Achieve Tips and Tricks for Screen-Reader Users

General Use of Your Screen Reader

A screen reader works with websites and software on a computer. It is a software program used by people who are blind or have a visual impairment.

The three screen readers discussed in this guide, paired with a common browser, are as follows:

- JAWS, used with Chrome. JAWS can also be used with Firefox.
- NVDA, paired with Firefox. NVDA can also be used with Chrome, but currently works better with Achieve in Firefox.
- Voiceover on a Mac, paired with Safari.

For most of the features in Achieve, you'll use your screen reader as you would with any other website. The tips below are intended to help you get the most out of your learning experience in those places where conventional use of your screen reader might not work, or might not be efficient.

Screen Reader Websites for Reference

If you are new to your particular screen reader, or would just like to have a link to the documentation and resources for it, follow the appropriate link:

- JAWS manual and other documentation
- NVDA list of hotkeys
- <u>Voiceover Documentation page</u>

The Achieve Courses List Page

You may find you want to move among several courses. To do this, go to the <u>Macmillan Learning</u> <u>Achieve Courses List</u>. You can use the link provided, or select the link from within your Achieve course. It's the very top link, labeled "Macmillan Learning Achieve Courses List."

From the Courses List page, you can enroll in a new course, or select courses from your list of current courses or past courses. These are conveniently separated, so you don't have to spend time looking at expiration dates, especially if your course titles are similar.

If you have a lot of courses, you can hide a category temporarily, to make finding your course quicker. Use your screen reader command to move by headings to jump to the headings for Current Courses or Past Courses.

JAWS users, if you prefer to use table navigation commands to move through the courses, note the number of courses in the category before you begin. The first or last row of the table may not be reachable using the table navigation commands. If that's the case, and you want to get to those missing courses, move down as far as you can, then just use the Down Arrow to finish moving through the information. You may also need to move to the top item and then switch to using the Up Arrow to get to an unreachable first row.

The Course Page

You'll spend a lot of time on this page, as it launches you into activities, and it lets you know about important upcoming events, such as assignments and their due dates.

You can jump from one set of content to another on this page easily by selecting the menu. It's labeled "Assignments" when you first arrive on the page, but once you change the type of course content you're viewing, the button label will change, too. It will read as "course content button menu" or "resource type button menu", for example. This button is preceded by "viewing by:". Press Space on this button, and you'll have the following choices: Assignments, Course Content, and Resource Type.

JAWS and NVDA users: After you make your selection in this menu by pressing Enter on the option, your screen reader might not return to browse mode. Use the hot key to get you back to normal web-page reading mode, Number-pad-Plus for JAWS, Insert+Space for NVDA. (Voiceover users: you should not have any need to do anything here.) For all screen reader-users, you'll find that the label on this button reflects your current selection. This is great for letting you know what category you're viewing, but makes it harder to find the button. When you first enter the course for a session, the button will return to "Assignments."

Assignments

Viewing your course activities this way will gather upcoming assignments together, which is what you probably want at crunch time. You'll see those items coming up this week at the top, and next week's assignments right after. Past assignments follow.

There are five possible categories: this week, next week, future assignments, past assignments, and no due dates. Each is in its own region, so you can jump to the one you want. Each region is preceded by a button that will collapse to hide that section, so you can reduce the number of assignments you're looking through when you need to.

Course Content

If you want to read the text, look at examples, and do other activities in your course, Course Content is an ideal place to start. This section organizes your text and activities into sections that reflect the course structure. Think of them as folders, or as chapters in a book. Your screen reader will announce each as a button, so navigating by button or by form control can be very efficient. As you move through the course content, some of the items will open to more items. Think of this as having opened a folder. If you've opened a folder and it isn't what you wanted, use browser refresh to restore the page to the initial state and try again.

If you have found what you want, you'll either open another level of folder, or you'll open a new page with the new activity or reading.

Resource Type

Selecting Resource Type from the menu gives you a quick view of the categories of resources in your course. These might include readings, files, links, assessments, and so on. If you have many resources in a category, such as reading, only a few will be displayed, with a "View All" button to bring up a more complete listing.

You can also collapse any of these categories, to limit the amount of items to search through. To do that, each region has a button above it, labeled with the type of resource.

NVDA and JAWS users: press Space on it to collapse that resource type temporarily.

Voiceover users: press Control+Option+Space to collapse that resource type temporarily.

Quickly Finding My Item

If your course is large and your time is short, here are some quick ways to get to the thing you need:

- If you think the item you need now is a scored activity, try saving time by jumping to the Gradebook, for its streamlined presentation.
- If you think what you want is a reading in the text for your course, try selecting the "e-book" button. This gives a hierarchical presentation of the readings, grouped in a logical manner.

• If the item you want is scheduled to be due very soon, jump to the Assignments category to see those things for this week and next right at the top. Items you've recently missed will also be readily available there.

Search

Achieve provides a global search option that allows you to search for assignments and readings. To use the search on this page, type a term, then select the button for the results or select one of the suggested search terms.

In order to type a term, select the "Open Search" button, which is near the bottom of the page, the way your screen reader gives the page layout. This will present you with an edit field. Type your term and press Enter. Right below the edit field with your term, you'll find a button with your term and the number of results.

Whether you select the button with your results, or one of the suggested results, a modal (dialog) will appear, and your screen reader will only read the title. Follow the steps below that apply to your screen reader:

- JAWS users: Turn off browse mode by pressing Insert+z, then use the Tab key to move among the suggested results and the Close button. Use Enter to make your selection. Once the page loads with the new article, turn browse mode back on with Insert+z.
- NVDA users: Press Insert+Space, then use the Tab key to move among the suggested results and the Close button. Use Enter to make your selection. Once the page loads, return to your usual reading mode with Insert+Space.
- Voiceover users: Use the Tab key to move among the suggested results. Use the usual, Control+Option+Space key, to select your option.

Once you've completed reading the article, return to your course page by selecting the "My Course" button from the top of the page. If you instead select the "Back" button, also near the top of the page, you'll return to the search results modal, so navigate it the way you did in your selected step above.

Exercises and Assessments in Achieve

There are several types of assessments. Here are some of the things you may encounter.

Assessments

Many assessments, quizzes, and assignments share this general layout, with some extra features in some cases.

After the banner, in which you'll find ways to return to other parts of your course, you may find a section called "Non-sequential Question Navigation." In this section, you'll have a button for each question in this assessment. These buttons give the details for the question, such as whether it has been completed or not. They are indicated as "Toggle buttons," and either pressed or not pressed. The pressed one is the current question.

Following this list of buttons, you'll have a section containing one or more items which your screen reader may identify as buttons. Those that are "expandable," such as the Assignment Info button, give more information about the activity.

After this region of helpful supporting information, you'll find the main portion of the page, the question and some features related to it. This region will have any text associated with the question and possible answers, navigation items that let you get to the next and previous question (sequential navigation), and some buttons for features related to this question, such as hints, "Try again," etc.

How do I quickly get to the question?

The current question is in the main portion of the screen, and you can jump quickly to that by moving by headings. The level 2 heading for the current question will be in the form: "Question x of y." For example, if you are just beginning the assessment, you'll probably land on question 1 of however many there are in the assignment. Right below that heading is a button to jump to the next question.

An even quicker way to jump to the start of the current question is to move to the bottom of the page with Control+End in Chrome or Firefox or with Command+Down-Arrow in Safari, then move backwards by heading. The last heading on the page is right before the question (unless, of course, there are headings within the question area).

Arrowing down from the heading, you'll find the question and the ways there are to answer it. You will find familiar question-types here, such as radio buttons, checkboxes, and edit fields for short answers.

There are a number of useful features specific to the question you are working on. To see what those are, move backwards from the heading for the current question.

Useful Features for a Question

Above the heading for the question, you may find:

- Helpful Resources
- Give Up
- Hint
- Check Answer
- And, of course, Previous right before the current question and Next right after.

Note: Not all features are available for every question and that the features available may depend on the grading settings for the assessment.

Sometimes some features are not available. How do I make them appear again?

Sometimes you'll need to "resume" your assessment. In this case, those useful features may not appear, and, additionally, you'll find you are not able to answer the question. In that case, just move to the heading of the current question, and arrow up to the "Resume" button. Press Space on that, and the features will become available and you'll be able to respond to the question.

Hints

Pressing Space on the hint button when it is "collapsed" will expand the hint. Your screen reader will read the hint automatically, and you can read it with usual page-reading keys to get any details you need. It appears right below the heading for the question.

Answering Questions

Radio Buttons and Checkboxes

These types of controls behave as you expect. You may find, however, that HTML characters are read by your screen reader along with the text of the question. If that happens, use word or character navigation to go over the question carefully.

Edit Fields

Of course, many questions may simply want you to type in a response, and you'll use your screen reader and the assessment page as you would any other page.

Sometimes, though, you'll find that the questions guide you very carefully, so that part of the question lies between two edit fields. Be sure you are reading the entire question before you begin, and be sure which part of your answer goes in which box.

To do this, before entering forms mode, arrow down through the entire question area. Make a mental note of exactly which part of the response will go in which edit field. For example, you might hear something like "[down arrow] What is the resulting fraction? [down arrow] Numerator: Edit [down arrow] Denominator: Edit."

Math Entry

Sometimes when you are entering numeric values, you'll just type the number as you would text. Other times, you'll need to use math notation to enter scientific notation, formulae, or other math expressions. You'll know you need to use math entry because JAWS will announce: "You are currently on the math equation text area. You can type math notation directly or press Tab to enter the math palette. Press Control Shift V to hear your current answer," or something similar.

If the math you wish to enter consists of characters that you have available on your keyboard, you can simply type the expression. Normal arrow keys and Backspace won't work in this edit field, though, so type carefully.

You can greatly expand what's available from the keyboard by knowing some text-equivalent characters. For example, if you wish to write x squared, or x superscript 2, you can type x^2 and the math editor will read it correctly. Greek letter π is read and displayed correctly when you type p.

Here are keyboard navigation and reading commands in Math Palette in Firefox. Some, such as reading what you have entered, do work in Chrome as well.

- Tab from the equation entry field moves into the palette.
- When you land on the palette, you land on a tab control. Left and Right Arrow keys move across those tabs as usual.
- Pressing the Tab key from any of those items in the tab control jumps into the list of what is available in that category, such as characters or commands like backspace and delete.
- Once in the section for the characters, Left and Right Arrows move among the available characters.
- Space on a character "types" it in the equation field.

• Control+Shift+Z moves you back into the equation field.

How do I check my score while I'm working through an assessment?

Shortly before the main body of the question, there is a level-two heading Assignment Score with a button below it. Pressing Space or Enter on that will toggle between percentage and points for your current score. Scores are given as a portion of the total possible, so you may start with something like "0/2500" where 2,500 is the maximum points you can get if you answer every question correctly.

How do I use the "Full Screen" feature?

Just above the heading for the question, and before the "Previous" button, there is a button that your screen reader announces as "Expand" or "Collapse." If it announces "Expand," press it and you'll hear a message "Press ESCAPE to exit full screen."

Full screen pushes the general links off the page, so that your layout now begins only with assessment-related links and controls. If you'd like to have the other links back, simply press ESCAPE or press Space or Enter on the button that is now announced as "Collapse."

The Full Screen feature can have some other beneficial side effects, too. Occasionally, you'll find that the Check Answer button is not available, although you have made a selection. If that happens, toggle the Full Screen feature. Likewise, the score may not appear, and toggling the Full Screen feature will help with that.

Writing in Achieve

Writing assignments have several characteristics that make them different from other types of assignments.

- They sometimes take an extended period of time, so that you are likely to leave and return several or many times to the same project
- They have a summary page that indicates the details of the assignment and reflects how much you've completed so far
- There is an editor with features similar to those of a word processor

The Summary Page

When you select a writing assignment from your course page, you'll first land on the summary page. This page has several sections, all very useful when you need them:

- The steps for completing the assignment listed right after the assignment name and due date information
- The Activity Prompt, which tells you what this assignment is and what you are writing
- A button to move to the editor, where you'll do your writing

The Activity Prompt is displayed or hidden by a button, so you can read this section and then hide it from your screen reader to reduce the amount of info on your summary page. You can display it again anytime.

Voiceover users: you will need to interact with the heading that includes the text to move into your writing. Look for a heading with text such as "Final Paper Begin Final Paper," or "return to Final Paper." This text is the label of the button, but Voiceover may include it within the heading. If you have difficulty finding the button, and you are using Voiceover on the mac, follow these steps:

- Move through the summary page by heading (you can move any way you like, but this is quick)
- When you arrive on the level 2 heading referring to the final paper, you'll notice that Voiceover is reading two things together. These are actually the heading and the button.
- Interact with the heading by pressing Control+Option+Shift+Down-Arrow.
- Move to the right to land on the button by pressing Control+Option+Right-Arrow
- Select the button as usual with Control+Option+Space

The Editor

When you begin your Writing assignment from the summary page, you'll land on a page that has several sections. The main feature of this new page is the editor.

After you've looked over the page, you'll see there are several things you'll want to move among. When you're ready to write, you'll move to the editor. If you wish to format your writing, you'll move to the toolbar, and if you want to read or research, you'll jump to the search.

JAWS and NVDA users: to move among the sections of the page while in browse mode (your usual web-page reading mode), use the letter "e" to move to edit fields. There are two, one labeled Search and the other unlabeled. The unlabeled one is your editor. In browse mode, you can jump to the toolbar by pressing "b" for button. You'll also find a few other buttons, such as Back and My Course buttons that way, which are not in the toolbar.

Voiceover users: you can move by form control to get quickly to the toolbar, which is immediately before the editor. Interact with that, which puts you in the application, the area that includes both the toolbar and the editor. From there, move to the right until you come to a group, which is labeled "Editor:" and your assignment name. Unlike most edit fields, you'll need to interact with this Editor in order to get into the text of your writing.

The **Toolbar**

The toolbar is where you'll find the buttons for formatting and otherwise acting on the text in your writing. It has things that will look familiar, such as bold and underline, and includes other options as well.

All users, you'll be pleased to see there is a button near the top of the page that gives you a list of handy hotkeys for using this page. These are particularly necessary for jumping between the editor and the toolbar while you are writing.

JAWS and NVDA users: you'll frequently want to get to the toolbar without first leaving forms/focus mode.

Alt+F10 (windows) or Option+F10 (mac) will take focus to the toolbar while you are in the editor. This is something you'll want to do if, say, you wish to select text and then apply formatting to it-- selecting the text and then navigating to the toolbar by the usual page-reading commands almost always unselects the text, while using Alt+F10 leaves the text selected.

The list of hot keys includes most of the things you'll want to do with the toolbar, so look at that list. If you'd like to, for example, add a bulleted list to your writing, you can begin and end the list by pressing Control+Shift+8 in Windows or Command+Shift+8 on the mac. Just press the hotkey, type your list, using Enter/Return to separate the list items, then press the hotkey again.