# Accessibility

# Technology Compliance for the Music Classroom

Ian Boynton, Redford Union Schools
Denise Gulliver-Lewis, White Pigeon Community Schools

#### How does accessibility affect me?

- Under the Americans with Disabilities Act (ADA) and specifically the update in January 2017 of Section 508, schools are responsible for their websites to be accessible for people with disabilities. This is a requirement regulated by law.
- Your school district has probably taken steps with their own digital content.
- If you contribute content to a school hosted teacher website, you are responsible to ensure compliance of that content.
- In the classroom, you are responsible for adapting materials to ensure all students have equal access to learning.

#### **Consequences of non-compliance**

- Failure to provide equal learning opportunities for all segments of your student population
- Negative impact on performance evaluations
- Building and/or district consequences
- Complaint filing with the Office of Civil Rights



#### Four Steps to Compliance

According to the <u>Web Content Accessibility Guidelines</u> (WCAG), there are four main areas of concern for website accessibility:

- 1. Perceivable
- 2. Operable
- 3. Understandable
- 4. Robust



#### **Perceivable**

- Larger fonts and/or text alternatives
- Present content in several ways (picture alternatives, recorded instructions)
- Simpler layout, clear color contrasts, clean foreground/background separation
- Captions and/or links to audio of text instructions

## **Operable**

- Multiple functionality (accessible via both mouse and keyboard)
- Ample time to read and/or use content
- Content designed safely to avoid seizure triggers (contrasts, pop graphics, flashing images or text)
- Ease of navigation (multiple methods of access, links open in new window, simple menu layout, direct access to highly used content)

#### **Understandable**

- Text is readable (single font or cleanly related fonts with good contrast to background) and understandable for the user (vocabulary, grade level analysis)
- Clearly organized website pages
- Predictable operation

 Help users avoid and correct mistakes (re-submit answers on forms, direct links to leading pages)

# Robust

Compatibility with user agents, present and future

- Assistive technologies (text readers, voice navigation)
- Parsing (markup languages, start and end tag completion)

This element concerns web authors who script or design their own user interface components

Perceivable

Robust

Understandable

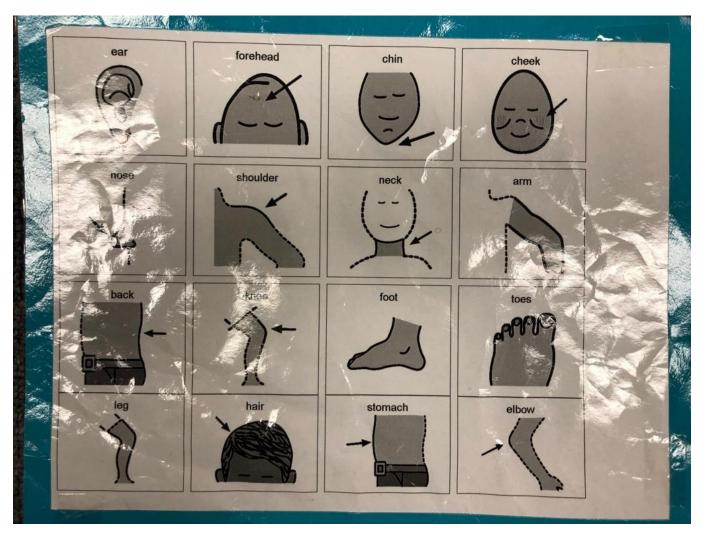
Operable

#### Aids for Students with Cognitive or Verbal Impairments

<u>BoardMaker</u> is a software designed to create iconic pictures to stand in for speech,

Originally designed for students with speech and language needs BoardMaker is also extremely useful for students that need visual clues in addition to verbal instructions.





# Adaptive Devices for Students with Language Impairment

Students with speech and language impairments may also be aided by devices and software that speaks for them. The most common solution is <u>GoTalk by the Attainment Company</u>.

There are a wide variety of devices for all age groups available on their website.

The software is also available for <u>Android and iOS devices</u>.

## Aids for Students with Hearing Impairment

Students with hearing impairment can be assisted by a variety of devices. The most basic is some form of surround sound system.

The teacher wears a lapel mic connected to a unit that sends the signal to the speaker.





#### Aids for Students with Hearing Impairment

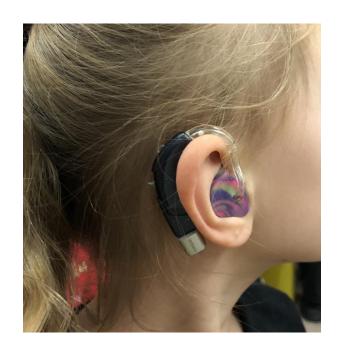
The Phonak system can also be directly paired with students' hearing aids.

There are three main types of hearing aid used today. All three have an external component connected to something internal.

Traditional hearing aids - Worn in ear

Bone conduction hearing aids - small implant behind the ear

<u>Cochlear Implants</u> - Implant deep in the inner ear







#### **Links and Resources**

ADA (official government website): <a href="https://www.ada.gov/">https://www.ada.gov/</a>

Web Content Accessibility Guidelines: <a href="https://www.w3.org/TR/WCAG20/">https://www.w3.org/TR/WCAG20/</a>

Datayze Readability Analysis: <a href="https://datayze.com/readability-analyzer.php">https://datayze.com/readability-analyzer.php</a>

Read&Write Chrome Extension: <a href="http://bit.ly/2RgnHmb">http://bit.ly/2RgnHmb</a>

BoardMaker: <a href="https://goboardmaker.com/pages/about-us">https://goboardmaker.com/pages/about-us</a>

Go Talk by the Attainment Company:

https://www.attainmentcompany.com/technology/gotalks

Links to information about types of hearing aids: <a href="https://www.hearinglink.org">https://www.hearinglink.org</a>

#### **Contact Us**

Denise Gulliver-Lewis
K-5 Music/Technology Specialist
White Pigeon Community Schools
<a href="mailto:dlewis@wpcschools.org">dlewis@wpcschools.org</a>

Twitter: @drglewis

www.digitaldoremi.com

Ian Boynton General Music/Tech Integration Redford Union Schools ian.boynton@gmail.com