

# 2017-2018 Science Instructional Materials

## Universal Design Learning (UDL) Questionnaire

**Bid Number: 3350**

**Course: M/J Physical Science**

**Title of Materials: Science Bits - M/J Physical Science**

**Publisher: Learning Bits Inc.**

The following are questions asked of the publisher and their responses can be found in their UDL document which is provided on their reviewer portal. Please mark where the material falls on the scale and provide comments that will help publishers improve their product and districts make informed choices. On completion please return to Cathy Seeds at [Cathy.Seeds@fldoe.org](mailto:Cathy.Seeds@fldoe.org).

**1. How are both flexibility and student choices provided for the following presentation features in the instructional materials:**

- Fonts:
  - Type and size.
  - Colors and background colors can be adjusted.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
			X	

Comment: The ability to adjust the font, font size, and colors was not reported.

Foreground/background colors could be adjusted a little using the Windows 10 color filter feature.

Adjusting the type of fonts and colors can increase the readability of the content for some students.

- Background: High contrast color settings are available.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
			X	

Comment: The ability to change contrast was not reported. Colors could be inverted using the Windows 10 color filter feature. Adjusting the contrast can increase the readability of the content for some students.

- Text-to-speech tools

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
		X		

Comment: The text cannot be selected in the online system to use with generic 3<sup>rd</sup> party tools. Text to speech tools as reported (click2speech in the Chrome environment, built-in text-to-speech in iOS) work well with the content text. Content is also available in PDF format and the text can be selected there. Accessibility cannot be reliably predicted as some districts may not support Chrome. Third party tools which include OCR features should work with this system. Note: All text and voices used in this system are available in English and Spanish. Text to speech support is important for students who have problems decoding text but may not need to hear everything in audio.

- All images have alt tags.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
				X

Comment: The use of alt tags was not reported and not observed. Alt tags and description tags are important supports for students who are blind or visually impaired.

- All videos are captioned.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
	X			

Comment: Captioning is available in all videos when there is speech. Videos that do not have speech occurring do not have anything that tells a student who may be deaf or hard of hearing that there is nothing to hear.

- Text, image tags, and captioning sent to refreshable Braille displays.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
				X

Comment: There was no report on whether or not this instructional material works with refreshable braille displays. It was noted that the content is written in standards-compliant HTML5. Support for refreshable braille displays is needed by students who are blind.

## 2. How are the following navigation features provided in the instructional materials:

- Non-text navigation elements (buttons, icons, etc.) can be adjusted in size.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
		X		

Comment: There is a degree of magnification that can be achieved within the browser and the navigation features increase in size along with the rest of the material. The limits depend on the size of the window the instructional materials are presented in. Being able to adjust the size of buttons and icons helps students who use switch systems to control a computer.

- All navigation elements and menu items have keyboard shortcuts.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
				X

Comment: No keyboard shortcuts were reported, and none were observed. Keyboard shortcuts are important when creating alternative keyboards, command overlays, and custom onscreen keyboards for students who have fine motor limitations.

- All navigation information can be sent to refreshable Braille displays.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
				X

Comment: There was no report on whether or not refreshable braille displays could control the navigation. Support for refreshable braille displays is needed by students who are blind.

## 3. How are the following study tools provided in the instructional materials:

- Highlighters are provided in the four standard colors (yellow, rose, green, blue).

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
				X

Comment: No highlighting tools were reported or noted. Highlighters in various colors provide students a way to visually organize the instructional content, an important support for students who struggle with organizing information and making connections.

- Highlighted text can be automatically extracted into another document.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
				X

Comment: No extraction tools were reported or noted. Extraction of highlighted text is an important tool for students who have problems organizing information.

- Note taking tools are available for students to write ideas online; as they are processing curriculum content.

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
				X

Comment: No notetaking tools were reported or noted. Notetaking tools are important for students who struggle with memory. These tools also provide options for students to organize their thoughts, processing, and understanding.

**4. Which of the following assistive technology supports, by product name, have you tested for use with the instructional materials:**

- Assistive technology software that can be run in the background. Examples include:
  1. Magnification – Magnification depends on the capabilities of the browser being used. All major browsers have been tested.
  2. Text-to-speech – Recommended tools are click2speech for Chrome and the text-to-speech in the iOS.
  3. Text-to-American Sign Language – nothing reported
  4. On-screen keyboards – works with the on-screen keyboards built into the operating systems.
  5. Switch scanning controls - nothing reported
  6. Speech-to-text – nothing reported (may work with operating system-based tools)

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
		X		

Comment: More exploration would be needed to determine how well this instructional material works with assistive technologies. The inability to freely select text indicates some barriers, but the ability of tools such as click2speech indicate that there is some access available. PDF versions are also available as students use these materials. Support for assistive technologies is critical to ensuring that all students are included in the instructional activities.

**5. For students with special needs who require paper materials based upon the IEP, how are the materials provided for students currently not able to access digital materials? (if specified)**

5 - Very Good Alignment	4 – Good Alignment	3 - Fair Alignment	2 – Poor Alignment	1 – Very Poor/No Alignment
		X		

Comment: All licenses provide access to PDF versions of lessons that can be printed out by teachers or students at any time. When costs are reasonable (i.e. for large numbers of students) Science Bits can professionally print and bind the paper-based units. Support for assistive technologies is critical to ensuring that all students are included in the instructional activities.