

## Science of Reading and Belonging

Oregon Department of Education

<https://youtu.be/NjkhQOYriTA>

Angelica Cruz: All right. Well, welcome everyone. Thank you so much for joining us today to learn more about the science of reading and student belonging in early literacy. I'm Angelica Cruz, and I have the great pleasure of serving as the director of literacy at the Oregon Department of Education. And I'm joined today by several colleagues from WestEd to help deliver this webinar to you. We are all very grateful that you are joining us today and have chosen to spend your Tuesday afternoon with us.

We would love to get started by finding out who is joining us today. So, if you can take a quick moment and share in the chat your name and your role. You can share your district or school where you work if you would like, and one sentence or phrase describing how you want your students to view themselves as readers and writers. I'll just give everybody a little bit of wait time here to enter that into the chat. Those of you who are just joining us, we are just introducing ourselves in the chat with name and role and district, if you'd like to share a sentence or a phrase describing how you want your students to view themselves as readers and writers. Awesome. We're getting some responses already: "capable," "feel empowered," "wanting their students to feel empowered by their literacy skills." Excellent. "Loving my students to be themselves as unlimited voice." I love that phrase. "Excited," "excellent." "A growth mindset." So important to build that up in our students. Great. Thank you everyone for sharing. All right. We will get moving on and talk a little bit about our objectives.

So today we'll be focusing on the importance of incorporating both the science of reading and student belonging within literacy instruction. We'll learn about how Oregon's Early Literacy Framework can serve as a resource for understanding the components of the science of reading and student belonging, and also explore examples and resources to support educators in using both the science of reading and student belonging to inform literacy instruction. Here's our agenda for the afternoon. We just completed a quick warm welcome and community-building activity. Next, we'll launch into a brief overview of Oregon's Early Literacy Framework, and then we'll spend the majority of our time together today framing the science of reading and exploring how to incorporate both the science of reading and student belonging into literacy instruction. We'll end with a brief reflection and a closing activity.

All right. Before we launch into the deeper content focused on the science of reading and student belonging, we want to ground our learning in Oregon's Early Literacy Framework. As you likely know, Oregon's Early Literacy Framework was published last May of 2023, and the purpose publishing a statewide literacy framework was to help build momentum and capacity for making literacy instructions stronger in Oregon so that all of our students leave elementary school reading and writing with grade-level fluency, confidence and competence in at least one language.

The framework also serves to build coherence, common ground and clarity across the state for the vision of literacy instruction so that we can work together to improve literacy outcomes for every Oregon student. And finally, it aligns with the governor's vision for improving literacy outcomes across our state with an intentional emphasis on how the framework elevates the literacy and language assets that our diverse learners bring. It is intended to be actionable for districts and building leaders, useful for teachers and informative for families and communities.

There are seven guiding principles upon which the framework is built: early literacy begins at birth, children are full of literary promise, families and communities play a vital role, multilingualism benefits everyone, foundational skills matter, teacher knowledge and practice are critical and every student can

be taught to read and write. The framework is then divided into eight sections to guide teachers and leaders in creating the conditions for learning that are necessary for high-quality early literacy instruction as well as a deep dive into the convergence of research on literacy in the brain and the importance of explicit systematic instruction of foundational skills.

Sections one, four and five are where we'll be focusing our time today as we combine both student belonging and the science of reading and the importance of interweaving those within your instruction. We have additional webinars posted on the instructional framework's website that focus on sections six through eight, which include how to teach writing, reading comprehension, vocabulary and background knowledge, core instruction, informative assessment practices and how to reach all learners, specifically our multilingual learners and our students with disabilities. All eight of these sections work together to lift literacy across our classrooms. And with that, I will pass it over to our WestEd colleagues to begin our deep dive into the science of reading.

Julie Webb: Okay. Thank you, Angelica. And thank you to all of you for joining us today. My name is Julie Webb and I'm a senior program associate here at WestEd.

Yessy Medina: I'm Yessy Medina. I'm a program assistant here at WestEd.

Julie Webb: And we're looking forward to sharing some information and ideas with you today for bringing together two key elements of Oregon's Early Literacy Framework in our classrooms: science of reading and belonging. So let's actually begin by framing the science of reading to develop a shared understanding from the framework. So a common question in today's schools is, "What is the science of reading?" So the science of reading is a large body of research that reflects our understanding of how learn to read and write, and it draws from thousands of studies around the world from the fields of education, psychology, neuroscience, cognitive science, linguistics and more. And it's important to understand that the research base in informing the science of reading is continually expanding and deepening to include best practices for all learners. And this is especially significant as research studies become more inclusive and researchers seek to understand the varied strengths and needs of different student populations.

And as with other research topics, the more researchers uncover, the more questions we can ask and investigate through additional research studies. And this continuous cycle provides educators with a wealth of information that can support the diverse needs of our students. And to help us frame the science of reading accurately, we can think about it in terms of what the science of reading is and what it is not. So first, the science of reading is not an untested or experimental approach. It's not a particular instructional program or curriculum. It's also not a one-size-fits-all magic button, and it doesn't only focus on phonics or foundational skills. In contrast, the science of reading represents more than 50 years of robust interdisciplinary research and includes a wide range of practices that should be uniquely tailored for students. It's also an approach that encourages finding joy in reading and writing, and it's an approach that's culturally responsive.

Now, over the years, researchers have created different theoretical models based on science of reading research. And section four of Oregon's Early Literacy Framework features several research-informed models, models of reading as well as updated lists actually of what sometimes are called the pillars of reading. Now, these pillars constitute components of literacy in which teachers can influence student development through evidence-based literacy instruction. So these particular components include phonemic awareness, phonics, fluency, vocabulary, text comprehension, oral language, and writing.

So let's take this big idea of the science of reading and bring it down to size a bit with some classroom examples. We're actually going to hear from two Oregon educators through this video as they share

how they integrate different components of literacy in practical ways to provide students with the instruction and practice opportunities they need.

Video: Supporting all students in core instruction.

Speaker 5: One of the things that I hear most often is how do I meet the needs of so many different students at once? And that can make it feel like the time is not enough when you're really trying to differentiate and to meet all the needs of students as all of our teachers are trying to do. So I think one of the parts that's at the heart of my own belief, and I do believe of my district's is that all should have access to core instruction. So when we shift our thinking to really, all students need access to this tier one instruction, now how do I scaffold up to help get them there? So the conversation really shifts to here's the content for that time. Now, what supports can I add to help all of my students be able to access it?

Speaker 4: Structuring literacy block time.

Speaker 6: When I think about fitting all the components of literacy, and I also feel a little overwhelmed, but it helps to take my district guidance. So I look at what my district gives me; they give me 25 minutes of reading comprehension. So I use that. I do a read aloud, I focus the read aloud on a specific skill, and then I do a little bit of language. I embed sentence frames in there too. We also do 30 minutes of foundational skills. So I explicitly teach sound spelling correspondences, decoding, blending, segmenting in that 30 minutes. And then I do three minutes of phonological awareness as well. I usually try to do the phonological awareness before I start the foundational skills to get their brains warmed up for it. And then I actually have 50 minutes for writing and language. The more that the students talk, then the easier that it is to process language and process what's going on. So I incorporate a ton of turn and talks in my reading comprehension book. And whenever we do reading comprehension and we pause—

Julie Webb: We're going to pause right there. There's actually a wonderful set of videos that we'll share with you later on the website or describe a little bit, and you get to watch more of them later on. So teachers can actually help students develop their literacy skills using evidence-based instruction and assessment practices. And lessons can bring together several components of literacy to provide students with ample opportunities to practice and apply literacy skills and strategies. Now, we just mentioned the Oregon Instructional Framework website literacy, where you may have found the link to this webinar today, actually. And on the Oregon Instructional Framework's website, specifically in the early literacy page, you'll find a rich resource library full of research-informed materials.

And if we could go to the next slide, we'll actually take a look at a couple that we've chosen for you today. And two such resources that we're featuring here are websites that come from What Works Clearinghouse. And one is entitled Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade. And the other is entitled Improving Reading Comprehension in Kindergarten Through 3rd Grade. And these are websites, as I mentioned, from What Works Clearinghouse, and they provide recommendations for teaching, reading and writing that include a really helpful summary of the evidence space that they're drawing from to make these recommendations. They also provide implementation steps, and also some solutions for common obstacles. So these are really very helpful and trusted resources, and we really encourage you in your slide deck that accompanies this webinar. You can find the links again on these slides, and also in the resource library on the website. They're all there for you.

Yessy Medina: Thank you, Julie. So along with the science of reading is the important role that student belonging plays in learning. We're going to deepen our understanding of student belonging and literacy development. This quote is from Michael Ralph, and it can help us think about what student belonging

means. I'm going to read the quote for us. "Belonging is a fundamental human need. People search for a sense of connection with the people and places in their lives. Students spend a huge portion of their time during childhood and adolescence at school, which makes it essential that the learning environment cultivate that the students." So studies actually show that belonging is a human biological need. It has implications for our physical and mental health. In the context of schools, improved student belonging can lead to improved academic performance. So how can we build school environments where students feel like they belong? We're going to explore this a little bit more on the next few slides.

So what is student belonging? Schools can foster... Children can have keen perceptions about how their culture and language is received within the school environment and what their teachers believe about their abilities. So children really know and feel when they are taught by educators who believe that they can achieve at high levels of learning. Engagement and motivation increases with a sense of belonging and safety. So authentic, reciprocal relationships are necessary to lead to those increased academic risk-taking in learning. Academic achievement also improves when culturally responsive practices are evident in the learning environment. Students can see the relevance of literacy in their lives through culturally responsive practices. So this looks like learning experiences that affirm students' identities and foster cross-cultural understanding.

To promote student belonging in our classrooms, students need to see themselves as readers and writers, and they need to see the relevance of literacy for the real world. As educators, we can support this by intentionally selecting texts and materials that represent students' identities and cultures, and we can highlight how to use literacy skills in their unique community and cultural contexts. There are so many other ways that we can intentionally promote student belonging through our instructional practices, and the way that we set up the learning environment for our learners. On the next slide, we're going to watch a video of one simple and intentional way that a teacher incorporates her student's identities into her daily routines and practices. So let's listen to this Oregon educator who explains the importance of centering student representation to create a sense of belonging in our classroom.

Video: Centering representation.

Speaker 6: I incorporate students' home lives into my teaching by making sure I center student voices. So sometimes if I'm doing a read aloud, I'll make sure that read aloud is representative of my students and not just one group but multiple groups of students. If I'm drawing a picture of a home, I'll draw an apartment building because I know that a lot of my students live in apartment buildings, and it's those little tiny details I've noticed that make them feel seen and represented. I also make sure to include music of their home culture. I have a lot of Spanish speakers in my class, and I know their favorite artists. So if the song is appropriate, we'll listen to a little bit of their favorite music after the day is over and they dance and they sing. And it's just those little moments where they feel connected and I can see their home culture visible in the classroom.

When I was growing up, I didn't really see a lot of my culture represented, being from a Spanish-speaking family, and I have a lot of memories of being through school and feeling really sad and wanting to be blonde and pretty. And it wasn't until I saw myself represented that I felt really connected to school, and my first Spanish-speaking teacher is the one who maybe want to be a teacher. So I look back at my experiences of my childhood and think if my students have that, then they will be set up for success and they might have a more positive experience later on in life.

Speaker 4: To learn more, visit—

Yessy Medina: Thank you. So as we see, educators really can promote student belonging by intentionally selecting texts and materials that represent their students' backgrounds. So to really reiterate that when

students feel seen and represented in their literacy instruction, they view themselves as readers and writers and why literacy is relevant to them in the real world. So on the next slide, we're going to take a look at some of these website resources that we have for you for student belonging. There's a couple here that we wanted to highlight for you.

So the first is the literacy learning pathways. So this will all be on the Oregon Instructional Framework's website for early literacy, and along with many other resources available to support for student belonging, we're going to include these two here. So, literacy learning pathways for student belonging. We have a web page that provides multiple professional learning resources, and these will help you to support understanding of student belonging, including family and community partnerships and reaching all learners as described in the framework. The second resource we see here is a literacy spotlight for student belonging. And this is a document that can be used to build a local vision of student belonging and quality early literacy instruction, or to be used to support communication and awareness build.

Julie Webb: So we were able to share some key elements from the framework today in the science of reading and belonging. And now we'd like to discuss how we can bring these two elements of the framework together in our classrooms. Literacy learning is supported by building an authentic sense of belonging that's linked to students' identities and needs as readers and writers. And differentiating core literacy instruction for learners with varying literacy backgrounds and abilities, sends a message to all students that they can have meaningful learning experiences during core literacy instruction. Centering student identities while learning about diverse perspectives allow students to see themselves as part of literacy learning, as Yessy had mentioned, and fosters a greater understanding of the world around them.

Also, bidirectional and collaborative relationships for families and school staff and even the greater community support, and learning from one another, can actually create the conditions for literacy learning that foster a culture of literacy inside and outside of the classroom. And as teachers, we need to intentionally layer these approaches even though they're very complex and complicated at times. We layer these approaches onto our lessons so that we can also focus on the pillars of reading themselves, the ones that we mentioned earlier. So let's actually take a look at different ways that that could be accomplished in the classroom.

So the following, in the next couple of slides, is an example of a lesson sequence that a teacher might plan that weaves together student belonging with learning experiences informed by the science of reading. And the plan that we share here represents several class periods of instruction. This would be an awful lot to achieve in just one lesson. So think about this as several days or class periods of instruction. So during the planning phase, to incorporate, again, student belonging along with science of reading components and those pillars of reading, the teacher could actually use and start with assessment data from her students to determine a focal reading strategy for this particular lesson sequence that he or she is planning. And that could be something like summarizing or inferring or critiquing some focal strategy that can actually expand students' ability to read strategically.

Then the teacher could take that kind of focus that they have and select a picture book that students can relate to, that has some representative qualities that they can relate to, that also provides opportunities for practicing the focal strategy the teacher selected, and also provides opportunities to engage in rich discussion in class. And the teacher could also plan for the specific vocabulary that they want to review with students. And also consider the language demands of the text they selected because those are going to be important components to support students' comprehension as well as their oral language development. And in addition to those, knowing the student's needs and where they are in their literacy development, the teacher might also create some supports to provide students with

so they can better engage in discussions around the text, including things like sentence frames that can be introduced to students and used for practicing oral and written language together in class.

The teacher could also, in the planning phase, actually plan discussion questions they would like to ask students, and especially questions that students can really connect the ideas from the text and share their own thinking with their peers and also with the teacher in the class. And also, again, have that opportunity to think about and use that focal strategy that the teacher has anchored this lesson around. And finally, the teacher can plan a writing response activity that offers an opportunity to extend text comprehension for students. And again, that's an awful lot. You couldn't really do that in one lesson, all those things. But those are definitely things to plan for that integrate those pillars of reading that we mentioned earlier and are definitely grounded in science of reading practices.

So on the next slide, let's take a look at all those planning pieces that we discussed altogether. And on this slide here, we've actually bolded text to help illustrate the key evidence-based approaches that are represented here from Oregon's Early Literacy Framework for actually teaching the various literacy components during the lesson sequence that we shared here. So these include using assessment data to plan responsive instruction for students, teaching reading strategies to improve comprehension, promoting belonging by choosing culturally responsive texts.

Also, highlighting vocabulary and language demands match to the literacy tasks that the teacher's going to ask students to take part in. Engaging in classroom discussions in which students connect to text and peers. This even goes beyond talk activities that are a great place for students to start, but also thinking through some deeper conversations and academic conversations that teacher can support students with to improve, again, oral language and their understanding of texts. But also providing really key writing opportunities to extend understanding for students. We don't want to forget that writing is a really important component of the science of reading, even though it's not in the name. So it's something we need to remember.

So if we continue this lesson sequence, we just talked about the planning part. So that's a lot for the teacher to think about and to weave together to really provide that safety net for students and all those opportunities they need to practice these skills and strategies that they're learning. But now the teacher can actually weave together student belonging and science of reading throughout the actual instructional moves that he or she makes. So here the teacher could actually do these things during the lesson. So first we have introduce key vocabulary and language from the text prior to reading. So the teachers planned some of those things and selected some of the language and vocabulary that he or she wants to feature. And this is where they're going to do that right before students even read. So we're going to set them up for success from the start.

We're also going to refer students to those sentence frames the teacher planned to help them to engage in academic conversations and provide some scaffolding there so that all students can actually partake in discussion at a level that's appropriate for them. The teacher also, during instruction, is going to engage students in a read aloud of texts. So if you recall here, we had an example of a picture book. So this is the text that's read aloud, and the teacher has a plan for pausing to ask specific questions that he or she designed previously. And a way to promote discussion, again, using the text vocabulary the teacher just introduced along with the sentence frames that were shared. So teachers intentionally providing those supports and keeps orienting students to those supports and expect students to use them to help them engage in the tasks that the teacher's providing. The teacher also really wants to invite students to share their personal understandings of the text as well. And that's going to be a key element for student belonging.

Also, during instruction on the next slide, we have here that the teacher can actually work with students to collaboratively complete a organizer. So this process really helping to collectively process the text as a whole group, and have some more discussion about the focal strategy again, that's anchoring the lesson. And students of course can have lots of turn and talk opportunities embedded here as well. And a great opportunity to use, again, the vocabulary the teacher has tailored to this lesson and the amounts from the text. Those can be purposely interwoven into the graphic organizer that's built if the teacher is very intentional. And those can then become tools that the students use in that writing activity. So in the end, we want to provide activities where students, again can extend their learning and expand their comprehension of the text and do some application of the thinking that they've been engaged in with the teacher.

So we can ask students to respond to the text with that planned writing activity, and really one that prompts them to apply their thinking hopefully in a new way because that's going to be a great way again, to expand the thinking that they're doing and really solidify these concepts into memory. So the more students can apply these things, the greater opportunity they have to learn them and for the long term. And it's going to be important for the teacher during this writing activity to not only... We've had all this scaffolding of supports along the way to get students to this point.

But during writing itself, the teacher also needs to think about the scaffolding and some of the support materials that students might need while they're actively encoding and doing some composition skills. So this is really across the board. All grades need some type of scaffolding and support, particularly in writing, which is an output activity that we know can be very challenging for students and also challenging for teachers to support. So if we're really intentional about the tools and resources that students know how to use, we can build some independence in that area and provide the differentiated instruction that they need to improve those encoding and composition skills.

So here we also have, as we did before, all these components that we just discussed in the lesson. But again, this is during the part where the teacher's actually making active moves, incorporating the instructional pieces and the application opportunities for students, and again, across multiple literacy components. So here the teacher weaves together language students need to be successful during discussions and writing. Also text comprehension opportunities with teacher and peer support. Co-created opportunities for using oral and written language that could be with peers and, again, along with the teacher. And also those extended opportunities for thinking through writing and application of phonics and spelling knowledge.

And the following resources on the next slide do a good job of showing some of these different instructional strategies and approaches that we've shown that teachers can weave together to support students. And these are also found online in the early literacy resource library on the [oregoninstructionalframeworks.org](http://oregoninstructionalframeworks.org) website. And these three resources in particular are from a website called Doing What Works. And it includes videos and related materials that, again, help illustrate some of these ideas that we've discussed and shared in this sample lesson sequence.

So these particular resources include the first, which is called Buddy Talk, and this is a video that provides guidance on how to incorporate different opportunities for students to have meaningful discussion and academic conversations in class. The second is called Compare-Contrast Graphic Organizer. And if you recall in our lesson plan sequence, we discussed that collective meaning-making that students could do with one another and the teacher, and the opportunity to populate a graphic organizer reinforcing language demands that students have to understand the text and that they can use in writing. This video provides guidance on how to use graphic organizers, specifically to support

reading comprehension, but we think we'll find some really solid ideas in there for new ways that you can use this resource.

And then finally, we also have one called Question Sea. And this one is about on- and under-the-surface questions. So questions that are more literal and some that are more inferential. And in this video, it has a great example of a teacher using and modeling and guiding practice around questioning and helping students to learn how to use questions themselves to improve their reading comprehension. And with that, I'm going to turn it back over to Angelica.

Angelica Cruz: All right. Well, we are super ahead of schedule today, so we will be giving you back a little gift of time at the end of our webinar today. But before we end, I just want to thank everybody so much for joining us. We hope you found this webinar helpful and informative for your practice. We've summarized the key takeaways from this webinar for you here. We hope you leave today with an understanding that the science of reading is a large body of research that reflects our understandings of how children learn to read and write. That student belonging is fundamental for literacy development, and that we need to potentially layer these approaches onto our lessons that focus on the pillars of reading. And please feel free to add any other takeaways you have from today's webinar into the chat before we close out this afternoon. I'd love to hear what others found helpful or informative or useful in our time together today.

And before we do end, I would also like to highlight our new website that houses all of our professional learning resources related to Oregon's Early Literacy Framework. This has been many, many months in the making and we are really excited to have launched this website last week. Please feel free to use any of the resources as you plan out professional learning in your districts and schools. There are resources for leaders, for professional learning facilitators, for classroom teachers, for families. There's just a very robust set of resources on this website, and it's all free for Oregon educators to use as needed. And please feel free to share it with your colleagues as well.

And finally, before folks sign off, we would love to just get a little bit of feedback. We have a QR code here to make it super easy, if you want to do that on your phone. It's just a few questions, or we'll put the link in the chat there and you can take the survey on your laptop or whatever device you're using today. And we just really value your feedback and hope that you'll take a couple of minutes to share it with us today. We've also included my contact information in case you have additional questions regarding how to combine both the science of reading and student belonging in your schools and classrooms. And we encourage you to reach out if you have questions or would like to talk more about this. We have a whole literacy team now, thanks to Oregon literacy legislation, and we stand by ready to support you and just really appreciate all that everybody is doing to embrace and uplift literacy for our students in Oregon.