



# Technology and Learning Connections

## Flexible Digital Instructional Materials

All instructional materials must be provided in formats that are appropriate and accessible for students with disabilities and struggling students to ensure that all students can effectively and independently complete instructional activities addressing the common core standards. The following are features that should be available in all digital *and* online instructional materials.

### *Presentation Features*

- Fonts can be adjusted in type and size.
- Font colors and background colors can be adjusted.
- High contrast color settings are available.
- Text-to-speech tools are included or text can be selected and used with text-to-speech utilities.
- Text-to-speech tools read math formulas correctly.
- All images have alt tags.
- All videos are captioned.
- Text, image tags, and captioning can be sent to refreshable braille displays.

### *Navigation Features*

- Non-text navigation elements (buttons, icons, etc.) can be adjusted in size.
- All navigation elements and menu items have keyboard shortcuts.
- All navigation information can be sent to refreshable braille displays.

### *Study Tools*

- Highlighters are provided in the 4 standard colors (yellow, rose, green, blue).
- Highlighted text can be automatically extracted into another document.
- Note taking tools are available for students to write ideas online as they are processing curriculum content.
- Resizable digital calculators are available in all math materials.

### *Assistive Technology Supports*

- Assistive technology software can be run in the background. Examples include:
  1. Magnification
  2. Text-to-speech software
  3. Text-to-American Sign Language software
  4. Text-to-braille (refreshable braille displays)
  5. On-screen keyboards
  6. Switch scanning computer control
  7. Speech-to-text computer control

## Universal Design for Learning

Flexible digital materials support all students, not just students with disabilities. A feature that supports a student with a disability can also be used by other students. For example, text-to-speech and text-to-audio tools can be used as a reading scaffold for any student who struggles with decoding text. These tools can also be used by gifted students to convert print to audio so they can listen to the content while multi-tasking. Being able to adjust the size of menus and navigation elements helps students who are using switch systems to control a computer as well as help any students use the instructional materials on smaller screens, such as a mobile device or tablet.