* for *Select styles to show*, *Alphabetical* for *Select how list is sorted*, and then place a check mark in the *Show next heading when previous level is used* and select *New documents based on this template*. You can always come back and change this later.

3 Style Pane Options

If you would like to reveal the formatting (helpful for veteran and novice designers), press Shift-F1 and select *Distinguish Style Source*. If you are working with old documents that you'd like to reformat using headings, you can use the *Clear Formatting* button (Figure 4) on the *Home* ribbon to highlight the entire



4 Clear Formatting

document and erase any previous formatting. Then you can apply new headings wherever necessary by highlighting text and selecting the appropriate heading. This is an easy way to redesign older documents in an accessible format without starting over from scratch.

A Few Reasons to Consider Styles: Obviously, it's easier for screen reader to interpret in a word processor or a PDF document. All readers are likely to find it easier to navigate through longer documents as well, either by using the *Document Map* option available under the *View* ribbon in Word 2007 to move to specific sections or by using the *Bookmarks* option available in most PDF readers. Using headings also makes it easier to create an

sherry.lindquist@northlandcollege.edu

automatically linked *Table of Contents*. A note of caution here: the actual Table of Contents heading itself does not transfer as a bookmark when the document is saved as PDF (don't ask why!). I usually include a separate level one heading right under the Table of Contents heading, something like *Linked TOC*, as a reminder to users that they can click on items. The *Linked TOC* heading is what will show up as a bookmark in the PDF document. For maximum portability, save the final version in PDF format as well. If you make changes in the original document, you can just re-save it again later as PDF. Use *File-Save As-PDF*, and select *PDF* from the *Save As Type* dropdown box. Finally, using style headings may give you a better sense of how readers might view your document in terms of sequencing and relationships between key ideas.

HTML Editors

HTML editors allow you to create web content with easy-to-use WYSIWYG screen interfaces. You can include many more accessibility features with HTML than you can with word processors, if you are willing to learn a bit of programming language. Commercial HTML editors are more likely to provide customizable templates and accessibility prompts than free versions. Please refer to the sections on [Useful Resources](#) and [Useful Downloads](#) for details on free and commercial html editing programs.



Be Careful with Lists and Tables

If you're creating a list, consider using the *List Paragraph* heading in styles rather than creating a bulleted or numbered list from the *Home* ribbon. You can highlight items you'd like to put in a list and then apply the list heading. If you still want bullets for design reasons, you can highlight the list and right click to add bullets. Often, writers will manually enter a blank line between items in a list for the sake of appearance, but this has a negative effect on someone using a screen reader. Each time a blank line appears, the screen reader interprets the next item as the first one on a new list, which can be confusing.

sherry.lindquist@northlandcollege.edu

Instead of using manual spacing, highlight the list and then right click to select *Paragraph* (Figure 5). Change the line spacing to 1.5 or 2.0 and take the checkmark out of the *Don't Add Space* box.



For maximum accessibility, tables should be used to communicate data, not for design purposes. If you would like to frame sections of text, consider using the *Smart Art* or *Text Box* options under the *Insert* ribbon or the *Paragraph Border* options available under *Page Borders* in the *Page Layout* ribbon.

5 Paragraph Window Options



Caption and Check

People using assistive equipment, particularly screen readers, will benefit far more from contextual captions for internal and external links rather than click here captions or web addresses pasted into a document. URL addresses can be provided to readers using printed copies of a document through footnote references or a separate list at the end of the document. Graphics should also contain contextual captions, unless the graphic is purely decorative.

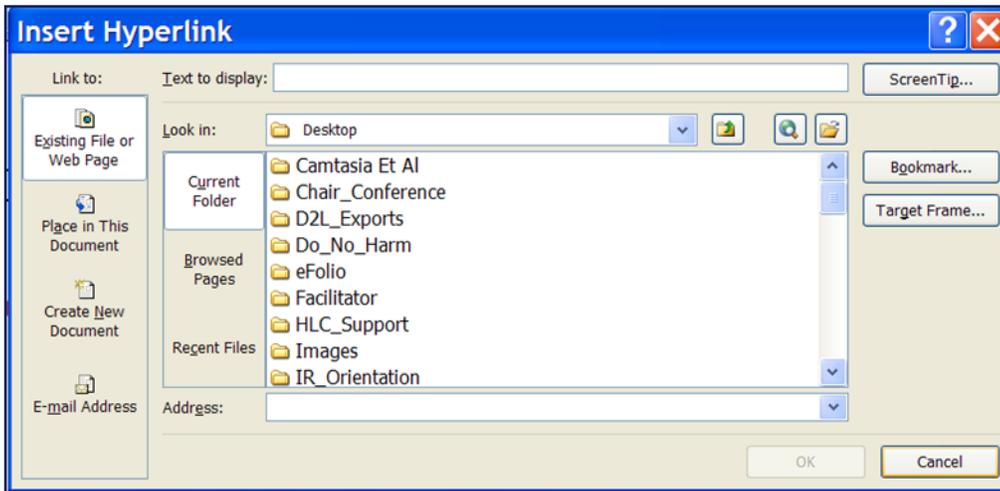
If you're taking the time to design accessible content, you'll also want to make sure it's actually accessible. There are a number of ways to check accessibility, using free or inexpensive tools you can download or using websites designed to check accessibility.

sherry.lindquist@northlandcollege.edu

Captions

To create captioned links in a word processor, simply position your cursor where you want the link to appear and press the control key and the letter k. This will bring up the dialog box seen in Figure 6. If you are inserting a link to an external website, select *Existing File or Webpage* and use copy-paste to put the link in the *Address* box. Then type the caption

you wish to use in the *Text to display* box (such as *New York Times Online*) and repeat it in the *Screen Tip* box. When you click OK, the caption will appear as an underlined link.



6 Insert Hyperlink Dialog Box

If you are creating a link to another section in the same document, select *Place in This Document* and select the appropriate heading from the list. Then type your caption in the *Text to display* box and repeat it in the *Screen Tip* box. When you click OK, the caption will appear as an underlined link.

To add a caption to a graphic, right click on the graphic and select *Size*. Then choose the *Alt Text* tab to enter your caption. If the graphic is purely decorative, you can leave the alt text blank or type two double quotation marks to let the screen reader know to skip the graphic. You will want to check what is being displayed for all graphics. If you do not make any changes, the default tag is the file name for the graphic, which may not provide any useful information for readers.

sherry.lindquist@northlandcollege.edu

Checking Content Accessibility

(Please refer to the footnotes for URL addresses if you are using a printed copy.)

[Web Accessibility Evaluation Tools](#)¹: A guide and resource for evaluating website accessibility from the World Wide Web Consortium

[Web Markup Validity](#)²: A guide and resource for evaluating the markup validity of sites and documents (such as HTML, XHTML, SMIL, MathML) from the World Wide Web Consortium



Useful Resources

[Illinois Information Technology Accessibility Act](#)³

Excellent example of a statewide effort to promote accessibility, as noted at its site: IITAA requires the State to establish and follow specific, functional accessibility standards and to address accessibility proactively. The site includes implementation guidelines and resources for design and securing financing for software and hardware purchases.

[Free HTML editors](#)⁴: This website includes links and evaluations of various free HTML and WYSIWYG editors along with useful tips.

¹ URL: <http://www.w3.org/WAI/RC/tools/>

² URL: http://validator.w3.org/#validate_by_uri+with_options

³ URL: <http://www.dhs.state.il.us/page.aspx?item=32765>

⁴ URL: <http://www.thefreecountry.com/webmaster/htmleditors.shtml>

sherry.lindquist@northlandcollege.edu

[Enroll in the Desire2Learn Community](#)⁵

The *Desire2Learn Community* contains step-by-step guides on accessibility and many other D2L tools under Documentation. You can also find other useful D2L information at the site. (Most learning management sites like Blackboard have similar sites.)

[Using Styles in Microsoft® Word 2007](#)⁶

This site contains video and text-based demonstrations of many features available in Styles.

[Adobe® Acrobat Accessibility Training Resources](#)⁷

This site contains a number of PDF documents on a wide range of accessibility topics, useful whether you use Adobe® Professional or the generic PDF options available in Microsoft® Word.

[The United Nation's Statement on Human Rights](#)⁸

This United Nations document was adopted in 2006 as a comprehensive guide to human rights and fundamental freedoms that should be extended to all people regardless of ability, including Article 9, the right of accessibility.

[Federal Section 508 \(Web Accessibility\)](#)⁹

This is the home page for the federal site governing web accessibility guidelines. Currently, the guidelines are mandatory for federal agencies but voluntary for most academic institutions. Key sections to review include *508 and You* and *508 Training*. You can sign up for free membership in the 508 Universe to access training modules. You may also want to review information from Section 255, as the federal government will be

⁵ URL: <https://community.desire2learn.com/enroll.asp>

⁶ URL: <http://office.microsoft.com/en-us/word/HA102019531033.aspx?pid=CH100740901033>

⁷ URL: <http://www.adobe.com/accessibility/products/acrobat/training.html>

⁸ URL: <http://www.un.org/disabilities/default.asp?navid=12&pid=150>

⁹ URL: <https://section508.gov/>

sherry.lindquist@northlandcollege.edu

merging these two sections in the near future, as outlined in the draft of the [Information and Communication Technology \(ICT\) Standards and Guidelines](#).¹⁰

[Federal Section 255 \(Telecommunications\)](#)¹¹

This is the Federal Communications Commission's consumer fact page related to Section 255, related to telecommunications access for people with disabilities. The site includes products and services covered under the act, background information, definitions, frequently asked questions, and information about how to file a complaint.

[Web Accessibility in Mind](#)¹²

In their own words, WebAIM's mission is to expand the potential of the web for people with disabilities by providing the knowledge, technical skills, tools, organizational leadership strategies, and vision that empower organizations to make their own content accessible to people with disabilities. WebAIM also offers a low-cost site monitoring and reporting service to check accessibility.

[Web Accessibility Initiative](#)¹³

In the words of the site authors, the World Wide Web Consortium (W3C) Accessibility Initiative *brings together people from industry, disability organizations, government, and research labs from around the world to develop guidelines and resources to help make the Web accessible to people with disabilities including auditory, cognitive, neurological, physical, speech, and visual disabilities.*

¹⁰ URL: <http://www.access-board.gov/sec508/refresh/draft-rule.htm>

¹¹ <http://www.fcc.gov/cgb/consumerfacts/section255.html>

¹² URL: <http://www.webaim.org/>

¹³ URL: <http://www.w3.org/WAI/>

sherry.lindquist@northlandcollege.edu



Useful Downloads

[Non-Visual Desktop Access](#)¹⁴ (NVDA): A free screen reader that provides feedback through synthetic speech and Braille—great for testing content and website accessibility.

[Audacity](#)¹⁵: A free digital audio recording and editing program that exports files as MP3 and Ogg Vorbis¹⁶ and can be used to create podcasts with optional (free) [LAME](#)¹⁷ software. Use this to add audio commentary to content you create.

[Voki](#)¹⁸: Free and fee-based software to create talking avatars for websites and learning management systems where you can add your own audio track (with Audacity, for example) or type in text for computer-generated audio.

[SoftChalk](#)^{TM19}: User-friendly HTML editor with many accessibility prompts, and a fully functional 30-day free trial download (you can continue to use any content you create in that period). Priced about \$200-\$500 per license depending on how many licenses you purchase

¹⁴ URL: <http://www.nvda-project.org/wiki/Download>

¹⁵ URL: <http://audacity.download-latest.com/>

¹⁶ Patent- and royalty-free audio compression software with better sound quality and lower bit rates and file sizes than MP3 format

¹⁷ URL: <http://audacity.sourceforge.net/help/faq?s=install&item=lame-mp3>

¹⁸ <http://www.voki.com/>

¹⁹ URL: <http://www.softchalk.com/>

sherry.lindquist@northlandcollege.edu