# Reading System Developer Survey Results

Last updated: August 28, 2019

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## Background

The Transition to Accessible EPUB DAISY working Group (TIES), and the Diagram Center task force on standards is attempting to better understand the technologies being used inside EPUB 3 Reading Systems. The work is centered in the epubtest.org arena. we hope to use this information to develop best practices for publishers for delivery of content.

We sent the survey to a wide range of RS developers, and to date have had eight companies respond. These companies are:

* Apple
* EDRLab
* Dolphin Computer Access
* Rakuten Kobo Inc.
* Google Play Books
* VitalSource
* RedShelf
* Infogrid Pacific Pte. Ltd.

Those that responded, in many cases, provide their software as open source or as white label products. This means that scores of reading systems on multiple platforms are represented here. Because this industry is very competitive, and because the nature of much of this information is proprietary, we promised not to disclose the specific details about the products and the technology they use.

Note: Other Reading System developers are encouraged to complete the survey, which can be found at the end of this page.

## The Questions

The focus of our questions was around support for:

* SVG, including the ability to enlarge.
* Support for “alt” text attribute associated with an SVG.
* The HTML “details” element and its child element “summary” and the ability to expand and collapse the view.
* JavaScript support
* MathML support
* Support for MathML inside the “details” element.
* The ability to copy MathML to the clipboard; we provided an example in the Math test book we provided.
* Media Overlays

## Results

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Platform** | **IOS** | **Android** | **Windows** | **Mac** | **Browser-based** | **Hardware** | **Total** | **Scheduled** | **Will consider** | **Comments** |
| Number responded | 7 | 6 | 6 | 6 | 4 | 1 | 30 |  |  |  |
| Details | 6 | 3 | 4 | 5 | 3 | 1 | 22 |  | 8 | 7 of the 22 said it was a partial implementation. |
| SVG | 5 | 5 | 4 | 4 | 4 | 1 | 23 | 3 | 4 |  |
| SVG and Alt text | 5 | 4 | 3 | 3 | 3 | 0 | 18 |  |  |  |
| SVG enlargement | 3 | 4 | 4 | 3 | 3 | 1 | 18 |  |  |  |
| MathML | 7 | 4 | 5 | 4 | 3 | 1 | 24 |  | 3 |  |
| MathML inside details | 4 | 1 | 1 | 2 | 1 | 0 | 9 | 5 | 13 |  |
| Copy MathML to clipboard | 1 | 1 | 1 | 2 | 1 | 0 | 6 |  | 10 | 9 did not know if supported. |
| JavaScript | 5 | 4 | 5 | 5 | 3 | 0 | 22 |  | 5 |  |
| Media Overlays | 3 | 4 | 2 | 1 | 1 | 0 | 11 | 10 | 9 |  |

## Survey for Reading System Developers

We need your help to develop best practices for long descriptions of images (extended descriptions, more than can be put in alt text) and for the delivery of Math content.

The industry, especially in education, have been asking for this for a long time. The publishers told us to first check with Reading Systems developers (that’s you) on what is supported, or what will be supported in the future for these areas.

We have produced two EPUB 3 advanced test titles that show a range of techniques that could become our recommendation for best practices. The “Extended Description” title, and the “Math Samples” title, each have a range of options of possible techniques.

You can get these two titles from:

http://epubtest.org/testbooks

We have a survey to make it easy for you to answer questions. The Extended Description section will focus on your support for the HTML “details” element with its child “summary” element. We hope that this standard HTML construct, with its expanding and collapsing feature will work in EPUB Reading Systems. Our testing shows it does work in many cases. There is also the “aria-details” attribute, which may eventually provide a way to navigate to a long description, but we do not see support for this yet in browsers, but Assistive Technology is announcing it.

Math, as you know is widely requested. The Math Sample title shows eight options, from a simple image with alt text to the most sophisticated using MathML, SVG, and even a copy MathML to clipboard function. From this range of options, the survey will be asking what technologies are supported.

We know this information is very sensitive and we will be taking great care to keep your answers confidential.

The ultimate goal is to publish best practices for publishers in these two areas. After we collect your survey results, the next survey will go out to publishers to determine what is doable from their perspective. The final survey will be for end users to gather their preferences.

If you have questions, please feel free to contact George Kerscher email:kerscher@montana.com

The survey allows for breaks during completion, so it can be resumed from the page you left using the original link and can be navigated using the Previous and Next buttons at the bottom of each page if you wish to amend your responses.

Here is the link to the survey:

https://www.surveymonkey.co.uk/r/C6THV7J