**Coffee Hour - March 11, 2021**

**Google Classroom and Accessibility**

Presented by

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# Agenda

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# Is Google Classroom Accessible?

* Yes, the architecture of Google Classroom can be navigated by screenreaders - but…
* If the assignments that are embedded into Google Classroom are not accessible, then students may have difficulty completing them

# Helpful Prerequisites Before Learning Google Classroom

* Google Classroom is web-based, so students will benefit when they have some prior knowledge of how to use JAWS to navigate the Internet, including having an understanding of what web elements are (e.g., “link” or “heading”)
* Even just 1 or 2 prerequisite lessons increase students’ understanding of navigating the web and, by extension, Google Classroom
* Prior to learning Google Classroom, students will also benefit greatly from having keyboarding skills and an understanding of how to execute keyboard commands (e.g., Alt + Tab to move focus from one program to another)

# JAWS Internet Navigation Instructional Strategies

* Students who use screenreaders benefit from explicit instruction in web elements and what web accessibility means so that they can employ the most efficient strategies to navigate web pages
* Web Elements:
  + These are used to create the structure of a web page and are used to present information in different ways
  + As screenreader users navigate a web page, they will use specific navigation keys in order to move by element more efficiently
  + Common web elements include links, headings, lists, tables, images, regions, and form controls such as edit boxes and buttons
  + JAWS provides easy to use commands called “Navigation Quick Keys” so that users can easily move from one web element to another (find some common ones below):
    - H: Headings
    - L: Lists
    - T: Tables
    - G: Graphics
    - R: Regions
    - B: Buttons
    - E: Edit boxes
  + JAWS also provides a way to compile a list of elements (find some common ones below):
    - JAWS key + F7: List of Links
    - JAWS key + F6: List of Headings
    - JAWS key + F5: List of Form Fields
  + JAWS has a tool called JAWS Find:
    - Ctrl + F - this will allow a user to search for a particular word or phrase on a web page
* Web Accessibility:
  + Websites, tools, and technologies are designed and developed so that people with disabilities can use them
  + People with disabilities can perceive, understand, navigate, and interact with the web, as well as contribute to the web
  + If a user is on a website and screenreader commands and strategies such as those listed above aren’t working, then the website may not be accessible

# Google Classroom Navigation with JAWS

* How to get to Google Classroom if you are already signed into google
  + Open a new web tab (Ctrl + T)
  + In the address bar, write classroom.google.com and press Enter
  + Other ways to get to Google Classroom: through a “Join Class” link in email or through the Google Apps menu in Gmail
* How to find your class when you are on the Classroom Dashboard
  + Go to Main Menu (Ctrl Home to get to top of page, then down arrow to listen for “Main Menu,” then press Enter)
  + Use down arrow to listen for the class you want
  + Other ways to find your class: When on the Classroom Dashboard, press H for Heading to navigate by the class headings to locate the one you want, press Enter to open the class
* How to navigate between Stream, Classwork, and People
  + Ctrl Home to go to top of page, then press Tab until you hear the option you want, press Enter
  + Or, open a list of links (JAWS Key + F7) and use down arrows to listen for option you want, press Enter
* How to navigate to posts in Stream
  + H for heading
  + Down arrow
* How to navigate to topics in Classwork
  + H for heading will move to topic headers, if the Classroom is designed this way
  + Use JAWS Find (Ctrl + F) if you know the topic you are looking for
* How to navigate to and open assignments
  + Down arrow from topic heading to get to an assignment, Enter when you hear the option to “expand” the assignment heading (this will expand the assignment, then down arrow again to hear everything or use tab to jump more quickly to attachment if there is one, then press Enter to open it)
  + To close an assignment, you can press Ctrl + W, which will close the web tab
* Assignments that are generally accessible: typically, YouTube videos, Google Docs, Forms, some PDF files
  + Note: when working in Google Docs students should be aware that they may need to turn off something called the JAWS virtual cursor (JAWS Key + Z to turn it off or on again), in order to use the native Google commands (this is less likely if students are updated to the most recent version of JAWS)
  + Bottom line, the more technology skills a student has prior to navigating the Google environment, the easier the transition

# Less Accessible Classroom Assignments

* Make sure all software and browsers are up to date
* Students often run into issues with PDF files:
  + One excellent way to access a PDF file on a laptop with JAWS is to have Adobe Acrobat Reader installed - JAWS has expanded its OCR (Optical Character Recognition) capabilities and it has become much easier for students to get information from PDF files, provided they have Adobe Acrobat Reader
  + In google classroom, if you use the “open with” option in the viewer, you should be able to access the PDF in Google Docs, provided all software and browsers are up to date
* There are a lot of different educational apps that are being used:
  + If a teacher links an assignment to an app that is less accessible, it won’t matter that Google Classroom itself is accessible - the student won’t be able to complete that assignment easily
  + Some apps, however, may work better on a different device, such as an iPad or, in some cases, it may depend on the web browser that is being used
  + There is also the issue of if something is technically accessible but the student either doesn’t have the tech skills or it takes such a long time to navigate the app or website that it really isn’t efficient for the student to complete the assignment - in those cases, it would be best to locate another way for the student to complete the assignment
* Ultimately, the ability for our students to be successful when navigating web-based tools will depend on:
  + The accessibility of the product
  + Our guidance
  + Our students’ own abilities to troubleshoot and access resources
  + All of this reinforces the need to provide students with multiple tools in the toolbox, including the ability to be independent and resourceful and it also reinforces the need for us to advocate for our students and help General Education teachers and administrators understand what web accessibility means and how a lack of web accessibility impacts our students

# Resources

* Freedom Scientific Trainings
  + [Surf’s Up Internet Training](https://www.freedomscientific.com/SurfsUp/_Surfs_Up_Start_Here.htm)
  + [Training Page](https://www.freedomscientific.com/training/jaws/)
  + [Teaching Resources](https://www.freedomscientific.com/training/teachers/)
  + [YouTube Video Tutorials](https://www.youtube.com/FreedomScientificTraining)
  + [JAWS and Google Classroom webinar](https://www.youtube.com/watch?v=0wVnF0aY2fI&t=4111s) (presented via APH Virtual Excel Academy)
* Perkins School for the Blind
  + [Paths to Technology](https://www.perkinselearning.org/technology)
* Typing Programs
  + [Typing Club](https://www.typingclub.com/)
  + [Typability](http://www.yesaccessible.com/typeability.html)
  + [Typio](https://www.accessibyte.com/typio-online-page/)
  + [APH Typer Online](https://www.accessibyte.com/typio-online-page/)
* Web Accessibility
  + [WebAIM](https://webaim.org/)