

Zotero Accessibility Summary

Information to post on the wiki:

General notes and things to eventually organize into the wiki:

- <https://accessinghigherground.org/accessibility-of-bibliography-software/> Really good presentation from Accessing Higher Ground 2017, only the PPT is available.
- And the [Zotero forums](#) seem to have some recent discussion about issues with the plug-ins/extensions, but there doesn't seem to be any movement on fixing them.
- [page on how bugs should be reported](#).
- [here's a recent problem someone had](#) with JAWS and the tip to get around it.
- Mainly, the browser plug-ins for article ingestion don't work well (or at all) with NVDA on PC, and there's all sorts of Mac OS issues (including VoiceOver and Pages incompatibilities) with Zotero.
- There's suggestions to install the [Zutilo extension](#) with Zotero to add more keyboard shortcuts, but I haven't used it.
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General Information

- [Accessibility of Bibliography Software](#), Accessing Higher Ground presentation slides, 2017
- [Zotero Forums](#), where current issues are brought up and discussed
 - [How bugs should be reported](#)
 - Zotero provides keyboard shortcuts instructions:
 - <https://www.zotero.org/support/preferences/advanced#shortcuts>
 - https://www.zotero.org/support/kb/keyboard_shortcuts (Zotero documentation)
 - [Zutilo](#), a third-party plug-in that allows you to set [up more keyboard shortcuts](#).
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Accessibility Overview

[insert narrative summarizing whether the software is accessible in general, or what major barriers exist]

Zotero does not have a page dedicated to accessibility or reporting accessibility issues, but they're hiring/have hired an accessibility specialist. Any accessibility issues are reported through the Zotero Forums.

Zotero Desktop (5.x and 6.x)

In general, Zotero Desktop is NOT accessible, but it is required for using the Zotero web plug-ins, De-duplication and pulling metadata from a PDF. The buttons are unlabeled. Some workflows can be done with the keyboard shortcuts.

Zotero Browser (Chrome and Firefox) PC

In general, using Zotero in the browser on Chrome or Firefox on a PC is accessible, with some issues. In order to use the web plug-ins to import articles to your Zotero library, you need to have the Desktop App installed; however, once it's installed and configured, you do not have to actually use the desktop app and can rely on the browser for most workflows.

With Chrome and Firefox, it seems that if you get lost/have problem/get stuck, you can return to the collection folder you were originally working in and open it again to reset the page and fix most issues.

Zotero Browser (Chrome and firefox) Mac

In general, using Zotero in the browser on Chrome or Firefox on a PC is accessible, with some issues. [the web plug-ins don't work?] In order to use the web plug-ins to import articles to your Zotero library, you need to have the Desktop App installed; however, once it's installed and configured, you do not have to actually use the desktop app and can rely on the browser for most workflows.

Known Accessibility Issues

Re'org this and do it by the workflows below.

Desktop App

- Zotero (Standalone 5.x) does not work well with VoiceOver on Mac due to its underlying architecture and VoiceOver does not match with the interface (dstillman [Zotero Forum administrator] and dmaley [a member], January 20, 2020).
- Zotero is aware of the issue but its desktop edition has not incorporated [W3C WEI-ARIA](#) practices (or wcag).
- Unlabeled buttons and other navigation issues:

- Throws you into the search bar immediately, so it was searching “h” instead of letting me find headers.
- No headers? Nav is weird without someone to introduce you to the interface and walk you through things.
- Can’t access the menu with keyboard.
- Figured out selecting title and then going to the menu to access “create bibliography”, but all the options are “blank”. The Copy to Clipboard is an unlabeled button.
- Can't tab to the toolbar in the desktop version.
- There is no way to move an item into a collection folder using a screen reader and keyboard on the Zotero Desktop app. There are no keyboard shortcuts for this unless you install and set one up using the Zutilo plugin.
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Browser:

- Missing Alt tags on the zotero.org homepage
- Missing form labels
- 4 empty buttons (sooo many unlabeled buttons as you switch views)
- Very Low contrast with the page footer (“# of results in this view)
- Very Low Contrast on the Info/tags/related headings on an item view when one of the tabs is selected (light blue over dark grey)
- Skips level 3 heading in web version, general lack of heading structure
- Doesn’t seem to rely on color for use of the web. It’s more obvious that there’s a low color contrast on the info/tags/related information on an item when you view it in greyscale.
- Magnification test: Unusable at 200X
- Using Zotero Web Browser version on Chrome
 - In the web browser version, tab until you are highlighting the article you want to add to another collection. NOTE: adding to a collection does not remove it from the current collection if it is one. To do so, you will need to add the article to a new collection folder first, and then remove that item from the old collection folder.
 - Shift-tab to get to the “toolbar”, then use the arrow keys to navigate over to “Add to a collection” button, and press enter.
 - A popup box will appear. Tab over to the My Library dropdown button, and use the arrow keys to select the folder/collection you want the item to be added to. Press enter to select the folder, then tab to the ADD button.
 - If you’re having some troubles doing this, you may need to refresh the page, or you can back-shift to the Collection Folder you were working in and open it again to refresh. (Example of a usual issue, is that when you select an item and then shift-tab, it takes you to the tags section, not the toolbar. If that happens, you need to go back to the original folder you were working in, enter to open it again,

and then tab forward to the item. It should then allow you to shift-tab back to the toolbar to add the item to another collection.

- Using Zotero web Browser version in Firefox
 - The issue where you can't get back to the toolbar comes up with Firefox. You have to reload the page or reload the collection folder to get the toolbar back.
 - Otherwise, it works the same as chrome. Note: if you shift-tab after selecting the item you want to add to a collection and you get to the Tags rather than Toolbar, then you need to reload/return to home and then try going forward again.
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Web Plug-Ins (Zotero Connectors)

- There were issues testing with the plug-in with Firefox.
- Workflow #1: find article, use the plugin to ingest into zotero (app), auto sync to the web browser version. Errors were coming up (may not be as syncable as I think?)
 - Using plugin to save article to Zotero desktop (Chrome)
 - Make sure you set up the folder in the browser first (there's no way to set up a new folder/collection using screenreader in the desktop app)
 - There's no audio notification that it has been saved anywhere.
 - **Some Mac users** using chrome are reporting a problem where when using the plugin, despite having the Zotero app open, they will not be given the opportunity to select which folder the item will go into. It seems to simply ingest things directly into My Library top level.
 - Meg test (Chrome & VoiceOver)
 - I was able to change the folder other than just my library, but I was unable to actually select done to add to that library. Also note, I need to have the zotero app open on my computer for the option to even add to library to work. So I would say this doesn't work and is extremely frustrating for a screen reader user.
 - UPDATE this works if you are using the keyboard shortcut, but not if you are going through the toolbar itself.
 - **MEG TESTED: This workflow NEEDS to be tested on mac!! -**
 - Ctrl-Shift-S: CTRL-Shift-S activates the plug-ins to import an article/book into Zotero.
 - Zotero Item Collector if there's multi items, otherwise it will simply announce what TYPE of item it is (document, webpage, etc.)
 - The syncing from the desktop app to the web browser version seems instantaneous. Same for web browser version to desktop app (as long as it is open at the same time).
 - It will automatically bring up the last folder that you had selected. You need to tab over to the expand button to bring up the full list of available

collection folders, then select the right one (it'll automatically add the article when you select the correct collection folder). Once you have the correct collection folder selected, you can go through and quickly add materials by pressing ctrl-shift-s and enter. The only audio cue is "document" or sometimes the title of the article if it comes up as an HTML website.

- If you spend too much time doing nothing with the plug-in, it will automatically disappear without actually saving anything. There's nothing telling you that it has disappeared (it reads the pop up box and then quickly disappears).
- Using plugin to save to Zotero Desktop (Firefox)
 - Ctrl-shift-s wasn't working for me.
 - When I tabbed to the menu item for Add to Zotero, it would bring up the popup box, but it wouldn't read it at all. I could NOT use it without vision. At some point, one of my tests wound up saving the item to my Zotero without telling me.
 - Firefox and the plug-in just don't seem to play well.
- Using Plugin to save to Zotero in the Web Browser (Chrome)
 - You need to have the Zotero desktop app closed when you use ctrl-shift-s. It'll bring up a dialogue box "Is Zotero Running?" By default, it's on a "Try Again" button, but you can back-shift to "Enable saving to online library" button.
 - An error will come up, and the item will either not save, or it will save incorrectly. The Dialog box will ask you to make sure that zotero is running.
 - When you open Zotero again, it'll save correctly in the Desktop version, but will only show "view content" or some other weird message in the online version.
 - After you do this, you can ctrl-shift-S and it seems to save it to your Zotero, but it doesn't actually save anything. Or sometimes it does.
 - **DO NOT DO THIS.** The only way to undo it is to uninstall the plugin and install it again. The save to web browser is NOT WORKING.
- Using Plugin to save to Zotero in the Web Browser (Chrome/Mac)
 - You need to have the Zotero desktop app closed when you use ctrl-shift-s. It'll bring up a dialogue box "Is Zotero Running?" By default, it's on a "Try Again" button, but you can back-shift to "Enable saving to online library" button.
 - On PDF download page for an article: You are fully able to do this using the keyboard shortcut. You can change the folder, and are not given weird suggestions for what the item is that you are trying to save.
 - On a website to save, it works fully as well, it is easy to change the folder as well.
- Seems to be a workaround with [Zotero 6](#) for Mac with the Install Connectors.

Resources

[Initial Impressions, problems, and suggestions for workflows to test: \(Feb 28, 2022\)](#)

[Suggested workflows to test](#)

[Accessibility Auditing Shortlist outcomes](#)

[First steps \(view the full list for details on the how and why of testing\)](#)

[Next Steps \(view the full list for details on the how and why of testing\):](#)

[Assistive Technology User Testing](#)

[Information to post on the wiki:](#)

[General notes and things to eventually organize into the wiki:](#)

[General Information](#)

[Accessibility Overview](#)

[Known Accessibility Issues](#)

[Web Plug-Ins](#)

[Resources](#)

Initial Impressions, problems, and suggestions for workflows to test: (Feb 28, 2022)

- Unlabeled buttons
- Setting up a new free account--if there's an error, it doesn't announce it, you have to nav around to find the error.
- Zotero Library in the browser
 - Throws you into the search bar immediately, so it was searching "h" instead of letting me find headers.
 - No headers? Nav is weird without someone to introduce you to the interface and walk you through things.
 - Can't access the menu with keyboard.

- Figured out selecting title and then going to the menu to access “create bibliography”, but all the options are “blank”. The Copy to Clipboard is an unlabeled button.
- Key things: inability to move items into collection via keyboard, you can ingest materials into zotero without drag/drop. Many avenues to get content into zotero (browser, file-upload, manual input)
- Most things require a mouse (select all reference and right click to export it). (this is important and should be tested more)
- Keyboard - hard to understand what the icons mean.
- Web interface allows some add to other collections.
- Hiring an accessible designer
- Can't tab to the toolbar in the desktop version. Need to test web version vs. desktop version.
- Workflow: find article, use the plugin to ingest into zotero (app), auto sync to the web browser version. Errors were coming up (may not be as syncable as I think?)
- For group libraries, they sync after 15 seconds. Personal sync is also pretty instant.
- Moving something that is in a folder, it does say “unexpected error” on the web version, but works fine in my library and moving to a collection.
- Workflow: moving items into collections. (from a folder or from the “my library”).
- Workflow: Adding tags to articles.
 - Seems to be possible on the desktop version
 - Meg can't add the tag on the browser version because it just allows you to edit the text of the tag opposed to select it.
- Workflow: Editing item
- Workflow: Creating Bibliography
 - The only way to do this is to right click using a mouse and select create bibliography, there aren't any keyboard shortcuts for this step, it also does not appear in a menu [Incorrect: there is a keyboard shortcut]
- Workflow: creating a group library (can you create it) (seems pretty straight-forward and accessible)
- Workflow: notes (adding notes)
- Workflow: manual ingestion of materials. (does it work)
- Workflow: Deduplicating with keyboard (duplicated items is missing from browser?)
- Desktop version: Accessing and setting application preferences

Suggested workflows to test

1. Workflow: find article, use the plugin to ingest into zotero (app), auto sync to the web browser version. Errors were coming up (may not be as syncable as I think?)
2. Workflow: moving items into collections. (from a folder or from the “my library”).
3. Workflow: Adding tags to articles.
 - a. Seems to be possible on the desktop version

- b. Meg can't add the tag on the browser version because it just allows you to edit the text of the tag opposed to select it.
- 4. Workflow: Editing item
- 5. Workflow: Creating Bibliography
- 6. Workflow: creating a group library (can you create it) (seems pretty straight-forward and accessible)
- 7. Workflow: notes (adding notes)
- 8. Workflow: manual ingestion of materials. (does it work)
- 9. Workflow: Deduplicating with keyboard ("duplicated items" is missing from browser?)

Accessibility Auditing Shortlist outcomes

First steps (view the [full list](#) for details on the how and why of testing)

1. Does the vendor or website have a page dedicated to accessibility, or a central contact address for accessibility questions and assistance?
 - a. No, but they're hiring/have hired a accessibility specialist
 - b. [page on how bugs should be reported](#).
 - c.
2. Run WAVE and report errors in the appropriate category.
 - a. Web version:
 - i. Missing Alt tags on the zotero.org homepage
 - ii. Missing form labels
 - iii. 4 empty buttons (sooo many unlabeled buttons as you switch views)
 - iv. Very Low contrast with the page footer ("# of results in this view)
 - v. Very Low Contrast on the Info/tags/related headings on an item view when one of the tabs is selected (light blue over dark grey)
3. Check Headings on the page (HeadingsMap)
 - a. Skips level 3 heading in web version
4. Keyboard access testing
5. Use of color/ColorBlindness access (RGBLind simulator)
 - a. Doesn't seem to rely on color for use of the web
 - b. It's more obvious that there's a low color contrast on the info/tags/related information on an item when you view it in greyscale.
6. Magnification test
 - a. Unusable at 200X
7. Links
8. Audio/Video
9. VPAT
10. Other complaints, posts about accessibility issues, or other general discussions?

- a. [Major thread in Zotero forum with lots of advice](#) (question from 2014, but has recent entries as well)
11. Drag and Drop without an alternative

Next Steps (view the [full list](#) for details on the how and why of testing):

1. Perform whatever tests you typically perform and report the results
2. Is the support documentation accessible, or in PDF-only?
3. Advanced Keyboard Testing
4. Navigation Evaluation
5. Alt Text advanced evaluation
6. AXE, ACE or other advanced accessibility checker
7. "Skip to main content" link?
8. Proper ARIA landmarks?
9. Test the site with a screen reader (NVDA, JAWS, VoiceOver, ChromeVox)
10. Any complaints from AT lists or IT discussions?
11. Performance on Mobile Devices?
 - a. Android:
 - b. iOS:

Assistive Technology User Testing

1. Debbie testing on PC with NVDA (Zotero 5):
 - a. With Chrome and Firefox, it seems that if you get lost/have problem/get stuck, you can return to the collection folder you were originally working in and open it again to reset the page and fix most issues.
 - b. You do have to download and install the Zotero desktop app to use the plug-ins and insert citations from Zotero (it also has to be running as you use it); however, you can easily avoid using the desktop app to manage the collections. You can use the create citation vs. create bibliography buttons in the item toolbar to create citations, copy to clipboard and paste into a document rather than using a Zotero plugin.
 - c. Workflow #1: find article, use the plugin to ingest into zotero (app), auto sync to the web browser version. Errors were coming up (may not be as syncable as I think?)
 - i. Using plugin to save article to Zotero desktop (Chrome)
 1. Make sure you set up the folder in the browser first (there's no way to set up a new folder/collection using screenreader in the desktop app)
 2. There's no audio notification that it has been saved anywhere.
 3. **Some Mac users** using chrome are reporting a problem where when using the plugin, despite having the Zotero app open, they

will not be given the opportunity to select which folder the item will go into. It seems to simply ingest things directly into My Library top level.

4. Meg test (Chrome & VoiceOver)

- a. I was able to change the folder other than just my library, but I was unable to actually select done to add to that library. Also note, I need to have the zotero app open on my computer for the option to even add to library to work. So I would say this doesn't work and is extremely frustrating for a screen reader user.
- b. UPDATE this works if you are using the keyboard shortcut, but not if you are going through the toolbar itself.

ii. **MEG TESTED This workflow NEEDS to be tested on mac!!**

iii. Ctrl-Shift-S: Zotero Item Collector if there's multi items, otherwise it will simply announce what TYPE of item it is (document, webpage, etc.)

1. The syncing from the desktop app to the web browser version seems instantaneous. Same for web browser version to desktop app (as long as it is open at the same time).
2. It will automatically bring up the last folder that you had selected. You need to tab over to the expand button to bring up the full list of available collection folders, then select the right one (it'll automatically add the article when you select the correct collection folder). Once you have the correct collection folder selected, you can go through and quickly add materials by pressing ctrl-shift-s and enter. The only audio cue is "document" or sometimes the title of the article if it comes up as an HTML website.
3. If you spend too much time doing nothing with the plug-in, it will automatically disappear without actually saving anything. There's nothing telling you that it has disappeared (it reads the pop up box and then quickly disappears).

iv. Using plugin to save to Zotero Desktop (Firefox)

1. Ctrl-shift-s wasn't working for me.
2. When I tabbed to the menu item for Add to Zotero, it would bring up the popup box, but it wouldn't read it at all. I could NOT use it without vision. At some point, one of my tests wound up saving the item to my Zotero without telling me.
3. Firefox and the plug-in just don't seem to play well.

v. Using Plugin to save to Zotero in the Web Browser (Chrome)

1. You need to have the Zotero desktop app closed when you use ctrl-shift-s. It'll bring up a dialogue box "Is Zotero Running?" By default, it's on a "Try Again" button, but you can back-shift to "Enable saving to online library" button.

2. And error will come up, and the item will either not save, or it will save incorrectly. The Dialog box will ask you to make sure that zotero is running.
 3. When you open Zotero again, it'll save correctly in the Desktop version, but will only show "view content" or some other weird message in the online version.
 4. After you do this, you can ctrl-shift-S and it seems to save it to your Zotero, but it doesn't actually save anything. Or sometimes it does.
 5. DO NOT DO THIS. The only way to undo it is to uninstall the plugin and install it again. The save to web browser is NOT WORKING.
- vi. Using Plugin to save to Zotero in the Web Browser (Chrome/Mac)
1. You need to have the Zotero desktop app closed when you use ctrl-shift-s. It'll bring up a dialogue box "Is Zotero Running?" By default, it's on a "Try Again" button, but you can back-shift to "Enable saving to online library" button.
 2. On PDF download page for an article: You are fully able to do this using the keyboard shortcut. You can change the folder, and are not given weird suggestions for what the item is that you are trying to save.
 3. On a website to save, it works fully as well, it is easy to change the folder as well.
- d. Workflow #2: moving items into collections. (from a folder or from the "my library").
- i. There is no way to move an item into a collection folder using a screen reader and keyboard on the Zotero Desktop app. There are no keyboard shortcuts for this unless you install and set one up using the Zutilo plugin.
 - ii. Using Zotero Web Browser version on Chrome
 1. In the web browser version, tab until you are highlighting the article you want to add to another collection. NOTE: adding to a collection does not remove it from the current collection if it is one. To do so, you will need to add the article to a new collection folder first, and then remove that item from the old collection folder.
 2. Shift-tab to get to the "toolbar", then use the arrow keys to navigate over to "Add to a collection" button, and press enter.
 3. A popup box will appear. Tab over to the My Library dropdown button, and use the arrow keys to select the folder/collection you want the item to be added to. Press enter to select the folder, then tab to the ADD button.
 4. If you're having some troubles doing this, you may need to refresh the page, or you can back-shift to the Collection Folder you were working in and open it again to refresh. (Example of a usual issue,

is that when you select an item and then shift-tab, it takes you to the tags section, not the toolbar. If that happens, you need to go back to the original folder you were working in, enter to open it again, and then tab forward to the item. It should then allow you to shift-tab back to the toolbar to add the item to another collection.

- iii. Using Zotero web Browser version in Firefox
 - 1. The issue where you can't get back to the toolbar comes up with Firefox. You have to reload the page or reload the collection folder to get the toolbar back.
 - 2. Otherwise, it works the same as chrome. Note: if you shift-tab after selecting the item you want to add to a collection and you get to the Tags rather than Toolbar, then you need to reload/return to home and then try going forward again.
- e. Workflow #3: Adding tags to articles.
 - i. Meg can't add the tag on the browser version because it just allows you to edit the text of the tag opposed to select it.
 - 1. As long as you are in your own account, you can add tags. You can't add tags to a public library that you're not a part of.
 - 2. Tags aren't used very much.
 - ii. Using chrome and firefox, I was able to add tags to an item that didn't have any tags previous in the web browser with no issues using the screenreader and keyboard.
 - iii. Using the desktop app, I was able to add tags to an item I owned in my own collections using keyboard and screenreader
 - iv. To edit tags, you need to select the item you want to edit, then tab to the INFO tab on the particular item, and then arrow over to the Tags section. You can select, delete, add, or edit existing tags.
- f. Workflow #4: Editing item
 - i. In Chrome and firefox, just select the item you want to edit the metadata for, then tab over to INFO, then you can tab down to the individual sections to edit them.
 - ii. This doesn't work if you upload a PDF or other item to the library, unless you create the item with metadata first (don't just drag in a PDF and expect it to autofill or create the item record and metadata in the web browser).
 - iii. This can be done in the desktop app using keyboard and screenreader.
- g. Workflow #5: Creating Bibliography
 - i. Chrome and Firefox: You can only select adjacent articles using the keyboard, but you are able to select multiple items by holding the shift key down while arrowing through the list. Once you've selected all the articles you want, then shift-tab to get back to the Toolbar and then arrow over to Create Bibliography button and press enter. Ctrl-shift-C can't be used in the browser if you have mapped to another app.

1. It's difficult to nav the pop up window for the Bibliography because the focus doesn't always go to the right area. The options in the dropdown menu for Citation Style and Language are not labeled, so you only hear "blank" if you edit and try to change it.
 2. You can change the Citation Style, but you will need sight to know what style you're selecting from the menu. You can also try to type in the style name, but there's no audio letting you know when that option comes up in the dropdown menu. It requires that you be exact in the name (Modern Library Association rather than MLA). Once you select something, press enter and the box will reload.
 3. By default on my account, the button on page was "Copy to Clipboard." This is an unlabeled button, so you just hear button. There's also a collapsed menu with it, but it says "menu item 1". The menu option one is Copy HTML. There is no audio cue that it has actually copied things to the clipboard after you activate the button.
 4. Likely best practice: if you are trying to only get SOME items out of a collection into a bibliography, then you can add those items to a new collection, then go to that collection folder, select all those articles, and then create bibliography. There doesn't seem to be any other way to select non-adjacent articles, or to skip one in the folder.
 5. There is also no option to just have an entire collection folder turned into a bibliography. You can't use ctrl-A to select all folder items in the browser version.
- ii. This can be done in the desktop app if you highlight all the items you want (they have to be contiguous to use the Shift-arrow to select, couldn't figure out how to select only certain articles from a folder with keyboard) and using Ctrl-Shift-C to copy them to the clipboard, then paste into the word document using the default citation style.
1. You can use ctrl-A to select all items in a folder, then Ctrl-shift-C to copy into clipboard.
- h. Workflow #6: creating a group library (can you create it)
- i. In Chrome: If you are zoomed in too much, the menu to access the Groups function is hidden in a hamburger menu "Banner landmark Button Toggle Navigation". Once you get that menu toggled on, you have to arrow up to get into the list. Listen for the "Title, Creator, Year" and then keep arrowing up after that and it'll be the 6 or 7th (somewhere around there). The link is just GROUPS. If you're not zoomed in to the point it hides the menu, then you need to get to the "Title, Creator, Year" form element and then up-arrow to get to "Groups". The top of the menu is "Web Library" and the bottom is "Upgrade Storage."

- ii. I couldn't find a way to do this on the desktop version. HOWEVER, in the desktop version there is no audio differentiation between your Library and the Group Library, so it may be easy to get into the wrong folder (especially if they are named the same) and mess up a group library pretty easily. It's more obvious in the browser version it uses Level 2 for the main collection headers and Level 3 for the individual collections within. In the desktop app, it's all Level 2. Collections are also not an ordered list in the desktop app; with the browser, you get "item 2 of 28" for collection folders, and Level 3 for top level.
- i. Workflow #7: notes (adding notes)
 - i. You can add notes in the browser version. Tab down to the Info section of the article, then arrow over to Notes. Arrow down to get to Add Notes. It'll jump you immediately into the Rich Text editing area for adding the note, but you have to switch modes to start typing in Chrome (this doesn't seem to happen with Firefox). Once done, tab out of it, and it'll automatically save.
 - ii. It's a little more difficult to add a note with the desktop app, as it opens a new sidebar menu without a close button (at least it's not available to the screen reader). You have to switch modes to type, and then switch again to get out of the note and back to the article.
- j. Workflow #8: manual ingestion of materials.
 - i. You can use the Toolbar for the collection folders--"New Item Button" is the first/default button for the Toolbar. You select the type of document it is from the dropdown. It'll add a blank item in whatever collection folder you have open. You then have to tab down to Info and then fill out all the information for the article manually. You can also upload a PDF attachment to the citation record at this time.
 - ii. If you use the "New Item" button and upload a PDF, it will be uploaded without any metadata and treated as a top-level item with no metadata. There is no way to get the metadata from the PDF to generate a record (a right-click action on the desktop). There is no way on the web browser to drag-and-drop that PDF into another citation in order to get it out of the top-level area.
 - iii. You can add a new item in a collection using the desktop app by the keyboard shortcut Ctrl-Shift-N
- k. Workflow #9: Deduplicating with keyboard ("duplicated items" is missing from browser?)
 - i. The Duplicated Items option is indeed missing from the web browser version. You have to select an item in a folder, and hit delete. You can also back-tab to the toolbar and arrow over to delete. When it deletes, you don't get an audio confirmation--the page reloads, and whatever the default audio you hear is replayed.
- l. Workflow #10: Unfiled items

- i. There is no Unfiled Items folder in the browser version of Zotero.
- 2. Debbie testing on PC with NVDA (Zotero 6)
 - a. There doesn't seem to be any accessibility improvements on the Desktop app.
 - b. Because of the unlabelled buttons and inaccessible menu icons in the desktop app, if you have some vision and/or use a mouse, you may find that the desktop app is more accessible to you, or that some of the extra features are attractive enough to decide to use the desktop app exclusively. You may need to install the Zutilo plug to create more functionality.
- 3. Debbie testing with Zutilo plugin installed.
 - a. Couldn't get the Zutilo plugin installed with keyboard and screen reader only. The add-ons manager buttons are unlabeled and unresponsive to the keyboard. You have to use the mouse.
 - b. It was also very difficult to set up the Zutilo plugin once it was installed. I couldn't find a way to use the keyboard and screenreader to set up the shortcuts. You have to use the mouse, and some items are not read by the screen reader.
 - c. I wasn't able to fully test zutilo plugin because it was too finicky, and I didn't have time to devote to it.