Considering Accessibility in Digital Resources

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An *accessible digital resource* is one which can be used by all its intended users, taking into account their different abilities.

Accessibility *barriers* occur when the design of the technology fails to allow for the variations in users' abilities (National Disability Authority, 2014).

Thinking about the accessibility features in a digital resource from the start is important for our students, and should be a factor in large-scale purchases of digital resources. When accessibility is considered too late, it is often not possible or too costly to address fundamental barriers.

When you are evaluating a digital tool, here is the **most important** question that you can ask about accessibility:

What sort of assistive technology features are BUILT-IN to the resource itself?

OR

If they are not built-in to the tool itself, has the resource been tested with assistive technologies? Which ones?

Here are some examples of four common assistive technologies that are increasingly built into digital resources:

- Text to speech
- Recorders
- Change of presentation
- Vocabulary support

Text-to-Speech

What is it?	How does this support student learning?
Text-to-speech reads the text on the screen aloud to the student.	Text-to-speech can support comprehension, memory and attention for students who are weak readers. It can also enhance independence and reduce frustration/fatigue.

***Important to consider when evaluating the text to speech within a digital resource:**

- Does the product simultaneously highlight the text as it reads aloud? This is an important factor in **enhancing comprehension** for students.
- Does the product contain a human-narrated voice or a synthesized computer voice? This is an important factor in the **enjoyment and auditory processing** of the text. Longer passages of text (ex. novel) are best listened to with a human-narrated voice, if possible.
- Can the user control the rate of text-to-speech in the product (decrease or increase the speed)? This is an important factor in the **auditory processing** of the text.
- If the product itself *does not* have text to speech, is it compatible with external text-to-speech technologies? Which ones?

Recorder

What is it?	How does this support student learning?
A recorder is usually a button that allows the student to record and save their voice within the resource itself.	Recording features are helpful for students to dictate voice notes/ideas within the tool itself, to record important information, or to provide another person the option to record important information (ex. teacher).

Change of presentation

What is it?	**How does this support student learning?**
A change of presentation can be the size, color and style of font, the contrast, or a reduced interface.	Changing the presentation can be helpful to some students with reading disabilities, who might have difficulty visually tracking text or perceiving the print on the page. Some fonts might be easier to perceive than others depending on the individual (ex. Open Dyslexic). Some tools allow the user to reduce the "clutter" on the page, providing just the printed text in a simplified format. These features can also be helpful to students with visual impairments.

Vocabulary support

What is it?	**How does this support student learning?**
Vocabulary support usually consists of a dictionary and/or thesaurus within the resource.	To understand a text, students must understand the words that represent the ideas or concepts. Vocabulary support in the form of a dictionary and thesaurus can be important tools in enhancing comprehension of the text. Visual dictionaries as well as text-to-speech built into the dictionary itself, can be helpful features for students with reading disabilities.