

Creating Accessible Documents with Microsoft Word

Transcript

Overview

Instructions

This e-learning course is designed to provide a guided, hands-on learning experience. The lessons can be read in any order, but if this is your first time taking this course, you may want to read them sequentially.

To get the most from this course, please familiarize yourself with the exercise documents for each lesson. Links to the exercise documents are provided in this transcript.

The activities at the end of each lesson provide you with additional opportunities to explore accessibility best practices using the exercise documents. You will answer practice questions that help guide application of the accessibility techniques discussed.

Introduction

VOICEOVER

Welcome to the e-learning course, *Creating Accessible Documents with Microsoft Word*, provided by Opportunities for Ohioans with Disabilities. In this course, we will explore best practices for building electronic documents that are accessible to users who are visually impaired.

In the United States alone, there are more than seven million people with visual disabilities. Many of these individuals rely on assistive technologies, such as screen readers and magnification software, to access electronic, Microsoft Word documents. If these documents are not created with accessibility in mind, navigating the information can become difficult, if not impossible, for these individuals.

A poorly accessible document might result in someone visualizing this...

SCREEN READER

Picture. Nature picture with title. (Slide_01_demo_picture_title#1006bREV01.jpg)

VOICEOVER

When what is really shown is...

SCREEN READER

Picture. A mountain climber dangling precariously from her rope as she tries to reach an inaccessible rock ledge. Superimposed title, *Creating Accessible Documents with Microsoft Word*.

VOICEOVER

As we create electronic documents, it is our goal to provide accessibility to all users. By following the guidelines in this course, you can help eliminate obstacles by supporting good document design and structure.

Objectives

This e-learning course will help enable you to create fully accessible Microsoft Word documents. By following the best practices presented in this training, you will be able to:

1. Save a document in an accessible format
2. Use styles to format a document for navigation and legibility
3. Provide accessible contrast and redundancy for elements that use color
4. Format tables for accessibility
5. Write alternative descriptions that communicate purpose and function
6. Test documents for accessibility

Screen Reader Demonstration

VOICEOVER

In this demonstration, we'll use the JAWS screen reader to narrate both an accessible and an inaccessible document. First, we'll open an accessible document and navigate the document using the headings.

SCREEN READER

Demo-Employer-Perspectives-on-Disabilities-Final.docx - Word. Print view. The document has seven objects. Edit.

VOICEOVER

In an accessible document, the screen reader will detect the headings automatically, and allow us to navigate using simple keystrokes. Let's listen to how this works.

SCREEN READER

Quick keys on. Heading 1, Overview. Heading 2, Major Industry Sectors. Page 2, Section 3. Heading 1, Employer Concerns. Section 4, Page 2, two text columns. Heading 2, Can an employee with a disability get the job done? Text Column 2, Heading 2, How will supervisors manage employees with disabilities?

VOICEOVER

We can also view a list of headings and navigate through this list.

SCREEN READER

Heading list dialog. Headings list view. How will supervisors manage employees with disabilities? Colon 2. 5 of 21. To move to items use the arrow keys. Are job accommodations and assistive... Will worker's compensation and... Tools & Resources. Colon 1. Alt+M. Heading, Level 1, Tools & Resources. Edit. Page 3, Section 5.

VOICEOVER

Let's switch to the inaccessible document and compare the navigation.

SCREEN READER

Quick keys on. No more headings found. There are no headings in this document.

VOICEOVER

The screen reader doesn't detect any headings in the inaccessible document, so we have to navigate using the up and down arrow keys.

SCREEN READER

With disabilities. Overview. In the first survey of its magnitude, 3,797 businesses representing 2.4 million... 12 industry sectors and various company... Recruiting, hiring, retain... Major Industry Sectors. Bullet, Construction. Bullet, Finance. Bullet, Manufacturing. Bullet, Professional.

VOICEOVER

This is slower to navigate, and none of the headings are indicated as headings.

We'll switch back to the accessible document, and this time, we'll navigate through the graphics.

SCREEN READER

Page 1, Section 1. Top of file. Employer Perspectives on Employment of People. Section 3, Page 1. Picture. Pie chart. Over half of employed individuals with disabilities are employed by the public administration industry. The service producing and goods producing industries roughly split the other portion of employed individuals with disabilities.

VOICEOVER

Accessible graphics are recognized by the screen reader and we can navigate using simple keystrokes as we did with the headings.

SCREEN READER

Page 2, Section 4. Two text columns. Picture. An office worker with a hearing impairment uses webcam technology to successfully perform her administrative duties. Image courtesy of Significan't SignVideo Services. Text column 2. Picture. An employee with a mobility impairment has a typical conversation with her supervisor while setting up for a business event. Photo by Jay Baker.

VOICEOVER

Notice how the alternative text for each graphic is narrated by the screen reader and conveys the purpose and function. Let's listen to how graphics are narrated in the inaccessible document.

SCREEN READER

Top of file. Employer Perspectives on Employment of People. Picture. Page 2, Section 2. Two text columns. Picture. Text Column 2. Picture.

VOICEOVER

The screen reader detects the graphics, but there is no alternative text to read, so we only hear the word "Picture." This doesn't tell the user anything about what each graphic represents. Finally, we'll go back to the accessible document and navigate through the links.

SCREEN READER

Page 3, Section 4. Two text columns. Link JAN Website.

VOICEOVER

Links are recognized by the screen reader and we can jump to these using a simple keystroke.

SCREEN READER

Text, Column 2. Link ODEP Business Case. Page 4, Section 5. Text Column 1. One text columns. Link EARN Website. Page 5. Link JAN Website. Link ADA National Network Website.

VOICEOVER

We can also get a list of links and navigate to them directly.

SCREEN READER

Links list dialog. Links list view. ADA National Network Website. 5 of 8. To move to items use the arrow keys. USBLN Website. Disability.gov Website. Department of Labor research website.

VOICEOVER

Notice how the links make sense out of context and we know where each link will take us.

SCREEN READER

Alt+M. For copies of survey reports referred to in this document, please visit the, link, Department of Labor research website. Edit. Page 5, Section 5.

VOICEOVER

We'll go over to the inaccessible document and compare how links work here.

SCREEN READER

Page 3, Section 2. Two text columns. Link <http://askjan.org/media/lowcosthighimpact.html>.

VOICEOVER

Again, the screen reader recognizes the links, but these links have not been named, so the screen reader narrates the full web address.

SCREEN READER

Text, Column 2. Link <http://www.askearn.org/businesscase/index.asp>.

VOICEOVER

This is tedious to listen to, and often does not give a good idea of what we'll find at a given link. Using the accessibility best practices discussed in this course, will help you to create documents that enable intuitive screen reader navigation.

Lesson 1: Formatting

Overview

Using accessible practices and formatting for document file names, titles, headings, fonts, and languages, helps documents to be easily found and viewed by people with visual disabilities.

The following guidelines are discussed in this lesson:

- Specify a title in the document properties
- Save a document to docx format using an accessible file name
- Use styles to format document elements
- Use themes to change a document's appearance, including colors and fonts
- Set the document language

Document Properties

The first step towards creating an accessible Microsoft Word document is to define document properties, such as *Title* and *Author*, and to save the document to an accessible format using a

file name that clearly indicates what the content is. Let's take a look at the best practices for saving an accessible Word document.

Follow along by opening [Exercise Lesson 1.1 Document Properties](#).

Here we have the exercise document used in this lesson. Let's click on the *File Tab*, and take a look at the properties. We click the *Properties Menu*, and select *Show Document Panel*. This displays the document properties at the top of the document. We can see that this document has no properties yet. At a minimum, we need add a descriptive title. Let's go ahead and copy the title shown in the document itself. We click in the left margin next to the title to select it, and then hit Ctrl+C on the keyboard to copy the text. Next, we navigate up to the document properties and click in the *Title Field*. This is where we'll paste the title by pressing Ctrl+V on the keyboard. If this document were part of a larger online repository or library, we could enter the author's name, subject, and keywords to make it easier to find. For now, let's close the document properties by clicking the 'X' in the upper right.

The next thing we need to do is save the file using an accessible file format and name. Let's click on the *File Tab* and choose *Save As*. We'll save to the current folder by clicking it in the list. If we look at the file type in the *Save As Dialog*, we can see that this document is currently saved in the older *.doc* format used by Word 97 through 2003. To enable the full accessibility features of Word, we need to save this document in the current *.docx* format. To do this, we select *Word Document* from the *Save as type Menu*. Before we hit *Save*, we need to uncheck the box next to *Maintain compatibility with previous versions of Word*. This will force Word to enable all of the accessibility features for this document.

The last thing we need to do is to give the file an accessible name. The best practice for file naming is to avoid using spaces, underscores, and other special characters. Instead, we use a hyphen where we'd normally put a space, and capitalize each word. The document here already has a file name that uses this convention, and is named according to its use in this demonstration. Let's change the name to something that makes more sense as a standalone file. We'll use *Employer-Perspectives-on-Disabilities*. The goal is to use a file name that sufficiently describes the content of the document in as few characters as possible. Now, we click the *Save Button* and this file is ready to go.

Styles

Using Word's built-in styles has two advantages. First, styles allow us to create a consistent look for a document that can be quickly modified. Second, styles provide an accessible structure to the content that can be easily navigated with a screen reader. Let's take a look at how to apply styles in Word for a consistent look.

Follow along by opening [Exercise Lesson 1.2 Styles](#).

To access styles, we'll go to the *Home Tab*, and look in the *Styles Group*. Here we see the standard styles that are available in Word. We can apply a style to existing text, or set the style for text we want to create. To apply the *Title Style* to the existing title, we click at the start of the line, and then select the *Title Style* from the *Styles Group*. The style is immediately applied. Let's see how we can set the style for text we're about to create. We click where we want to add the text, in this case above the first paragraph, and then select the style we want to use. We'll choose the *Heading 1 Style*. Next we'll type the word "Overview" for our heading. We can see that the new text uses the selected style.

Looking at the rest of the text in this document, we can see that only the *Normal Style* is applied. This is the default style for text in Word. The appearance of some text in this document has been changed using bolding and different font sizes, but this does not improve accessibility. Let's go ahead and apply styles to the rest of the headings. To select the headings, we click in the left margin next to the first one. Then, we hold down the Ctrl key on the keyboard, and click in the left margin next to the second heading. We can select any number of headings or paragraphs using this technique. Now, we choose the Heading 1 style, and it is applied to all of the selected text. Let's repeat this process for the subheadings. We select the first subheading by clicking in the left margin, and then hold down Ctrl and do the same for the other subheadings. For these, we choose the Heading 2 style.

Once styles have been set, we can modify the formatting as needed. For example, let's change the subheadings to a different color. We select one of the subheadings, and set the font color. Now, we right click on the style for this heading, and choose *Update to Match Selection*. Notice that all of the text with this style is automatically updated as well. It's also possible to modify styles directly. Let's say we want to change the font size of the top level headings. To do this, we right click on the Heading 1 style, and select *Modify*. We'll increase the font size and click *Okay*. This changes the size of all the top level headings, and now we have a consistent look for the document.

Themes

A quick way to change the visual appearance of a document is to use themes. Themes offer preset styles that can be used to modify the look of a document. Often times using a theme is quicker than modifying the individual document styles, but we still need to apply the styles to the text. Let's apply a theme to this document.

Follow along by opening [Exercise Lesson 1.3 Themes](#).

To access themes, we click on the *Design Tab* and then on the *Themes Menu*. Let's choose the Berlin theme by clicking on it. This applies the theme to our document and updates the styles of associated text. We can also choose from several different style sheets within this theme. These are shown next to the *Themes Menu*. Let's find a style sheet, like this one with the lines,

and activate it by clicking on it. We can also change the colors used in the theme by clicking on the *Colors Menu*. We'll select the Red color palette to change the color scheme of our document. It's important to be aware that use of the color schemes may not always produce accessible results for individuals with visual impairments. Some of the colors may need to be changed, or used differently, to provide better contrast.

Finally, we'll change the fonts used in this theme by clicking on the *Fonts Menu*. This menu provides a list of system fonts that work well for readability and accessibility. Both the Calibri and Cambria fonts were specifically designed for accessibility, and we'll go ahead and choose Calibri for this document. When choosing fonts, we need to make sure that the font is legible at both small and large sizes. The best way to ensure legibility, is by using standard system fonts at size 12 or higher.

Language

VOICEOVER

Most screen reading software includes voices for multiple languages. To make a document accessible in different languages, we need to tell Word what language our text is written in.

Follow along by opening [Exercise Lesson 1.4 Language](#).

Here we have a document with three lines of text that we'll apply different language settings to. To get started, let's select the last Spanish sentence by clicking in the margin next to it. Next, we click on the *Review Tab*. In the *Language Group*, click on the *Language Menu*, and then *Set Proofing Language*. Notice that the checkbox next to *Detect language automatically* is checked by default. Word can only automatically detect languages that are listed above the double line at the top of this dialog. In our case, only English is available for auto detection. This means that screen readers will try to read the Spanish text as if it were English. We can change this by manually setting the language for the text we selected. We'll type in the word "Spanish" and then scroll down to *Spanish (Mexico)* and click that. Now click *Okay*. This tells Word that the text we selected is written in Spanish. Notice how the first line of Spanish text is flagged for misspellings, but the last line is not. This is because Word now recognizes the last line of Spanish text in the correct language, and screen readers will as well. Let's listen to how a screen reader narrates this text.

SCREEN READER

I am very hungry and would like some chicken soup. Tengo mucha hambre y me gustaría un poco de sopa de pollo. Tengo mucha hambre y me gustaría un poco de sopa de pollo.

VOICEOVER

We can hear how the screen reader accent changes when it reads the last line of Spanish text that has the language set correctly. This is a good way to provide accessibility in different languages.

Exercise

The knowledge check questions in this activity are designed to provide additional opportunities to explore formatting accessibility best practices using the [Employer Perspectives on Disabilities](#) exercise document. To answer the practice questions, open the document, and use the processes discussed in this lesson.

1. What is the *Document Title* property for this document?
 - a. Employer-Perspectives-on-Disabilities-Final.docx
 - b. Employer Perspectives on Employment of People with Disabilities [Correct]
 - c. Employer-Perspectives-on-Disabilities
 - d. Employer Perspectives on Disabilities

Incorrect Feedback: To access the *Document Properties*, go to *File Tab > Properties Menu > Show Document Panel*. To review this topic, click the *Review Topic Button*.

Correct Feedback: Adding document properties makes a document easier to find and navigate using a screen reader.

2. What style does the heading *Ways to Recruit Talented Workers with Disabilities* use?
 - a. Title
 - b. Heading 1
 - c. Heading 2 [Correct]
 - d. Normal

Incorrect Feedback: To view styles associated with a line of text, select the text, and then go to *Home Tab > Styles Group*. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 19.

Correct Feedback: Using styles provides a consistent look for a document, and makes the document easier to navigate using a screen reader. For more information, click the *Job Aid Button* and navigate to page 19.

Note: The job aid page numbers are off by 4 pages (i.e. page 19 is actually page 23 in the document).

3. What font does the *Slice* theme use for the *Heading 1* style?
 - a. Century Gothic [Correct]
 - b. Calibri

- c. Cambria
- d. Arial

Incorrect Feedback: To change the document theme, go to *Design Tab > Document Formatting Group > Theme Menu*. To view the font for a particular style, go to *Home Tab > Styles Group*, right click on a style, and choose *Modify*. Look at the font in the *Formatting* options. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 46.

Correct Feedback: Using the themes supplied with Microsoft Word helps ensure the use of accessible fonts and colors. For more information, click the *Job Aid Button* and navigate to page 46.

- 4. Under the *Disclaimer* heading at the bottom of the document, the proofing language is correctly set to Spanish for the Spanish text. True or false?
 - a. True [Correct]
 - b. False

Incorrect Feedback: To set or check the proofing language for selected text, go to *Review Tab > Language Group > Language Menu > Set Proofing Language*. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 44.

Correct Feedback: When the language of a document, or selection of text, is properly identified, screen readers will pronounce the text correctly using a native accent. For more information, click the *Job Aid Button* and navigate to page 44.

Lesson 2: Color

Overview

The proper use of color is critical for ensuring that a document maintains accessibility for users with color vision deficiencies and other low vision impairments. The following guidelines are discussed in this lesson:

- Use good contrast for document elements
- Provide redundant information for content conveyed solely through color

The color contrast demonstration video uses the [Contrast-A: Color Contrast Checker](#) tool. Visit the site for more information.

Contrast

The amount of contrast between the document background, the text, or other content elements, can affect how accessible the document is to users who are visually impaired.

Follow along by opening [Exercise Lesson 2.1 Contrast](#).

One way we can test for contrast is to print the document to a black and white printer to see if it still readable. A better way is to use a contrast checker to verify that the colors in the document meet accessibility standards. There are many different tools that can be used to check color contrast, and one of the best ones is a web app called [Contrast-A](#). Contrast-A can be used to find or validate color combinations that meet the contrast standards defined by the World Wide Web Consortium.

Let's see how we can use Contrast-A to check the contrast of our document. First, we need to find the color value of one of our elements. The darker red color of the document title is used throughout the theme, so we'll use that. To find the color, we click at the beginning of the title. We'll look at the *Home Tab*, and then we click on the *Color Menu* in the *Font Group*. We can see where the swatch for the dark red color is selected, and we click on *More Colors* to find its color values. We'll note the numbers in the boxes next to *Red*, *Green*, and *Blue*, and click *Okay*. R123, G35, and B11.

We browse to the [Contrast-A website](#) to access the Contrast-A tool. We can see that there are two color pickers at the top of the page. We'll type the color values we noted from Word into the R, G, and B boxes under the first color picker. We need to set the second color picker to white, which represents the document background. We drag the crosshairs in the second color picker up to white in the top left. Now, we scroll down and have a look at the result. We can see that the thresholds in the *Luminance Contrast Ratio Box* all have checks next to them. This means that the colors we entered offer good contrast, and meet accessibility standards. Let's scroll back up and reduce the contrast by changing the color that represents our document text to a lighter color. Now, when we look at the threshold values, we see an "X" next to each one. This indicates poor contrast that does not pass accessibility standards. Sometimes contrast is okay for larger text, but not for smaller text. The threshold values indicate if this is the case. Larger text is anything above a font size of 18 in Word, and smaller is anything under 18.

The Contrast-A tool has a number of other features that are worth a look, but it works well as a quick tool to check color contrast.

Redundancy

Some visual impairments prevent people from seeing or distinguishing colors. To ensure accessibility, documents that use colors to communicate information should provide a

redundant way to receive this information that doesn't rely on color. Let's take a look at an example.

Follow along by opening [Exercise Lesson 2.2 Color Redundancy](#).

Here we see a chart that uses color to convey meaning. The colors shown in the legend match up sections of the pie chart with industries that employ people with disabilities. As such, the legend is not accessible to users who are unable to see or distinguish colors. Let's fix this by adding redundant data labels to the chart itself.

We click on the chart, and then on the plus icon for chart elements. In the *Chart Elements Menu*, we'll put a check in the box next to *Data Labels*, by clicking it. The labels aren't showing the data we need, so let's click the *Right Arrow* next to *Data Labels*. In this menu, we choose *More Options* and give it a click. In the *Format Data Labels Pane*, we'll set the options we need. First, we'll change the *Label Position* by clicking the radio button next to *Outside End*. Now, we click the box next to *Category Name* to show the legend text next to the pie sections. We'll also click the box next to *Value* to uncheck it. This hides the actual percentage values, which are not needed because we're only trying to communicate the general impact of these industries. Finally, let's right click on one of the data labels, and hover the mouse over *Change Data Label Shapes*. From the *Data Label Shapes Menu*, we'll click on *Rectangle*. Now, the sections of the pie chart each have a corresponding text label. This small change adds redundancy for the information that is otherwise communicated only through color. Let's take a look at another example.

If we scroll down in the exercise document, we can see that there's a table showing some accessible and inaccessible document design approaches. Icons in the *Accessible* column use color to indicate whether a design approach is good or bad for accessibility. To make this accessible to users who have trouble seeing color, we need to provide this information in a redundant way. We'll use the icons under the table for this purpose. Let's click on the icon with the checkmark, and press Ctrl+X on the keyboard to cut it. Now we click on the first green icon in the *Accessible* column, and press Ctrl+V to paste and replace the icon image. We'll do the same for the second green icon by clicking, and pressing Ctrl+V on the keyboard. Let's repeat this process for the "X" icons. We click the "X" icon under the table, and press Ctrl+X to cut it. Then we click on the first red icon in the *Accessible* column, and Ctrl+V to paste. Finally, we click the last red icon in the table, and Ctrl+V again. The information in the table is now conveyed through color and the icon marks. If color were removed from this document, we could still tell which document design approaches were good for accessibility and not. Using redundancy, when communicating information through color, is a good way to ensure the content stays accessible.

Exercise

The knowledge check questions in this activity are designed to provide additional opportunities to explore color accessibility best practices using the [Employer Perspectives on Disabilities](#) exercise document. To answer the practice questions, open the document, and use the processes discussed in this lesson.

1. What are the font color values for the *Heading 3* style?
 - a. R: 50, G: 50, B: 50
 - b. R: 255, G: 81, B: 39
 - c. R: 40, G: 45, B: 41
 - d. R: 64, G: 64, B: 64 [Correct]

Incorrect Feedback: To find the color values for selected text, go to *Home Tab > Font Group > Font Color Menu > More Colors > Custom Tab*. To review this topic, click the *Review Topic Button*.

Correct Feedback: The red, green, and blue color values for a piece of text can be used to determine if the text provides good contrast with the document background.

2. The font color of the *Heading 3* style provides good contrast with the white document background. True or false?
 - a. True [Correct]
 - b. False

Incorrect Feedback: To determine if a font color provides good contrast with the document background, use a tool such as Contrast-A. A link to the Contrast-A tool is provided in the resources section of this course. It may also help to print the document to a black and white printer to see if the text can be easily distinguished. To find the color values for selected text, go to *Home Tab > Font Group > Font Color Menu > More Colors > Custom Tab*. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 69.

Correct Feedback: Using an online contrast checking tool, such as Contrast-A, ensures that document color good contrast for accessibility. A link to the Contrast-A tool is provided in the resources section of this course. For more information, click the *Job Aid Button* and navigate to page 69.

3. The pie chart entitled *Industries Employing People with Disabilities* relies solely on color to convey the information. True or false?
 - a. True
 - b. False [Correct]

Incorrect Feedback: The textual data labels in the pie chart supply redundant information to what is shown in the legend. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 71.

Correct Feedback: When document elements use only color to convey meaning, it is necessary to provide redundant information to provide accessibility to individuals with color deficiencies. In this case, the textual data labels in the pie chart supply redundant information to what is shown in the legend. For more information, click the *Job Aid Button* and navigate to page 71.

Lesson 3: Navigation

Overview

The best practices for document layout not only produce visually appealing documents, but also provide a content structure for accessible document navigation. The following guidelines are discussed in this lesson:

- Use heading styles to provide a document hierarchy
- Use the paragraph layout to add spacing
- Create lists using the built-in formatting styles
- Supply standalone names for links
- Copy critical information in the header or footer to the main document
- Use columns for complex document layout, instead of tables or tabs

Headings

Using styles for the different levels of document headings allows a document to be easily navigated using a screen reader. Let's see how to view the document structure once heading styles have been applied.

Follow along by opening [Exercise Lesson 3.1 Headings](#).

We go to the *View Tab* and check the box next to *Navigation Pane* in the *Show Group*. We'll make sure the *Headings* option is selected to show the document structure. Here we can see how an outline is created from multiple heading levels. We can click on a heading in the outline to jump to that section of the document. This is the same structure that is accessible to screen reading software, and users can quickly navigate the document using this hierarchy.

It's also possible to create an accessible table of contents using Word. Since our document uses styles for the different heading levels, we can have Word create a table of contents automatically. Let's take a look at how to do this. First, we click where we want the table of

contents to appear, in our case, after the document title. Next, click on the *References Tab*, and then on the *Table of Contents Menu*. There are multiple templates to choose from, and let's pick *Automatic Table 2*. Word inserts a nicely formatted table of contents into the document. The table of contents includes links to pages and sections within the document that can be used by a screen reader to navigate.

Paragraphs

Another best practice for accessible document navigation is to use the paragraph layout options.

Follow along by opening [Exercise Lesson 3.2 Paragraphs](#).

Instead of hitting the enter key multiple times to separate text, a better approach is to adjust the paragraph spacing. This prevents screen readers from announcing multiple blank lines or paragraphs when reading a document. A good way to identify extra lines in a document is to show the hidden formatting symbols. To do this, we go to the *Home Tab* and click it if it's not already selected. Then, we click on the paragraph symbol in the *Paragraph Group*. This button toggles visibility of the hidden formatting symbols.

We can see that there are several extra paragraphs after the title. Let's go ahead and remove these and use the paragraph formatting for spacing instead. To do this, we click and drag to highlight the extra paragraph symbols, and press Delete on the keyboard. Now we click at the beginning of the title text, and then on the *Page Layout Tab*. In the *Paragraph Group*, we'll increase the spacing after the paragraph by adjusting the numeric value next to the *After Box*. Now that the title looks good, let's adjust the spacing for all of the subheadings.

To begin, we click at the start of one of the subheadings. We'll go back to the *Paragraph Group* on the *Page Layout Tab*, and increase the value in the *After Box*. This changes the spacing for the current subheading. To apply this spacing to the rest of the subheadings in this document, we click on the *Home Tab*, and find the *Heading 2 Style* in the *Styles Group*. Right click and choose *Update Heading 2 to Match Selection*. The spacing is now applied to all of the level two subheadings in the document. Remember that we can change the visual appearance of a style to whatever we like, and the document navigation will still be accessible to screen readers.

Lists

Lists are another paragraph formatting style that improves accessible navigation of a document. Screen readers can easily navigate the items in a list when proper formatting is used. Let's see how this is done.

Follow along by opening [Exercise Lesson 3.3 Lists](#).

At the end of our document is a list of employment strategies for people with disabilities. Currently there is no formatting for this list. Let's change this so that the list can be easily read by a screen reader. There are three list options in the *Paragraph Group* on the *Home Tab*: bullets, numbering, and multilevel. These options apply different list styles. Since the list we're going to modify is an unordered list that's only one level, we'll choose the bullets option. The list is now formatted in an accessible way. Remember to use the built-in list formatting when making lists, instead of using special characters or images.

Links

Formatting links for accessibility also improves screen reader navigation within a document.

Follow along by opening [Exercise Lesson 3.4 Links](#).

Screen readers can access inline links within the document text, and as a separate list. Instead of providing the full web address or URL, we want to give a name to each link that would make sense if it is read out of context. For example, the first paragraph in our document has a link that is a full web address. Without changing this, a screen reader will narrate the entire web address along with the special characters. Let's give this link a name instead. To do this, we right click on the link, and choose *Edit Hyperlink*. In the dialog, we'll type the link name in the *Text to Display Field*. Instead of the full web address, let's enter *Department of Labor Research Website*, and click *Okay*. This looks much better, but the sentence containing this no longer reads smoothly. Let's fix this by adding the word "the" before the link. Now the sentence reads well, and the link has a name that's understandable on its own. When naming links, the important thing to remember is avoid URLs and generic text like "Click here" and "Website." Instead use a name that stands on its own.

Headers & Footers

When formatting a document to provide accessible navigation, it's important to keep in mind that text in the header and footer areas, as well as watermarks, and text boxes are not easily read by screen reading software. The best practice for making this text accessible is to duplicate it in the body of the document.

Follow along by opening [Exercise Lesson-3.5 Headers And Footers](#).

Our document has a header that reads, "DRAFT. DO NOT DISTRIBUTE." Since this is critical information, let's go ahead and add this to the body of the document so that it's accessible to screen readers. We'll double click in the header area to activate it, and then another click in the left margin next to the text to select it. Press Ctrl+C on the keyboard to copy the text. Then we double click back on the document body to exit the header. Let's position the cursor at the beginning of the title and press Ctrl+V on the keyboard to paste the *Do Not Distribute* text. This solves our accessibility issue with this text, but it looks poor because the text is redundant with

the header. A workaround for this is to hide the text by making it the same color as the background.

Let's give this a try. We click in the margin next to the text we just pasted, and then go to the *Home Tab*. In the *Font Group*, we click the *Color Menu* and select *White*. Since the document background is also white, this effectively hides the text. Let's reduce the font size as well, so that the text we're hiding doesn't offset the layout too much. We'll go back to the *Font Group* and change the font size to 8. The text is now hidden from view, but can still be read by a screen reader.

Columns

Sometimes we need to add multiple columns of information to a page. People will often use the tab key or tables to create a column layout in Word. Unfortunately, using tabs or tables in such a way can make the document difficult to navigate using a screen reader. In the case of tabs, some screen readers will narrate each individual tab, making it hard to distinguish full lines of text. In the case of tables, non-uniform layouts can cause individuals to lose their place within a document. The best practice for creating columns is to use the built-in Column layouts in Word. Let's see how this works.

Follow along by opening [Exercise Lesson 3.6 Columns](#).

We'll add a column layout to the list at the bottom of this document. Let's scroll down and select the list. Then, we go to the *Page Layout Tab* and give it a click. Finally, we'll click on the *Columns Menu* and choose the *Two Column Layout*. This evenly distributes the text in our list between two columns. Screen readers will read this list from top to bottom and left to right, providing a more intuitive way of navigating the layout than using tabs or a table.

Exercise

The knowledge check questions in this activity are designed to provide additional opportunities to explore navigation accessibility best practices using the [Employer Perspectives on Disabilities](#) exercise document. To answer the practice questions, open the document, and use the processes discussed in this lesson.

1. How many heading levels are used in the document?
 - a. 0
 - b. 1
 - c. 2
 - d. 3 [Correct]

Incorrect Feedback: To view an outline of the document headings, go to *View Tab > Show Group* and check *Navigation Pane*. To review this topic, click the *Review Topic Button*.

Correct Feedback: When heading styles have been used for document headings, these can be easily navigated with a screen reader.

2. How much paragraph spacing is before the heading *Services and Information*?
 - a. 20 pt [Correct]
 - b. 12 pt
 - c. 6 pt
 - d. 0 pt

Incorrect Feedback: To view paragraph spacing, go to *Page Layout Tab > Paragraph Group*. Look at the spacing values in the text boxes. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 26.

Correct Feedback: It is best to use paragraph spacing for text layout instead of pressing enter to create multiple lines. Paragraph spacing makes the document text easier to navigate with a screen reader, and avoids the screen reader narrating multiple blank lines. For more information, click the *Job Aid Button* and navigate to page 26.

3. All of the lists in this document are formatted using the built-in list styles. True or false?
 - a. True [Correct]
 - b. False

Incorrect Feedback: To view list formatting, select a list and go to *Home Tab > Paragraph Group* and view the list formatting options in the upper left. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 27.

Correct Feedback: Screen readers can easily navigate lists when they have been formatted using the built-in options in Microsoft Word. This also helps screen readers properly narrated list items. When creating lists, it is a good practice to avoid using images or special characters for bullets. For more information, click the *Job Aid Button* and navigate to page 27.

4. What is the address for the *EARN Website* link?
 - a. <http://www.askearn.org/community/resources.html>
 - b. <http://www.askearn.org/> [Correct]
 - c. <http://www.earn.org/>

- d. <http://www.earn.org/community/resources.html>

Incorrect Feedback: To view link properties, right click on the link and choose *Edit Hyperlink*. The full URL appears in the *Address* field. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 67.

Correct Feedback: Many screen readers can display a list of links in a document. Giving links standalone names that make sense out of context, helps individuals using a screen reader to quickly identify and navigate links. For more information, click the *Job Aid Button* and navigate to page 67.

- 5. Why is there a hidden line of text at the top of the document?
 - a. This is added when the theme is selected to test color contrast.
 - b. This tells screen readers where to start narrating.
 - c. This allows screen readers to narrate the document header. [Correct]
 - d. There is no hidden line of text at the top of the document.

Incorrect Feedback: Screen readers cannot easily access text that is in the header or footer areas of a document. If there is critical information in the header or footer, this must be duplicated elsewhere in the main document. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 37.

Correct Feedback: Screen readers cannot easily access text that is in the header or footer areas of a document. If there is critical information in the header or footer, this must be duplicated elsewhere in the main document. For more information, click the *Job Aid Button* and navigate to page 37.

- 6. The list under the heading *Major Industry Sectors* uses tabs for column layout. True or false?
 - a. True
 - b. False [Correct]

Incorrect Feedback: To view the column layout for a section of text, click in the section and go to *Page Layout Tab > Page Setup Group > Columns Menu*, and view which option is selected. To show tab characters, go to *Home Tab > Paragraph Group > Paragraph Marks Button*. This will show hidden characters in the document, including tabs. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 29.

Correct Feedback: Some screen readers will narrate individual tab characters making navigation of such text tedious. Using column layout will solve this issue, and force screen readers to narrate the text from top to bottom and left to right. For more information, click the *Job Aid Button* and navigate to page 29.

Lesson 4: Tables

Overview

Formatting tables for accessibility provides easier screen reader navigation, and helps communicate complex data. The following guidelines are discussed in this lesson:

- Use tables for uniform, tabular data and not visual layout
- Define table headers
- Prevent text from wrapping around tables
- Add alternative text to describe table content and formatting

Formatting

Often times, people will use the table features of Microsoft Word for visual layout. This can make it difficult for screen readers to navigate a document because they rely on special commands that require a uniform table layout. The best practices for table accessibility are to use a header row, and to avoid merging cells, so that the table maintains a uniform, tabular layout. It is also a good practice to make sure that there is no text wrapped around tables, because this can cause reading or navigation errors when using a screen reader. Let's take a look at the accessibility features of tables.

Follow along by opening [Exercise Lesson 4.1 Tables Formatting](#).

If we scroll down in the exercise document, we see a table that lists strategies used to recruit people with disabilities. These are ranked based on the percentage of companies using the strategy. The first thing we'll do, is check to make sure the table uses a uniform layout. To do this, we click somewhere in the table, and take a look at the *Table Tools Tab Group* that appears in the *Ribbon Bar*. Here we click the *Layout Tab*, and then head over to the *Table Group* and click the *View Gridlines Button*. This shows the invisible grid or layout used by our table. We can see that the table uses uniform rows and columns, which will be accessible to screen readers. Since the table layout looks good, let's turn off the gridlines by clicking the *View Gridlines Button* once again.

Next, we need to set the header for the table. Let's right click in the table header row, and choose *Table Properties* from the menu. In the *Table Properties Dialog*, we click on the *Row Tab*. Under *Options*, we check the box next to *Repeat as header row at the top of each page*.

Now click *Okay*. If we look at the second page of this document, we can see that the header row is duplicated. This improves the accessibility of tables by labeling what content is shown in each column.

The last thing we need to check is the text wrapping for the table. This setting tells Word whether or not to allow surrounding text to appear next to, or around, the table. We can view this setting by right clicking somewhere in the table, and choosing *Table Properties* from the menu. This time, in the *Table Properties Dialog*, we'll click on the *Table Tab*, and have a look at what's selected under *Text wrapping* towards the bottom. In this case, we see that the icon for *None* has been selected. This is the default setting for text wrapping, and provides the highest level of accessibility for screen readers. This prevents text from appearing next to the table, which otherwise might confuse screen reader navigation.

Alternative Text

Tables should have alternative text to provide a description of the content. Adding alternative text for tables helps users with visual disabilities get an idea of what content to expect in the table, and how this content is formatted. Let's look at how alternative text can be used to make a table more accessible.

Follow along by opening [Exercise Lesson 4.2 Tables Alternative Text](#).

Here in our document, we'll scroll down to the table at the bottom. The table shows strategies used by companies to recruit people with disabilities in the first column. The percent of companies surveyed, who use the strategy, is shown in the second column. The overall rank of the strategy is shown in third column. Let's see how this description can be used as alternative text for the table. We right click somewhere in the table, and choose *Table Properties*. We click on the *Alt Text Tab* to see the alternative text. In this case, the *Description* has already been entered. A screen reader may only narrate one of the two fields here, either the *Title* or the *Description*. It's a good practice to use only the *Description Field* because it is more likely to be read by screen readers than the *Title*, and it allows more characters. The goal of alternative text for a table is to summarize the table content as succinctly as possible. It is also a good idea to describe the general layout of the table, as is done in the description here. This will help users to navigate the table more easily.

Exercise

The knowledge check questions in this activity are designed to provide additional opportunities to explore accessibility best practices using the [Employer Perspectives on Disabilities](#) exercise document. To answer the practice questions, open the document, and use the processes discussed in this lesson.

1. *Table 1* has a uniform layout. True or false?

- a. True [Correct]
- b. False

Incorrect Feedback: To view table gridlines, click in a table and go to *Table Tools Layout Tab > Table Group > View Gridlines Button*. The table is considered uniform if the columns and rows line up, and there are no merged cells. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 62.

Correct Feedback: To navigate tables, screen readers rely on special commands that require a uniform layout. Using tables for tabular information instead of visual layout will help ensure table accessibility in Microsoft Word. For more information, click the *Job Aid Button* and navigate to page 62.

- 2. *Table 1* is set to repeat the header row at the top of each page. True or false?
 - a. True [Correct]
 - b. False

Incorrect Feedback: To view or set the header row of a table, right click in the first table row and choose *Table Properties*. Go to the *Row Tab* and look at the checkbox next to *Repeat as header row at the top of each page*. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 63.

Correct Feedback: Specifying a header row for each table allows screen readers to associate the table headers with specific columns. This gives individuals using a screen reader an idea of what each column contains. For more information, click the *Job Aid Button* and navigate to page 63.

- 3. What is the *Text Wrapping* setting for *Table 1*?
 - a. None [Correct]
 - b. Around

Incorrect Feedback: To view the text wrapping setting for a table, right click in the table and choose *Table Properties*. Go to the *Table Tab* and look at what is selected under the *Text wrapping* section. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 65.

Correct Feedback: Removing text wrapping from tables makes screen reader navigation of tables easier, and minimizes reading errors that might occur if text surrounds the table. For more information, click the *Job Aid Button* and navigate to page 65.

- 4. According to the alternative text for *Table 1*, what is shown in the second table column?

- a. The percent of total employees with disabilities recruited using the strategy.
- b. The percent of public administration organizations that use the strategy.
- c. The percent of companies surveyed that use the strategy. [Correct]
- d. There is no alternative text for *Table 1*.

Incorrect Feedback: To view alternative text for a table, right click in the table, choose *Table Properties*, and go to the *Alt Text Tab*. To review this topic, click the *Review Topic Button*. For more information, visit the [SSA Job Aid](#).

Correct Feedback: Tables should have alternative text to provide a description of the content. Adding alternative text for tables helps give users who are visually impaired an idea of what content to expect in the table, and how this content is formatted. For more information, visit the [SSA Job Aid](#).

Lesson 5: Images & Graphics

Overview

When images and graphics are used to convey information or add meaning to a document, this content must be communicated in an alternative way. Crafting alternative text that describes the purpose or function of a visual, within the context of the document, adds accessibility to this content. The following guidelines are discussed in this lesson:

- Minimize the use of text within images and graphics
- Prevent text from wrapping around images and graphics
- Write alternative descriptions that communicate purpose and function
- Provide chart and diagram details in the main document

Formatting

To make the images and graphics used in a Microsoft Word document accessible to screen readers, they must be placed in line with the document text. The *In Line* setting is a text wrapping option in Word. Let's take a look at how to use this.

Follow along by opening [Exercise Lesson 5.1 Image Formatting](#).

Our document here has one image with some text that wraps around it. To see the text wrapping options for this image, we right click on the image and hover the mouse over the *Wrap Text* option on the menu. We can see that the current wrapping option is set to *Square*. This means the text will wrap around the image leaving a little space on all sides. This looks nice on screen, but causes the image to become what's called "floating." A visual object is considered floating if it's not in line with the main document text. Screen readers often ignore

floating images and graphics, making them inaccessible. To fix this, we need to choose *In Line with Text* from the menu by clicking it. Let's press Enter on the keyboard to start a new paragraph for the text after the image. Setting the text wrapping for all images and graphics to *In Line* will help ensure that these visual objects are correctly recognized by screen reading software.

Images

In order for images and other visual objects to be accessible, alternative text must be entered into Microsoft Word. A common misconception about alternative text is that it's only used to describe the appearance of an image. In actuality, the goal of alternative text is to succinctly describe the purpose and function of a visual object within the context of the main document or surrounding content. Let's look at some best practices for writing alternative text for images.

Follow along by opening [Exercise Lesson 5.2 Images](#).

On the first page of our document, we have two identical columns of content that describe how employees with disabilities can get their jobs done. The images look the same, but let's examine the alternative text. We'll right click on the left image, and choose *Format Picture* in the menu. Now we click the *Crosshairs Icon* in the *Format Picture Pane*, which shows the *Layout & Properties* settings. Alternative text should be entered into the *Description Field* only, as text in the *Title Field* may be ignored by screen readers. We'll select all the text in the *Title Field* and press Ctrl+X on the keyboard to cut it. Then we click in the *Description Field* and press Ctrl+V to paste the text where we need it.

Let's leave the *Format Picture Pane* open and consider the purpose and function of the images. This particular image, accompanies a passage of text about the satisfactory performance of employees with disabilities. The current alternative text doesn't adequately describe the purpose of this image. To see how the alternative text could be written better, we'll click on the second image on this page. This description fits the context much better, and communicates the purpose of the image. In this case, we're using the image to show how an employee with a disability can perform satisfactory administration work. Considering the purpose and function of images, when creating alternative text, will help users with visual disabilities gain meaning from the visuals.

Graphics

Graphics such as charts, diagrams, and logos, all need alternative text to be accessible. In addition to alternative text, a good practice for graphics accessibility is to minimize the use of text within the graphics. In Microsoft Word, screen readers cannot access SmartArt or text boxes. Instead of displaying text within graphics, it is better to add the text to the main

document. If it's necessary to put text in in an image, then this must be written verbatim in the alternative text. Let's review some examples of alternative text for graphics.

Follow along by opening [Exercise Lesson 5.3 Graphics](#).

In our exercise document, we'll scroll down to the pie chart on *Page 1*. We'll right click on the chart background and choose *Format Chart Area* from the menu. Then, we click the *Crosshairs Icon* to display the *Layout & Properties*. The alternative text here is a good example of chart accessibility. The goal of alternative text, when describing a chart, is to note the chart type, and data highlights or trends, as these relate to the surrounding information. It's not necessary to relay all of the data used to create the chart as alternative text. If such a level of detail is required, then using a data table is a better bet. For diagrams, alternative text should convey the purpose and function of the diagram. Diagrams with large amounts of text should be described in the document itself. We'll leave the *Format Picture Pane* open and scroll to the end of our document, so we can take a look at the alternative text for the graphics there.

Let's click on the screenshot. The alternative text indicates that the warning dialog is described in the main text. If we refer to the main text above this image, we can see that there is an adequate description of the dialog. When creating alternative text for screenshots, the goal is to communicate any information not already described in the document, for example, the text of a dialog. If the surrounding text describes the screenshot adequately, then it is okay to indicate this in the alternative text.

Finally, let's click on the logo at the bottom. Since the logo is text, this text needs to be written verbatim in the alternative text description. It is also a best practice to briefly describe the graphic. In this case, the text, "OOD Logo," tells us what the graphic is. Some screen readers will not pronounce acronyms correctly. If the acronym should be read as individual letters, then separating these with a space will force the screen reader to narrate them properly. This should only be done in the alternative text *Description Field* that is not seen in the document.

As with images, the purpose and function of charts, diagrams, and other graphics should always be communicated in the alternative text. Aim for keeping this text succinct, and, if needed, add details in the main document.

Exercise

The knowledge check questions in this activity are designed to provide additional opportunities to explore accessibility best practices using the [Employer Perspectives on Disabilities](#) exercise document. To answer the practice questions, open the document, and use the processes discussed in this lesson.

1. Under the *Survey Information* heading, why is the alternative text for the *Warning Dialog* screenshot appropriate?
 - a. Because it describes the dialog in detail.
 - b. Because it refers to the dialog description in the main document. [Correct]
 - c. Because it includes the full text of the dialog verbatim.
 - d. Because this screenshot does not require alternative text.

Incorrect Feedback: When creating alternative text for screenshots, the goal is to communicate any information not already described in the document. If the surrounding text describes the screenshot adequately, then it is okay to indicate this in the alternative text. To review this topic, click the *Review Topic Button*.

Correct Feedback: When creating alternative text for screenshots, the goal is to communicate any information not already described in the document. If the surrounding text describes the screenshot adequately, then it is okay to indicate this in the alternative text. To review this topic, click the *Review Topic Button*.

2. What is the *Text Wrapping* setting of the image of the construction workers under the *Employer Concerns* heading?
 - a. Square
 - b. Tight
 - c. Top and Bottom
 - d. In Line with Text [Correct]

Incorrect Feedback: To view the text wrapping setting for an image, right click on the image and go to Wrap Text. See what the wrapping is set to in the menu. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 55.

Correct Feedback: Screen readers will not be able to see images unless the *Text Wrapping* is set to *In Line with Text*. Using this option ensures the accessibility of images in Microsoft Word. For more information, click the *Job Aid Button* and navigate to page 55.

3. Which of the following alternative text options **best** conveys the purpose of the keyboard image under the heading titled *Are job accommodations and assistive technology expensive?*
 - a. A businessman typing on a braille computer keyboard which is an example of an inexpensive assistive technology. [Correct]
 - b. An employee typing on a braille computer keyboard to successfully perform his administrative duties.

- c. An image of a person typing on a braille computer keyboard.
- d. A person with a disability using assistive technology.

Incorrect Feedback: This particular image accompanies a passage of text that discusses low cost, high impact accommodations. The alternative text should describe the purpose of the image within this context, and avoid the use of redundant words such as “image” or “picture”. To review this topic, click the *Review Topic Button*. For more information, click the *Job Aid Button* and navigate to page 49.

Correct Feedback: Using alternative text that describes the purpose of an image within context, and avoiding the use of redundant words such as “image” or “picture”, will help convey the visual information to individuals using a screen reader. For more information, click the *Job Aid Button* and navigate to page 49.

- 4. The alternative text for the pie chart entitled *Industries Employing People with Disabilities* conveys the purpose of the chart within the context of the document. True or false?
 - a. True [Correct]
 - b. False

Incorrect Feedback: The goal of alternative text, when describing a chart, is to note the chart type, and data highlights or trends, as these relate to the surrounding information. It is not necessary to relay all of the data used to create the chart as alternative text. If such a level of detail is required, then using a data table is a better bet. To review this topic, click the *Review Topic Button*. For more information, visit the [SSA Job Aid](#) and navigate to page 10.

Correct Feedback: Noting the chart type, and data highlights or trends that relate to the surrounding information, is a good way to add accessibility to charts. If a greater level of detail is required, then using a data table is a better bet. For more information, visit the [SSA Job Aid](#) and navigate to page 10.

Lesson 6: Checking Accessibility

Overview

There are multiple approaches to checking document accessibility. One of these approaches is to use Microsoft Word’s built-in *Accessibility Checker*. Using the *Accessibility Checker* helps to identify outstanding accessibility issues that may have been overlooked when creating the document. This lesson describes how to use the *Accessibility Checker* to identify and correct

accessibility issues. Visit the [SSA Microsoft Word Accessibility Checklist](#) for more tips and techniques for checking accessibility.

Accessibility Checker

The Social Security Administration has an excellent accessibility checklist for Microsoft Word.

Visit the [SSA Microsoft Word Accessibility Checklist](#) for more information.

Using this list, and additional information on the website, helps streamline the process of testing accessibility in Word. Some document elements, such as lists, colors, and table layout will need to be checked manually, but Word offers an automated *Accessibility Checker* to identify many other accessibility issues. Let's see how we can use the *Accessibility Checker* on a document.

Follow along by opening [Exercise Lesson 6.1 Accessibility Checker](#).

The document we're looking at is a complete document on the topic of employer perspectives on employment of people with disabilities. This document has not been created with accessibility in mind. Let's see what the *Accessibility Checker* finds. To show the *Accessibility Checker*, we click on the *File Tab*, and then click the *Check for Issues Menu*. We'll scroll to the middle of the menu and click *Check Accessibility*. This opens the *Accessibility Checker* in its own pane. We can see that a number of accessibility errors and warnings have been identified. If we click on one of the issues in the list, the table header for example, Word will scroll to the associated element within the document and select it. At the bottom of the *Accessibility Checker*, there is additional information that explains the selected issue. This gives us an opportunity to improve the accessibility. In the case of the table header, the *Accessibility Checker* indicates that no header row is specified. To fix this, we right click on the table row that has been selected for us, and choose *Table Properties* from the menu. In the *Table Properties Dialog*, we click on the *Row Tab*. Under *Options*, we check the box next to *Repeat as header row at the top of each page*, and click *Okay*. This issue has now been corrected, and is removed from the *Accessibility Checker* errors.

Integrating the *Accessibility Checker* into the process of document creation can help identify accessibility issues that may have been missed when drafting the document. This is a great way to improve the accessibility of a document, but it's important to keep in mind that not all accessibility issues can be identified automatically.

Exercise

The knowledge check questions in this activity are designed to provide additional opportunities to explore accessibility best practices using the [Employer Perspectives on Disabilities Draft](#) exercise document. To answer the practice questions, open the document, and use the

processes discussed in this lesson. Please note that this is a different document than what is used for the other knowledge checks in this course.

1. Which of the following table accessibility issues is identified by the *Accessibility Checker*?
 - a. Table has no header row specified. [Correct]
 - b. Table is non-uniform.
 - c. Table uses poor color contrast.
 - d. Table has text wrapping set to *Around*.

Incorrect Feedback: To open the *Accessibility Checker* in Microsoft Word, go to *File Tab > Check for Issues Menu > Check Accessibility*. Any issue that can be automatically detected will be shown in the *Accessibility Checker*. To review this topic, click the *Review Topic Button*. For more information, visit the [SSA Job Aid](#).

Correct Feedback: The *Accessibility Checker* that is built in to Microsoft Word can identify a number of accessibility issues, but some things will need to be checked manually, such as table structure. For more information, visit the [SSA Job Aid](#).

2. Which of the following is an accessibility issue that is **not** identified by the *Accessibility Checker*?
 - a. The web address, <http://askjan.org/>, is an unclear link.
 - b. Picture 10 is missing alternative text.
 - c. There are repeated blank characters under the *Major Industry Sectors* heading.
 - d. The list under the heading *Ways to Hire, Retain and Advance Employees with Disabilities* does not use built-in list formatting. [Correct]

Incorrect Feedback: To open the *Accessibility Checker* in Microsoft Word, go to *File Tab > Check for Issues Menu > Check Accessibility*. Any issue that can be automatically detected will be shown in the *Accessibility Checker*. Some things will need to be checked manually, including list formatting. To review this topic, click the *Review Topic Button*. For more information, visit the [SSA Job Aid](#).

Correct Feedback: The *Accessibility Checker* that is built in to Microsoft Word can identify a number of accessibility issues, but some things will need to be checked manually, including list formatting. For more information, visit the [SSA Job Aid](#).

3. Microsoft Word automatically checks the accessibility of color and contrast. True or false?
 - a. True
 - b. False [Correct]

Incorrect Feedback: To open the *Accessibility Checker* in Microsoft Word, go to *File Tab > Check for Issues Menu > Check Accessibility*. Any issue that can be automatically detected will be shown in the *Accessibility Checker*. Some things will need to be checked manually, including color use and contrast. To review this topic, click the *Review Topic Button*. For more information, visit the [SSA Job Aid](#).

Correct Feedback: The *Accessibility Checker* that is built in to Microsoft Word can identify a number of accessibility issues, but some things will need to be checked manually, including color use and contrast. For more information, visit the [SSA Job Aid](#).

Challenge Activity

Instructions

This activity provides an opportunity to apply the document accessibility techniques and best practices discussed in this course. To complete this activity, please choose one or both of the options below.

Option 1 – Add Accessibility to the Exercise Document: Now that you are familiar with the exercise document entitled [Employer Perspectives on Employment of People with Disabilities](#), your challenge is to convert the inaccessible version of this document to an accessible version using the guidelines presented in this course. When you have completed this activity, compare your final document with [Employer Perspectives on Employment of People with Disabilities - Accessible Version](#) to see how well you accomplished this task.

Option 2 – Create or Add Accessibility to Your Own Document: Your challenge is to create an accessible document, or add accessibility to one of your existing documents, using the guidelines presented in this course. When you are finished, share your document with your team, and ask them to provide feedback on how well you accomplished this task.

Resources

For additional information and resources, please review the [Accessible Documents Resource List](#) provided with this course.