

Microsoft Word 2007

Creating Accessible Documents



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Jean Wells Editor jwells@calstate.edu

Mary Fran Breiling, Content Editor, maryfran.breiling@sjsu.edu

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TUTORIAL DESCRIPTION

Overview

Structural formatting is an essential element of accessible digital content. Structural formatting describes the purpose of the text, allow readers to scan through and identify content, and supports better understanding of the author's message. Structured Word documents are also more likely to be accessible to other types of technology (like search engines) and are more likely to be accessible when converted to other file types, like HTML or PDF. Accessibility can be added to a Microsoft Word document either during its creation or after all content has been finalized.

These guidelines were written for the 2007 version of Word for the Microsoft Windows. Topics covered in this tutorial include creating accessible document through the use of styles, hyperlinks, alternative text, and tables. Additionally, information about converting a Word document into an accessible pdf document is included. A list of resources related to accessible documents is contained at the end of this tutorial.

Prerequisites

Individuals using this tutorial should have basic computer skills and the ability to work in the Windows operating system.

Objectives

After completing this training you should be able to:

- Structure a document using the Styles feature of Word
- Add alternative text to describe a graphic contained in a Word document
- Insert an accessible hyperlink
- Format a simple table to be more accessible
- Repeat heading row when the table breaks across two or more pages
- Convert an accessible Word document into a PDF document with tags.

CREATING ACCESSIBLE WORD DOCUMENTS

Introduction

Accessibility in terms of electronic documents (in particular, documents provided for a general audience on the Web) generally refers to facilitating the use of technology for people with disabilities. Providing equivalent access to electronic documents for all faculty, staff and students across the CSU system is required by SB302. This Senate Bill extends the requirements of Section 508 of the federal Rehabilitation Act to the California State University. To learn more about accessibility requirements for the CSU, refer to the following Web site [About the Accessible Technology Initiative](http://www.calstate.edu/accessibility/) at <http://www.calstate.edu/accessibility/>.

The focus of this tutorial is to create documents that are accessible to individuals with a visual impairment and that require the use of an assistive technology, like a screen reader, to navigate and read documents. Students with physical disabilities, learning disabilities and English language learners may also benefit from the formatting features of an accessible document.

What Makes a Word Document Accessible?

Accessible Word documents, above all, can be read intelligently by screen reader software (software used by the visually impaired to read material on the screen out loud) more easily.

Accessible Word documents:

- Activate Document Map to view the structure of the document
- Contain styles that define the document structure.
- Include alternative text defined for all graphics. (Alternative text is used to describe an image so that the information portrayed by the image can be understood in an equally effective way by the visually impaired.)
- Provide the name of the web site in hyperlinks to URLs
- Define header rows in tables
- Continue header rows when the table flows to subsequent pages



TIP: Some users cannot perceive certain colors, green and red, for example. Use a style such as underline or bold to emphasize text in a document rather than rely upon color.

Structure the Document Using Styles

Structural formatting is an essential element of accessible digital content. The formatting allows readers to scan through and identify content and to better understand the author's message. In addition, an individual using a screen reader can navigate the document by heading levels, thus getting an overall sense of the structure of the document without having to read the entire document. Structured Word documents are also more likely to be accessible to other types of

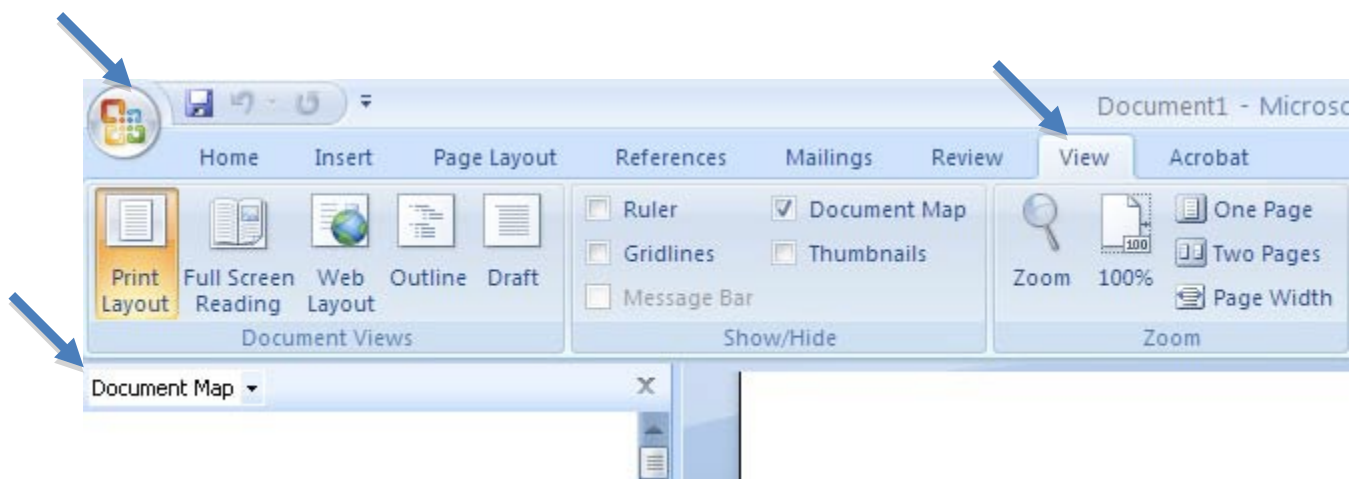
technology (like search engines) and are more likely to be accessible when converted to other file types, like HTML or PDF.

All text can be formatted using the *Styles* features within Word. The *Styles* formatting features allows the user to specify and even customize the way the document looks and behaves. Formatting using *Styles* is achieved by using the various options for headings, paragraphs, and other elements of the document. Most documents will only require heading elements (entitled *Heading 1*, *Heading 2*, and *Heading 3*) and the basic paragraph element (entitled *Normal*).

Once a user builds a complete style set for documents, time and effort is saved by using the formatting features of Word rather than highlighting and formatting each element separately. Users discover that using Styles has additional benefits. A document's font, size, bold and/or other characteristics of the document's body text and headings can be changed quickly by modifying the style. Additionally, if styles are used, a table of contents of the content of the document can be created very easily using the Insert Table of Contents command within Word.

Displaying the Document Map

- step 1.* Launch Word 2007. Click on the **Office** button and select **New**. Click on the **Blank Document** icon. A new document will appear in the document window.
- step 2.* Click on the **View** tab and select **Document Map** in the **Show / Hide** group. The Document Map task pane will open on your left. After you applied a Style to a heading, sub heading, caption, etc. the heading structure will appear in their hierarchy in this window. Document Map can also be used to determine if an existing document has a heading structure.

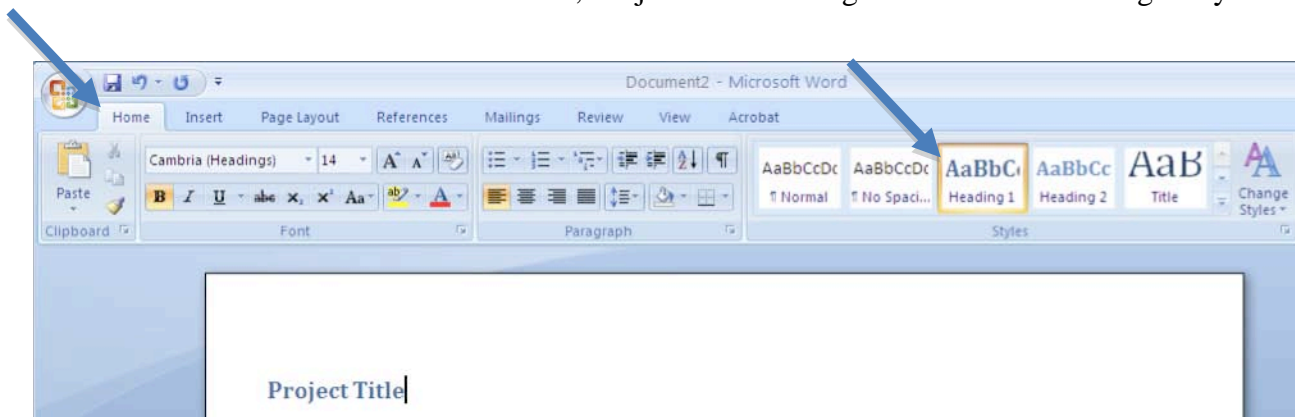


Applying Styles

Document should be structured in a hierarchical manner, with Heading 1 being the highest in hierarchy, usually page title, then Heading 2, usually major section headings, down to Heading 3, sub-sections of Heading 2, and so on. Lower degree headings should be contained within headings of the next highest degree. Styles prioritize the elements as well as enable the formatting and visual presentation of material quickly. By default, when you input text, it will appear as in Normal Style, the lowest in the hierarchical structure.

step 1. To apply a heading style, highlight the text, click on the **Home** tab.

step 2. Highlight the text, then select the appropriate Heading style in the Styles group, such as Heading 1 for title, Heading 2 for the next level, Heading 3 for the next sub-level, etc. In the illustration below, Project Title is being selected for a Heading 1 Style.

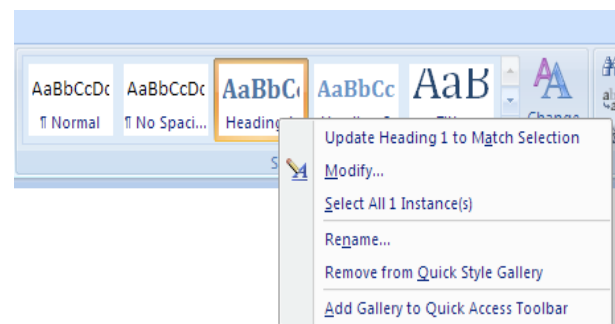


TIP: Use the Styles features of Word to create ordered and unordered lists. Avoid manually creating lists by using dashes or asterisks to represent separate bullet points.

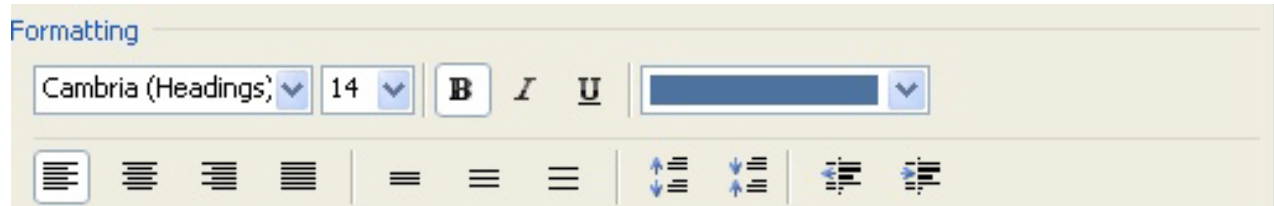
Modifying Styles

Word has a number of default settings for Styles that can be modified to change appearance of the document.

step 1. To modify the visual effects and formatting of your Styles, right click on a specific Style in the Home tab's Styles group, and select **Modify**. The Modify Style window will appear. The Modify Style window contains the selections for Properties and Formatting.

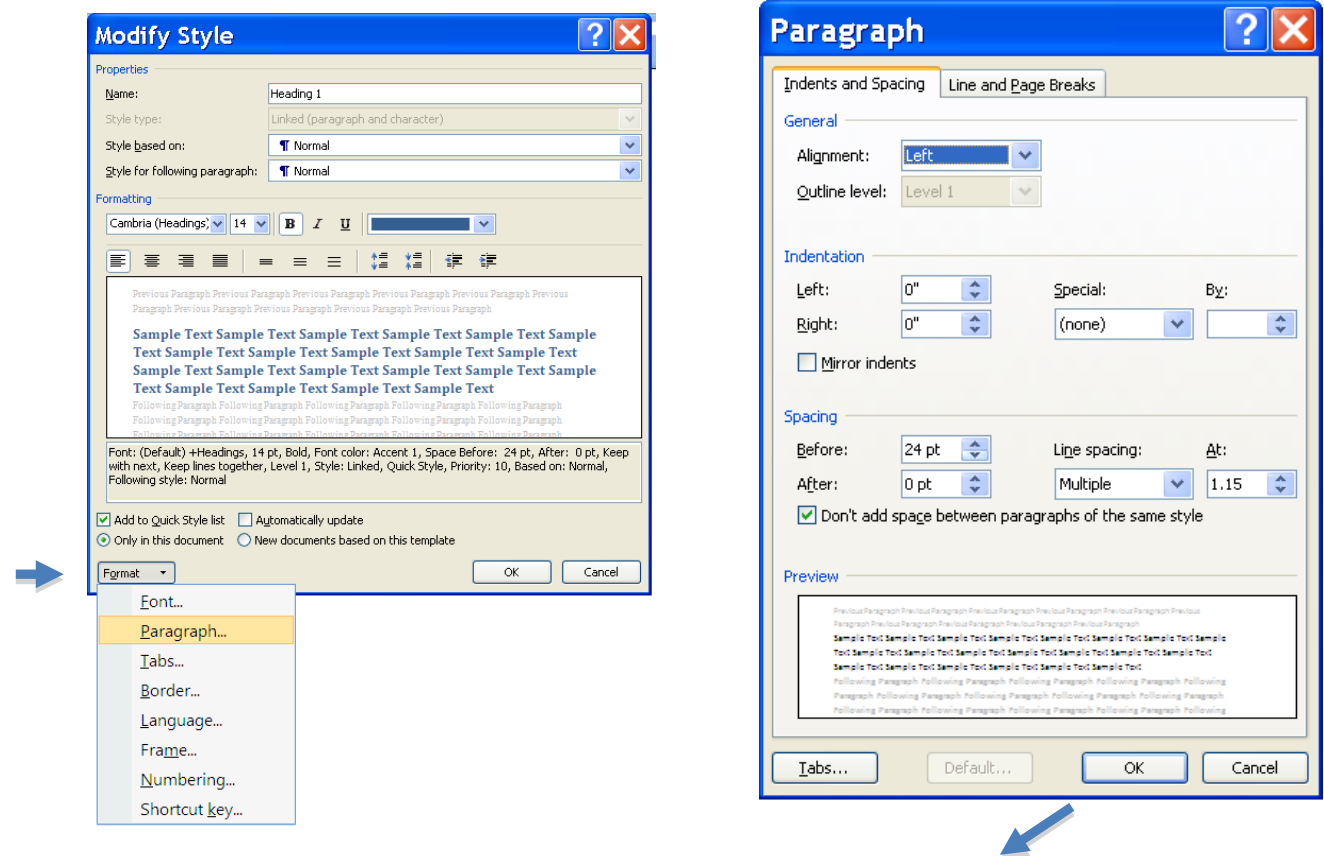


step 2. Change the font, size, alignment, and other characteristics of the heading as desired.



step 1. To change the formatting options such as paragraph, numbering, tabs, etc., click on the lower left-hand **Format** button in the **Modify Style** window. The formatting option list will appear.

step 2. Modify the before and after line spacing of headings, by selecting **Paragraph** in the **Format** option list.



step 1. In the Spacing group of the **Paragraph** window, modify the increments of space **Before** or **After** your Style by clicking on the up and down arrows.

step 2. Click OK to preview document and exit the **Paragraph** window.

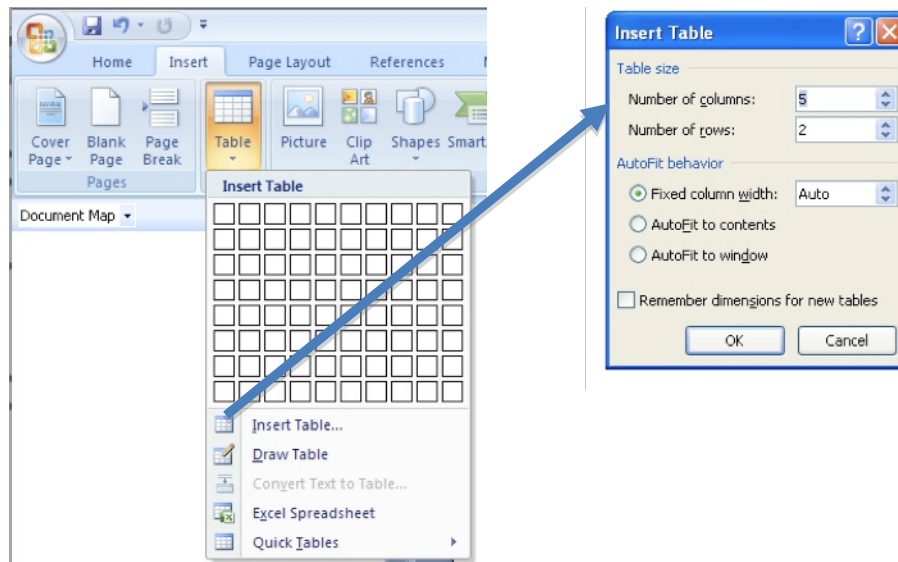
step 3. Click OK again to confirm modification and exit the **Modify Style** window.

Formatting a Table

Tables are useful for displaying a large amount of data in an organized manner. Relationships and changes between data can easily be shown in a table format. Someone who can read a table visually can refer back to the column and row headings for the table to make sense of the data. In order to make a table accessible for the visually impaired provide a description of the contents of the table. The text-to-speech software by default will read the information in a table horizontally, cell by cell, row by row. Simple tables are read efficiently by screen readers when the column or row headers are clearly defined. Identifying the header row in a table assists the visually impaired. Tables that are contained on multiple pages, should have the header row repeated on each page.

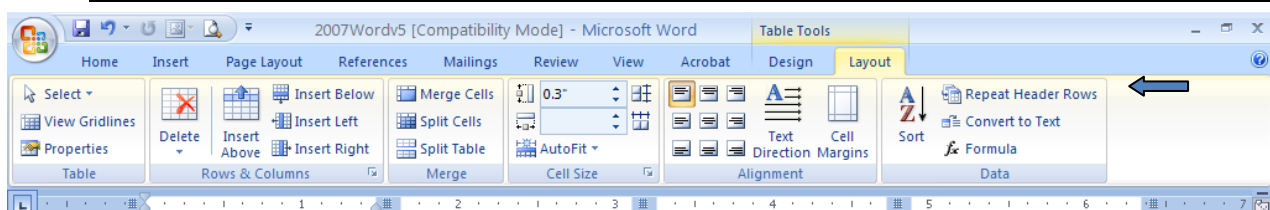
Defining and Repeating the Header Row

- step 1.* Go to the Insert tab and select the **Table** icon.
- step 2.* Click on the **Insert Table** label below. Enter the number of columns and rows desired. Click OK when done.



- step 3.* Enter the text labels for the columns of the table.
- step 4.* Highlight the header row and click on the **Layout** tab
- step 5.* Click on the **Repeat Header Rows** label.

First Name	Last Name	Phone	E-mail



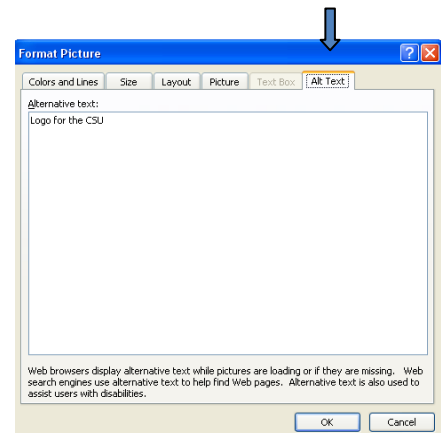
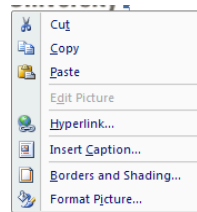


TIP: It is very important that tabs or spaces not be used to create tables or columns. The visual appearance may look like a table or column; however, tabbed text and data do not have the structure and will not be recognized as either a table or a column. The information will not be accessible or readable by assistive technologies.

TIP: Screen reading software continues to have difficulty reading complex tables created in Word when tables have cells of different heights or a varying number of columns per row.

Graphics And Alternative Text

Graphics (photographs, clip art, figures, charts, etc.) convey information and provide an attractive appearance to documents. Screen reading software will detect the image or object in a Word document and will read the alternative text description, if it has been provided. The text description should convey the same information to the user that the graphic provides. Describe the graphic concisely while conveying equivalent information.



step 1. Right click on the image

step 2. Select **Size** or **Size and Position** in the **Options** list. Documents that have been created in Word 2003 may have **Format Picture** as the option rather than Size or Size and Position.

step 3. Select the **Alt Text** tab.

step 4. Input a concise description in the Alt Text area. The Alt text will be embedded in the image and will not be visible in the Word document.

step 5. Click Close



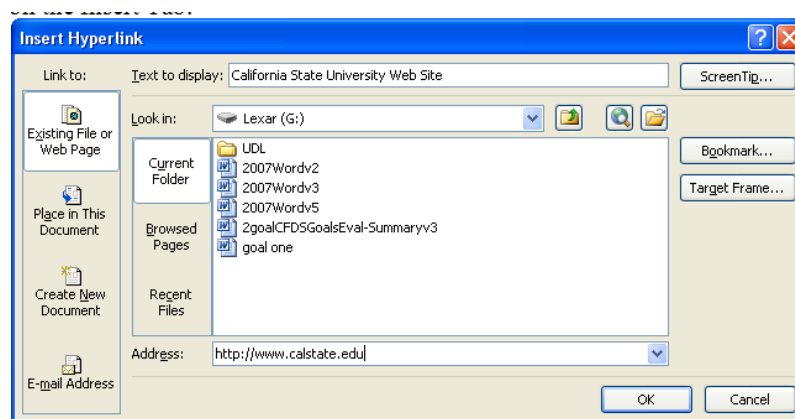
TIP: It is not necessary to include the words, “Image of...” in your text description. The assistive technology software will convey that information to the user, and it would be redundant to have that information in the text description as well.

Inserting Hyperlinks

Hyperlinks are elements within electronic documents that link to another section in the document, to another document, or more commonly, to an Internet resource. When inserting a hyperlink, provide a title for the URL or document, such as, California State University web site.

It will enhance readability if the list of hyperlinks in this table is informative rather than a list of long URLs or non-descriptive words such as, “Click here.”

- step 1.* Input the name of the destination, i.e. name of your web site, “California State University Web Site.”
- step 2.* Highlight the text that will be hyperlinked.
- step 3.* Click on the **Insert** Tab.
- step 4.* Click on **Hyperlink**. The Insert Hyperlink window will appear as below.
- step 5.* The highlighted text is displayed within the Text to display text box. By default the hyperlink function for **Existing File or Web Page** button is selected in the left column.
- step 6.* Select the location of the electronic document to be linked; **Existing File or Web Page**, **Place in This Document**, **Create New Document**, **E-mail Address**.
- step 7.* If the link is to an Internet resource, type the URL in the Address text box.
- step 8.* Click OK.



[California State University Web Site](http://www.calstate.edu)

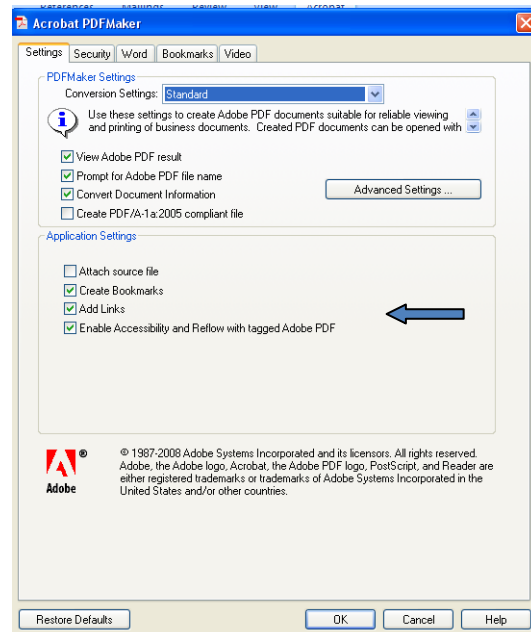
Note: The text that is hyperlinked will be in blue and underlined, as is commonly found in documents with hyperlinks.

Converting to Adobe PDF

Accessible Word documents can be converted to accessible Adobe PDF documents quite easily. Use the Adobe Acrobat Plug In that is available within Word if Adobe Acrobat is installed. Avoid using the Print to PDF option as that option creates an untagged PDF.



- step 1.* Select the **Acrobat** tab
- step 2.* Select **Preferences**
- step 3.* Check the **Enable Accessibility and Reading** with tagged Adobe PDF feature.
- step 4.* Click **OK** when done.



RESOURCES

Online Resources

[Accessibility Features of Microsoft Word - Web Accessibility for All](http://www.cew.wisc.edu/accessibility/tutorials/MSWordFeatures.htm)

<http://www.cew.wisc.edu/accessibility/tutorials/MSWordFeatures.htm>

[Accessibility in Learning& Teaching, San José State University, Center for Faculty Development](http://www.sjsu.edu/cfd/resources/instructional/accessibility.shtml)

<http://www.sjsu.edu/cfd/resources/instructional/accessibility.shtml>

[Accessible Web Publishing Wizard for Microsoft Office: Best Practices for Word](http://www.accessiblewizards.uiuc.edu/bp-word.php)

<http://www.accessiblewizards.uiuc.edu/bp-word.php>

[CATEA.org: GRADE Project Guidelines: Accessible Word Documents](http://www.catea.gatech.edu/grade/guides/wordmust.php)

<http://www.catea.gatech.edu/grade/guides/wordmust.php>

[Creating Accessible PDF from MS Word – Web Accessibility Center The Ohio State University](http://www.wac.ohio-state.edu)

<http://www.wac.ohio-state.edu>

[Data and Layout Tables – University of Wisconsin-Madison Web Accessibility 101](http://www.doit.wisc.edu/accessibility/online-course/standards/tables.htm)

<http://www.doit.wisc.edu/accessibility/online-course/standards/tables.htm>

[How Accessible are Microsoft Word Documents?](http://www.washington.edu/accessit/articles?266)

<http://www.washington.edu/accessit/articles?266>

[Microsoft Office \(Microsoft Word\)](http://www.document-solutions.com/accessibility/AdobeAccessChapter3a9.html)

<http://www.document-solutions.com/accessibility/AdobeAccessChapter3a9.html>

[NCDAE – Microsoft Word Fact sheet](http://ncdae.org/tools/factsheets/word.cfm?template=print)

<http://ncdae.org/tools/factsheets/word.cfm?template=print>

[Using Markup for Word and Word Perfect – Web Accessibility for All](http://www.cew.wisc.edu/accessibility/tutorials/structuralmarkuptutorial.htm)

<http://www.cew.wisc.edu/accessibility/tutorials/structuralmarkuptutorial.htm>

[WebAIM: Microsoft Word](http://www.webaim.org/techniques/word/)

<http://www.webaim.org/techniques/word/>

CSU Online Resources

- [CSU Accessible Technology Initiative](http://www.calstate.edu/accessibility):<http://www.calstate.edu/accessibility>
- [Professional Development Accessible Technology](http://teachingcommons.cdl.edu/access/):<http://teachingcommons.cdl.edu/access/>

Getting Help on Your Campus

Visit the CSU Accessible Technology Initiative Resources web page for links to campus ATI websites where you can get more information on how to get help on your campus:

<http://www.calstate.edu/accessibility/resources/>

Acknowledgement

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