# **Listen to Learn**

Event ID: 2767401
Event Started: 10/29/2015 2:44:49 PM ET
[Please stand by for realtime captions.]Okay, in about one minute we will let them in.

[Captioner standing by]

## [Not part of webinar recording]

[Robin Sitten] Hi everybody, this is Robin from Perkins elearning. So we're going to give people about five minutes we just opened the room. There is a checkbox on the screen if you want to introduce yourself and tell us where you are from what kind of work you do and you guys can enjoy getting to know each other while we wait for everybody to join us.

Just a couple of more minutes we will get started right at the top of the hour. I have some announcements before we start and I don't wantent to take more time from Karen who is waiting there eagerly to talk to you.

I'm going to go ahead and get started. Let me formally welcome you to Perkins e-learning webinars series today is Thursday, it's October 29, 2015. My name is Robin, always a pleasure to host these presentations. Today's presentation listen to learn is also presented in partnership with Bookshare which is the largest accessible online library for people with disabilities. You may not know that Bookshare is an initiative which is a nonprofit technology company whose work in global literacy human rights and the environment measure success in the number of life changed for the better.

Perkins e-learning webinars are presented throughout the year on a monthly basis, you may register to attend life as you are today at no fee, and you can you recorded webinars at the time and place that suits your schedule. The webinar series is just one of the offerings in our professional development program. Which includes publications, newsletters, webcasts, online and in-person classes, and self-paced study. You can see our entire listings at our website Perkins e-learning You can see our entire listings@ourwebsitePerkinse-learning.org. Whenever I have an audience that's devoted to reading like this one, I also want to make you aware of our path to literacy community which is a joint project of the Perkins school and the Texas state school for the blind and visually impaired, their website is passed to literacy.org devoted to enhancing learning experience for students who are blind or visually impaired.

Today's presentation will cover the concept of listening and educational context. Specifically in the development of literacy skills, through audio supported reading. This presentation is also the kickoff for an ongoing series of discussions by and for Bookshare mentors. If you are new to Bookshare and you would like more direct tools, Karen also teaches an online course with us which returns in February 2016. You can also find a self-paced version of her Bookshare in-depth course on our website Perkins e-learning.org. Let me review a couple of things about the technology we are using today. We have muted your lines that helps keep noise levels under control. A checkbox that you are using now will soon be replaced by a question and answer space where you can post your questions as they occur to you and we encourage that you do that. We are going to address all questions at the end of the presentation but if you want to make a comment or ask a question you can write it in that box. We are using this virtual meeting room for audio, so you want to make sure that your volume is on and turned up, external speakers or personal headphones tends to give you the best audio. You do have individual controls for your screen, for both audio and video, and part of this introduction is just to give you time to make those adjustments as you need them. Sometimes you may notice that Karen's video is not quite in sync with their audio, this has to do with bandwidth, unfortunately we cannot control that. Wireless connections can also sometimes be a little bit sketchy so if you find that distracting, you can either minimize her video, or just listen and it usually will resynchronize but it's not something we can influence.

## [Webinar recording begins]

[Robin Sitten] This will be recorded, it's being recorded, it's about to be recorded, we are being recorded, and this presentation will be made available to you usually buy the next they and you will get information for that in a follow-up that will also include a PDF version of the presentation today and some other handouts. Karen's presentation has a great amount of resources and studies and there will be a resource sheet provided in the downloadable, so you need to worry about trying to keep up with all of these citations. I invite you to simply listen and learn and you can refresh your notes with the downloads and recordings. Let me introduce today's speaker: Karen Narvol, is a private assistant technology consultant and a trainer who works with both Bookshare and Kurzweil Education and she's also been an instructor for the Perkins elearning online program since 2013 and it's always a pleasure to welcome you to Perkins Karen. The floor is yours.

[Karen Narvol] Thank you for your very gracious introduction, I do appreciate it. We are going to talk about the purpose of today's webinar. As mentor teachers for Bookshare we are always building working relationships with our colleagues who are using Bookshare with students. As busy educators we are involved in our own workloads and we take on the added role of Bookshare mentor teacher. We've also taken on the responsibility of keeping up with the ever-changing landscape of accessible, digital media. It's a challenge for all of us. It's an impossible task for us to do alone. We can't be experts in every facet of assistive technology and accessible materials. We need an active community of collaborators with which we can have conversations about the issues that were facing regularly. We have wonderful opportunities to make a difference in how we support other educators with Bookshare, and meet the literacy needs of students with print disabilities. To get us started with our conversation, this afternoon we are going to target one important facet of literacy, and that is listening. During our upcoming conversations as part of the Bookshare mentor teachers’ Google group, we are going to talk about how as mentors we can work with other educators to integrate Bookshare into other students curriculum. We will be asking questions of each other, sharing ideas, resources, classroom experiences, techniques, and strategies. All regarding the use of Bookshare to enhance students literacy skills. And we welcome you to participate in the conversation by joining the Bookshare mentor Teachers’ Group if you're not already a member. Bookshare has an affirmative webpage devoted to information about the mentor teachers group and how to sign up. And that is the URL or the address that you see on the screen about joining the conversation.

You are now seeing a poll of questions about what your role is when you are working with students and if you could take a couple of minutes to answer the poll and then we will move on. And I see that the poll is being populated, and it looks like almost everyone is finished with the poll. I will just give a little bit more time. I think that most everyone has finished the poll so we can go on.

To begin our conversation today I'm going to discuss the importance of listening as a critical component of literacy. And we will be continuing this conversation through the Bookshare Mentor Teachers’ Google group which will be hopefully one of many topics that we are going to discuss over the next year. First of all we need to define listening itself. Several researches have defined it as assigning meaning to what we hear. And by assigning meaning to what we hear we react, we select meaning, we remember, we attend to, we focus, we analyze, and we incorporate previous experiences and background knowledge. And unlike hearing which is a physiological passive activity, listening is considered an active, cognitive process.

Listening is among the most consequential communication skills but it is often downplayed in our educational and social contexts. Students who do not have visual impairments, use visual cues to help them make meaning of what they are hearing. Students with visual impairments often cannot use visual cues, they have to compensate for visual information that is missing. When researchers say that listening is an active, cognitive process, they mean that it requires effort on the part of the individual who is listening. It is focused, it is intentional, it is selective, the act of listening is strategic and it requires that the listener self-monitor his or her understanding of what was heard. And to extract meaning from what we hear, we have to make the effort to hold information in memory, compare it to background knowledge, predict what is ahead, and sustain our attention.

How do listening skills support the development of literacy skills? Successful listeners as well as proficient readers must be able to hear and manipulate the phonemes of language. This sounds within words. This includes the critical skills of blending, segmenting, and manipulating sounds within a language. This is purely an auditory skill. But it is highly predictive of the ability to acquire beginning reading and spelling skills. Young children must be able to correlate the sounds of language with letters and groups of letters, they have to be able to utilize letters sound associations to determine how to pronounce unknown words. We know that struggling readers need to be taught explicit, systematic decoding instruction. Now if text is read aloud, or presented through other media, which contains human narrated speech or synthetic speech which is computer generated speech, students have to listen strategically to ask and answer sessions about key details in the text, they have to listen to determine the main topics and the supporting details, they have to be able to summarize what they have heard, and they have to be able to relate ideas to other ideas and make inferences.

Through listening students have to be able to connect the text to background knowledge and previous experiences and what they have heard before in other texts that they have heard. Listening skills provides the foundation for reading, and writing, and spelling skills. We know that students need to listen skillfully.

Now what is the correlation between listening comprehension and reading comprehension? Learning to listen is absolutely fundamental in learning to read. If a student has good listening comprehension, it means that the student is able to process auditory information in order to understand the meaning of the spoken language. If a student has good reading comprehension it means that he can apply meaning to what he has read. Research has shown that there is a strong correlation between reading comprehension and oral language comprehension. During active strategic listening students are using the same executive functions that they use during active strategic reading. Both listening and reading require the same skills, same processes, and the same strategies. These include things such as being able to pay attention to, and recall the events in a text. Answer comprehension questions, follow the sequence of a story, discriminate among sounds, and understand the vocabulary of the language. Listening is incredibly important, much of our time is spent listening it's estimated that it takes up to 65 to 90% of our time every day we spend listening.

What are the domains of listening? At the elementary school level beginning readers are learning the sounds of the English language. They are also listening to comprehend information that is presented orally. They are engaged in active listening and critical listening and most students are using forms of technology that require listening. Students are learning social skills by listening.

In the higher grades students must also listen actively and critically. They listen to organize information, to engage with technology and to interact socially. Many of these domains whether they're on the elementary, middle school, high school level fit into listening requirements that are found in academic standards that appear at the state’s level, and also nationally through the Common Core State Standards. They fit within those particular standards. How does listening fit into academic standards? Not only state academic standards, but the Common Core academic Standards. The Common Core State Standards along with many state’s academic standards define the skills and knowledge that students in K-12 classrooms should have so they can succeed in college and the workforce. Students must meet standards not only for reading and writing, but they now have to meet them for speaking, listening, and language. The Common Core State Standards allow for accommodations, to ensure that the students with disabilities can participate to the maximum extent in the curriculum. And students can use a variety of assisted technologies for learning in the subject areas. The Common Core State Standards do not define all the supports that are appropriate for students with special needs it's up to the school district and each student’s team to determine the appropriate supports.

So what are these reading, writing, speaking, and language standards and how does listening fit into them? The Common Core State Standards are aligned with higher education and work expectations. They are clear and consistent and they emphasize rigorous content at the application of knowledge. The language on this slide comes directly from the Common Core State Standards. By the time students finish high school, they are expected to use technology and digital media strategically, and capably. They are also expected to utilize technology thoughtfully to enhance their reading writing, speaking, listening, and language use. Students are expected to be proficient at doing online searching, and then tying what they have learned online to what they are learning off-line. And finally students are expected to know the strengths and limitations of technology tools and media and they should be able to select those that best meets their communication needs. This is a high bar.

Here are some examples of a literacy standard and the Common Core State Standards, one is for third grade and one is for sixth grade. Listening skills are embedded in the Common Core State Standards and in the language arts standards of many state’s academic standards, and there also embedded in the Expanded Core Curriculum for students with visual impairments. Now these two are very much alike, the standard for third grade and sixth grade are very much alike. Listening skills become more complex as students move up to the grades and this is reflected in the Common Core State Standards. Students at the third grade level are expected to demonstrate that they comprehend text that is read aloud, or presented in other media or formats such as oral formats and students at the sixth grade level are expected to interpret and explain information they read using various media and formats including oral formats.

So how does state listening standards align with the Common Core State Standards, listening standards? Many of these standards align with the common core and this includes listening. This is an example of Pennsylvania academic standards for reading, writing, speaking, and listening for grade 8. Students must be able to listen actively and critically, when listening to others and when listening to both fiction and nonfiction texts. The Pennsylvania standard for listening comprehension are correlated very closely to the skills needed for proficient reading comprehension. What is the importance of the speaking and listening standards. The professionals who collaborated on developing the Common Core State Standards and those who developed individual state academic standards they all agreed that listening is crucial to a student's success and readiness for college and the workforce. What's interesting is the Common Core State Standards has elevated listening to an anchor skill which means that it cuts across curriculum and it applies to all grades. The Common Core State Standards called them college and career readiness anchor standards for speaking and listening. By the end of high school the speaking and listening standards require students to interpret information from diverse media formats. And also be able to describe specific arguments and clAEMs.

Now along with the state standards there are also legislation that provides protections for students. Accommodations for students with disabilities have been required of schools for a long time. Under the Individuals with Disabilities Act, local education agencies are required to provide textbooks and related core instructional materials and specialized formats to students with disabilities in a timely manner. In addition, some students served on the 504 plans which is chapter 15 of the Rehabilitation act of 1973 they may also need at accessible education materials and specialized formats. What are these specialized formats? There are four of them that are described in IDEA, braille, audio, large print and digital text. Teams have to make a decision as to whether a student needs accessible education materials and if so what formats does that student need. You have to make that determination. The national Center on AEM has a number of questions that teams can ask to determine whether a student may need accessible education materials. Some of those questions include does a student have a sensory, physical, or cognitive disability that impacts the ability to perceive or use standard materials? Can the student understands text when it's read aloud, but has difficulty reading on his or her own? Is there evidence that a student cannot read or use grade level-based print materials in a sufficient rate and with adequate comprehension to complete academic tasks with success and if the student cannot do that or can do that, what is it relative to the same age peer? So, how are they measuring up with their peers, are they able to keep up? Does the student have difficulty reading independently at grade level or across environments and tasks? If the answer to any of these questions is yes, then the team may decide that the student may need AEM.

How does AEM help? Students with print disabilities usually need specialized formats of curriculum based materials to access their curriculum, master their IEP goals, and achieve academic standards. AEM is an accommodation for access to curricular content, it provides students with the same curricular content as traditional print-based text. And AEM that students receive should align with state academic standards and with the Common Core State Standards and support the use of specialized formats of print materials.

Now that educational system has begun to embed listening skills in standards and in practice, it's important to know about the history of oral literacy and listening. Well 2400 years ago in Plato's time oral literacy was the only way anyone acquired and passed on information. When writing was invented in many civilizations, and the mass production of the books and printed materials came about, the status of oral literacy and listening became less important, it kind of took a backseat. However, in our digital age the traditional literacy that we have been using for the past 500 years are changing. They are being blended, redefined, and replaced by new technologies and new ways to communicate.

Now there is a broader pallet for literacy. Literacy is no longer just reading and writing. Oral and visual literacy are becoming equally important. With our iPods or iPhones and android tablets computers, augmentative and alternative communication devices, digital talking book players, braille devices, and many other technologies the importance of listening is now started to take a front seat. With current technologies that we are using speech can now made permanent. It can now be transported, it can now be viewed on a screen, and it can be recorded in many different ways. All of our students, every single one of them, that we are working with today, they are all digital natives, they are all born into a society where technology is everywhere. They are often called the Facebook generation. Our students are consuming media on mobile devices, every day, digital media are becoming more integrated in their lives, they use digital devices to shop, to text their friends, to contribute to blogs, to create personal webpages and get information about almost anything that interests them. These digital natives, the students we are working with, are listening to learn, they're using their devices to listen to learn.

As the new technologies are altering listening as an important literacy there offering us ways to store and manipulate language. Speech can now be transformed in many ways and it can be captured in digital format. And can be played back in many different devices. These new technologies can be used to support our students learning and provide alternatives for students who are struggling with traditional print-based text. Listening is now essential for many areas of technology access. The technology tools reinforce and enhance listening and learning and they are redefining what it means to be a literate individual.

Here is another poll, we would like your feedback on. What you're rate just challenge is right now for serving your students with print disabilities. If you can just take a few minutes to answer this whole that would be great and then we will move on.

[Robin Sitten] Karen this is Robin I just want to let you know that even though these are very different issues try to identify what of these is the greatest issue that you are having. Is it assessing students for appropriate tools, is it working with other educators to integrate Bookshare into programs, is it teaching students how to use the tools such as Bookshare, is it just keeping up with changes, is its managing the technology or maybe something else?

So it looks like that just be able to assess students is something that people are feeling.

[Karen Narvol] What are some of the challenges for our students with print disabilities? Our students have many challenges when it comes to literacy. For students who are blind or visually impaired their sensory and motor limitations can negatively affect their fluency and their reading rate. And slow and labored reading can cause frustration and the lack of motivation to read. For students with physical disabilities or who are blind or visually impaired or maybe have multiple disabilities they often struggle to navigate through and interact with text. Students with dyslexia struggle all the time with the skills they need to break the cultural reading. Many of her students with print disabilities are going to process information found in text much too slowly, and they are very likely to experience cognitive overload. Research has shown that the way information is presented can influence its load and thereby impact whether or not the student is able to retain that information or becomes so overloaded that the student cannot retain the information.

So how is listening an alternative to the limits of print-based text? Many students will need to skillfully use the listening skills to support and augment their literacy skills. For students whose print disability significantly interfere with their fluent use of the text listening can be used to augment the use of print-based text or it can be an alternative to traditional print. If print-based text is a barrier for students to access and meet academic standards, then listening can help overcome those barriers. Many of our students cannot keep pace with the amount and the complexity of reading that's required of them. This is especially true when they enter middle school and high school grades providing accommodations that include audio support can prevent students from falling behind. In our modern age, with all of the new technologies and all of the exciting things that are coming out it's very important that our students learn to listen, and listen to learn to be literate.

How can we help our students overcome the barriers of print? We can supplement in large print and braille, with speech output. We can also provide audiobooks and digital text with computer software that has read aloud functionality either with human narrated text or synthetic speech which is computer generated speech, the call that's text to speech or TTS. We can also provide audio files such as MP3 files which are flexible and they are transportable and they are readable on many mainstream devices and assistive technology devices. And along with providing or supplementing with audio many teachers use what is called audio supported reading, or students use audio supported reading when they are reading text.

Audio supported reading and it’s also audio assisted reading, is a technology-based approach for reading and this approach has proven to have many benefits for students with print disabilities. The student reads text which is displayed on a computer screen or on a device or on a refreshable braille display while simultaneously listening to an auditory version of the text. The student then is able to use all areas of sensory input simultaneously to acquire and process information. The goal is to increase the rates that the student can move through texts. What are the benefits of these assistive reading tools? There are lots of benefits including those that can be supplemented with speech. What they do is they help to level the playing field for students with print disability who need accessible education materials. Tools can help students improve their fluency, expand their vocabulary, activate prior experiences and background knowledge, develop comprehension, and increase motivation to read.

In current technologies have audio supported reading features built in to their operating systems, so if we think of iOS devices like the iPhone and the iPad and Macintosh computers, they have voice over screen reader built right into the operating system. There are numerous applications that provide speech capabilities and there are some Internet browsers that have built in or add on text to speech extensions so this auditory component that will assist the students is now being built into a lot of technologies.

Many current technologies are flexible in that users can decide what mode or modes of access they want to use to interact with the technology, whether it's visual, audio, or a combination of those. They have the choices. The choices are there. There are many examples of technology that supports students with print disability. One of those examples is text to speech software programs and these programs can offer very powerful scaffolds, they often include online dictionaries, the ability to change the reading voice whether it's male or female, rate of speech, the mode of presentation, text presentation so a student can decide whether this text is going to be read continuously to him or her, or if the text will be read self-paced where the students reads a sentence or has the technology read the sentence, and it stops and they can have the next sentence read to them.

These kinds of programs also allow the unit off text presentation to be decided by the student. A student can decide where they want to have highlighting of a text by sentence or by line or by paragraph to meet their needs. These text to speech programs often provide annotation and bookmark tools for study skills kinds of tools with highlighting and putting notes in. They also offer tools for reading webpages and locked text such as locked PDF files or the text within a flash object or reading hyperlinks. Students can also pause to reflect on what they have just read, or a segment of text or they can replay a segment of text. Navigation tools offer students the ability to skip to various sections of text such as specific chapters, and pages so they can easily navigate within the text itself.

Now if a student is using braille devices with voice output the auditory component can help reinforce literacy skills. Students can control the speech output of that braille device, by customizing the various speech features such as voice, volume, pitch, and speed. Students can benefit from the multi-sensory access that braille and voice output provides. Braille PDAs and other braille devices can read multiple formats including texts that contain audio only, books that contain text only, and others that contain both text and audio. Students who are using braille with audio can use navigation control on their devices to skip to various contents or sections of the content so it's easy for them to get around.

Now for students were using software programs integrate large print with speech output they are also benefiting from a multi-century approach so students using large print speech output can customize the voice, the volume called the speech, they can customize some of the settings such as the mouse or typing or program echo settings and they can also customize the verbosity. When reading has to be sustained for an extended period of time this multi-sensory access is very helpful for students with visual impairments.

It used to be that audiobooks were produced in only analog format which was linear in nature. But now with new technologies and with a new format called Daisy format which stands for Digital Accessible Information System Format, with these Daisy books a student has access to many more features than what were available in traditional audio books or the analog audiobooks. With Daisy book players such as the victor readers screen, the [indiscernible] pockets, students can easily customize the speech output, the student can explore a book by chapter, section, or page or use a table of contents, or an index, or can also interact by placing bookmarks and taking notes. Also Daisy players can read multiple audio formats so they have lots and lots of features that benefit students especially students with visual impairments and with physical abilities.

Along with discussion about audio how does listening to learn fit within Universal Design for Learning? Which is being adopted more and more throughout schools in the country. Universal Design for Learning is an educational framework and what it does it guides the development of flexible learning environments. These flexible learning environments can accommodate individual learning differences. Listening to learn is an essential component of UDL. UDL provides flexibility in ways information is presented to the student in ways students demonstrate their knowledge and skill, and in ways students are engaged with the curriculum. Universal Design for Learning principles, if they are adopted, they reduce barriers that students encounter in instruction and they provide accommodation and support were needed, And when UDL principles are implemented diverse learners will be more likely to have access to literacy and learning strategies and they are able to master that literacy.

Now if students with print disabilities use technologies to listen to learn there are many options for supplementing reading with audio supports. Within this discussion we need to consider the nature of speech output itself. Most audio support will be rendered digitally, in either human narrated voice or synthetic speech. There is a place for both. Human voice has many advantages, we can think of learning allies, digital audio books. Human narration is superior in its ability to convey emotion, and tone, and to pronounce words correctly. It is superior in features such as addiction, timing, pacing, inflection, accents, phrasing, and distinguishing between characters. It also provides a strong model for oral language usage, so it has many advantages. But there are also many advantages off synthetic speech or computer-generated speech.

We think of Bookshare here because Bookshare digital text format works with applications that have synthetic speech features. Also Bookshare's digital audio and MP3 formats have synthetic speech or text to speech. What are some of the advantages of synthetic speech? There are many text to speech tools available, and applications available. There are many to choose from. Synthetic speech is not tied to a specific text so the text can be read with many different text to speech tools so it's very flexible that way. It's also very easy to slow down and speed up the rate of speech using a text-to-speech application. Text-to-speech applications can include many different male and female voices as well as different languages. The files are usually easier to store because they are not as large as digitally produced human narrated files. And many offer synchronized highlighting of text so students are having trouble with tracking text these applications provide a lot of this synchronized dual highlighting of text where the line or the sentences is highlighted and then as each word is read it is highlighted.

As I indicated there is a place for both human narration and synthetic speech. And choosing between them will between on depend on many factors, the type of text, the availability of specific text, student preferences, the capabilities of the computers and devices, and other considerations.

What are some of the benefits of using audio? For students whose reading rates have not increased to meet the demands of the curriculum, the use of audio can be a very successful accommodation. The task of reading and comprehending text can be more efficient when reading a supplemented with audio. For students with severe reading disabilities audio formats can be used to bypass the sensory and motor skills that are occur with decoding. And because a student isn’t struggling with cognitive load the student can use the full capacity of his working memory to comprehend the meaning of the text. Audio assisted reading tools can support a student's literacy goals.

To conclude, this webinar is targeted a specific instructional theme, listening to learn. We learned that active listening skills play an important role in supporting students with print disabilities. And the technologies that students are using have revived the importance of listening for acquiring literacy. The tools such as digital audio, digital text with screen reading technology, or text to speech application all of these provide alternative to traditional print-based classroom material. And finally the impact of a student's disability on his or her academic performance can often be minimized by implementing appropriate strategies for using assisted reading tools.

This poll is going to ask you to share what you would like to discuss as part of the Google Mentors Group, so these are some topics and if you wouldt complete this, pick out what topics you are most interested in, and then we will conclude.

[Robin Sitten] Feel free to choose more than one if a few of those stand out to you, this is a poll where you can answer multiple responses. Working with families has just gone to 67%.

We will be able to export these responses Karen, so you don't have to take note of them. It does look like you have chosen some things that are on the top of mind for some of our participants. Last call. Thank-you.

[Karen Narvol] I just put down some sample questions here that we can use as kind of the start to our Google group discussion around this listening to learn theme. And some of these are questions such as, what kind of strategies techniques or ideas are you using to teach the use of audio formats to your students with print disabilities? If you do have students who are using audio with other format so they are using a multisensory approach, so it's audio with digital text or with braille or enlarged print are they having any challenges using the two formats simultaneously?

Another question might be how you incorporate audiobooks and digital books into your students educational programs? Just a sharing ideas of how you do that. Another is how you teach students to connect listening strategies and reading strategies? And finally how you teach and support students as they read, listen, view and interact with digital media using assisted reading tools? These are simple questions that our Bookshares Mentor Teachers’ Google group may want to discuss, all related to the listening to learn theme of this webinar. What are next steps? This webinar is intended as a segue into our Bookshare Mentor Teachers’ Google group discussions. And we can begin by sharing strategies, techniques, ideas, and resources around listening to learn theme. Throughout the coming year we will discuss many other topics of interest to the mentor teachers group. We want you to watch the conversation to begin at the start of next month and we want to encourage you to join us in our community of practice as we strive to improve our mentoring of other educators who are implementing Bookshare with their students. There are a number of references here that I've used in the webinar slide presentation and these will be available to you and Robin will make sure that they are provided to everyone who has attended.

[Robin Sitten] Thank you Karen. Those resources will be in the presentation but also on a separate handout so if you want to share it with other colleagues or file it away or using your own teaching you can do that. We do have some time for questions so I would encourage any of you who have questions or ideas if you want to put them in the Q&A box and thank you so much for participating in the polls, I think Karen that the suggested questions that you have listed there really show the depth of conversation that the mentor group wants to get to and sometimes we just never get there, we are always at the level of how to make it work or how to set up my files and then we don't really have those difficult questions because everybody’s students are so individual.

I had a couple to things that struck me in looking at people's responses, we saw in the beginning that people commented that assessments were something that was kind of a struggle that you're having right now is, how to assess what is my student’s needs and then we saw in that last poll you also answered having trouble matching what my student needs with the right technology. Those two things to me seemed to really go together, trying to identify what the student needs. I wonder, and knowing that everybody so individual if there's some kind of brought comment, there's also question coming in from Barb, are there specific assessments that you might suggest?

[Karen Narvol] Specific assessments will I know when I was working many years as an assistive technology assistant I used this such framework which stands for student environment tasks and tools and this framework is was developed by Joyce. And she on her website has a number of the forms but just briefly the framework takes a look at the students need, at their abilities, and then discusses the environments in which they are going to carry out the tasks, where their instruction is going to take place, and then the team looks at the tasks that the student is required to complete and then they look at what tools the student is already using and then they explore tools that perhaps the student may need and they try all devices. There is a set type of procedure that can lead to good outcomes using this set framework's I know that is one thing that I have used and then gathering lots of data from teachers of the visually impaired, teachers of students with severe learning disabilities, teachers of students with multiple disabilities, or physical disabilities and bringing in lots of information from occupational and therapists speech and language pathologists and special education teachers and bringing all that information together and putting it together in the set itself and it gave us a really great picture of the student and the needs that the student had. And then how we could address those. That is the type of -- and the set framework is not an assessment, it’s looking at assessment data because you're always going to have other types of assessment data call you're going to have teachers of the visually impaired going to be assessing students, you're going to have psychologists assessing students, special education students assisting students, reading data coming in, from maybe dibbles, different type of assessments and your bringing all that information together looking at it, in this set framework itself and that's using that set as a guide to help you make good decisions for students. That's my answer to that.

[Robin Sitten] Thank you Karen and thank you Barb for asking that. I think a lot of you TVIs will also be familiar with different kind of learning media, and also just functional vision assessments, where, particularly those of you who might be general education teachers may want to get together with your student’s TVI to figure out whether the student who has some usable vision is really getting the most support that they can. And while listening and auditory may be a great strategy for them they may also be able to use a lot of their remaining vision with just a few accommodations or adaptations made to the course work.

I'm going to date myself, I was raised on SRA tests which we used to jokingly say stood for students reading aloud and I wonder if any studies are showing that that methodology which was students in a circle reading aloud to each other has been, what the thought has been about that value both for listening skills and for reading skills?

[Karen Narvol] I think that's a discussion we had and I know that there are students especially some students who are reluctant readers that can also that can make them more reluctant if they are reading aloud and maybe struggling through text so I think there are a number of different takes on that as well.

[Robin Sitten] And if I make a student who is the advanced reader often finds that approach very stressful as well because they know that they are advanced, they’re at the other end of that curve from that brought struggling reader of so both of them are standing out and when you're a child that's all that matters, it doesn't matter if you send out if you're stronger or weaker. I also notice that a lot of you noticed that you're working with students who have brain injury, it wasn’t unusual to see it, it did make me wonder again whether an again brain injuries are so unique but what we have some general understanding about cerebral injuries and listening and comprehension may be what is a typical impact of a brain trauma or a stroke or any kind of pediatric cerebral impairment that affects comprehension?

[Karen Narvol] I noticed that some of the students their needs on a day-to-day basis are unique because of the type of brain injury they have. Often the approach is­- it can be a real struggle for teachers to find the best approach. Some students are performing much better on one day and not performing very well on the next day even with the same approaches and strategies. I think that's a real kind of discussion that we can have among our Google group.

[Robin Sitten] And again for medications can affect people's ability to focus or their energy level at a specific time of day where you might discover this is not the time of day that we should be trying to do close reading or writing because of like you said the other challenges that they have. We've got just about three or four minutes left so I will call for any other final questions from the participants.

A lot of people are giving compliments, wonderful webinar, looking to getting a copy of the references,

Thank- you very much, I have to run to a meeting,

so there is certainly some positive feedback and as Karen mentioned our next up from here will be to invite each of you to join the Google group if you are not already participating and if you've never joined an online group like that before, and you are feeling a little bit apprehensive, go ahead and give it a try. It's a great discussion area that's happening and we feel like particularly with Karen's expertise we will be able to moderate some of the conversation so that they really get to that next level that we can tell that you're all hungry for.

This recording will be available as I mentioned probably by tomorrow and you will have the references handout and also this presentation. You will also receive a survey from us, we’re always interested how the webinars are or are not serving your practice, so if you have a few moments to answer a few questions about the webinar.

I know many of you are new to this series and we hope that you will come back for many other topics coming up in November is actually a topic, a very interested to our itinerant TBI's about a methodology for tracking the level and intensity of service that is given to students needs. It's based on a program that is used in Texas and it may be applicable to your practice.

And also coming up before the end of the year were going to meet with a parent, actually a woman who blogs for Paths to Literacy, she is a parent of a preschool boy who is deaf blind and she's making accessible books for him since he was old and up to sit up and hold one and you might find some interesting ideas particularly if you work with kids who are deafblind.

Karen, thank you again, always a great pleasure to work with her, Karen will be teaching our train the trainer class coming up in the winter, I'm looking at my calendar, it starts in February, and that is for those of you who are experienced mentors and are interested in how you increase the knowledge within your own organization or program. That's a great class for that, I mentioned at the top of the show that we always also have an in-depth class if you have a new employee or a new person in your group or even a parent that you're working with that might want to explore that class, come and see us, we are here for you.

Thank you. On behalf of Perkins elearning and all of us here thank you Karen, and thank you all for participating.

[Karen Narvol] Thank you everyone.

## [Event concluded]