



CHROMEBOOK ACCESSIBILITY FEATURES TO SUPPORT READING AND WRITING CHALLENGES

TEXT-TO-SPEECH

On a Chromebook (not a desktop or laptop computer accessing Chrome and Google) you can provide ability for anyone to hear accessible text (Google Docs, Google Slides, Google Forms, most websites) read aloud.

1. Open Chrome browser
2. Top right-hand corner is three dots in a vertical presentation, click on the dots
3. Settings: when settings box opens, click on three horizontal lines on left corner
4. Advanced
5. Accessibility
6. Manage accessibility features
7. Text-to-Speech
8. Enable select-to-speak click on toggle switch to turn on
9. Text-to-speech voice settings (just below Select to Speak) where you can choose a voice and customize rate and pitch of speech. Typically, the default setting is a little fast and you may want to slow it down for your student.

A speaker icon should now appear in the bottom right hand corner. To use text-to-speech:

1. Open a Google Doc, Google Slide, or website that needs to be read aloud. Will also work with text entered into a text box using a PDF editing app, and text entered into a Google Form.
2. Make a box around the text you want read aloud. To do this:
 - a. Click on the speaker icon
 - b. Move cursor to the beginning of the text to be read. While pressing the left side of the touchpad, use your other hand to draw a box around the text. This is the same action you would use to highlight text, but by clicking on the speaker first, you highlight the text specifically to be read. It can be a sentence, paragraph, or a page. Whatever is in the box will be read line by line. You can repeat as often as needed.

Text-to-speech can be used as part of the editing/revising process when writing. This is especially valuable if the student has difficulty decoding but has adequate listening comprehension.

SPEECH-TO-TEXT

“Voice Typing” is the speech-to-text feature in Google Docs and in the speaker notes section of Google Slides.

“Dictation” is the speech-to-text tool for other applications such as Google Slides, Google Forms, PDF editing apps.

Voice Typing

1. Open a Google Doc or Google Slide
2. Tools tab
3. In Docs: click on Voice Typing in Slides: click on Voice Type speaker notes. A microphone appears. When using for the first time, you will receive a message asking for permission to access microphone. Click on allow.
4. Click on the microphone and it turns red. It will transcribe everything it hears. Click to turn it off.

Dictation

1. Follow steps 1 – 6 in text-to-speech to get to manage accessibility features
2. Keyboard and text input
3. Enable dictation (speak to type) click on toggle switch to turn on

A microphone icon should appear at the bottom right corner of the screen. To use Dictation:

1. You need to have some form of a text box in which to dictate: the URL search box in Google, a text box in a PDF editing app, or the content section of a Google Slide or Google Form. There must be a place to enter text.
2. Click on the microphone icon and then click wherever you need to insert text.
3. Click it off when done otherwise it will continue to record

TIPS FOR USING SPEECH TO TEXT

1. Dictate one thought/sentence at a time.
2. Turn microphone off between sentences.
3. Turn microphone off if you get stuck or forget what you want to say.
4. Speak clearly but do not yell. You cannot whisper but you can speak quietly.
5. If the student speaks quietly, a headset may help so that the device can better hear the student.
6. End punctuation must be used, either through dictation or keyboard. If there are no periods, then the device has trouble understanding a long rambling sentence.
 - a. Speech-to-text uses context of previous words and beginnings of sentences to base transcription accuracy. If there are too many things going on in one sentence, it can become easily confused and may change text that was previously transcribed correctly.
7. Dictate punctuation to keep momentum going. This also works with helping students to remember to use periods. *You can Google a list of voice commands that can be used with Voice Typing. You can get the exact wording for “next line, new paragraph, open quotes, close quotes, etc.*
8. With more context and specific vocabulary, the better the transcription accuracy. Students who write/dictate in very general terms may have decreased accuracy of transcription because there are no contexts clues to guide transcription.
9. Some students cannot watch as they dictate because it is too distracting or confusing to watch the transcription appear and change as they are speaking. Just lower the screen a little or turn the device around.
10. Pre-writing tasks that are performed before writing really need to be used before dictating. It is difficult for most students to hold the thoughts in their heads in the correct order and to dictate in an organized and efficient manner.
11. Speech-to-text is a great way for a student to brainstorm ideas quickly into a Google Doc and later rearrange and elaborate for sentences and paragraphs.
12. The student needs to edit for errors of transcription as well as typical errors. Errors can be corrected with speech-to-text or keyboarding. Text-to-speech is a good complement to composing with speech-to-text to listen back to work that was produced to listen for errors that may not be noticed by reading.
13. Typically students who struggle with expressive language challenges will struggle with speech-to-text for the same reasons they struggle with paper and pencil. Expression is still difficult, speech-to-text removes the stress of paper and pencil or keyboarding but coming up with ideas and language will still be present.