>> All right, everyone, to keep us on time, I'm going to introduce our presenters for Getting Ready to be Readers. We have Ellen and Elaine. We'll get started.

>> Ellen: Hi, everybody, Elaine and I are here from Teachers College, we're going to be talking a little bit about reading instruction or reading development during the EHDI time period and we're also going to be introducing a little bit about a study that we did on early readers and a tool that we participated in the development of that might facilitate literacy in young children.

So, quick question. How many of you are parents? Wonderful. How many of you are teachers? Great. SLPs? Wonderful. Who else? Audiologists? Other EHDI folks? Wonderful. Okay, terrific.

So, we're on a tight schedule and we want to make sure we get through everything and we let the next group of speakers have all of their time. So, we'll get started. Here are our disclosures.

We're going to talk about a tool called the Reading Castles that we helped develop and we're going to promote it, but we don't get any royalties if you are interested in it or buy it. Just point that out.

And here we go. Our agenda today, we'll look at a stage view of literacy development and we're going to stick, primarily on the stage view, looking at young children and pre-schoolers and we'll talk about our tool that hopefully facilitates understanding of development through those stages. Who is familiar with Jean Chao? Jean was a researcher at Harvard University who did most of her work in the 70s and early 80s, she was one of the first theorists to look at reading development as a hierarchy of individual skills that eventually all contributed to becoming a literate person.

She named her stages for the numbers you see, but also, for the, for a particular skill that needed to be mastered in that stage before you could successful go on to another stage.

So, we're going to focus mostly here on stage zero and stage one because that's the EHDI population, but for those of you who are teachers, we talk a lot at school age about things like vocabulary and comprehension. We focus on that in school classrooms, we need to have a solid foundation in some of those earlier stages that we don't really, we don't really work on in, with a school-age population.

Stage zero is a stage, early interventionists, anybody here an early interventionist. This is a stage you're all familiar with, right? What happens from -- Jean talked about age 6. But remember, it was the '70s and '80s so, kids didn't enter formal schooling until maybe 5. Now kids enter formal schooling much earlier. We'll be flexible with those ages, right? Kids are learning the language system that they're exposed to, right? They're learning about the spoken language that surrounds them, or they're learning about the sign language that surrounds them. For spoken English, they're learning the sounds that contribute to that language.

All about language development in this period. They learn simple concepts about books from being read to, right? They learned things like the front of the book, and the back of the book. And that you turn pages, they maybe learn to point to pictures, often if they have a book read to them frequently, they can read that book, right? But they don't really read it, they just have it memorized, right? Looks like Brown Bear Brown Bear. They can read those books, but they're pseudoreading or pretend reading.

Jean called this prereading or pseudoreading stage because kids know some things about receipting, but they can't really read yet. By 4 or 5, she said, and we might say, by 3, some kids can point to words in a book or they can point to pictures, if we say, "where's the brown bear?" They can point to the brown bear. Some kids can cite the alphabet or sing the alphabet song. Sometimes they can recognize letters, especially when the letter's in their name, right?

Typical children can understand thousands of words by the time they enter formal schooling, but they really can't read many of them at all.

They might recognize words like Coca-Cola or McDonalds, but they're not reading them, they're just recognizing them as wholes. This is the period that early interventionists or pre-school teachers are most familiar with. It's the stage in reading development that is probably the longest, but most important in terms of a foundation.

For our kids, kids who we know who have language learning challenges, we focus a lot on this stage. Right?

So, what are some things we do? We try to develop their phonological awareness. They're understanding that in the language that they're listening to, there are words, words have parts, we have words like hotdog that have two parts to them, words have an initial sound, they have the rest of the word, when we play baby games, and do nursery rhyme things, they learn that words rhyme, right?

And as they get into the beginnings of formal reading instruction, they learn that they can do things with words. Right?

So, you can take the "h" sound away from had and you have "ad," right? Or take the "m" sound away from mad and you have "ad." Anything in terms of phonemic awareness can be expressed visually through a system like cued speech.

Any gestural system where all of the phonemes are represented can also contribute to this understanding. Now we'll talk about this tool, the Reading Castles, our study and then we'll go back to our kids.

>> Elaine: Maria mentioned skills that go into prereading. Most of the skills that Jean talked about in the pseudoreading or prereading phase don't seem like reading at all. There are lots of different skills from lots of different domains that contribute to a child's readiness to read in kindergarten or first grade.

And what we set out to do when we started developing what we call the Reading Castles was to take all this information and follow Jean's stages theory and put it into a tool that parents and professionals could use to that can those skills we need before we start reading.

So, we partnered with Sunshine Cottage school for deaf children in San Antonio, Texas. You may be familiar with Cottage Acquisition Scales for Listening and Speech.

They've been thinking for many years about the families they worked with, who knew what the goal was for their child. They had literacy goals for their child and knew what kind of skills they might need in kindergarten, but didn't know the skills they needed before that. This is what we're doing when a child is 2 that doesn't seem like reading, but it is reading. They wanted to develop a tool that's friendly for all sorts of professionals. Those who work in schools, itinerant teachers and working with kids at many different age levels.

And mostly for parents to use.

This is what we came up with and was published a couple years ago. We have no financial stake in this, so, we're proposing it, but we don't receive any royalties if you're interested in getting it.

It's a criterion referenced assessment that has three instruments in one. We have an early literacy booklet, prereading booklet and learning to read booklet. These follow Jeanne Chall's stages. This is early literacy, really bitty babies in the EHDI period. Skills for book handling, print concepts, things they're learning about the alphabetic system and phonological awareness, picture-reading and vocabulary, fluency, which is really important, which we'll talk about later. Language comprehension, all of those things don't necessarily have very much to do with sounding out words or understanding whole text.

But all of those come into play later.

So, this is, this is a tool that's available to you and we developed it -- it came out right before COVID. We haven't had a lot of feedback on what it's been like for practitioners.

We were interested in looking at what these skills looked like in a variety of deaf and hard of hearing children. What were kids doing during this EHDI period?

We have a longitudinal study called the read-up study. We partnered with a large listening and spoken language program in the southwest. Which has a diverse array of children, many, many from Spanish-speaking, primarily, primarily Spanish-speaking homes.

And we, we're really interested in what their reading development looks like. We have a lot of data and different projects going on within this study.

We wanted to talk about the specific early reading period. We use an assessment called the Woodcock Johnson Test of Achievement. We're looking at different areas of literacy, spelling, word attack, reading comprehension, influence, vocabulary.

Before COVID, the scores for our participants in this project in Pre-K through third grade were average range. That's different from data presented previously. We always hear about reading delays in children who are deaf or hard of hearing, but in this population, who are receiving specialized services, we found scores in the average range.

We saw kids were really strong in their phonological awareness skills and basic reading skills, but reading influence may have been an area of challenge. That's something we're looking at further. We have our pre-kindergarten participants here. These kids weren't yet reading but should have skills that facilitate reading.

We had 16 children in our preCOVID cohort in the 2018, 2019 school year and another 22 in the period after COVID started and they came back to school. We compared scores and thought there'd be a difference. We hear a lot about learning loss and all the ways kids were impacted by going to virtual learning and having services impacted.

We didn't find a significant difference in the prereading scores for these cohorts. We did find a lot more variability. So, while the average scores were similar, there were a lot of kids doing really, really well and had very strong prereading and were even reading.

A lot of children who didn't have strong skills at all, were impacted by loss of services and changes in the way they're receiving services.

We also saw lower scores in oral reading and sentence-reading fluency. That's something we're looking at and focusing on in our Reading Castles and thinking about ways we can incorporate oral reading fluency, oral fluency in general and translate that to influence.

This made us think about what parents and professionals may have been doing to achieve, on average, these really strong skills, even when so many things were in upheaval. And we'll talk about what some of the strategies that folks have been using in this stage zero period.

>> Maria: We're going to rush through this, just to stay on time. If you download our PowerPoint, you have this, and all of these underlined words are links, so, they'll link you to examples of what we're talking about.

>> Are you going to be sending out the PowerPoint or e-mailing us?

>> We'll wait for the microphone.

>> Is that one working? Hold up. The PowerPoint was uploaded to the EHDI site, although it sounds like folks aren't accessing it. We'll check in with the EHDI folks. It should be all available to you. And then we have our e-mails at the end of the presentation, so, we'd be happy to e-mail you if you want to talk further. We will look into what's going on. It was made available, perhaps there's something -- there's a hiccup in that system, thanks.

>> These are all links that I think you can make sense of by the way they're labelled here. But what I do want to suggest is Ella Jenkins. She's an American folk singer. I think she recently passed away. She's got multiple, multiple -- I don't know what you call them anymore? CDs? What would you call those today? I don't know.

All of her work is in, like, call and response type songs or chanting and they're wonderful ways to help kids become familiar with the phoneme system.

So, lots of sort of, slowish music that's very, very interactive.

So, there's a part for the -- maybe teacher or the early interventionist or mom or dad and there's a part for the child. All of this is available on YouTube.

So, certainly check out Ella Jenkins. I highly recommend her for all of pre-school.

Okay, so, we won't continue there. We'll finish with prereading stage. Stage zero. If you can look, all of the things the children learn in the prereading stage, they continue to develop during stage one.

If you can see that little yellow line, they keep learning about their language, but now, they're going to start to look at it more closely.

So, in stage 1, kids have to slow down from that fun pseudoreading, brown bear brown bear, what do you see? Now they have to start looking at individual words. They have to learn the alphabetic principle. They have to learn that letters have names and letters make sounds.

And when you put letters together, they might make different sounds. And when you put sounds together, they make the words that we use to communicate and that we read in books.

So, this decoding, or this phonological recoding is very laborious work. They gain insight into the language they've used fairly effortlessly for the first five years.

So, what Jeanne Chall said is you have this long period where you get to pseudoread and you get to just use language. Now you have to let go of that and you have to glue yourself to the print in order to learn to be a reader, in order to learn to decode.

But if you haven't had that previous six years, decoding won't be easy. You won't be able to attach all of this print on a page to what's already in your auditory memory in order to facilitate reading.

That's our next slide. We talk about phonemic awareness as an auditory skill, right? As a skill you gain through listening. If it's delivered through cued speech, a visual listener. We call phonics, the study of letters and letter sounds, we call that an oral and a visual skill. Because it's about looking at letters and pronouncing those the way we've stored them in our auditory memory.

So, when we think about formal phonics instruction, it's this system of rules that we have about saying words and about spelling words. How are we doing on time?

And then, they learn orthographic mapping. So, what do we do to support kids in stage one? We teach them that letters have names, letters make sounds. We provide lots of opportunities to look at words and not memorize them as wholes all the time, but to sound them out. When you can sound out a word, you can take what you've learned with one word and transfer it to another.

So, it's a generative skill. Okay? In this stage, we want to select the right books. Right? We don't want to select books that are overwhelming. We don't want to select books that will not interest kids in reading, okay?

In reading, when we read to kids at this stage, we want to ask them more questions about the print than about the pictures. Okay?

We're facilitating that gluing to the print. Okay? Rushing through quickly. Now it won't move. I don't know what happened.

This, you have a link on the bottom, when you finally get it. There's a really, really nice, very short video about what the orthographic processor is. And if you're new to this term, orthographic processing is the way we develop a site word vocabulary. Initially, we think the word cat in our auditory memory and we think a schema for what a cat is, right? It's a small animal that's furry and soft and it has little ears. We have that label, cat for it and then, when we get to school, and we start learning how that phonology is applied, we know that cat is made up of "c-at" right? In a skilled reader, these three systems will happen so rapidly that it becomes effortless decoding.

Once you become a decoder, once you have efficient word processing, then you're ready to go on to the next skill. Which is fluency and comprehension. But a lot of our kids don't have stage zero, right? Or they don't have enough of stage zero, which means when they get to stage one, which is this decoding, they're already at -- they're already struggling.

All right? Okay. Watch that film about orthographic processing. Okay, so, again, just to go back to the Reading CASLLS, when you, when the -- when Sunshine Cottage asked us to help them with this, what they said to us is we want to be able to show parents when they come to us, with infants, what would you like for your child later on? They said, "we want our kids to be readers or do well in school." They said, we want to be able to show them that what you do right now, at zero to 12 months, what you do right now, is, is contributing to your child becoming a reader.

What they're doing at 3, what they're doing at 4, and this is a way to show them, when you, you know, you as the early interventionist, SLP, TOD, when you can check things off on this list, you're able to say to parents, "look what your baby can do. Look how your baby is becoming a reader, right?" Or you can say, "here are some things we want to work on" and then those other slides, where I linked you to all kinds of things, are ways to introduce parents to things they can do at home.

And now we're just showing you the other -- this goes up to grade three. Yeah.

Okay, so, we rushed through that because we want to be respectful of the next group that's coming to speak. But please be in touch with us. We are continuing to work on that longitudinal study. So, we, we will have more data about how kids at this particular school are developing as typical readers, which is wonderful for our field, right? To finally not have journal articles begin with deaf kids don't read well. We'll finally have some solid data on that. Where we'd love to hear how, maybe, you used the Reading CASLLS or if you'd like more information about it and we're all getting ready to be readers with our kids, right? Thank you.

[applause]