Student Accessibility Tips

If you are a student who uses assistive technology, this document is for you! Here you'll find tips to navigate your materials, engage with text alternatives to media, and adjust your assistive technology settings to get the most out of your Connect course materials.

All information in this document about how to use or change settings for assistive technology may vary based on your particular software and version.

Contents

Text to Speech

Connect provides a Read Speaker feature in our e-books which allows for text to be read aloud. For students needing to utilize text to speech for assignments, there are third-party browser plugins available. We encourage students to add both the Read&Write extension and the Screenshot Reader for the latest version of Chrome on Windows 10. We encourage for students to pin these tools to their browser extension for quick access.

[Text Help Read& Write for Google Chrome](#)

These links are provided as a convenience to you and not as an endorsement by us. We have no control over these services and make no representations regarding their accuracy, quality, or accessibility, and we disclaim any liability for their content or functionality.

Assignments: When accessing content in an assignment, we encourage students to first try the Read&Write extension. If the Read&Write extension is not picking up the text after it has been highlighted, try the Screenshot reader.

To utilize the screenshot reader, click on the extension and it will provide a + or cross hair, allowing you to create a window in which you can capture the text on the screen you need to be read aloud. It takes a few seconds for the screenshot reader to process the text in your selected window. Once the screenshot reader has processed the text, Read&Write will start to read the text aloud. You then have the option to pause, stop, or play that content. You must close out of each screenshot window before you can select new text.

Kurzweil does not currently work with Connect & our integrations because Kurzweil operates as a closed system (meaning that content must be launched directly via the Kurzweil app); this prevents direct usage via our products.

Keyboard-only use – no screen reader

Connect uses Landmark Regions to organize the areas of our interface and, in some cases, our eBook content. Learning how to use landmark regions will help you be more efficient in navigating your course materials.

There are third-party browser plugins available that provide keyboard shortcuts to take advantage of this type of navigation, even if you do not use a screen reader.

[Firefox Landmark plugin](#).   [Chrome Landmark plugin](#).   [Edge Landmark plugin](#).

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PowerPoints: To activate links in slide show view, tab to them and use the Enter key. Space will advance the slideshow, not activate the link.

Keyboard shortcuts to navigate assignments

Windows

- Next: SHIFT+ALT+N
- Check my work: SHIFT+ALT+C
- Submit: SHIFT+ALT+S

Mac

- Next: CTRL+ALT+N
- Check my work: CTRL+ALT+C
- Submit: CTRL+ALT+S

Assistive technology settings

Recommended AT and browser combinations

While Connect works well with many assistive technologies, browsers, and operating systems, the combinations that we recommend are:

1. JAWS 2018+ and the latest version of Chrome on Windows 10
2. NVDA and the latest version of Firefox on Windows 10
3. Dragon NaturallySpeaking and the latest version of Chrome on Windows 10

Magnification software

We recommend setting your mouse pointer to track your movements around the screen so that it is available for any interactive elements such as links, expandable content, buttons, and question responses you may come across.

Screen readers

Set your screen reader to indicate the following types of formatting, which provide important cues within the content. Font attributes can be found in JAWS under schemes, in NVDA under document formatting, and VoiceOver under utility options.

- bold (strong)

- italic (emphasis)
- capitalization

Punctuation-reading set to "most" works best for Connect (NVDA's default is "some"). Some information in the punctuation can be vital to your understanding of the content.

Announce landmark regions:

- JAWS: Found in reading verbosity settings.
- NVDA: Found in document formatting settings.

You may find it helpful to set different voices for different kinds of information, such as different cursors.

- See also the Discipline-Specific Tips in this document.

Media

Images with long descriptions

Extended descriptions for complex images are available for many images within our products. Here is how to access them.

- **eBook:** Follow the link after the image caption. You will be taken to a separate page in an appendix of the eBook that contains the description. Use the "return" links to go back to the image in the chapter or module you were reading.

- **PPT:** Follow the link at the end of the slide. You will be taken to a separate slide that houses the description. These slides are in an appendix and are not part of the regular slideshow. Use the "return" links to go back to the slide you were on previously.
- **Keyboard navigation tips:**
  - Tab to bring focus to the link.
  - Enter to activate the link. (Note: Space will advance the slideshow, not activate the link.)

- **Assignments:** In some of our assignments, extended descriptions of images will be read automatically for screen reader users after the image alt text.

Video captions and standard transcripts — audio content only

- Closed captions are available in the Connect video player.
- Your instructor may be able to provide access to standard (audio-only) video transcripts.

Described transcripts for videos – select videos only

Described transcripts are available for SELECT videos in our products by following the link which comes just before the video itself. They alternate pieces of a standard video transcript with descriptions of the visuals surrounding that portion of the audio. These are intended as standalone text alternatives to the videos but in some disciplines where subtle audio cues can enhance understanding, we do suggest watching or listening to the video as well if you are able.

- Access to described transcripts requires an active Internet connection.
- Described transcripts are HTML files that open in a new tab. They can be closed at any time.
- These files do not contain timestamps, they are meant as asynchronous alternatives to watching or listening to the video.

Navigation

General advice

- "Skip to Main Content" links are available using the Tab key when a page first loads. This brings you past all navigation and complementary content and straight to the primary content of the page, such as your list of assignments on a course page or the activity/question contents when you first start an assignment.

- Connect uses Landmark Regions to organize the areas of our interface and, in some cases, the content of our eBooks. Learning how to navigate by landmark region will help you be more efficient in navigating your course materials. Jump quickly among Navigation, Main Content, Complementary regions, and more.

  - Landmark region navigation varies by screen reader. Some examples follow, and you can find more details on the [W3C's ARIA Landmarks Example page](#).

  - Viewing a list of different kinds of elements on a page may be helpful for navigation.
    - JAWS:
      - Form fields, such as buttons: INSERT+F5
      - Headings: INSERT+F6
      - Links: INSERT+F7
    - NVDA: NVDA+F7 (lists all elements on the page such as links, headings, form fields, buttons, and landmarks)
    - VoiceOver: W and shift-W (using quick nav)

Finding your way around Connect

When you first sign into Connect, you will see the To Do page. Any assignments due in your Connect courses within the next 7 days will be listed. If you use Connect in more than one class, you can filter this list from the header banner region.

Focus will start on the menu button which is used to expand the main navigation. You can also move to the banner region — which identifies the content of the main content region — and the main content region itself. When you first enter Connect, the main content region holds your To Do list. As you make selections in the main navigation, the main content region changes appropriately. The quickest way to the information you selected is to navigate to the next region (see [General Advice](#)).

What follows is a summary of the features of the Connect website. We recommend that you familiarize yourself with all the options in the main menu and related pages.

Connect landing page main menu

- Under your name you will find messages from your instructor, system notifications, a link to the Connect help center, and a logout link.
- To Do will bring you back to the landing page with your upcoming assignments listed.
- Calendar shows all your assignment due dates in a calendar interface.
- Classes allows you to navigate to the instructor information and course materials for each class and links to take your assignments.
    - Information about your instructor
    - Course materials such as purchase options for the printed book
    - Access to the eBook(s) associated with your course
        - Note: Your eBook will open in a separate tab or window.
    - Additional resources
    - Assignment list
        - IMPORTANT: A summary of the policies your instructor has set for the assignment will appear before the "begin" button. Read this information very carefully as these policies may impact how your assignment is scored, how much time you have to complete the assignment, how many attempts you have, and other assignment policies.
        - The assignment timer, if there is one, will not start until your first question is presented. **Plan to complete any timed assignments in one sitting; the timer will continue to run even if you save and exit the assignment.**
- Results is where you will find your graded assignments for each class
- Insight is a visual tool designed to chart your course progress
- Log out
- Contact our Customer Experience Group for support

Reading content (eBooks, SmartBook, assignments, etc.) with a screen reader

Our eBook and assignment content often include interactive elements in line with plain text. Examples: links, expandable items, fields to record your responses. In order to ensure you don't miss key content, we recommend the following:

Tips

Reading line-by-line (arrow keys) or by paragraph (keystroke varies by screen reader) is recommended to ensure easiest access to embedded links and to form fields for replying to prompts and questions.

- If you read by line, you'll be able to activate a link as soon as you hear it.
- Reading by paragraph provides a less interrupted reading experience, but you might have to backtrack to open a link etc.

The word "blank" may be used where there is a blank line indicator in the middle of a sentence that is NOT an interactive form field where you can actually add your answer.

Things to avoid

- DO NOT USE the "Read entire page" button in your eBook; rely on your screen reader instead.
- Avoid using Tab to move through content; use tab to navigate the interface itself or you will miss essential information. Follow the reading tips above.
- It is not recommended to read an entire page of content at once, even in eBooks. ("Say all" in JAWS, "read from cursor" in NVDA.) Doing so will skip indications of links and other interactive content.
- It is also not recommended to navigate by graphic or image as some assistive technology will skip over images with captions when using this method of navigation.

Data table navigation for screen reader users

There are many data tables with complex layouts within our content. When tables have complex layouts, we include "table summaries" for screen reader users that help explain how the information is organized.

Learning to use table navigation will help you orient yourself and understand the relationships among the cells.

You are encouraged to navigate tables in Read Mode first to orient yourself. You will then navigate in data entry mode.

- "auto complete list box" is indicating to the user that you will be making a selection.
- "blank input cell for data" indicates that you will need to input your own answer.

- [JAWS table navigation commands](#)
  - Note: Use the "current cell" command to read all the column- and row-heading information and data for the cell you are on.
- [NVDA table navigation commands](#)

Assignment navigation for screen reader users

Tips

- IMPORTANT: A summary of the policies your instructor has set for the assignment will appear before the "begin" button. Read this information very carefully as these policies may impact how your assignment is scored, how much time you have to complete the assignment, how many attempts you have, etc.
  - The assignment timer, if there is one, will not start until your first question is presented. Plan to complete any timed assignments in one sitting; the timer will continue to run even if you save and exit the assignment.
- Different assignment types function in different ways and have different options. Be sure to pay attention to the assignment type before working on an assignment so you know what to expect.
- Some questions or activities have resources available, in a complementary landmark region, to help you. As each question may have different resources available, it is best to check this for each question.
- The word "blank" may be used where there is a blank line indicator in the middle of a sentence that is NOT an interactive form field where you can actually add your answer.
- After submission you may get automatic feedback on correct vs. incorrect answers and some questions may have additional explanations about why an answer is correct or incorrect. Check for this by reading the headings on the page before moving on to the next question.

Things to avoid

As with eBook content, **AVOID** using Tab to move through content; save tabbing for navigating the interface itself or you will miss essential information. [Follow the reading tips above](#).

Keyboard shortcuts

Windows

- Next: SHIFT+ALT+N
- Check my work: SHIFT+ALT+C
- Submit: SHIFT+ALT+S

Mac

- Next: CTRL+ALT+N
- Check my work: CTRL+ALT+C
- Submit: CTRL+ALT+S

Tips for navigating supplemental materials for screen reader users

PowerPoints (PPTs)

- For the best experience we recommend using PPT in Microsoft 365, Office 2019, or a later version.
- Always save PowerPoints to your computer before trying to read them with a screen reader.
- Read the PowerPoints in slideshow view.
- If your screen reader says "no selection" when trying to read a PowerPoint:
  - Double-check that you opened the version of the PPT saved to your PC and did not try to open it directly from an email or website.
  - Try closing the PPT file and re-opening it.
  - If your screen reader still says "no selection" exit and reopen the PowerPoint application.
- If there are complex images within a PPT, long image descriptions are provided on a separate slide. Use the links on the slides to navigate back and forth.
  - Tab to bring focus to the link.
  - Enter to activate the link. (Note: Space will advance the slideshow, not activate the link.)
- To access MathML markup language, you will need to access it by using NVDA (Free, PC only). You will also need a Paid subscription to the full version of MathType- academic discounts available [(from Wiris)](#) and MathPlayer [(free to download from Wiris)](#)

Discipline-specific tips

Language courses

General tips

- When you need to type a response within Connect in a language course, you will find a special character palette available immediately following each input box.
- When using the record my voice function, be aware that it starts recording as soon as you activate the button. If your screen reader is talking, you may need to rerecord and stop your screen reader from talking immediately after you use the record button.

Dragon Users

- You will want to set up a different profile with a second language. See [Nuance's guidance](#)

ZoomText tips

Use the "Multilingual" or "International" version of ZoomText; they support voices in multiple languages and come with those voices. This will allow ZoomText to change its pronunciation based on the language of the text it encounters.

Screen reader tips

Screen readers can change their pronunciation based on the language of the text they encounter.

- Choose a speech synthesizer that can handle the languages you need. Some examples: "Eloquence" or "Vocalizer Expressive" in JAWS and "eSpeak NG" in NVDA.
- Some screen readers automatically detect the language of text and pronounce it by default. For others you may need to turn this on in settings.

Spanish

- Use a Latin American Spanish voice for our Spanish titles. There may occasionally be Spain-Spanish in some chapters where the differences in pronunciation are pointed out, but we teach Latin American Spanish.

JAWS notes

- You can download *free* voices in many different languages to supplement the ones included by default. Download them from the Freedom Scientific website.
- Info on setting JAWS to use the different voices is in the Freedom Scientific article on Voice Profiles With JAWS and MAGic .

STEM courses

Note, you may wish to set up a separate voice profile for STEM courses so that the extra punctuation required does not interfere with your reading elsewhere.

Most math and equations in our products are written in what's called MathML. This allows you to interact with the math objects and navigate around in them to understand them fully.

- JAWS reads MathML with no additional software. How to navigate MathML with JAWS.

- For NVDA to read MathML you must install a free, third party program called MathPlayer.

Ensure that your screen reader will pronounce the symbols and punctuation necessary to understand your materials such as negative numbers, plus, apostrophes, subscripts and superscripts. Ask your instructor what other sorts of punctuation will be commonly used to mean more than simple punctuation.

- NVDA: this setting is under pronunciation symbols. Set to "always send actual symbol."
- JAWS: most options can be found under the punctuation settings. Set numbers separated with a slash to read as fractions rather than dates.

English courses

In cases where punctation, capitalization, and other markings are important, we spell these out for screen reader users. Depending on your screen reader settings, this may occasionally result in you hearing double punctuation.

We still recommend you become familiar with your screen reader's settings related to punctuation, capitalization, and font attributes such as bold and italic text. In some cases, you can set up voice profiles that allow you to easily turn on and off advanced reading features so you can hear punctuation, formatting, etc. when you need it, but not be bothered by it when you don't.

Accounting, economics, etc. courses

Ensure that your screen reader will pronounce the symbols and punctuation necessary to understand your materials, such as negative numbers and plus. (NVDA: this setting is under pronunciation symbols. Set to always send actual symbol.)

- NVDA: this setting is under pronunciation symbols. Set to "always send actual symbol."
- JAWS: most options can be found under the punctuation settings.

Courses using Excel

Excel can announce the names of column and row headers for any given cell with some set-up:

Tell Excel to name your column and row headers so that when you go into a cell it announces the headers and not just "B2"

- http://easi.cc/archive/col-tables/week3/03_CreatingAccessibleRangesInMicrosoftExcel.htm

If a set of cells has both column and row headers:

- Go to the upper-left cell of the set of cells that the headers will apply to.

- In the Formulas menu, go to Define Name in the Defined Names section.

- Type "TitleRegion"; then (if there will be more than one of these) the number that this one is, then a period, then the location of the upper left cell of the set, then a period, then the location of the lower right cell in the set, then the sheet number. For example: TitleRegion1.A1.D4.1 would mean that row 1 from column A to D should be used as header names and column A from row 1 to 4 should be used as row names. You can also define a second area of that worksheet to have headers. For instance, TitleRegion2.B7.E10.1 would span cells B7 through E10.

- To define just row headers, the name would change from TitleRegion to RowTitleRegion.

- To define just column headers, the name would change from TitleRegion to ColumnTitleRegion.

Some sheets will utilize Objects, you can navigate to those objects by using Cntrl+Shift+O.

Set NVDA to read the column and/or row headers in your Excel tables:

- For column headers: Move focus to any cell in the ROW that contains the COLUMN headings (usually row 1). Use the NVDA keystroke: INSERT SHIFT C to set the reading of the column heading information to the current row.

- For row headers: Move focus to any cell in the COLUMN that contains the ROW headings (usually column 1). Use the NVDA keystroke: INSERT SHIFT R to set the reading of the row heading information to the current column.

For DRAGON Users:

- Using Microsoft Excel with DRAGON