

# 2017-2018 Science Instructional Materials

## Universal Design Learning (UDL) Questionnaire

**Bid Number: 3366**

**Course: M/J Comprehensive Science 2**

**Title of Materials: Discovery Education Science Techbook (Florida) - M/J**

**Comprehensive Science Publisher: Discovery Communications, LLC**

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: Nice consideration of general display of text. Although the publisher’s notes reflect the font size and color is dependent on browser, **there is indeed a built in adjustment setting found when a student highlights text and selects “speak text.”** There is an option to “enhance text visibility” as well as a choice to alter colors of words, sentences, and text. This offers great variety for students and will assist in readability. Furthermore, within the program is 3 readability levels, with one being Spanish.

- 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 overall contrast is not able to be adjusted within the program and will greatly depend on the student’s browser. This can cause unpredictable results for each user. The “speak text” feature, however does allow for sentence backgrounds to be adjusted with a variety of options within the program. For best results and for ease of access, it would be best to have a feature to provide a few options of contrast for the entire screen built in to the program.

- Text-to-speech tools

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

Comment: Text to speech tools are fairly easy to use and offer options for speed, highlighting as it reads, and even reads in Spanish (if selected). This built in feature provides ideal accessibility for most users.

- 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 publisher reports all images have alt tags. This is ideal for students with visual impairments who are using the resource.

- All videos are captioned.

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

Comment: As reported by publisher, all videos from Discovery Ed are indeed captioned. The videos appear to all have English closed captioning options that are easily turned on by clicking the symbol at the bottom right of the embedded videos. This is a very important feature for those with auditory processing limitations or hearing impairments. It is also a wonderful feature for English Language Learners, and any student who might benefit from seeing science vocabulary written out as it is discussed on the video (and a great reinforce for teachers of any grade-level or ability student).

- 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: The publisher reports this is a work in progress. Exploring the online resources was not easily done using simple tabbing features. This could be an obstacle for those with significant visual impairments who are unable to use a mouse to select specific links or menu items. Some content was easily navigated via using the tab and space bar on the computer. Although the headings appear to be tagged appropriately, the natural navigation does not always flow. Once this is adjusted to fit the entire website, the Braille displays should have an easier time reading content in proper sequence.

## 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: The online resources are dependent on the browser features to enlarge the navigational tools. This can allow for unpredictable experiences for students using different browsers or devices to access the resources.

- 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: This was not evident in the online student resources. A user must be able to navigate via a mouse, use a touch (on touch screen devices), or use voice control for scanning on computers and tablets in order to select certain menu items. Once inside many of the specific resources, a user can then use the tab key or switches set for scanning to access elements of the lesson.

- 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: The publisher reports this is a work in progress. Exploring the online resources was not easily done using simple tabbing features. This could be an obstacle for those with significant visual impairments who are unable to use a mouse to select specific links or menu items. Some content was easily navigated via using the tab and space bar on the computer. Although the headings appear to be tagged appropriately and for the most part read in order via a screen reader, the natural navigation does not always flow. Once this is adjusted to fit the entire website, the Braille displays should have an easier time reading content in proper sequence and navigating the information being displayed.

## 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: Excellent built in resources for students.

- 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: This program works well with copy and paste. Although this requires a few steps, it should be familiar to most users. No built-in exporting feature obvious for notes a user might make.

- 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: Notes pages are built right into the resources and easily accessed. Furthermore, the notes option supports speech to text extensions in the Chrome browser.

**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: browser dependent, but works well
  2. Text-to-speech: built in
  3. Text-to-American Sign Language: not available
  4. On-screen keyboards: device dependent
  5. Switch scanning controls: not consistent, however works within some of the content
  6. Speech-to-text: not built in, but 3<sup>rd</sup> party extensions work well

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

Comment: Overall, many of the browser and device tools work seamlessly with this resource. Most students should be able to access the information and have options for processing it. Ideally, the features would be built directly into the program to avoid barriers for users of browsers with less accessibility options or for those students/users who are unaware of browser features and extensions. Although not completely unavailable, the main barrier for AT software running the background is found in the navigation.

**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: Many options for printing resources with a variety of formats.