Lesson Plan

Title | Concept - Access, Sub-Concept - Accessibility

Subject Digital Citizenship

Grade level Grade 4

Time duration | 45 minutes

Outcomes RIPSD 1.4.1, RIPSD 1.4.2, TOC 1.1.4, C 1.2.4, P 1.1.4, P 2.1.4, DC 2.2.4, ELA 8.1, ELA 9.1, ELA 10.3

Objective 1. Return to the concept of Access in a digital world (from Grade 3).

2. Introduce the sub-concept of Accessibility.

3. Introduce Google Voice to Text, practice using the program.

1. Class set of Chromebooks (Google Voice to Text enabled)

2. Teacher computer and projector

Activities and procedures

Materials

1. Review What is Digital Access (5-7 minutes)

Digital Access is about the equitable distribution of technology and online resources. Teachers and administrators need to be aware of their community and who may or may not have access, not only in school but at home as well. Educators need to provide options for lessons and data collection such as free access in the community or provide resources for the home.

What does this mean to you?

Last spring, we had to do school remotely at home. Did you have access to the school activities online? What type of access did you have? Did you have to share with family members, or did you have your own?

2. What is Accessibility (10 minutes)

Accessibility is the degree to which a product, device, service, or environment is available to as many people as possible. **Accessibility** can be viewed as the "ability to access" and benefit from some system or entity.

- What does this mean to you?
- Who might need to have an accessible product, device, service or environment?
- Can you think of products, devices, services or environments that increase or allow accessibility to people?
- Do you know anyone the benefits from an accessible product, device, service or environment?

Video to show class – Accessibility Features - https://youtu.be/1tW2MyjXiDc

Examples of Accessible

Products - wheelchairs, braille signs, stair lifts,

Devices – hearing aids, platform lifts, smart home devices (google mini, amazon echo)

Services – access a bus, voice to text, speech reader

Environments – entryway ramps, computer accessibility settings (eg: large type)

In the Information Technology world, **accessibility** often describes hardware and software designed to help those who experience disabilities. Today we are going to look at a Google program called voice to text that helps students to get their ideas onto "paper" in an easier way than writing or typing.

Who might this program help?

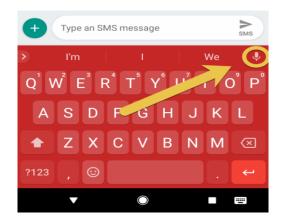
3. Voice to Text (5-7 minutes)

How to start using Speech to Text

- 1. The microphone icon on the keyboard of an Android or iPhone
- 2. Google Docs voice typing (Google support article on voice typing)

Here's the beauty of using Google docs for voice typing: no matter what you're doing on your computer, you can type with your voice in Google Docs and copy and paste it over to practically any program or website.

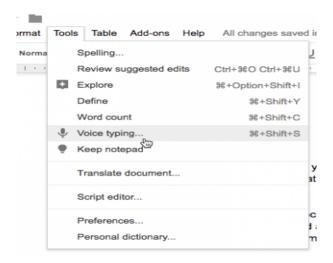
Here's what the button looks like on an Android device.



Here's what the voice typing (dictation) button looks like on an iPhone or iPad.



Here's how to find voice typing in Google Docs. Choose it and click the microphone button that appears to start voice typing.



Tips you need to know

When using voice typing, you will realize quickly that there are certain things that you can do with a keyboard that you might not know how to do with your voice intuitively.

For example: punctuation. There are no punctuation keys in your voice. So how do you do it?

(Wait for suggestions from students.)

Google Docs voice typing, as well as the speech to text on iOS and Android devices, support the following punctuation and commands.

- Period
- Comma
- Exclamation point
- Question mark
- New line
- New paragraph

Activity

Practice using the Voice to Text using your Chromebook (20 minutes)

The assignment is to write a short news story (non-fiction, informational) about how to use Voice to Text applications and why you think they are good for students, or not good for students to use.

When creating your story consider what *COMPONENTS* included in a typical news story – author, date, title of article, the information in the story, and any pictures relevant to the story.

Once your news story is done please share it with the teacher for review.

Student Rubric: News article written using Google Voice to Text application.

Assessment

| | 4 | 3 | 2 | 1 |
|-------------|---|--|---|---|
| Components | All included | Most included | Some included | Missing key components |
| Information | Detailed information, accurate information. | Some detail and accurate information. | Limited detail and not completely accurate | Many missing details and not accurate information |
| Writing | Exceptionally written story, good grammar and word use. | Well written, some error with grammar. | Good writing but too many grammar errors. | Too many errors in grammar and writing does not flow. |