Creating, Distributing, And Maintaining Accessible Documents

Tips and Tools to Streamline Your Document Creation Process

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Accessibility Statement

To support [University Policy 8140: IT Accessibility](#), this guide contains step-by-step procedures, developed by the Boise State Web Accessibility Team, to ensure your documents are created, distributed, and maintained with accessibility in mind with an emphasis on creating an accessible source document in Microsoft Word.

The recommendations here can apply to other word processing platforms, such as Google Docs, but the tips and tools are specific to Microsoft Word and to Adobe Acrobat Pro.

Where possible, the guide contains both mouse and keyboard specific actions for completing tasks. This document has been reviewed for compliance with WCAG 2.1 AA accessibility standards. If you require this content in another format to be fully accessible, please contact OITAccessibility@BoiseState.edu.

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Introduction

Documents are a great resource for providing content to users but only if they are accessible to all users. An accessible document contains consistent structure and design, includes alternative text descriptions for images, graphics, charts, and other forms of media, and verifies accessibility through an accessibility checker, is distributed to readers using accessible platforms. This guide provides step by step procedures to ensure your documents are created, distributed, and maintained with accessibility in mind using Microsoft Word and Adobe Acrobat Pro.

Why Microsoft Word and Adobe Acrobat Pro?

Software provide by the university for use by employees. Microsoft Word contains tools to make docs accessible. The tools available in Adobe Acrobat Pro can help remediate any issue remaining issues in your documents to ensure they are accessible.

Creating Accessible Documents

Drafting your content in a document format can help ensure your content is accessible for the widest number of readers. You might be aware of the built-in Accessibility Checkers for Microsoft Word and Adobe Acrobat Pro, but did you know there are a whole suite of tools available to make your documents more accessible?

The OIT Accessibility Team developed a custom ribbon called Boise State A11y Tools to help identify the most helpful tools and processes in Word for creating accessible documents. In this guide, we discuss a recommended workflow for using the ribbon and these tools to create

more accessible documents, distribute them to your audience, and maintain them for future use.

If you need assistance using a specific tool in Word we suggest searching Word's Help documentation, reviewing the tutorials available at [Goodwill Community Foundation](#), or contacting the OIT Accessibility Team at [OITAccessibility@BoiseState.edu](#).

Installing the Boise State A11y Tools Custom Ribbon

To install the Boise State A11y Tools custom ribbon settings into Microsoft Word, follow these steps:

1. Download the customizations file from Google Drive: [Boise State A11y Word Ribbon Customizations.exportedUI](#)
2. Note where the file is saved on your computer
3. Open Microsoft Word and right click with your mouse, anywhere on the ribbon then select Customize Ribbon, or navigate to **File**, **Options**, **Customize Ribbon**
4. From Customize Ribbon section of Word Options, locate the **Import/Export field** and select **Import Customization File**
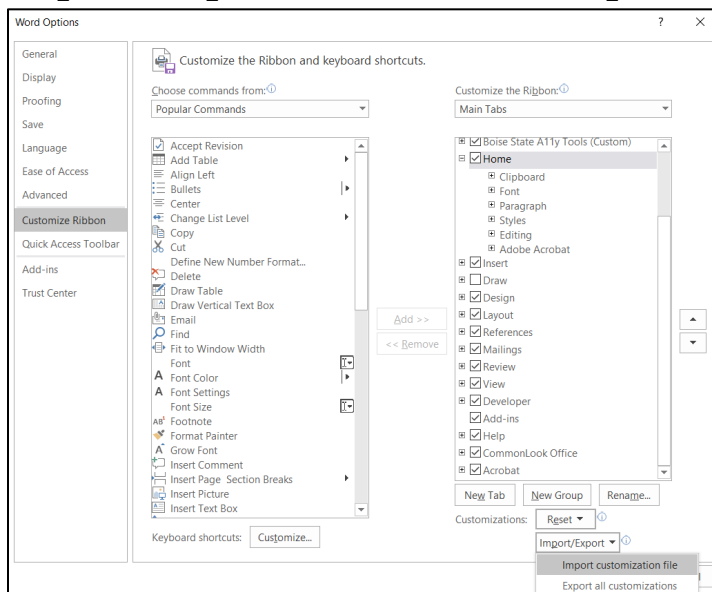
5. Locate the customizations export file you downloaded in step 1 and open it
6. You'll receive a notification from Microsoft Office asking if you want to Replace all existing Ribbon and Quick Access Toolbar customizations for this program. Select Yes to proceed.
7. The Boise State A11y Tools ribbon is now installed and ready for use.

Practice Document

Download the practice document, [Accessibility Toolbar Activity - Unstyled](#), to access an unstyled version of this guide. In the unstyled document you'll find all the same content but none of the styles, images, links, or navigation aids. You can use this document to practice applying styles, structuring your document, inserting content such as links and images, adding references and navigation aids, before reviewing your document and saving as a PDF.

Steps to Create an Accessible Document

After drafting your content, use the following tools in the Boise State A11y Tools ribbon to style, structure, review, and save your document in an accessible format.

1. Set Colors, Fonts, and Styles
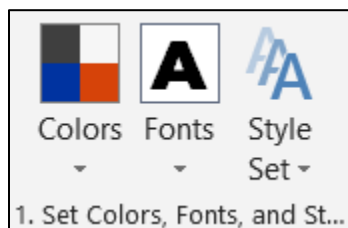
Your first step to creating an accessible document is setting the colors, fonts, and styles. These will help direct the design of your document.

These tools help you quickly change the look and feel of your entire document. Review [Using University Web Colors in We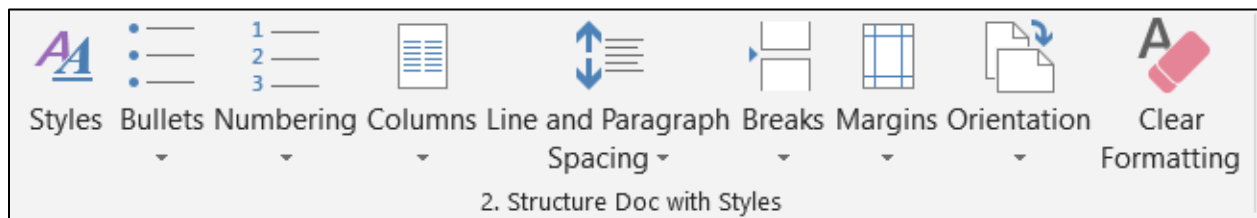b Graphics](#) and the [Boise State Brand Standards](#) site for details on using Boise State's accessible fonts and colors.

2. Structure Doc with Styles

After setting your styles, you can then apply those styles to different elements of your document including titles and headings. If you are starting from a document that already has styles applied, you can quickly clear the formatting and start over with your new style. Lists and columns are available to help format your text into a more readable format and you can adjust the line and paragraph spacing, add section breaks, adjust the margins, or change the orientation of your document.

- **Styles** – Turn on styles to quickly apply style tags to your document to add design and structure.
- **Bullets** – Use bullets to organize information into lists where order does not matter. Example, ingredients in a recipe don't require a specific order.
- **Numbering** – Use bullets to organize information into lists where order does matter. Example, steps in a recipe must be performed in order.
- **Columns** – Use columns, and not tables, to layout content in two or more columns.

- **Line and Paragraph Spacing** – Instead of adding hard returns or adding extra spaces manually, use the Line and Paragraph Spacing tool to add spacing between the objects in your document.
- **Breaks** – The Breaks tool allows you to create more accessible, and more precise, breaks between pages, columns, and sections in your document.
- **Margins** – Use the Margins tool to apply new margins to your entire document.
- **Orientation** – Change the orientation of your document with the orientation tool.
- **Clear Formatting** – Need to start over? Clear formatting removes any styles currently present in your content. Clear a section or the entire document by highlighting the content you want cleared then using the Clear Formatting tool.

3. Insert Links, Images, Charts, and Tables

3. Insert Links, Images, Charts, and Tables
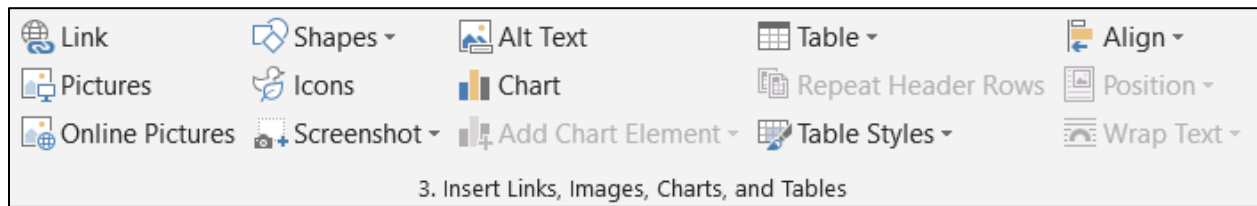
Anytime you are inserting content, like links, pictures, shapes, icons, tables, charts, or screenshots, into your document, you must describe it. For more tips on how to describe content, see Webguide: Describing Images and Webguide: Describing Complex Images

- **Link** – Links require descriptive text instead of the URL. You can add this using the "Text to Display" field on the insert link tool.
- **Pictures, Online Pictures, Shapes, Icons, Screenshot, Alt Text** – Images require an alt text description or must be marked as decorative. Use the Picture, Online Pictures, Shapes, Icons, or Screenshot tools to insert your images, then use the Alt Text tool to

add a description or mark as decorative. Note: Only mark as decorative if the image provides no additional content or context to your document or is fully described within the text itself.

- **Chart, Add Chart Element** – Charts require labels, colors with contrast, and legends to help users better navigate the content.
- **Table, Repeat Header Rows, Table Styles** – Tables require a header row and also benefit from a heading and brief description immediately before the table to help describe the content and context
- **Align, Position, Wrap Text** – Use the Align, Position, and Wrap Text tools to arrange the objects within your document. Note: Objects not set to wrap "in line with text" may cause an accessibility error, however, you can adjust the order of the image in a PDF format.

4. Insert References

4. Insert References
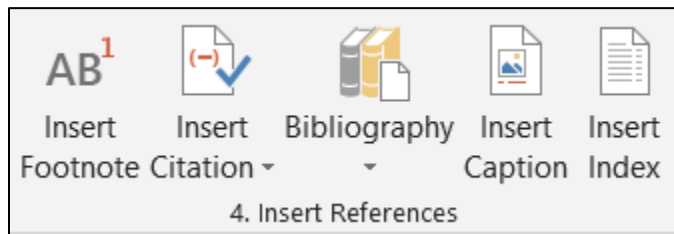
If you need to include references, you can insert footnotes, citations, bibliographies, captions, or an index using the tools in this section of the ribbon.

5. Add Navigation Aids

5. Add Navigation Aids
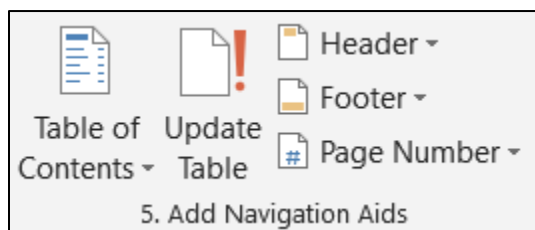
If you have accurately tagged your content using styles you can easily add navigational aids with table of contents, headers, footers, and page numbers.

6. Review document

Lastly, review your document to ensure it is readable, easy to navigate, and has no accessibility errors.
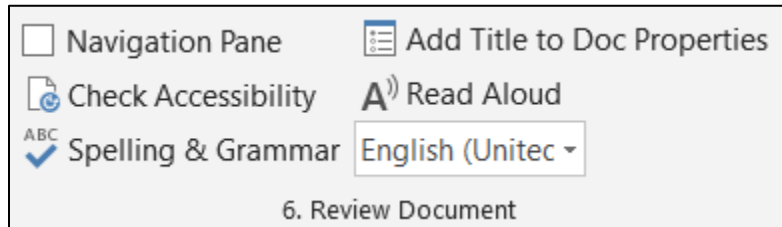
- **Navigation Pane** – Use the Navigation Pane to get a quick overview of your document's structure.
- **Check Accessibility** – Use the Check Accessibility tool to identify any areas in your document where users with disabilities might encounter issues.
- **Spelling & Grammar** – Use the Spelling & Grammar tool to help proofread your document for any spelling or grammar issues.
- **Add Title to Doc Properties** – Give your document a descriptive title. This is the information announced to screen reader users and displayed in a browser for documents shared on the web. Without a descriptive title, your document doesn't have an identity.
- **Read Aloud** – Use the Read Aloud tool to listen to your document. This won't be the exact same experience as using a screen reader but can help you proof the document and find any areas that may not be as easy to comprehend.
- **Set Language** – Set the language of your document. If you have a section of text in your document in a different language, you can highlight that section and change the language using this tool.

7. Save as PDF
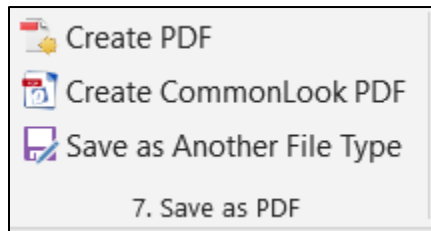
After ensuring your word document is fully accessible and free of errors you can save as a PDF using one of the following methods:

- **Create PDF** – If you have installed the Adobe plugin you can select the option to Create a PDF.
- **Create CommonLook PDF** – If you have a license for CommonLook Office, you can Create a CommonLook PDF.
- **Save as Another File Type** – If you don't have either the Adobe or CommonLook Office plugins, you can Save as Another File Type. Select this option then choose PDF as the Save as Type.

After saving your document, it may open automatically in Adobe. If it doesn't, simply open your Adobe Pro application, then navigate to where your document was saved and complete the following steps A-F.

Important Note about Steps A-F

You must have a license to Adobe Acrobat Pro to fully verify and remediate PDF documents. Contact your department or college administrator to request an Acrobat Pro license, or send a request to the Help Desk at helpdesk@boisestate.edu. With Adobe Acrobat Pro you can complete steps A-F to review and verify your document's accessibility.

If you are responsible for creating and remediating a large number of documents each year, we recommend purchasing CommonLook PDF. This is not currently provided by the University and must be purchased separately. Reviewing your document with CommonLook is a slightly different process.

A. Walk the Tag Tree

Once in Adobe, the first thing you need to do is walk the tag tree. These document tags are what make a document accessible to different types of access technology like screen readers, braille displays, or even keyboards.

Where a sighted person uses their eyes to read and understand the organization or structure of a document, tags communicate that same organization and structure to the person using access technology such as a screen reader so they can read the document in an equitable way. For this reason, the tags must replicate the visual layout of the document.

To verify the tag structure, open the Tag navigation pane. If you don't have the Tag pane added, go to **View**, **Show Hide**, **Navigation** and then select **Tags**.

If you have followed steps 1-6 in this document, the you should see tags in this pane. They should also resemble the styles you set in your Word document prior to saving as a PDF. If you see No Tags Available, you may have printed as a PDF instead of saving as a PDF. Verify your Word document has styles and re-save as a PDF.
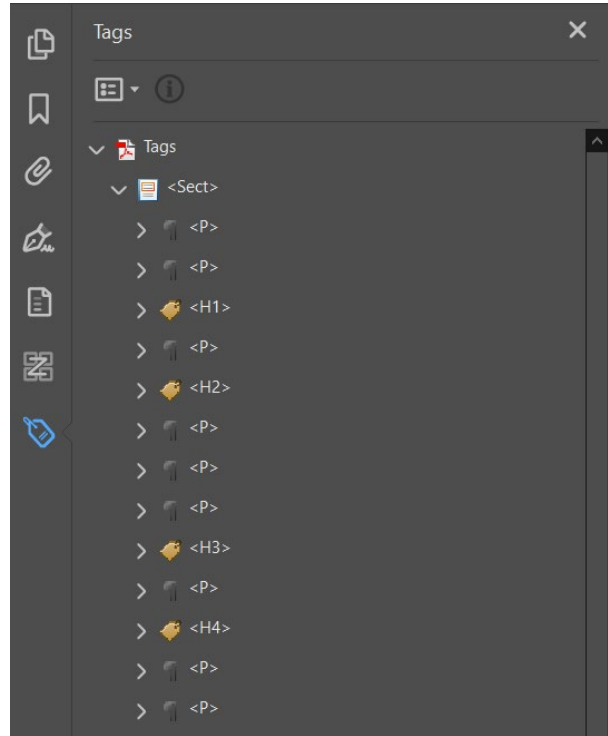
## B. Access Accessibility Tool

After verifying your document has tags, access the Accessibility tool. If this tool is not available in your list of Tools select **More Tools**, find **Accessibility** and then select **Add**.

From your list of tools select **Accessibility** and then select **Accessibility Check**. When the dialog box for Accessibility Checker Options opens, select Start Checking.
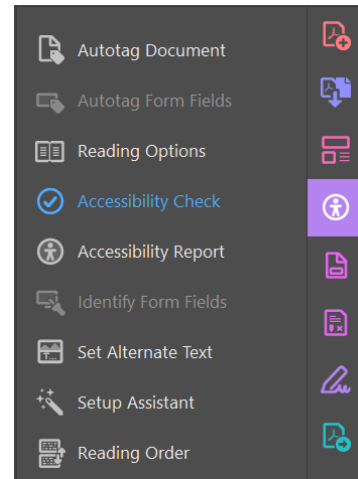
C. Review Navigation Links

If you have links in your document, you may have a review item that says navigation links needs manual check. Review all your hyperlinks and make sure they are correct then right-click the item and select pass.

D. Set Title

Another common issue is the document title. Locate this error, right-click and select fix. If you've added your title in Microsoft Word, it will automatically update. If you didn't add your title in Microsoft Word, a dialogue box will appear for you to add the title. Add a descriptive title and select OK.
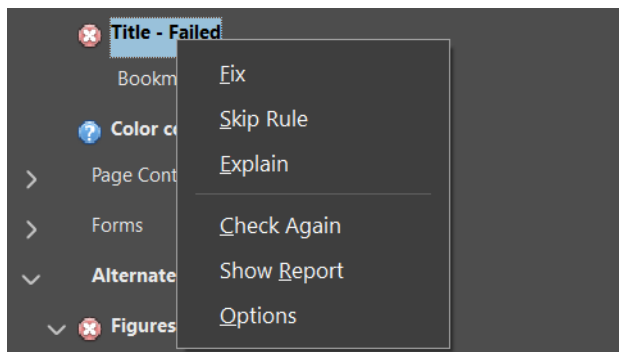
If you are unsure what the title of the document is, open the document properties by selecting CRTL+D or File then Properties to access the Document Properties window. Review the Title field in the Description tab and adjust as needed.

E. Check Color Contrast

The other thing you need to review is color. If you're using the accessible Boise State color palette in your document, you can right-click and select

pass. If you aren't using Boise State's accessible colors you may need to review these in more detail. One tool that can help with this review is the [Colour Contrast Analyser (CCA) from TPGi](#).

F. Logical Reading Order

The last item that needs review is the logical reading order. This is the order that content is readout from a screen reader and most often mirrors the tag tree.

If you don't have the order pane added, go to **View**, **Show Hide**, **Navigation** and then select **Order**.

Occasionally, you may need to reorder any images that were added to your Word document with text wrapping. To change the reading order simply grab your image from the Order navigation pane and drag it to where you need it to go.

You'll need to do this review for however many pages are in your document. Go through each page and do a visual review to make sure everything is listed in a way that makes sense. If there's anything that looks a little weird or out of place, drag and rearrange as needed.

For example, if you have an image on your document that logically should have the alt text description read after the third paragraph of text but it's currently in the seventh position in the reading order you can drag the image and drop it after the third paragraph. Now, your document will read out the three paragraphs of text and then the alternative text description of your image before reading the next paragraph of text.
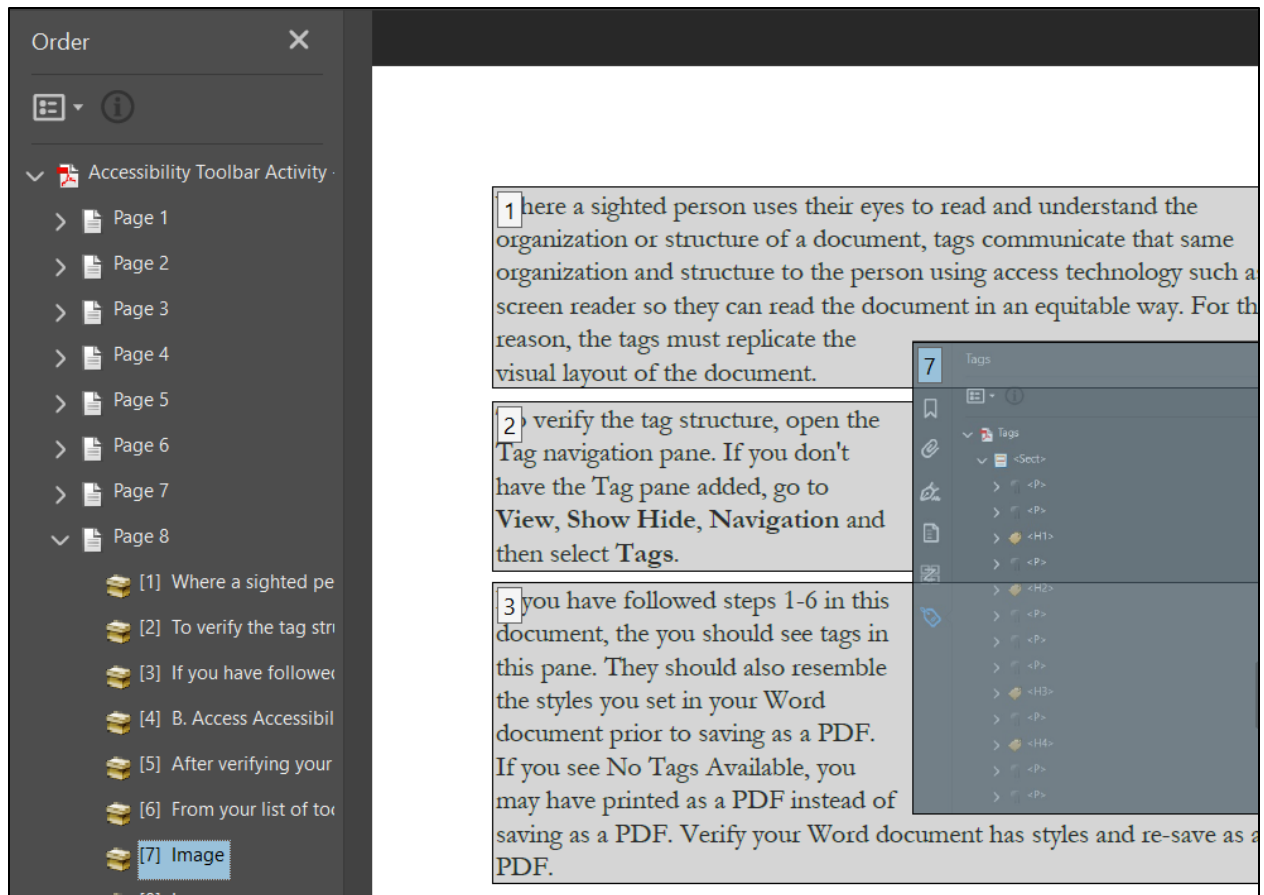
If your document was accessible in word and you don't have any images, charts, or tables on the page you more than likely do not need to make any changes. If you find any blank content that may be just an extra space that carried over so you can select it and delete.

Once you've verified the Logical reading order you can right click on the item, select pass, then save your accessible PDF document.

Distributing Document to Readers

Now that you have an accessible document, you can distribute it to your readers. Even though you've taken care to ensure it's accessible, depending

on the type of content in your document there may still be barriers for users.

For example, users with disabilities may require additional tools or technology to fully access, navigate, and read the content. Users on mobile devices may not have the same reading experience as users on desktops.

For these reasons, and to create a more equitable reading experience for all users, we recommend creating an accessible web alternative version as well.

Shifting from Print to Digital

In the video Shifting from Print to Digital, you'll learn five steps to create more accessible digital content using the tips in this guide and Boise State's WordPress theme.

Play Shifting from Print to Digital

Play [Shifting from Print to Digital](#) online in a web browser or review the video transcript in this document.

Video Transcript

There was a time when the best way to connect with your audience was through print. Newsletters were mailed, brochures printed, and flyers displayed to share information about your events.

With the growth of the internet, social media, and mobile devices, sharing content in a digital format is increasingly the preferred method of communication. Additionally, circumstances related to the COVID-19 pandemic have also changed how people consume content. With more people working and learning from home, the need for accessible digital resources has never been greater.

However, sharing digital content in a format designed for print creates challenges for users. Print document formats, like PDF, require extensive editing to meet accessibility requirements. Even if everything goes perfectly, there can still be problems for users depending on the platform it's published on, or the device used to read it.

Consider a mobile phone screen. Reading a PDF document on a screen this small requires more effort since the text often does not adjust automatically. For users who require additional technology, like a screen reader or Braille display, a document formatted for print can be impossible to read without assistance.

Making the shift from print publication to digital publication requires a slightly different approach. Here are five steps you can take to make your next brochure, flyer, or newsletter more accessible for a digital audience.

Step 1: Review your digital platform

The Boise State WordPress theme has a variety of options available for publishing your digital content.

Pages are a great option for brochures and other informational content. Posts are perfect for timely content like department newsletters and can be pulled into your pages through the News panel. Event posts are ideal as

flyers for one time or repeat events and can also be pulled into your pages with the Events panel.

Since the Boise State web theme is designed with Boise State brand standards in mind, letting the theme take care of your design leaves you more time to focus on step two.

Step 2: Outline your content in plain text

There are several benefits to outlining your content in plain text. First, you are focusing on the content and not the way the content looks. This helps you to write a clear message for your audience. Second, starting in plain text gets your content ready for step three.

Step 3: Add your design and visuals

Highlight and copy your content then paste it as plain text into your digital platform. Tag your section headings with heading tags. Add any images, graphics, or icons along with an appropriate image description. If they are purely for decoration, leave the image description blank and WordPress will add an empty alternative text tag. Link to additional content with clear, descriptive link text instead of generic links like here, more, or link.

Step 4: Check for accessibility

Use an accessibility checker, like Siteimprove, to verify your content meets all web content accessibility guidelines. Siteimprove access is available for all Boise State staff and faculty. Simply contact the Help Desk for access.

You can also perform some usability testing by viewing your content on different size screens, with different levels of contrast, or with magnification. Listening to your content with a screen reader is also a great way to check your content.

Step 5: Publish your digital content

You now have an accessible, digital resource to share with your audience through social media or by email. Your audience can now view this content on a variety of devices like a desktop, a laptop, a tablet or other mobile

device. They can also listen with a screen reader, or even translate the information into another format like Braille.

There you have it! Five steps to transform your former print production processes to digital production. Learn more about web accessibility and using WordPress at Boise State by visiting BoiseState.edu/Webguide or send your accessibility related questions to mailto:OITAccessibility@BoiseState.edu.

Clear Formatting then Copy + Paste

One way to quickly create a web version of your content is to clear the formatting from your document (or first create a copy of your document before you clear formatting) then paste your content into you WordPress.

Clearing the formatting before you copy ensures that no additional styling comes over with your content. Then you can use the styles available in WordPress to add similar style tags to your content.

You can include a link to your accessible document as well to give your readers the option to view in that format.

Additional benefits of having a web version of your content is that it's easier for Search Engines to index and find your content and you can more easily share the web version on social media or in an email.

Maintaining Accessible Documents

Finally, a major benefit of having an accessible web version of your document content is you can now treat your accessible document as a master copy of your content. Use this master document to collaborate with others and track changes of edits made.

[Track Changes in Microsoft Word](), or the [Suggesting Mode in Google Docs]() allow you to easily track the changes needed to your content. As edits are reviewed and approved, you can use the tracked changes as a guide for what needs to be updated on the website and mark them complete in your document once updated on the web. This creates a history of the work completed and helps you manage your web content more efficiently.
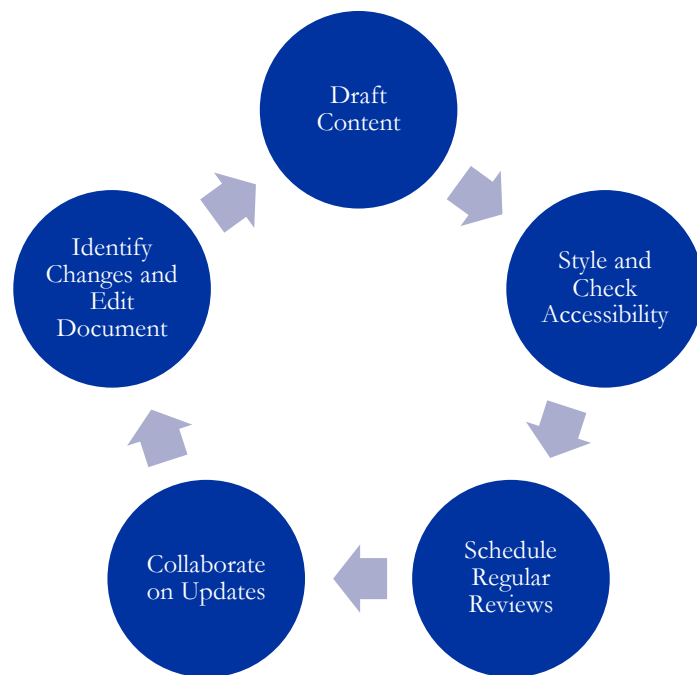
Then, if needed, return to the steps in this guide to generate an updated, accessible document to add as a downloadable resource to your web content.

Accessible Content Lifecycle

In an accessible content lifecycle, you start by drafting your content.

Draft Content

A good practice for creating accessible content is to generate a draft in a Word processor. This is an easier platform for editing, outlining, and making changes than your final publishing platform.

Draft Content

Style and Check Accessibility

Schedule Regular Reviews

Collaborate on Updates

Identify Changes and Edit Document

Style and Check for Accessibility

After drafting your content style and check for accessibility either using the accessibility tools for a document, a webpage, or both.

Schedule Regular Reviews

After publishing, schedule a time to review your content regularly. This could be by semester, annually, or even monthly.

Collaborate on Updates

Identify who is responsible for making edits to your documents and collaborate with them using the available collaboration tools such as Track Changes in Word or Suggesting in Google Docs.

Identify Changes and Edit Document

Finally, identify what changes need to be made and then make the edits in your document. Use the changes in your document as a guide for updating your web content.

You can repeat this cycle as many times as needed for your content. When your content reaches the end of its life cycle, for example it is no longer needed or is no longer relevant for your audience you can remove it from the web so it's no longer accessible by your readers.

Conclusion

Creating accessible content, whether in a document or a webpage, requires advance planning and lots of practice. An accessible workflow, like the one described in this guide, can help you plan and practice more effectively the next time you start a project.

However, workflows take several forms and this is just one recommendation. As you become comfortable creating accessible content, you can adjust the workflow so it works best for you.

If you have questions or need assistance on your next project, contact the OIT Web Accessibility Team at OITAccessibility@BoiseState.edu.