# DAISY Webinar: Publishers Faceoff to Prove the Accessibility of their Titles

Full details of this webinar can be found on the following page:

<https://daisy.org/news-events/articles/publishers-faceoff-to-prove-the-accessibility-of-their-titles-w/>

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>> Richard: Hello everyone. And a very warm welcome to today’s webinar, “Publishers Faceoff to Prove the Accessibility of their EPUB”.

My name is Richard Orme and I work at the DAISY Consortium and I am your host today. Before I hand over to our speakers, let’s quickly cover some housekeeping information.

Today’s webinar is being recorded. We will post a link to the video on the webinar webpage in the next few days. You are welcome to revisit the content and share it with your colleagues. We will also post the slide deck and any resources that are provided to us by the presenters.

Whilst the webinar is underway we invite your comments and questions. Please use the Q&A feature for this. If you think of a question for the speakers at any point, just type it in there and we will cover as many as we can in the discussion section after the presentations.

Live captioning is provided for today’s session. If you are using a computer then the recommended way to view these is using the link daisy.org/webinarCC. Alternatively you can click on the CC button in the Zoom controls.

And so let’s get this webinar started. Later on we’ll be hearing directly from several representatives of leading publishers as they respond live to the evaluations of their titles. But right now I’m delighted to hand over to our panelists who will introduce themselves and get stuck into the Publishers Face Off.

>> George: Hello, everybody. I'm chief innovation officer with the daisy and senior officer with global with benetech.

>> Charles: I'm at benetech.

>>Joseph: Hi, everyone. I'm JP I'm the alt text at UC Berkeley.

>> On to an overview of this webinar. So this series is all about accessible reading and publishing. To have a great reading experience, requires a combination of things. You have to have a reading system that is rendering EPUBs faithfully. You need to have Assistive Technology that works with that reading system and you must have a great EPUB. Our focus today is about that EPUB textbook that product from a publisher and we will be looking at what is an accessible textbook and the concept behind that, look at our evaluation process, how we examine the titles, we will show you the results of what we looked at and we will hear response from publishers. And we hope to have enough time at the end to answer your questions and have a good discussion. So, what is an accessible textbook? It must have all the text in the correct reading order and accessible to Assistive Technology. It must be well structured and navigable. So the table of contents that EPUBs have allow for navigation directly to the chapter, section and subsection. And while in the title you can move through the chapter, through the section using normal navigation commands like heading navigation and landmarks.

Print page equivalence and the ability to go to a particular page is essential. Tables must be well structured with table heads and column and row heads so that as you move side by side or up and down in the table you can get the information you need. I'm a blind user so this kind of function is super important to me.

The text must be able to be resized and personalized. So, with EPUB you it's HTML under the hood. So you can increase the size of the font, you can select foreground and background colors, you can change the line spacing and the margin width and all of these types of personalization features are super important to the dyslexic and low vision reader.

And the publication must support read aloud from either a screen reader text to speech or the built-in read aloud features in many of the EPUB reading systems today.

One other thing I want to mention is the importance of how images are treated. So alt text is very common, and some can be longer. What we are finding with these titles is that publishers are adding extended descriptions. Experts in the field going through the creating an extended description that blind users or anybody who wants to read that extended description can handle. So the evaluation process that we used was a combination of automated checks. We use EPUB checks. All publishers use EPUB check. Most distributors will not accept an EPUB title unless it passes EPUB checks. We use the accessibility checker. Everybody has access to this. This is open source. We do a manual inspection of the title. Cracking it open and looking at the code.

And we had a formal review from the global certified accessible program that benetech is running which is a third-party certification.

Then we looked at the titles inside reading systems themselves, and we provided reports to the publishers and giving them feedback what was good and what could be improved, et cetera.

We have got publishers in the ring. We have macmillan learning. And WW Norton is with us today. KoganPage is here. Pearson is here. And Wiley.

>> Charles: Let's get ready to rumble! And drum roll please for the results. Here we go. Up first here we have macmillan learning. General structure was fabulous. Numbering of the table of contents, George, you found that useful, right?

>> George: I love it when you go to a heading and it will say if I'm in chapter 2, 2.1 and what that heading is and then I hit the next key and I know where I'm at in the book. That kind of information is helpful.

>> Charles: Also, these publishers are doing such great work for image descriptions. That was one of the biggest barriers for making an accessible book. Excellent alt text and extended image descriptions. Way to go. The use of inline hyperlinking to assist in navigation of the content was beautiful and including math in your book. Well done. This is following best practices. Some room for improvement. Techniques used for math and extended image descriptions. I can't fault them too much because this is a moving target. We are coming out with textbooks and we are finalizing and testing them on multiple reading systems. We will stay tuned on how to put math and extended image descriptions in the EPUB. So well done macmillan.

Joseph?

>>Joseph: After George and Charles announcing of these tech accessibility features I will call attention to easy ways to access EPUB. These nice UX, nice user experience features refer to the learning objectives, key terms and figures and summaries of key points. One-way publishers can enhance is provide clear introductions to a chapter. We find this in the macmillan EPUB that we reviewed. At the beginning of the chapter there's hyperlinks. These hyperlinks make it easier to discover the structure of the chapter and jump to a relevant chapter. Each section of the chapter is its own XHTML file which helps with the loading. The table of contents of macmillan EPUBs which you can see on the right matches the breakdown of the chapter section links. So the navigation structure is very clear to the learner. After the list of hyperlinks in the introduction of the chapter, the macmillan EPUB has a description of the key learning objectives for the chapter and two paragraphs of an introduction. So a learner is very gently introduced into the main text by way of this type of introduction.

>> Charles: On to KoganPage. I have to give you props. You got the highest score in our global certified accessible. Skip table links was very interesting. You could have a link that would skip the table. George, what did you think of that feature?

>> George: I liked that very much. That was really good. In this book the techniques were the extended description was very innovative and really cool. I liked it a lot. And Charles, you say the score. GCA in your global certified accessible when you do an analysis for the publisher you actually give them a numeric score. That doesn't come out of the ACE report. That's something that's unique to you.

>> Charles: Exactly. We dig into the over 60 or 70 different touch points within a publication and score each of them on a 0 4 scoring and tally those up and give that to the publisher and say this is how you did on images and tables and links and then an overall score. KoganPage got up to 90% born accessible. We have seen some publishers get 100%. You guys are on the right track here. Then room for improvements. How references were included. I believe there were potential issues on references. Let's move on here. Joseph?

>>Joseph: Often times the publication conveys crucial information through charts and tables. Many include a list of figures on a separate page. These help learners who wish to find a specific figure quickly. A great technique is to add the list to the landmarks navigation section. The landmark list functions like a table of contents and can include information that might not appear in the table of contents. We found a list of tables and many in the list. By adding the list of figures, the KoganPage EPUB has provided a faster way for learners to access these learning aids. On the left we see the list of figures with hyperlinks that will lead the learner to the figure in the book. Having this list enables the learner to locate it without having to hunt through the chapter. On the right we see the landmarks. The KoganPage include many items such as an author index and a figure index which a student may want to access quickly.

>> Charles: I love that feature with the landmarks. We encourage publishers to beef up their landmarks. On to W. W. Norton. They were the best at accessible images. They scored 100% in born accessible section. Their extended descriptions and use of HTML summary details technique was excellent. It shows under the image the extended image description that is great for screen reader users and low vision or people with cognitive disabilities that may need extra information about what are they seeing here. Why is this image important at this point? George, you liked that technique.

>> George: The details element can be expanded and collapsed. The details button says its labeled there and you click on it and it expands to provide the extended descriptions. It's right there in the under the image. You can read it and inside details. You can put tables or paragraphs or any HTML mark up and you can collapse that again. I really like that technique and alternative would be to put a hyperlink under the image and link to a different place in the book where the image is and a link back to that same spot, so you don't get lost. Those are the two techniques that are evolving as being the most popular.

>> Charles: Agreed. If it is using links, I'm starting to think adding those images again in those sections so you can see the description in context with the image is important.

>> George: Right. I haven't thought of that. You lose the context because you can't see the image. So that's a good point. That's another reason why I like details.

>> Charles: Exactly. As I said, we have an extended textbook we will explore all of these and see what works on reading systems. They did great on lists and all of their HTML pages were marked up correctly as far as the titles. I love to see that. Room for improvement: Numbering of the SKZ headings outside of the heading elements. So they have chapter 1 and the title but the chapter 1 was outside of the heading. So if you jump to headings you don't see it was chapter 1 you are going to. So small improvement there needed.

>> George: I hit the H and I hear the text that is inside the heading whatever that was. But what's nice to hear is 2.1 and then the heading and all that would need to be improved is move that number inside the heading and you would be gold. So a little thing here.

>> Charles: Totally.

>>Joseph: In addition to the introduction section of a chapter which the learning objectives are laid out, it's also important that the chapter or unit have a review section at the end. This portion of a textbook functions as a tool for the learner to reflect on their understanding of the key points of the chapter. In an EPUB there's a lot of potential for the review section to reinforce learning by providing relevant links back to the key learning objectives. In the Norton title we found a creative approach. In these sections we found Norton has a summary of the key points of each chapter divided into the sections. So the learner sees the key points and which section from the chapter they come. The learner can click on these sections of the chapter and be brought back to the relevant section in the main content of the EPUB. In addition, the review sections of the Norton EPUB have a list of key terms with page number links that will take learners back to the sections where the key terms are located. These hyperlinks back to a chapter section or key term in the main body of the text help a learner go back to a learning objective and review the content and solidify their understanding.

>> Charles: On to Pearson. We had no hard-coded text or fonts inside the EPUB. That's great so it can be personalized in a reading system. The color contrast was WCAG AA throughout. Heading levels in the table of contents matched the levels in the chapters. So having that nice one to one correlation. Live links, URLs most of the time were done. We like to see that and done accessibly. And their extended descriptions contained full alt text. Well done with back navigation. George, comments on that?

>> George: The back navigation is it worked perfectly. I'm glad to see that feature added. So that is really really good. I like that the table of contents heading structure matched the headings when you go to that chapter. So if it was an H1 in the table of contents, it's an H1 there. That's not always true. So that just makes it, you know, logically easier for me to understand what's going on.

>> Charles: Right. That was an issue that we found the back navigation to the alt text to the images wasn't done a few months ago when we first evaluated Pearson's book, but they took our feedback and added it in. Room for improvement: We need back navigation links from references and glossary items too. On to Joseph.

>>Joseph: The students depend on the use of skimming and scanning skills to grasp key points of a publication when they may not have time to read the text thoroughly. Not every chapter may be relevant. So students may wish to learn quickly what portions of the book they need. Some may flick up and down to find a relevant section, another possible tool is include a list of subjects or authors. We found just such a list of indexes in the EPUB. On the left we see an author’s index which they list first name and last name initial is listed. Next to the author's name are hyperlinks that take a learner to the relevant pages where the author's information appears. On the right we have a subject index where large and smaller topics are found and hyperlinks. So students will find these indices helpful tools for determining which portion of the book have the information they need.

>> Charles: Excellent. John Wiley and sons here. Really like this is one of George's favorites. The chapter in a single file. George, you want to talk about that.

>> George: The way EPUB is structured is there's separate HTML files. And having the chapter all in one file just makes it when you are in the reading system you can just easily work through that chapter. When you get to the end of the chapter you hit the next file button and that's fine. But if it's one section and then you have to move to the next section it's kind of nice to see the whole thing there. Can you talk about the meta data here?

>> Charles: The accessibility summary has room for improvement. It was on the short side. You put so much into great alt text and great use of landmarks. We want to see that in your accessible summary. You need to promote yourself. That's a human readable metadata field that is your opportunity to highlight all of the accessibility features within that book and any short comings if any as well. Right, George?

>> George: The accessibility metadata is one of the things we look at extensively whether it's screen reader friendly or if there are hazards. All of these things are made available in the different distribution catalog. So vital source exposes the metadata and we want people to buy born accessible books and exposing that metadata is a cool feature. So we are helping publishers get the accessibility emphasizing the accessibility metadata that is in their title.

>> Charles: Absolutely. Joseph.

>>Joseph: In our discussion of these nice UX features found in these publishers EPUB we talk about the creative use of hyperlinks. So far we highlighted how accessing in an introduction or chapter review or index is helpful. We see the use of hyperlinks in those sections I mentioned in the EPUB but links throughout the whole text including the body of the chapters. On the left we see portion of a chapter and we see links. There are links for key terms and figures in the chapter. What sets the Wiley implementation of these in chapter hyperlinks apart is when you click on the hyperlink the destination of the link also has a back link to activate to return to his original location in the text. On the right we have a screen shot of the glossary section. This takes them back to the hyperlink in the chapter. Links for the figures work in the same way. If a learner clicks on a key figure, he can click on the figure itself to return to the body text. This is a clever implementation of hyperlinks because it can ensure learners cannot lose his original place in the chapter.

>> Charles: That's great. I love that. Okay. Here are the GCA results. An overview for all of the publishers that we looked at today. Overall the born accessible scores range from 73% to 90%. These are awesome scores. With a few minor improvements everyone will get above 80% which is our minimum requirement for being global certified accessible. We also require that you reach WCAG AA status. Great job there. Most of them are already above 80% and doing well. 3 things that were done perfectly by all publishers that had those features was the language tags were done correctly. Lists were done perfectly and notes in the EPUBs. So awesome to see the accessibility meta data requires from 81% to 100% perfect. Structural navigation. Things like the table of contents and page navigation, page breaks done correctly up to 100%. Awesome. Images and tables range from 50 100%. That doesn't mean that 50% of the images weren't described, no. It means maybe they scored down because they forgot an image description and mostly on the cover page. Something simple like that which is one of our touch points in our GCA program to look at the title page and cover page where publishers spend all this time working on the main content and forget and put cover image instead of the image of the EPUB.

Accessibility metadata optional from 25 100%. We want you to put in the access of textual. If you spend time putting in descriptions for images access modes means we can put you as screen reader friendly. We are working with bookstores and libraries in order to surface that accessibility meta data from inside the book and make it as a nice user-friendly viewable option, so you know this EPUB that you are about to buy is screen reader friendly. That's something George has been talking about with the metadata and why it's so important. Then we have semantic mark up, general accessibility and links were in ranges here. There's room for improvement there. For the most part publishers are doing a great job. Well done.

And as for the reports that we provide to the publishers like George mentioned we have the ACE report by DAISY. This is something the publishers can do themselves which can check by a computer about 25% of the WCAG requirements that we are looking for AA and the rest has to be done manually. That's where smart report by DAISY comes in. It takes that report and highlights where we need manual checking. Are the image descriptions meaningful? Is the presentation image really presentational or should it be described? Are the table column headings done correctly? That has to be done by a human. With the smart report we give a detailed GCA report. It's a word document that we go into detail on every issue we find from ACE or SMART or our own testing and highlight what we found and the code of what the issue was and then the code that we give the publisher on how to fix those issues so they can score 100%. All of these reports were given to each of the publishers. With that, we will turn it over to the publishers to respond to what we found. First up we have macmillan learning. Rachel.

>> Rachel: I'm the senior director of content standards and accessibility at macmillan learning. I want to thank, everyone for all of the work they put into this for two years running now. The effort is incredible. Especially as the number of participating publishers grows. I really appreciate what you are doing to help us get better at making good e books. Our primary goal is to have an educational environment where students are getting the same materials at the same time. For that reason we have accessible EPUBs as our primary textbook output and distribute them to all of our channels. We provide this to access text network and book share. When a student has a book that doesn't play nice with titles we are happy to provide alternatives. In order to get the books to where they are today we have become deeply involved with the industry working groups at W3C and elsewhere. Mostly to learn about and contribute to the standards that are in existence and in development. So we take that work and use it in house and develop what we call our implementation guide. That has examples from our own books and use them to meet the standards and test them using automated validators and a human quality assurance program. So that implementation guide is well over 100 pages now. It includes samples for math and images, getting print page book navigation so students can find page 23. As a result, we are really proud of our e book quality.

We are also really happy that this means that we have been able to maintain our global certified accessible and recognized by the global book consortium as well. The first challenge was with math being read properly by screen readers. We tested these updates that we made after working with Charles and a number of other people in various readers and some of our esteemed host have tested those implementations as well and I'm happy to say we made significant changes to the way we put math into our EPUBs and those solutions are being rolled out in our new math titles.

Our second challenge was exposing extended description. So it's a pretty exciting challenge for us and we are keen to tackle, and we talked a little bit about this when we were doing this presentation back in accessing higher ground. So we tested various implementations based on recommendations. So this is our this is really close to the final iteration of what we are putting into our books. So we are going to start rolling it out very soon. There's a clickable information icon that will lead to a new page that has the extended description and the extended description link back to the text so users can continue with their reading experience without frustration. Thank you again to our partners in this. I'm happy weir here prioritizing accessibility and I'm glad we are here making education a more inclusive place.

>> Martin: Hello, I'm Martin Klopstock. I'm the operation director at KoganPage. I want to echo Rachel's thanks. This appearance has been helpful. We have taken on board all the feedback Charles provided and baked that into our workflow. As of April our new e books reflect those changes. EPUB 3.2 files with all the feedback taken on board. For a couple minutes if I may I would like to as much as the other publishers are focusing on content I would like to focus on the communication piece. This is about informing the end user. It's not an it's outward looking. We include accessibility meta data on each product meta data on 196 and the files themselves. We ensure there's information on our website to give them the information they require. We set up a dedicated e mail address where we invite [inaudible] readers to ask questions or make suggestions.

This slide is from the vital source platform and it shows how one of our EPUB files displays its accessibility features to the end users on that platform. Vital source list all the accessibility features and they pass that file and surface that meta data. This gives readers an overview of what to expect and helps manage their expectations. Vital source is the platform that we recommend for the [inaudible] that have our content.

Early on we concluded that the end user community needed to be a core part of our accessibility. In particular, we did two things. First, we tested our content on a variety of platforms and with a print impaired EPUB expert using a variety of tools and screen readers. The experts that we engaged in gave valuable feedback. It pays to remember that it's the actual readers are the needs we try to serve. Involving them in the process was eye opening and we learned a lot from the expert. He came up with a suggestion to skip table suggestion. That is directly from an affected reader. Secondly, we spent time constructing an accessibility statement that explained our approach to accessibility in a jargon free language. Outlying what they can expect to find in our content. We wanted to make sure our statement really was up to scratch, and we submitted it to for an aspire review and certification. We received a gold rating for our accessibility statement but that does not mean that we are complacent. We are always happy to listen to suggestions on how to improve. It's the readers that we are serving with our content. I hope this gave you a bit of our flavor to accessibility.

>> Charles: Thank you. Evan.

>> Evan: I'm Evan Yamanishi. I'm the accessibility lead at Norton. I want to thank everybody for coming. Thanking our panelist and everyone who is here. This is a great privilege. I'm happy we are doing this together. Our books are built with our EPUB developer tool kit. The goal for this accessibility is to ensure that we can scale accessibility well and implement solutions quickly as all of you have seen there are a lot of innovative interesting things that I'm probably going to take away from this presentation and build into our books and production process. One of the problems there is making sure to implement those things quickly and scale them out and distribute them. There are a lot of problems towards just getting accessibility out to the masses. That's what our developer tool kit seeks to solve. The path to broader accessibility improvements is very fast. As an example for part of this process for review, we realize we could improve the landmarks in our nav to make sure that users when they encounter our nav they understand it. That change was defined in our books and implemented and tested and merged in less than a day. So that gives you a sense of how fast that is. That will scale for all of our books going forward. Any revisions that we do will also have that which is a great thing about this tool.

The e book team uses this. They do a great job in making sure they can scale their production standards well using this. Any changes that we need to put in are very fast. One thing that George and Charles called out is our extended image descriptions. This is something that came out of a diagram collaboration that I've done with many people over the years. [Inaudible] consortium. It allows us to display image descriptions to everyone. That's a priority going forward for us. The example in this book uses the details in a simple way but we have improvements to come for that to include a more creative experience, so they are more in control of how they experience the descriptions. One of the difficult things with accessibility and making sure it works for everybody is allowing users to be in control as we have seen during this presentation there are a lot of different tastes. You can do accessibility well in a lot of different ways. We want to facilitate all of the ways.

The missing heading numbering that was just a mistake to be honest. It was something that we can fix quickly and its one of the reasons I think these sorts of events and feedback from the community is critical. We have a mechanism in place to fix things. We don't notice every single thing. It is an iterative process. I think you will see that with all of the publishers. Improvements are constantly being made. This was very helpful. One of the slogans at Norton is books that live. We are book publishers first and foremost and EPUB is our core goal for accessibility. Like the other publishers. EPUB affords a lot of great things thanks to the web and ARIA and WCAG provides clear guidelines on it. It is our priority. At Norton we also publish a lot of online learning tools. We have a large selection of online quizzing engines and things like that where some of our e book content is used. So a strategy we have is that accessibility works everywhere and that books live in all the places they will live and stay accessible. That can be an exciting problem to solve.

>> Charles: We should move on to our next publisher.

>> Evan: Sure. Thank you.

>> Charles: You did great. Pearson.

>> Ben: I'm going to keep this as brief as I can. So for me the trick is to make sure that whatever we implement is scalable. We have thousands of books in our distribution channel. As you have seen from some of these presentations, there's a lot of improvements that are ongoing as far as best practices that are still being decided upon. We have couched this as a playful competition but in truth we have all been working on the same working groups and figuring this stuff out today. So there's a lot of affection in this group. This exercise has been incredibly valuable as we try to iterate. I've moved a lot of this stuff downstream to where I can make sure that EPUBs going out to the distribution channel are as bullet proof as possible. We have a lot of authoring systems and vendors that are getting together with our course wear. So I want to go downstream to do the testing and fix up tools. Going into AAG, accessing higher ground we got a lot of feedback. Heading structure fix is a great example. We can get depending on how the workflow and the authoring system as these assets are compiled into a straight we want to make sure that now it is in context and we have proper heading structure and semantics.

We did a lot of improvements. The back links and language tags especially for foreign language titles. We want the screen reader to be able to speak the language in the proper intonation. And significant meta data improvements and upgraded ACE. Then based on this feedback we are improving our landmarks, improving the print page content and if there's a print equivalent, what's the ISBN of that book. Additional meta data improvements and finding a nice solution for the end notes and glossary terms. For the extended descriptions I love the way Norton is doing it and maybe some others. For those interested in that there's a sample EPUB that showcases that implementation on EPUB test.org. Very elegant implementation. Better than what we are doing now which is going out to a separate HTML file.

So with that I will pass it over to Christina.

>> Christina: Hi, everyone. My name is Christina Volpe. I'm the accessibility manager at John Wiley and sons. I will try to keep my response as brief as possible, so we have time for questions. I want to thank the panel to participate and my fellow participants because this opportunity allows us to find gaps in best practices for EPUBs and because we can find those gaps we can remediate files, so they are accessible for our customers.

So there are two things I want to address here. First are the current initiatives that we completed and a few initiatives on the horizon. First I want to start with alt text. Anyone who has to write alt text knows that it's incredibly difficult and important to write good alt text. It's one of the most important components to make up an e book. Wiley has been writing alt text for many years but within the last years we have looked at the quality and make it as good as it can be. To do this we have been consulting with subject matter experts and accessibility experts, users who have disabilities, author teams, product teams, anyone who has a stakeholder in alt text. Not just for our EPUBs but anything that has images such as interactives or PowerPoints. This is something that we have been rolling out for the past year and a half. And those efforts have been completed with the release of requirements for biochemistry, organic chemistry and geography. I'm proud of the work these teams have done, and that dedication resonates with how well we score.

The two initiatives I want to talk about is the benetech certification. We have been working with the benetech to become GCA certified. I'm happy to say we are close to meeting that requirement and I hope to release that in the next few mungs MUNTHS. That process has been eye opening and our participation in accessing higher ground and this presentation because it brings up errors that might be occurring within our policy for how we are creating EPUBs. Those items that have been identified have resulted in corrections to our EPUB specifications and they have been updated quite a few times. So as we are able to participate in more opportunities like this we are then able to make our books more accessible and we have additional work here for how we create our meta data. I think this is a great opportunity and I want to thank everyone for allowing Wiley to participate.

>> Charles: The ultimate winners are the students getting fully born accessible EPUBs getting information at the same time as their peers. Let's jump into question and answer.

>> Richard: Thank you everyone to our panelist and publishers. So much good information has taken up almost all of our hour. I will cue up questions and I will let you know if we have questions that we don't get to. Let's jump into questions that might be quicker to answer. So question from Briana and Katie is how many titles are reviewed and how was the sample chosen.

>> The publishers select their own title. We gave them requirements that it had to be a substantial title. We did not require STEM this time. We have done that in the past. It was one title that we reviewed. In the GCA process when a publisher gets certification there is more titles that are reviewed to make sure that their production process is going to dependably produce born accessible content all the time.

>> Richard: Candace ask are the publishers putting in the page numbers? Are they to match the hard cover book?

>> Yeah. Unless the book is totally digital and doesn't have a print equivalent, they add the print equivalent page numbers in the book so you can go to the same page number as the print book.

>> George: In the EPUB meta data there's reference to the print page to the print textbook. So if there's an equivalent and then that way we can match up the page numbers from the print book from the digital version.

>> Great question from Karen. Are the publishers now creating all of your textbook with all of these accessibility features or only an entry?

>> Martin: Every one of our books goes from a single workflow.

>> Rachel: Everything that we produce receives the same treatment with our implementation guide. We even went back into our back list with 200 most used titles and remediated those and made those accessible.

>> Christina: We follow the same process. Some of our very older back list titles may not follow this but we follow this process for recent editions and new editions as they are revised.

>> Richard: I'm going to jump in quickly and ask one more question at the end before we wrap up. Thinking about learners and how they get access. Caitlin has had request for PDF's declined because an online copy is available, but the student may have poor Internet access. Are most of the titles available to be downloaded? Link to that tiler ask do they need to purchase them.

>> First some distributors have platforms for online reading or downloadable. Vital source has the bookshelf application running on iOS, android, Mac and windows. You can download the title to your device and read offline. A lot of different publishers have the offline reading experience, apple books for example is offline reading. Many of them. So that's part of the answer. We did a webinar last week on the freely available titles to students from many of the publishers during this COVID 19 schooling. So through the end of May the titles will be freely available. Also book share has many titles in EPUB. Close to a million now.

>> They can be downloaded or read online.

>> Richard: Thank you for that. We are coming to the end of this session. I want to be respectful of your time. Thank you to everyone who joined us for today's webinar. Thank you for sharing your insight and expertise. Clearly we have had far more questions that we have had time to cover today. We are going to cover all the questions that didn't get answered and post the answers on the webinar page. If you have also got additional questions, we will provide contact information so you can follow up directly. Sorry most of the questions we didn't get to. But great questions there and I'm sure everyone will enjoy seeing the answers posted. We have the following webinar topics. On April 15 we have create EPUB publications from Word. April 22 we have making math accessible one step at a time and April 29 we have telling your story creating better accessibility statements with aspire. We have an alt text webinar in development. We had lots of questions around alt text. Make sure you are signed up to the webinar mailing list to learn about new sessions. If you would like to subject a subject or have a webinar in you that you would like to propose, e mail us at webinar @ DAISY.org. Thank you for your time. Have a wonderful rest of your day and goodbye.