Tips for Using Speech-to-Text Software

Working With Students to Develop Dictation Skills

Speech-to-text programs convert spoken words to typed text. These applications may seem easy to use when they are being employed by someone who has had ample practice. However, speech-to-text software can be difficult to master. Successful users must develop multiple skills. For example, they must be able to properly dictate words, enunciate clearly, add appropriate punctuation, and be proficient in starting and stopping the tool.

If you place children or teens in front of a computer screen and ask them to dictate without any training, you may end up with text that looks like this:

"The cat sat on the oh wait no I don't want to say that how does this stop oh no…."

After a few failed attempts, a frustrated student may be tempted to give up. However, with explicit, systematic instruction and guided practice students can learn to make efficient use of speech-to-text applications.

Here are some suggestions for teachers, caregivers, tutors, and anyone else helping students get started with speech-to-text software.

Getting Started

1. Dictate without the pressure of the screen

   a. Using new a new application or software can be intimidating for students. To help ease the pressure, begin by giving them headphones with a microphone to speak into. Turn the screen away from students so they do not have to try to simultaneously manage what is on the screen and what they are saying.

2. Begin at an appropriate level

   a. Depending on students' ages and abilities, you may want to begin dictation practice at the word level and work your way up from there. Prompt students to dictate a list of simple words that you provide or have them repeat back a word or simple sentence that you say (see list below for examples you can use)

3. Analyze the text together

   a. After the student has finished dictating the practice material, turn the screen around and show them what was transcribed. This provides a great opportunity to suggest ways to adjust pace or enunciate specific words.

4. Introduce punctuation

a. Once students can successfully dictate words and sentences, they should learn how to insert punctuation. Give them similar prompts but this time, add in "period" or "question mark" to get students used to adding punctuation while dictating.

5. Give students control of the screen and the start/stop function.

a. The last introductory step is to allow students complete control over the screen and the "listen" icon. Have them practice speaking full sentences with punctuation while simultaneously activating the appropriate buttons.

Writing Paragraphs and Longform Assignments

Once students have mastered dictating words and sentences with proper punctuation, they can begin using speech-to-text to draft longer blocks of text. Initially, you may still need to turn the computer screen away from them, as they may feel overwhelmed by the amount of text populating the screen.

1. Create an outline

a. Before students begin dictating, work with them to draft an outline that includes prompts for what will be written in each section. Write in reminders about enunciation and punctuation as necessary.

2. Use picture prompts

Some students may benefit from the use of picture prompts if they find images easier to connect to than text. For example, imagine that students have been assigned to write an essay on the state of Iowa. Here is how you could use picture prompts to support dictation:

a. First, gather appropriate images related to Iowa (e.g., the state flag, the capitol building, corn, Iowa sports team mascots, etc.)
b. Present the images one at a time and have students talk about the pictures. Prompt with sentences like, "Tell me what you know about this picture." Encourage them to speak clearly and add punctuation while they dictate. Depending on skill level, you can also prompt them to use complete sentences and proper syntax.
c. Ask students to go back and add paragraph breaks as needed.

3. Edit your text

a. After students finish a first draft, ask them to use the playback function to listen to what they wrote. Work with them to correct errors, rearrange sentence order, and make other revisions so that the student understands that their writing can easily be revised.

Other Tips and Tricks

1. Make this experience fun! Come up with games to see who can speak a list of predetermined words, sentences, or paragraphs with the fewest errors.
2. Create nonverbal cues that you can display to help guide students while they dictate, such as popsicle sticks with punctuation or cards with stoplight colors to indicate when the student should slow down or speed up.
3. For students who dictate too fast, stress the importance of speaking one sentence at a time. Have them say a word or phrase and then mentally count "one" before continuing.
4. Encourage use of the "start/stop" function and remind students that they can pause if they are struggling to find a word.
5. Remind students that just because a cursor is blinking does not mean they need to feel pressured or rushed; the computer will wait patiently for them. Encourage them to look away from the screen while thinking if needed.
6. When giving prompts for single word dictation, follow a sequence from simple to complex. Begin with simple consonant-vowel-consonant (CVC) words and progress to complex sentences.
7. Provide students a quiet room with minimal background noise in which to work while using speech-to-text.
8. Keep track of words students dictate that are consistently misunderstood by speech-to-text and work with students on how to pronounce those words at another time.

Limits of Speech-To-Text

Speech-to-text can be a helpful tool for students for a number of different reasons. However, it may not be for everyone. Before attempting to use speech-to-text with students who have speech articulation difficulties, it is best to consult with a speech-language pathologist. Articulation errors can make using speech-to-text very frustrating.

Example Prompts and Materials

The following words and sentences are examples of the kinds of prompts you might use when practicing speech-to-text dictation with a student. Ensure that simple consonant-vowel-consonant (CVC) words are mastered before moving on to multisyllabic words or full sentences to avoid unnecessary frustration.

Simple CVC words

dog	bat	hat	tip
cab	map	man	get
pen	lip	hit	hug
job	bus	cut	wig

Multisyllabic Words

birthday	airplane	newspaper	basketball	barefoot
handwriting	throughout	decorate	volcanoes	computer
imagination	caterpillar	watermelon	discontinue	manipulate
chalkboard	congratulations	university	cafeteria	television
veterinarian	sandwiches	helicopter	organization	superhero

Full Sentences

- The cat sat on the mat.

- Bob is not too happy this morning.

- She slipped on the ice outside her house.

- How do you get to school in the morning?

- I hope you have a great day!

- Have you ever visited the Grand Canyon?

- I sip peppermint tea in the afternoon.

- I am so excited for my birthday!

- He prefers waffles with whipped cream and strawberries.

- The bunny hopped over the holes in the ground.

- Katie printed out pictures of her friends and family to hang up around her room.

Example Exercises

1. Have two students speak the same words/sentences/paragraphs and whoever has the fewest errors receives a point. Do this several times and whoever has the most points after a predetermined number of rounds wins.

2. To work on editing skills, prepare a block of text containing several errors. Have students work though the text and edit it to find the errors. At first, give them the number of errors to make it easier.

3. Present students with different images/icons and have them describe the images using speech-to-text. If necessary, prompt them with questions about the images. For example:

When does this make noise? What does this sound like? What can you do to this when it is making noise? Do you own one?
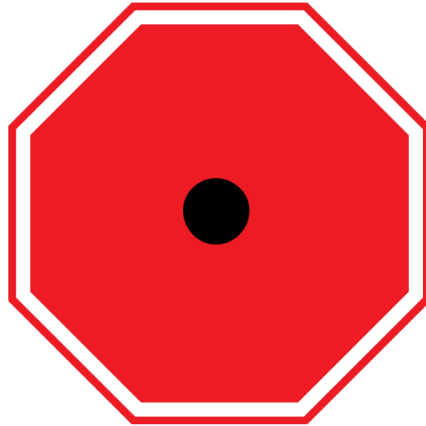
What is this? When do you make one? What can you use to make one?

Speech-to-Text Dictation Cue Cards

SLOW DOWN

PERIOD

COMMA