American Enterprise Institute

Web event — Why children can't read — and what we can do about it

Welcome and introductions:
Katharine B. Stevens, Resident Scholar, AEI

Presentation:
Emily Hanford, Senior Producer, APM Reports

Panel discussion

Panelists:
Margaret Goldberg, Cofounder, Right to Read Project
Munro Richardson, Executive Director, Read Charlotte
Ralph Smith, Managing Director, Campaign for Grade-Level Reading
Carey M. Wright, Mississippi State Superintendent of Education

Moderator:
Katharine B. Stevens, Resident Scholar, AEI

10:00–11:30 a.m.
Thursday, October 29, 2020

Event page: https://www.aei.org/events/why-children-cant-read-and-what-we-can-do-about-it/

Katharine B. Stevens: Good morning, everyone. Thanks so much for joining us here today for our webinar discussion on "Why children can't read — and what we can do about it." I'm thrilled that you've joined us here today for a discussion with a truly remarkable group of experts. I'm going to say just a few words before I turn the screen over to Emily Hanford, followed by our comments by our panelists. I also want to just note that we'll be having Q&A at around 11:15 or so. You can submit questions either by email, which was in your invitation, or via Twitter #AEIteachreading.

So, today, we're talking about what I think is arguably a crisis in the United States in the number of children who are failing to learn to read. We now know that early mastery of language supports children's social-emotional and cognitive development starting at birth. And early reading proficiency is a crucial predictor of school, work, and life success. On the flip side, a lack of reading proficiency often has profoundly negative long-term consequences.

Next slide. So, these are just a few statistics. Children who do not read proficiently by third grade are four times more likely to drop out of high school, 85 percent of children involved with the juvenile justice system are functionally illiterate, and an estimated three-quarters of incarcerated adults can't read above a fourth-grade level. So, these are just kind of tip-of-the-iceberg stats on how profound the consequences can be of failure to learn to read by fourth grade.

Reading proficiency by third grade has been established as the crucial benchmark. If children who are not reading proficiently by third grade — as this slide shows — are four times more likely to drop out of high school. There's a kind of — a "rich get richer, poor get poorer" after that point, where good readers get better and better — poor readers fall farther and farther behind. Today in the United States, a shockingly large proportion of children lack even basic reading skills.

Next slide. So, this is a percentage of fourth graders who scored at proficient or above on the 2019 NAEP reading assessment. So, you can see that on average only about one-third of fourth graders are proficient in reading. Broken down by subgroup, the picture is even worse: Between a fifth and a quarter of lower-income and Hispanic children read at proficiency. Just 18 percent of black fourth graders are proficient in reading.

So, analysts commonly focus on these proficiency rates. However, I think perhaps a more important metric in some ways is the percentage of fourth graders who score below the NAEP — the National Assessment of Education Progress — level of basic. Next slide.

So, this slide shows the fourth graders who scored below NAEP's lowest level, which means they failed to demonstrate even minimal competence in reading. So, you see on average about a third of fourth graders in 2019 scored below basic. Broken down by subgroup, the picture is really terrible. Close to one-half of lower-income and Hispanic fourth graders and over one-half of black children on the fourth-grade NAEP reading assessment scored below NAEP's lowest level of basic. Addressing this problem is what we're going to be talking about today. Martha, you can take the slides down.

So, recent brain science has shown that the first year of life establishes the crucial foundation for ability in language and literacy throughout schooling. Language skills at age 1 have been found to predict language skills at age 3, which have been found to predict language skills at kindergarten entry, which strongly predict third-grade reading ability. Early language

development, both understanding and speaking, occur through babies' and young children's social interactions.

Research has shown that it is through the back-and-forth social engagement that young children learn to understand and speak language. That language ability provides the foundation for learning to read. Reading skill, though, is different from language skill. Reading specifically means decoding the marks on the page, which represent spoken language, whether the English language, Chinese characters, or even Morse code. So that's the distinction between the skills needed for language, the skills needed for reading, and the intersection between those two — are an important part of what we're going to be talking about today.

So, we're going to begin with a presentation by journalist Emily Hanford of APM Reports, who is well-known for her groundbreaking work showing how a deeply flawed idea about how to teach reading is widening early inequalities and setting millions of children up to fail. After Emily's presentation, as I said, we have a wonderful panel of experts who will share thoughts from their work on how to build strong literacy skills for all children, not only in school but laying the foundation beginning at birth.

After Emily's presentation, we'll first hear from Dr. Carey Wright, who's state superintendent of Mississippi public schools. She's going to want to talk about the work she's done to increase reading skill — children's reading ability in the Mississippi schools. We'll then hear from Munro Richardson. He's the executive director of Read Charlotte, who's going to talk about his organization's work to help children develop the critical set of skills and competencies they need to be strong readers by third grade — starting at birth through the continuum into school.

Then Margaret Goldberg, the cofounder of the Right to Read Project, will talk about her work with that project and as a literacy coach in the San Francisco Bay Area. And finally, Ralph Smith, who many of you know as the head of the highly successful Campaign for Grade-Level Reading, will share his thoughts on what's especially needed now in the COVID context.

We'll then have a short discussion, followed by 10 to 15 minutes of Q&A starting at around 11:15, and we'll close at 11:30. So with that, I am delighted to present Emily Hanford, who is going to take over from here. Emily.

Emily Hanford: Hi — good morning. Thank you very much. I'm going to share my screen because I have some slides to show you. So, here we go. OK.

Good morning. I am Emily Hanford. I work for APM Reports. We're the investigative and documentary reporting unit at American Public Media. And I've spent a large amount of my time over the past few years, much to my surprise, doing reporting on reading: how kids learn to read and how they're being taught how to read. And I am going to tell you today a little bit about what I have learned about the science of reading, which is a term that's being thrown around a lot these days.

So, as a journalist, I have a really great job. I've ended up with this opportunity to, over the past four years, read basically thousands of pages of books. They're all right over here in the corner of my office. Thousands of pages of books, reports, articles about how skilled reading works, what kids need to learn to become skilled readers, and what is going on when children struggle to learn how to read. And I've also, before COVID — I was able to travel to 10

states — talk with hundreds of people — to try to understand how reading is being taught in schools today. And what I've learned has really shocked me.

And it's basically this: Over the past 50 years or so, cognitive scientists and psychologists and neuroscientists and linguists and other researchers all over the world have conducted thousands of studies in classrooms and in labs to try to understand how we read and how kids learn how to do it. But this mountain of scientific evidence about reading is not making its way into many schools. Teachers and other educators are not, for the most part, being taught the science in their teacher preparation programs. They're not taught the science in professional development they get on the job.

In fact, as Katharine mentioned earlier, some of what they learn about reading and how to teach it actually turns out to be at odds with what the scientific evidence says. So, what is the science of reading? So, this is a definition from Mark Seidenberg. He's a cognitive scientist who's been studying reading since the 1970s.

So, he says the science of reading is a body of basic research in developmental psychology, educational psychology, cognitive science, and cognitive neuroscience on reading, one of the most complex human behaviors, and its biological bases. This research has been conducted for decades in the US and around the world. The research has important implications for helping children to succeed, but it has not been incorporated in how teachers are trained for the job or how children are taught.

So, what I'm going to do today is tell you just a little bit about what does this science says. A good place to begin is with something called the "simple view of reading." So, I didn't know any of this a few years ago. I'm not a reading researcher; I'm not a reading teacher; I'm not a parent of a struggling reader. I'm a journalist who just got obsessed and fascinated by this research.

So, the simple view was first proposed in 1986, when I was still in high school, by researchers Philip Gough and William Tunmer. And they proposed this model because they were trying to clarify the role of decoding in reading comprehension. Because there were a lot of fights going on about the role of phonics instruction, everyone was fighting about decoding. So to be clear, everyone agrees — everyone agrees — that the goal of reading is to comprehend text. The question is: How does a little kid get there?

So, the simple view says that reading comprehension is the product of two things — not the sum but the product. So, one is your ability to decode words. You see the letter string r-e-a-d-i-n-g, and you know that that string of letters represents the word "reading."

And the other part of the equation is your language comprehension. Katharine was talking about this. So, that's your ability to understand spoken language. So, we're not talking about your ability to read text. Language comprehension is your ability to understand meaning when someone is talking or when text is being read out loud to you. So for example, when someone says to you, "She is reading the book," you know what the verb means in that sentence; you know what she's doing.

So, the simple view says that if you have really good language comprehension skills but zero decoding skills, your reading comprehension will be zero because zero times anything is zero. The simple view also says that if you have really good decoding skills but very poor language comprehension skills, you just don't know the meaning of that many words in spoken language — your reading comprehension is not going to be very good either.

So, let's look at how this applies to learning how to read. Most kids entering school have very little when it comes to the decoding part of the equation. They have zero or close to zero when it comes to the "D" in the simple view of reading equation. But they do have something when it comes to the language comprehension part of the equation. In other words, when children enter school, they know the meaning of lots of words, but they don't know how to decode those words yet.

This is why people familiar with the science of reading call for an emphasis on phonics instruction in the early grades. Because if the goal is to get to reading comprehension, and you have a bunch of 5- and 6-year-olds before you who have language comprehension skills but virtually no decoding skills, what do you need to do to help those children get to reading comprehension? You need to help those children develop decoding skills.

So what you want to focus on with little kids is getting their decoding skills up to the level of their language comprehension. Now, the simple view clearly shows that focusing only on decoding would be a very big mistake; it's only half the equation. And as everyone knows, kids come into school with very different language comprehension skills. Some kids know the meaning of lots and lots and lots of words, and some kids have far smaller vocabularies. So, reading instruction that aligns with the simple view has to focus on the language comprehension part of the equation too. So, that means lessons and activities that expand children's oral vocabularies.

So, I was in a first-grade classroom in Oakland, California — we're going to hear a little bit more about Oakland from Margaret in a minute. And reading instruction was well aligned in this classroom with the simple view of reading. And here's what I saw: There was explicit phonics instruction in one part of the reading instruction. So, kids were broken into small groups depending on the level of their decoding skill, because kids are at very different levels.

And another part of the reading instruction was explicit vocabulary lessons and lots of reading out loud by the teacher. Now, the words that the kids had learned were posted on cards all over the classroom. It was early spring; they'd learned a lot of words so far. So, these words were — like — covering the windows at this point. And they included words like "gigantic," "extraordinary," "neighborly," and "ridiculous."

So, those are not words that the vast majority of first graders are going to be able to decode, and they shouldn't be expected to. But the first graders in this class were learning the pronunciation and meaning of these words, so that when they're able to read them, they'll know what the words mean. And by the way, every child in this class spoke a language other than English at home, and many of them actually spoke English as a third language.

The simple view was proposed as a theoretical model back in 1986, as I said, and the basics of this model have been confirmed over and over and over again since. The simple view is helpful because it disentangles some of the stuff that is most contentious in the debates about reading. So, in what's known as the whole language view, and in the balanced literacy view more recently, the focus right from the start of reading instruction should be on getting kids to focus on the meaning of what they're reading.

So, whole language and balance literacy are meaning emphasis approaches to reading instruction, as opposed to what's known as a code emphasis approach, which emphasizes decoding skills at the beginning of reading instruction. So, early reading instruction that aligns with the scientific research is a code emphasis approach so that kids can get to

meaning, because everyone agrees that meaning is the goal. And the question, again, is: How does a little kid get there?

So, this is another model for understanding how skilled reading works. It's known as "Scarborough's rope." Hollis Scarborough was a psychologist at Haskins Labs, and she's been studying reading development since the 1980s. And Scarborough's rope helps unpack what goes into each side of the equation put forth in the simple view.

So, the upper strand is language comprehension. And this model shows that language comprehension is complex. It's not just all the words you know the meaning of in oral language. It's also your level of knowledge; it's the stuff you know. And it's your understanding of how language works — language structure, grammar, your ability to make inferences — understand things like metaphors.

So, this is a more nuanced explanation of what goes into the language comprehension part of the simple view equation. And it can help teachers understand what might be going on when kids are decoding well but are struggling with reading comprehension. Very often they have a language comprehension issue. Note here, too, that the language comprehension is more complex and thicker than the word-recognition part.

So, in the simple view of reading equation, it puts them as sort of equal, but language comprehension really is probably stronger. Research shows it's sort of a stronger predictor and a more complex part of the equation. So, that lower strand of the rope is very, very important; it's the word-recognition strand. So, like the simple view of reading, Scarborough's rope shows that without good word-recognition skills, you are not going to become a skilled reader; it's not going to happen. And the rope unpacks the various skills and abilities that go into word recognition.

So, you can see that one element is decoding. That's basically your phonics knowledge. Do you have a good understanding of how letters and combinations of letters represent the sounds in words? Teaching students the basic letter-sound combinations in the English language gives them access to successfully sounding out more than 80 percent of the words in English print. That's a lot. It's not all of them, but it's a lot. But as you can see, children need more than just phonics knowledge to be successful with written English.

I think it's a lot more useful to think about teaching children how their written language works. English spelling is not just based on the sounds and words. English is actually a morphophonemic language. That means our spelling patterns are based on both sounds and meaning. So, to understand English spelling, kids should be taught some morphology. In other words, they need to understand the meaningful parts of words and how English words are put together — roots words and prefixes and suffixes.

And some etymology is really helpful too. That is, to understand English spelling, it helps to know something about the history of our language. English has a reputation for being a wacky language that's full of exceptions, but it's not. It's a melting pot language that has complex spelling patterns because English has roots in Greek and Latin and French and other languages.

Now, written English is perhaps the most difficult alphabetic language to learn. It takes two to three years for a typically developing reader to master the basics of written English. In contrast, it takes only a few months for kids in Italy, for example, to learn how to decode

Italian, because Italian spelling is almost perfectly regular. Italian is spelled the way it sounds.

Now, one of the reasons that we have fought so much about reading instruction in the English speaking world — and it's argued about all over the English speaking world — is that there's a lot to teaching children written English. So there's a lot to argue about in terms of how to teach it.

So, back to the Scarborough's rope model and the elements of the word recognition strand. So, there's phonological awareness — that's understanding the sounds and words. And there's decoding — understanding how letters represent those sounds. And then there's something called sight recognition.

So, this is where things get really interesting, in my opinion. It turns out, when you are a skilled reader, you don't actually have to decode most of the words you encounter. When you see a word that's familiar to you, you know the word immediately on sight; you don't have to sound it out. Scientists refer to the words that are instantly recognizable to you as "sight words."

Now, this term, "sight words," can be really confusing because teachers and reading scientists usually mean different things when they use that term. In schools, sight words are typically words that kids are supposed to memorize. They may be words with unusual spellings that are difficult to decode. Or they may be words that kids are going to come across a lot in their reading — in other words, high-frequency words.

So, children often come home with these words on flashcards, and they're supposed to memorize them. But what the scientific research shows is that having kids memorize lots of words is not the best path to good word-recognition skills. And it turns out that weak word-recognition skills are the most common and most debilitating source of reading problems. So, struggling readers may also have language comprehension issues.

But when children do not get off to a good start with decoding, it has an impact on the continued development of their language comprehension. And eventually, kids may be weak on the language comprehension side because they're weak on the word-recognition side. This problem has been described as the Matthew effect. It's a biblical reference, and Katharine referred to this also. Basically, when it comes to reading, the rich get richer and the poor get poorer. Here's how it works.

If you come into school with lots of language comprehension ability but you struggle with learning how to decode words, your ability to continue to develop language comprehension may be impeded. Because one of the best ways to increase your knowledge and your vocabulary and your reasoning and your understanding of the structure of language is through reading. In contrast, if you come into school weak on the language comprehension side but you are taught how to decode, you have just been given the gift that is your best bet for gaining knowledge and vocabulary because you can read the words.

This is why equity in education begins with good phonics instruction in the early grades. It is one of the most important things that teachers can do to try to even the playing field between kids who come from homes that give them an edge on the language comprehension side — and kids who come from homes that may not be as rich and resourced when it comes to vocabulary development and access to knowledge. Good phonics instruction is where educational equity begins. It doesn't end there, but it's the foundation.

Now the good news is that most schools seem to be doing some kind of phonics instruction these days. Publishers and authors of curriculum materials know that if their stuff is going to have a chance of being considered research based, there has to be some phonics. And if they didn't know that or believe it until recently, they're quickly adding a phonics component now. So, that means we must be on the right path — that reading instruction is finally starting to line up with the science.

Unfortunately, I don't think that's the case, because while more and more schools are adding a 20- or 30-minute phonics block, what I also see in schools are things like this. So, these are reading strategies that you will find in schools all over the country. I've seen them everywhere. They're on bookmarks that are sent home with kids; they're on posters in classrooms; they're on Pinterest; they're on Teachers Pay Teachers. You can google them and find a whole bunch.

I've also seen things like this. These are all strategies for kids to use when they're reading and they come to a word they don't know. And these strategies seem sensible enough. You get to a word you don't know — what can you do? You can look at the picture to try to figure out what the word might be. You don't want to completely guess, so you can look at the first letter — you can look at how the word begins. This will narrow your choices. You can then check to see if you think you were right. Reread the sentence using the word; see if the sentence makes sense. And if you're stuck, you can just skip the word and move on. Hopefully, you get the gist of the sentence anyway.

So, what's the theory of how reading works that these strategies are based on? What's the idea about how kids learn to read words? These strategies are rooted in a theory about reading that came to be known as "three cueing." The idea is that readers use three different kinds of information or cues to identify words as they're reading. So, this idea was originally proposed by an education professor named Ken Goodman, back in 1967 at the American Educational Research Association conference in New York City. He laid out the original theory in a paper that he called "Reading: A Psycholinguistic Guessing Game."

In the paper, Goodman rejected the idea that reading is a precise process that involves exact or detailed perception of letters or words. Instead, he argued that as people read, they make predictions about the words on the page using these three cues. So, graphic cues: what the letters tell you about what the word might be. Syntactic cues: what kind of word could it be — for example, a verb or a noun. And semantic cues: what would make sense here, based on the context.

In his paper, Goodman concluded this skill in reading involves not greater precision but more accurate first guesses based on better sampling techniques, greater control over language structure, broadened experiences, and increased conceptual development. As the child develops reading skill and speed, he uses increasingly fewer graphic cues. So, this was kind of a new twist on prevailing ideas about how reading works, and it went on to become the theoretical basis of the whole language approach to teaching reading.

For the couple of centuries previous to the introduction of whole language, the debate about how reading works and how to teach it had focused on one of two big ideas. So, one idea is that reading is a visual memory process. The teaching method associated with this idea is the whole-word method, which is a little bit different than whole language. So, the basic idea of whole word is that if you see words enough and you associate them with their meaning, you eventually store those words in your memory as visual images — like little pictures. This is the basic idea behind long lists of sight words that kids are supposed to memorize.

The other idea is that reading requires knowledge of the relationships between sounds and letters and that the way to identify a word is to sound it out. That is basically the phonics approach. Reading instruction was a series of pendulum swings between whole word and phonics until this new twist of an idea came along that said, “People don’t read by sounding out words, and they don’t read by memorizing words as wholes either. Instead, they use this cueing system.” That is, they use context to predict what the words will be, and they use the letters to check their predictions.

So, many teachers have never heard of three cueing, but they know this theory of word reading as MSV. So, M is for using meaning to figure out what a word is. S is for using the sentence structure or syntax. And V is for using the visual information — the letters in the word. You will find this MSV idea in lots of curriculum materials that define themselves as balanced literacy. You can trace the roots of this MSV idea back to the work of a woman named Marie Clay.

Marie Clay was a developmental psychologist in New Zealand who came up with ideas about reading that were similar to Ken Goodman’s ideas at about the same time. They didn’t develop these ideas together; they didn’t agree on everything. But they did meet and travel in similar literacy circles back in the ’80s and ’90s. Clay built her ideas into a reading intervention program for struggling first graders called Reading Recovery. Reading Recovery was implemented across New Zealand in the 1980s and went on to become one of the most widely used reading intervention programs in the world.

Clay’s theories were popularized as part of core reading instruction in the United States by Irene Fountas and Gay Su Pinnell. They’re education professors who learned from Clay in the 1980s. They were Reading Recovery teachers. Fountas and Pinnell are well-known today for an approach to teaching reading known as “guided reading” and also for a very widely used reading assessment system that uses what are known as “leveled books” — the Benchmark Assessment System. Fountas and Pinnell also sell a reading intervention program called Leveled Literacy Intervention, or LLI.

Education Week did a survey about a year ago, and they found that 43 percent of teachers in this country reported using LLI. You will also find the cueing theory of reading in the Units of Study materials written by Lucy Calkins at Teachers College, Columbia. Units of Study is more commonly known as readers and writers workshop. And according to the Ed Week survey, 16 percent of teachers report using these materials to teach reading. You will find some phonics in the Calkins and Fountas and Pinnell approaches. In fact, Lucy Calkins recently created a Unit of Study for teaching phonics program, and Fountas and Pinnell have books and materials to teach phonics too.

But phonics is often presented as one way to know what a word is. It’s one strategy; it’s that third cue in the cueing system. What schools need to know is that when they buy materials from Calkins and Fountas and Pinnell, they are buying an approach to teaching reading that is rooted in a particular theory about how reading works. And it’s this idea — that skilled readers use meaning and context to identify words as they read.

So what you’re likely to find in a lot of American classrooms today is 20 to 30 minutes of a phonics program and then readers workshop and guided reading, where kids are taught that when they come to a word they don’t know, they can sound it out and use what they’ve learned in their phonics lessons. But they can also use the cueing strategies. They can think about a word that makes sense, they can look at the first letter of the word, or they can just take a page from Skippy the Frog and they can skip the word altogether.

Now, what's wrong with this? Like, why not teach kids lots of strategies to help them when they come to a word they don't know? Why not teach cueing?

It comes back to the scientific research on reading. So, what's going on in these little boys' brains as they're learning how to read? And for a long time, nobody knew the answer. And that is one of the reasons we fought so much about how to teach reading. But as I said, over the past half century or so, scientists and labs and classrooms all over the world have done this mountain of studies about how skilled reading works. And here is a key thing that they figured out.

Skilled readers do not use cues and context to read words. In fact, what scientists have discovered is that this is how poor readers read. Poor readers often have a hard time with word identification. Too many of the words they come across are a little mysteries — series of letters that they don't know and they can't quite figure out. So, they use a bunch of other strategies to try to understand what the words say. They memorize as many words as they can. When they come across a word they don't know, they look at the first few letters and try to think of a word that makes sense. In other words, they use context to try to come up with a word that fits. And when they can't figure out what a word is using context clues, they skip the word. Often, they can get the gist of what they're reading this way.

But using context — guessing and skipping words — this is not what reading is like when you are a skilled reader. What cognitive scientists have figured out is that a key difference between skilled readers and unskilled readers is that skilled readers can immediately and accurately recognize words. They don't need to guess or predict or use context. Skilled readers know tens of thousands of words instantly on sight.

In fact, if you are a skilled reader, your brain has gotten so good at reading words, that you process the word "book" faster than you process a picture of a book. So, how did your brain get so good at doing that? It happens through a process called orthographic mapping. Sounds kind of complex and weedy, but I think educators — I think everyone has to understand some basic things about orthographic mapping to understand why phonics is so important and to understand why teaching cueing is not a good idea.

So, here's a quick and really simplified explanation of what orthographic mapping is. Orthographic mapping is the process that we use to store printed words in our long-term memory. The way you do that is by attending closely to how a written word is spelled and then linking that sequence of letters to the word's pronunciation and its meaning. So, for a very simple example, a child knows the meaning and pronunciation of the word "cat." The word "cat" gets orthographically mapped to her memory when she links the sounds c-at to the written word c-a-t. So, this requires an awareness of the speech sounds and words; that's phonemic awareness. It also requires an understanding of how those words are represented by letters; that's phonics.

So, you need phonemic awareness and phonics to orthographically map words into your long-term memory. And once a word has been orthographically mapped to your memory, you know it instantly on sight. In fact, you can't suppress your ability to read that word. You don't have to sound out the word when you see it. You know it instantly because, at some point, you successfully sounded it out. And you linked the spelling of the word in your mind with the meaning and the pronunciation of the word.

So, by about second grade, a typically developing reader who's acquired good phonics skills needs just a few exposures to a word through its pronunciation, its spelling, and its meaning, and — bam — the word is mapped to her memory.

And the more words a reader maps to her memory this way, the more she can focus on the meaning of what she's reading. She's not using her brainpower to identify words; she's using her brainpower to understand what she's reading. And this is the goal: for readers to comprehend what they're reading. But when teachers use the cueing system I told you about — when they teach all those word reading strategies, they're actually impeding the orthographic mapping process. So, I'm going to explain this with a story.

These are first graders in Oakland, California. A literacy coach who worked with these girls came to see that teaching the cueing system — that MSV thing: meaning, structure, visual — was actually making it harder for her students to learn how to read. The coach's name is Margaret Goldberg, and you're going to meet her in a few minutes. She's on the panel. Margaret was hired by the Oakland schools in 2015 to teach level literacy intervention. LLI is the reading intervention program I mentioned that was developed by Irene Fountas and Gay Su Pinnell, now known as Fountas and Pinnell, or FNP.

LLI does include some phonics instruction. It also teaches kids that, when they come to word they don't know, they have lots of strategies for figuring out the word. They can sound it out, but they can also use pictures and context and other cues to try to come up with a good guess. So, Margaret Goldberg started teaching LLI, and around the same time, she found a bunch of unopened materials sitting on a shelf in her school. And it was a systematic phonics and phonemic awareness program that teaches kids, when they come to a word they don't know, they sound it out — doesn't teach any cueing.

And in this phonics and phonemic awareness program, beginning readers practice reading in decodable books that contain words with spelling patterns they've been taught, so they don't have to guess at words. Now, Margaret started teaching some of her groups LLI with cueing, and some of her groups she taught systematic phonics and phonemic awareness with no cueing. And she started to notice differences between the two groups of children. Not just in how well they were reading, but in the way they approached their reading. She and a colleague recorded first graders talking about what makes them good readers.

So, I'm going to play this video for you. So, I'm going to turn the sound up on my computer. Mia is in the white shirt, and she was learning phonics and no cueing. And Jebri is in the pink jacket; she was taught the cueing system.

[inaudible]

So, Margaret was seeing this over and over again in her two groups of students. So, one group was taking away from the reading instruction that reading is about looking closely at words and sounding them out. And another group of children was learning that, when you come to a word you don't know, you don't have to look at it carefully and try to connect the spelling with the pronunciation and the meaning. Instead, you can look away from the word; you can look at the pictures; you can look at the other words in the sentence. Basically, you search around for clues to help you identify the word.

Now remember, orthographic mapping requires you to look carefully at words so your brain links the spelling with the sounds and the meaning. But cueing teaches kids to look away from words. Here's what Margaret said to me about the kids in her LLI groups. She said, "I

did lasting damage to these kids. It was so hard to ever get them to stop looking at a picture to guess what a word would be. It was so hard to ever get them to slow down and sound a word out because they had had this experience of knowing that you predict what you read before you read it."

As Margaret was noticing the differences between her two groups of students, she was discovering the scientific research on reading. It was not stuff she knew or had been taught. And she was shocked by what she was learning and how different it was from the curriculum materials — what those materials were telling her about how reading works. But what Margaret was learning from the curriculum materials about how reading works is what a lot of teachers are learning about how reading works.

Instructional approaches that include cueing are all over American classrooms. This, I think, is a big elephant in the room when it comes to reading instruction in the United States today. Schools and publishers are adding what I've come to think of as a phonics patch. They're checking the phonics box, but they're still teaching cueing. Why? Well, I think there's a lot of reasons, but a big reason is that schools are better at adding things than they are at taking things away.

And many teachers believe in cueing because, if they were taught anything about how reading works, they were likely taught the idea that readers use meaning, structure, and visual cues to identify words as they're reading. And cueing seems to work for some kids, because some kids, maybe even most kids in some schools, will learn to read no matter how they're taught. This is what the research is showing us; they will learn to read in spite of the instruction.

That's maybe 40 percent of kids, but half or maybe more — 60 percent of kids — they are not going to learn to read very well unless they are taught how their written language works. And they are kept away from cueing, which can really impede the orthographic mapping process — which is absolutely central to becoming a reader who can quickly look at text and understand what it means.

So, I am going to end it there. I know the other panelists have a lot of other angles on all of this to bring into this conversation. This is my contact information. And what I do as a reporter is I write articles and I create podcast episodes. And I've done this now for about three years — about reading — and all of the stuff that we have done is collected on one page — right there at the bottom. So, you can find all the podcast episodes and articles there. So I'm going to stop sharing my screen and come back to you. Thank you.

Katharine B. Stevens: Emily, thank you so much. That was absolutely fascinating. I also want to mention that at the bottom of the event page, with the photos of the participants, the link to Emily's name is to the page that she just referenced. She has a number of phenomenal articles. And I'd say podcasts that are even better. These are some of the best podcasts I have ever seen. I can't recommend them more highly. And I've listened to a couple of them more than once, and I'm learning new things each time I hear them. I also want to put her comments back in perspective. Is my screen sharing? No one is talking. I can't hear anyone talking. Well, I'm not sure if my screen —

Emily Hanford: I am not seeing your screen, no.

Katharine B. Stevens: You're not seeing my screen. OK, hold on one second. I just want to reiterate — oops, I'm sorry. What I'm trying to get — I'll skip it. But the point I wanted to

make is on that slide that I showed previously — we're talking about 52 percent of black fourth graders are not demonstrating even a basic level of competency on the fourth-grade reading test. So, the outcome of what Emily has been talking about — that's a big — what she's been talking about is a very big part of how we're ending up in a really catastrophic situation, especially for children of color and low-income children.

So we're now going to hear from Dr. Carey Wright about her work as the state superintendent of education for the Mississippi schools. She's been doing extraordinary work in focusing on this issue that Emily's been talking about — to raise reading performance — early literacy in the Mississippi schools. Carey.

Carey M. Wright: Thank you, Katharine. Yes, thank you, and thank you for having me. Happy to share the work that we're doing. Excited about our progress that we're making and just give you some insight into how exactly that we did this. Next slide.

We've established a very firm vision and mission in the state of Mississippi around making sure that we are establishing a world-class educational system. We knew that we had a long way to go, and we knew we needed to have some key component parts of that because we want all of our children to be successful when they leave us. Whether they go to college or whether they go into the workforce or decide to go into the military, we needed them to have very strong foundational skills. Next slide.

Our State Board of Ed established very clear goals — six goals. And you will see the word "all" or "every" in that, and that means exactly what it is: We are looking at all children. Equity is a big issue in our state, and we want to make sure that we are having children that are progressing, children that are graduating college and career ready, that all little ones have access to high-quality early childhood instruction. All of our teachers and leaders are effective. We're using data to drive our decisions to improve outcomes — and also that our school districts are rated C or higher in our state. Next slide.

So, I kind of want to give you some context to start this. I came to Mississippi in November of 2013 and started doing a lot of data gathering to decide what it was that we needed to do. We knew we needed to totally reorganize our state department because we didn't have an early childhood — you know, office — we didn't have an office for literacy. And so there were a lot of things the department didn't have. So, that's the first thing that we did. We also knew our standards were horrible. They'd already been evaluated by two outside agencies, and I think that one of the phrases was "worst in the nation," and I think the other phrase used was "horrible."

So, we then adopted brand-new standards — the most rigorous standards our states have ever had. And then we had to then make sure that what we were doing was aligned to NAEP — our NAEP. We were the poster child for the honesty gap. So, we would put out that we had — 65 percent — 70 percent of our children that were proficient in reading. And the honesty gap said no — actually, when NAEP came out, we were looking at about 22 percent to 23 percent of our children that were proficient in reading.

So, we aligned a brand-new assessment to the rigor of NAEP, and we did that deliberately because we wanted to make sure a — it was aligned to our standards, but that it would be measuring the same kinds of things that NAEP was measuring. We also implemented a very strong accountability system — what gets measured gets done — and I believe that accountability drives behaviors that you want in schools. And so our accountability system I feel very strongly does exactly that.

We also need to improve our data. We wanted to make sure that it was transparent. We wanted to make sure that no matter what report was written, that it was accurate, and we would get the same results regardless of when those reports were written. And then we doubled down on teacher and leader professional development. That was a key part of our strategy. We thoroughly believe that we needed to provide far more professional development to our teachers and our leaders and that the department needed to drive that. Next slide.

So, we had two key pieces of legislation that were passed in 2013. And that gave us the impetus really — to really start doubling down on early literacy. The Early Learning Collaborative Act was the very first time that any public money had been put into pre-K. We started out with three million. We're now — this year — up to 7.8 million, but that was the first time that we'd really put a stake in the ground. So, we knew we were behind where a lot of other states were — who had been investing in early childhood far longer than we were.

And the second act that was passed was the Literacy-Based Promotion Act, and this really made reading instruction a primary focus throughout the state. We started out with 9.5 million, and I went back to the legislature, and I said, "If you want us to improve literacy" — because we were at the bottom; we were 50th in the nation when it came to literacy — "then we needed more money to do that." So they've increased that the very next year to 15 million, and they've kept that at 15 million every single year. Next slide.

So, let me tell you about the key components which I think are really important. We wanted to make sure that our overall learning collaboratives were placed in the most underserved areas of our state — because we used our data to place them. We took a look at our assessment data, and we knew that we needed to place early learning opportunities where children were not getting them. So, it gave money to local communities to establish these programs, and you had to have a lead partner, which was typically a public school. And then others that were going to collaborate, like the school districts as a whole, Head Start, childcare.

And we also established for the very first time our office of early childhood. So, we now — we're up and running. I think we had a total of three people at the time, but we had to start somewhere. And once again, we doubled down on professional development for all of our early learning collaboratives. And those people across the state that touch 3-year-olds and 4-year-olds were invited to attend our professional development for free. Next slide.

The Literacy-Based Promotion Act gave us the opportunity once again to think very seriously about what we were going to do around professional development. And we established a very firm belief system that we were very much in favor of the science of reading. We were hearing from our teachers that they weren't prepared coming in day one. I was hearing from principals and superintendents the same thing: to teach the foundational skills of reading. So, we put an RFP out so that we could make sure that, whatever vendor came in, they were going to teach our teachers the foundational skills of reading.

And so, our vendor that we're using provides the letters training, which is the language essentials for teachers of reading and spelling, and we double that with Phonics First. And so that — we require every kindergarten through third-grade teacher, general ed, and special ed to come to this training. And it was the first time we've done something like this. Part of it was online. You had to take the online part of it first; then you had to come for three days face to face. And then you had to take a test if you wanted the credit, and you had to pass with an 80 percent or higher. So we knew that that was going to be an essential part.

The next part of this was our literacy coaches. So, we had the money to buy the literacy coaches. So, what we could have done? We could have just distributed that money across the state. But we chose no — we're going to hire the coaches to make sure that they had a strong background in the science of reading and also about adult learning theory. And so, we then hired our coaches ourselves. And that took us a while, but we have some of the best coaches anywhere in the nation out in our lowest-performing schools.

We also adopted a K–3 monitoring and assessment system because the law had a provision that if children could not pass our third-grade assessment — by the end of third grade — they were going to be retained. So, we wanted to make sure that schools and districts were monitoring children at the beginning of the year, in the middle of the year, and the end of the year — to monitor their progress.

And it also required any school that had children that were struggling with reading — within the first 30 days of school, they had to notify parents. But it wasn't just "Carey is struggling in reading." It's: "Carey is struggling in reading, and this is specifically what we're going to do to improve her as a reader." And it also gave us the opportunity to establish our first Office of Elementary Education in Reading. Next slide.

Then we decided we needed something a little bit firmer around this. So, went back to the legislature and asked them to pass a law that requires that any elementary education candidate must pass a rigorous test of scientifically research-based reading instruction and intervention to ensure that they knew how to teach the science of reading. And we put out an RFP — I have a reading panel that's just absolutely amazing. And they looked at all of the people that came — gave us an offer, and we then decided to go with the Foundations of Reading Assessment. So, all teachers are now required to pass this test in order to receive their license. Next slide.

The other thing we did — we have a five-level system: five being advanced, one being the worst. And the law was only passed that children, in order to pass the third-grade assessment, had to pass above the lowest achievement level. Well, all they had to do then was pass at a two or higher. And so I went back in 2016, and I said, "Look, you've got to raise the level of expectation. If four is proficient, we need to raise the bar for teachers and students in order to make sure that we are moving toward proficiency."

So, we gave a three-year window. We told them in 2016 that in 2019 — that we were now raising the bar and students were having to score at a three or higher — not quite proficient, but certainly getting there. And also — we also had a good-cause exemption for children that could be promoted but were still below grade level.

So, part of what we also did for those children — we knew that children retained in third grade didn't just need another year at third grade; they needed something different. So, we provided professional development to our teachers. If you've had children that are retained, here's what you need to be doing — here are the data that you need to be looking at — here are the interventions that you needed to be using. Likewise, our fourth-grade teachers who were getting those children that were being promoted because of good-cause exemption but were still below grade level — we held PD for our fourth-grade teachers as well. Next slide.

So, as we were going through this — it was an expensive venture to provide the letters training, and we were starting to see our test results come up, so I had confidence. But I really wanted a research institution to come in and really validate that what we were doing — we were seeing in the classroom. So, we're a part of the Regional Education Lab Southeast,

and Florida State University is the research institution that's associated with the REL Southeast. So, I went to the director, and I said, "Would you do me a favor? Can you come in and validate that we're actually seeing what we're seeing?" And she said, "I'd love to."

So, they brought a whole team in, videotaped hundreds of teachers across the state, went back and analyzed those results. And she said, "Oh, you're going to love what we found. Not only were we seeing in the classroom what you want to see in the classroom around teachers teaching the science of reading — but teachers who are reporting that this professional development had improved their knowledge of how to teach reading. None of these teachers had really known how to do that." And those links that you see there — one to our news release but the other to the research paper if you want to follow up with that. Next slide.

So, what were our results? So, we're looking at our little ones, and you can see that the children that were in our early learning collaboratives met the kindergarten readiness score in 2019 — 77 percent of them. And this was a huge improvement from 2015. And they also showed higher rates of kindergarten readiness. When we first started administering our kindergarten readiness assessment, only one in three children were prepared for kindergarten. And so now, our collaboratives are showing you that well over 77 percent of them are already showing up kindergarten ready. Imagine, now, kindergarteners walking in ready — think of what these kindergarten teachers can do and then move them on. Next slide.

We also started disaggregating the data. I went back and changed the kindergarten enrollment form, and I asked parents, "Where were your children as 4-year-olds?" So, we wanted to be able to see who was doing a really good job of preparing kindergarten children for kindergarten and who was not. Because then I can deploy resources to those that were struggling to help them get better — at being able to not only teach children to read but an overall kindergarten readiness.

So, these were the fall 2019 average scores. And you can see that our public pre-K — the score that they're expected to come in as kindergarten ready is 530. So, you can see that they're coming in above that. Our private kindergarten coming in at 530. And you can see down at the very bottom — which didn't surprise you a lot — was family. Those are the kids who had just been kept at home. But when we first produced these results, I can tell you that it was a little alarming, because when we first started doing this, which was about three years ago, there was only a one-point difference between Head Start and children that have been kept at home.

So we knew that we needed to really work with our Head Start partners in their programming, because these were kids who were in Head Start all day long. So, we knew that there was more to do. And we also hired coaches — early childhood coaches to go out across our state and really work with those programs that were struggling the most. Next slide.

So, our third grade — so, everybody was nervous when 2019 hit, and the bar had been raised. You can see, in 2015 to 2018, we had come up to 93.2 percent pass rates, but that was just at a level two. And everybody was so sure that it was going to be horrible when we raised the bar, but it wasn't. Almost 86 percent of our kids passed on that third-grade reading assessment. That told me that our teachers were doing exactly what they needed to be doing in order to be able to teach these children how to read. So, now the momentum was gathering. Next slide.

These are our statewide assessments. And so, you can see from when we changed our assessment to where we are in — these are levels four and five. So, these are proficient and advanced in ELA and mathematics. And obviously, you can see steady gains each year — obviously not where we ultimately want to be, but the direction is heading in the direction that we want. Next slide.

We also took a look at districts — and to say: How many districts had more than 45 percent of their students scoring proficient or advanced? And you can see that, in ELA from 2016 to 2019, we more than tripled the number of districts. And in mathematics, we more than quadrupled the number of districts that were showing gains in proficiency or advancement. Next slide.

Then along came NAEP — and so, I cannot tell you how so excited we were about our NAEP scores. This was from 2009; this is a 10-year span, and you can see we have made significant growth in our NAEP scores as well. Once again, not surprising that it's our fourth grade who were scoring as high, because they were the ones that were really here at the very beginning, when we started all this reform.

I'm going to be anxious to see when our fourth graders reach eighth grade now that we've been able to do this, because we've also extended our letters training at teachers' request into middle school. And even our high school teachers are wanting access to our letters training, because they've got kids that do not know how to read and they just don't know how to diagnose that. Once again, not where we want to be, but so proud of where we've come. Next slide.

So in 2019, results came out: Mississippi was number one in the nation for our gains in fourth-grade reading and for our gains in fourth-grade math. We were number three in the nation for our gains in eighth-grade math and number four in the nation for our gains in eighth-grade reading. And if you look across the 10-year period, we were number two in the nation for our gains in eighth-grade math, fourth-grade math, and fourth-grade reading. Next slide.

We also took a look at our districts — so how is that impacting your grades? We have an A through F system. So between 2016 and 2019 — remember I told you that we want all districts at C or higher. We went from 62 districts being rated A, B, or C to 70 percent of our districts. And the next slide shows you schools. We went from 62 percent of our schools at C or higher to 74 percent of our schools at C or higher. So, we're trying to look at this from as many different angles as we possibly can. Next slide.

Our next steps are our educator prep programs because we know that there is a lot of revision that is needed there, particularly in our Early Literacy I and Early Literacy II classes. We invited all of our professors at all of our universities that teach the EL I and II to come to our letters training. And many of them did because we needed them to know what they needed to be teaching our teachers. Because it was unfortunate that they were coming out of our universities and then we were having to train them — you know — as a state to teach them the science of reading, when that's something they really should have learned under educator prep.

We also were looking at redesigning the 15-hour sequence for reading in our EPPs. We also were thinking about how do we provide additional clinical experiences. So, even our licensure program is considering making the first year of teaching not one where you automatically get your license, but you are under the counsel of an experienced and highly

qualified teacher for that year prior to that. And we also need them to look very carefully at embedding culturally and linguistically responsive pedagogy, because that is something that we see as missing in our EPPs as well. Next slide.

So I thank you. Thank you, Katharine, for inviting me, and I look forward to the conversation.

Katharine B. Stevens: Carey, thank you so much. That was fascinating. The work you're doing is where the rubber hits the road. And I also really appreciate your highlighting a piece of this picture that I think is absolutely core and was not talked about enough, and that is the role of the education schools. And I think Margaret is going to talk about the challenges of not only teaching teachers how to read but persuading them to give up what they've learned about how to read from ed schools.

We kind of have a — realizing several events wrapped up into one — each one of our panelists if we could — be having a stand-alone event with. And I want to make sure that we have enough time to hear from the other participants. So, I am going to extend this event by 15 minutes to 11:45. To any of our audience that has to leave, I apologize. We will be posting the event video. You'll get an email with the event video tomorrow. And so if you're not able to stay past 11:30, you can watch the end of it when you get the video. I just don't want to miss the opportunity to hear from the other three amazing people on the panel.

So with that, I'm going to turn the screen over to Munro Richardson, who is executive director of Read Charlotte — who's going to talk about their work focused on the continuum from birth up through third grade. Munro.

Munro Richardson: Thank you, Katharine. Good morning, and greetings from Charlotte, North Carolina. It's a pleasure to be with all of you here this morning. I'm Munro Richardson, the executive director of Read Charlotte. I have the pleasure of running a countywide literacy initiative that's here in Charlotte. And our work is to coordinate, integrate, and align people, resources, research, and data to double early literacy outcomes over a 10-year period. Like Emily Hanford, I also read lots of research and lots of academic papers and peer-reviewed journal articles. And we've used this research and data to really help guide our work focused on birth through third grade.

A couple of years ago, I saw an analysis of a cohort of children here in Charlotte, North Carolina, who started school in kindergarten and were followed through third grade — and found that their initial language and early preliteracy skills at kindergarten entry actually found a very strong correlation with their third-grade outcomes. In fact, it was a 53 percent correlation from when they started to how they finished up at third grade — this actually grew to 76 percent by the end of first grade. So, the early language and preliteracy skills that Katharine talked about that children develop before they enter school and those early initial foundational literacy skills that Emily talked about are absolutely critical to get kids on the right path.

I find that statistic that Katharine shared with us — about 85 percent of children involved in the juvenile justice system as being functionally illiterate — as being absolutely shocking. And the work to give those kids a fair chance, not just in school but also in life, starts very, very early. Here in Read Charlotte, there are really three big ideas that animate our work that really connects families, schools, and community, with the goal of giving every child a fair chance to be strong readers by the end of third grade.

The first big idea is what we call the "reading success pathway." So, if you think about all the skills and competencies that Emily talked about — Scarborough's rope — we've kind of organized and socialized them, with our partners here in Charlotte, to imagine a pathway. And children need to follow along this pathway to be proficient readers by the end of third grade. And our job as educators, parents, adults in the lives of children — nonprofit organizations — is to know where children are at on that pathway and help get them back on the pathway when they fall off.

And so, at the very beginning, it begins with language, both expressive language — their ability to communicate — but also receptive language — their ability to understand. And these are just fundamental skills that children develop, starting at birth — some would argue prenatal — but that all together give them the opportunity to develop those later preliteracy and literacy skills that are really important.

So, a lot of the work that we've done in Charlotte has been to focus on families in the earliest ages to help give them the knowledge, the resources, and confidence to support their children's language and literacy development. And we've been guided by the findings from both the National Reading Panel from 2000 but also the National Early Literacy Panel from 2009. And have worked to — as we call — stack and align a set of evidence-based or evidence-informed strategies that are intended to help children on one or more of those reading success pathway skills.

The second big idea that motivates us here in Charlotte is something called the "home literacy model." And this is research by Monique Sénéchal at Carleton University, first published in 2002 — it's been validated over a dozen times — that really shows what parents are able to do at home to help get their children ready to learn to read when they start school — and then also continues to help support them to third-grade reading proficiency. The two big drivers of the home literacy model are shared book reading and teaching the basics: reading and writing.

And there's actually an interaction effect between those two types of activities that help children develop their phonemic awareness skills. But also lays the foundation for being able to develop their letter knowledge skills — understanding letter sounds — all of those precursors for really good phonics skills that Emily talked about.

So, the work that we've done in Charlotte, guided by the home literacy model, has really helped us to pick and choose from evidence-based or evidence-informed strategies that are intended to help families perhaps — you know, equip them with the right skills and knowledge and resources to help their children in those two critical areas.

Here in Charlotte, we bet big on families; we have a strong belief in families; we take a strengths-based approach to families. And although we know that there are often barriers, we ask ourselves, "How is it that we can help families do the things that research and evidence tells us helps their children to be successful? And then how do we work together with partners to remove barriers to get out of the way so that families are able to be successful?"

The third big model that really informs our work is something called the "four types of reading instruction." And this is research by an education researcher named Carol Connor. And it really builds upon the research that Emily did a fantastic job of describing — about how children learn to read. What Dr. Connor found — and her colleagues — was that there are actually four types of reading instruction. There's instruction that focuses on code focus skills — so phonics, like Emily mentioned — but also spelling and fluency.

And then there's other instruction that focus on meaning focus skills. So, things like vocabulary, writing, and comprehension. And that the instruction is either directed by the teachers who's leading instruction or it's directed by the children, whether it's an independent work or group work. And that depending on the combination of a child's vocabulary, basic reading, and comprehension skills, kids need more or less of those four types of reading instruction.

And so when Emily talked about children who might have stronger vocabulary or language skills or stronger decoding skills — what we know from this research is that we can better understand what types of instruction kids need to move to grade-level reading at the end of the year and, ultimately, third-grade reading proficiency. And we can try to provide the right supports, whether it's at home, in the classroom, or in out-of-school settings. And so, our work is really being guided by these three really big research and evidence and form models, to help us understand what strategies to run towards — and also what strategies we might de-emphasize based on what these models tell us.

What I can tell you is that here in Charlotte, we've seen an extraordinary ability to bring people together. There's a great interest around how do we support children's language and literacy development. It is important to think across the continuum; it does begin at birth — it's not just classrooms — but it does include both the earliest years. It includes out-of-school programs; it includes families and other adults in the lives of children. And of course, really importantly, it includes the classroom. And with that, I'm going to turn it over to our next speaker.

Katharine B. Stevens: Munro, thank you so much. I'm eager to learn more about several of the things you were talking about, and I can imagine that our audience is too. On the event page we'll be posting related resources for people who want to follow up on any of the speakers — what any of the speakers have talked about. So we're now going to hear from Margaret Goldberg, who is the cofounder of the Right to Read Project. And currently, I think, a first-grade teacher in the San Francisco Bay Area. Margaret.

Margaret Goldberg: Thank you. So yes, I teach first grade. In fact, that's what I'm about to go do as soon as we're done with this panel. But I firmly believe that every child should be taught how to read in school and that families and society should be able to trust that that's going to happen in our schools. One of the things that's happened is that I've realized, even though I'm painfully shy — but it's helpful for me to open up my own experience — to try to help other people understand why we're in the problem that we're in. So that we can work on solving that problem strategically and with compassion and with respect for teachers who are in a very similar position to where I was.

I came to teaching knowing that I wanted to be a teacher. I knew that from the time I was really little. And I was determined to be as well equipped to be able to do that job as possible. I went to a two-year credentialing program. I got a master's from UC Berkeley. I was committed to trying to be the best teacher from the onset of my career. And what happened in my training program is that we spent a lot of time working on things like the social-emotional supports that students need — talked a lot about child development. We explored our own implicit bias. We worked on integrating the arts into different subject areas. We did a lot of work — all of those things are meaningful things — but they were not properly equipping us to know how to teach reading.

So, I ended up going into a high-performing low-income school as a fourth-grade teacher. And I had the understanding that reading instruction was supposed to be readers and writers

workshop. My only model for teaching reading to students was guided reading. And one of the things that I think is so interesting is that I — like many teachers — I had the illusion of success. I was working in a high-performing school. I was told by my colleagues and by my student data that I was doing well. And it wasn't until I took on a new challenge of going to work in one of Oakland Unified's lowest-performing schools that I realized how unequipped for the job of teaching reading I really was.

So, I went to a school in Oakland that had between 2 percent and 3 percent of students scoring proficiently on state tests. And my job was to work as a literacy coach and then also as a reading interventionist. One of the things that happened for me was that I quickly realized that what I thought I was going to do, which was teach teachers to teach the way I had been teaching, was not going to cut it. Because it doesn't work, when you're counting on kids being able to read independently for extended periods of time, if they are beginning or struggling readers.

And so quickly, I had to change my focus so that I was focused on, well — how do we teach children how to read? And I had two programs. Emily described both of them succinctly. One was a program that was provided by my district — a balanced literacy program — which taught me that readers are supposed to cue based on meanings, syntax, and visuals. I had another program that was a more code-focused approach, and I was teaching those simultaneously. And pretty quickly, I realized one was working, and the other one wasn't.

What was interesting is that my colleagues realized that too. So, the primary grade teachers I was working with came to me, and they were saying, "Those kids that you're using this one program with, they're the only ones who are learning how to read. And they're learning at a rate that's much faster than anything we've ever seen here before." And so we started to work collaboratively — together — to try to understand (1) how to teach the program well and (2) how to figure out why it was working. We didn't want to just follow a script without thought; we wanted to make sure we understood what we were doing and why.

And what was interesting is — as we started diving into this work, we were seeing some gains in our student growth we were really excited about. I happened to be visited by the director of a foundation who happened to have a couple of millions of dollars that she was interested in using to set up a grant-funded project. And so, one of the things that we worked on was coming up with a plan so that there would be a literacy coach/interventionists doing similar work to what I was doing at each one of 10 low-performing schools in Oakland.

What we were working on — we called "a community of practice." So, we focused on teaching principles — what teachers of reading need. We helped principals know what to look for in instruction and why. We helped literacy coaches understand how children learn how to read and what instruction is necessary — and what effective intervention would look like. And we were working directly with teachers, helping them to understand what they needed to teach, what they needed to notice, what data they needed to have on hand, and how to understand the data that they were collecting.

So, we had a model that we framed as "learn it": We were all learning new things. "Expect it": so raising our expectations — figuring out ways to support it — we were working in hard-to-work schools. And figuring out what kind of monitoring was necessary so there was a level of accountability. And what ended up happening for us is in this work — we found ourselves trying to uproot the three cueing system that Emily talked about, which is at the core of balanced literacy. So, we started to realize that we were doing a whole lot of learning, and we had to do a whole lot of unlearning as well.

And so what ended up happening for us was we were expanding our program. It grew to 15 schools that we were supporting, and now it's held at the district-office level. And in doing this work, I started to realize we were creating what we call the "coalition of the willing." So, it was public school teachers but also our charter school colleagues and researchers and parents and advocates. And we were all working together — putting together the pieces that everyone needed in order to do this learning and the unlearning together.

So, that ended up forming the basis of our Right to Read Project. And that's an alliance of teachers and parents and activists and researchers who are all working to translate the research and get it to the people who need it so that they're able to use it to teach all children how to read. And that's been the focus of my work for the past couple of years.

Katharine B. Stevens: Margaret, we've gotten a question that I'm thinking that you could address, which is: Where is the problem arising in teachers not understanding how to teach reading? And you've referred to that very briefly in terms of your own at-school experience, and maybe Emily can comment on this afterwards. And Carey Wright also referred to this.

My understanding has been that education schools are systematically teaching a method that does not work and that very few education schools are teaching the method that you found does work. And that when you're a literacy coach, you're actually having to kind of un-teach teachers before you can teach them. Could you just say a couple of quick words about that?

Margaret Goldberg: Well, everything that you said is absolutely right. I think what I would add on to that is that I've done some really interesting data collection with the teachers that I support. And what I've asked them to do is to explain their own experience of learning how to read. And so, I asked them to tell me, "Did you learn to read before you came to school? Did you learn to read relatively effortlessly? Did it require systematic explicit instruction? Did it take a lot of instruction for you to learn how to read?"

And what I found is that consistently more than 80 percent of our teaching profession that I've surveyed — so this is all of our Teach for America core members in the past year — it's also teachers I've worked with across the nation and professional development — we all learned to read relatively easily. We came into teaching because school was a positive experience for us. We were successful in reading. We want to replicate that for our students.

So, one of the things that I've come to realize is that we have what is called a "learner's bias." We believe that if something was good enough for us — just 20 minutes of phonics instruction and a lot of time spent with really good books — that should be good enough for our students. And the fact of the matter is, teachers are not a representative population of all of our children across America, and we need to do for them better than what was done for us.

Katharine B. Stevens: Before I turn the screen over to Ralph, Emily, could you just comment very quickly on your observation about how ed schools are teaching reading? I think that's just such an important piece of the picture. Carey Wright had talked about her work in Mississippi on exactly that. What are your thoughts?

Emily Hanford: Well, I mean, I think, you know — there's obviously a lot of variation. I think the theme that I have heard a lot from teachers I've interviewed is that they just really weren't taught much of anything about how to teach reading. And Margaret referred to that too. They're taught about a lot of other things, and it's not that those things aren't important. But reading was kind of, like, left off the table — and how you actually teach it. And I think Margaret makes a very important point: that for many of them, probably a lot of what goes

on in balance literacy — it's sort of good enough for a substantial portion of people. And those people, I think, are overrepresented among the teaching profession.

I'll just add one other thing. I don't think it's just that teachers need to be taught about the science of reading. I think teachers need to be taught about the structure of the English language. Because I think the really important thing here is that many teachers just themselves don't know enough about how English is spelled and, like, the way the English language works. And here's the thing: You can be a very good reader and writer and not understand that stuff. It comes to be very implicit, and you can't necessarily describe how it works. So, the level of knowledge that you need to be able to teach something well is very different than what it is to be an expert at it yourself. And we know that is true in teaching overall.

But I think the level of knowledge that teachers need to have of written English to be able to teach it well to 5-, 6-, and 7-year-olds is really high. And most human beings don't have that level of language. And many of these teachers were themselves taught in, sort of, whole-language balanced literacy classrooms where they really didn't get very much of this either. So that's a big part of the lift here: not just the science of reading but really teaching teachers about the English language.

Katharine B. Stevens: Thank you very much. So I'm now going to turn the screen over to Ralph Smith. Ralph.

Ralph Smith: Thank you so much, Katharine. I appreciate just having the opportunity to hear from my colleagues on the panel. The Campaign for Grade-Level Reading — we have the opportunity to listen to and learn from opinion leaders, public officials, and over 300 communities across the country. I get a chance to learn from Dr. Wright all the time. And my colleague Munro Richardson has made Charlotte one of the learning laboratories for the campaign. And everybody on this panel — I think we all have something to contribute.

But coming from the standpoint of the campaign, here's what I'd like to offer to today's conversation. There's a powerful case for making an effort to close the gap between what the science tells us about teaching reading and the current state of practice in teaching reading. And we know that we're going to need to focus on preservice teacher preparation and on in-service teacher development. That's a big agenda, and we've got good reason to believe that if we focus on that we can make a significant difference.

However, at the start of the campaign, we asked groups of teachers around the country: "If we did everything on the education reform agenda, would that be enough to move the numbers for children from economically challenged families and in disinvested neighborhoods and rural communities?" And they were uniform in saying no — that quality teaching is essential but not sufficient. That it would be important to acknowledge that children and families needed services and supports that would allow them to succeed in schools. That it was important that we do more to get children ready for school. That we make sure that we dealt with the health and other challenges that get children from attending school. And that we figured out how to do something about the "summer slide." And that became the work of the campaign, responding to the challenge we heard from teachers.

And as we've developed the campaign, we've indulged a bias to action and a tilt towards solutions. And as we think about the action and solution paradigm, we've got to admit that the challenge of closing the gap between the science and the practice of teaching is significantly more complicated today in the post-COVID era than it was before. And we've

got to acknowledge that the magnitude of the learning loss that is still being experienced by children from economically challenged families and communities will make that task significantly more complicated.

And it'll be significantly more complicated, not just because of the learning loss itself but because what we now can see is that schools and school systems are major service providers. And if we all remember — the weeks immediately following the closure of school — the number one problem for many school districts was not continuity of learning; it was continuity of feeding. That we depend on schools and school systems to provide food and a range of services to school-aged children, and when schools close, that service provision takes precedent over everything else, including learning.

What we've learned from what happened in the economy is that, when schools close, we recognize that schools are really the childcare system. And we hope it's a developmentally appropriate and safe custodial system for school-aged children. And in many respects, the conversation today about reopening schools safely really has a lot more to do with reopening the economy than continuity of education.

We are still in the relief mode when it comes to learning-loss recovery. And what we know about most disasters is the recovery period, which follows the rescue and relief — recovery takes a decade. And as we think about where we are now, you will find a number of us pushing really hard to remind people that we cannot afford to take a decade to recover the learning loss the kids are experiencing today. We've got to do it now. We've got to make sure that kids are connected to the internet, that they've got the tutorial support, and that parents have the information and tools that they need to succeed with children.

So, there's a significantly more complicated context within which this conversation occurs now, and we've got to figure out — all of us — how we engage in parallel play, how we continue to push for quality teaching that reflects the best of what we know about the science and how we push for learning-loss recovery. Because without a concerted effort to engage in helping a generation of kids get back on track, we're essentially going to allow compromised futures for kids who, without us and without schools, are in serious trouble.

And what we try to do is to make sure that these two conversations get linked and that we bring our collective energy, effort, and everything we know to making sure that we deal with learning loss, even as we attend the closing the gap between science and teaching reading. So, that's my contribution to this particular conversation, Katharine, and I'm so glad you pulled this panel together.

Katharine B. Stevens: Thank you so much, Ralph. You're brilliant and incisive as always. Sammy, can we have everybody join the screen? Great. We have just a little over 10 minutes left. I've gotten a few questions, which I'm going to integrate with some of my own.

To start with, Munro, I'm wondering if you could follow up on what Ralph was just talking about. And there were two things I was thinking of in particular. You referred briefly to what you've described as a strength-based approach to working with families. And I'd like you to say a couple more words about what you mean by that. That's obviously become an extremely important piece of the picture, given the COVID pandemic.

And then second, I know you've recently written a piece on your concern, which you're describing as, I believe — is a "K-shaped" recovery. So, I'm wondering if you could just talk

briefly about those two things and then maybe mention to people where they could get more information if they'd like to learn more about your work in those areas.

Munro Richardson: Sure. So, first of all, I agree 100 percent with what Ralph talked about. You know, we've got to focus on how do we make the connections between, kind of, the reading loss part but also how do we provide and address, kind of, the child and family needs. And I think at a community level, our work has to be how are we connecting those two pieces together, which I think is absolutely important. One of the things we believe is critical is really enlisting families as partners in this work.

And one of the challenges I think we often face in this work, particularly when we're focusing on children from low-income households, is too often we focus on what parents don't have as opposed to what they do have. And, you know, there's a real difference between approaching parents from the position of "this is what you can do" versus really focusing on what you think they don't have. And the reality is that, you know, some of the most industrious parents on the planet are parents living in low-income households. I mean, you talk about somebody who knows how to stretch a buck. Talk about a mom or dad living in a household that's below the federal poverty level. They know how to do it; they're experts at it.

We found in our work — and we've done some work since the pandemic to really heighten the resources and supports we're giving families. But we had one partner this summer, which is the Charlotte affiliate of the Black Child Development Institute, that was, like, literally out in grocery stores and on curbs working with families. And one of the things that was very interesting that they found was very successful was, despite all the challenges that families are facing — housing insecurity, food insecurity, you name it — the notion that they could control one part of their life, which is helping their child with reading, was an incredibly compelling and effective frame.

And so, I think the mindsets that we bring to this work as professionals — practitioners is really important because we may be missing the — in fact, I know we're missing the opportunity to empower families. Where I think this is really important — and connecting with what Ralph said, again — is, you know — in economics and business we talk about this idea of a K-shaped recovery. Whether it's people or businesses, some have recovered faster and are doing better. So, think about the Amazons of the world — the Microsofts that are doing well. And then think about the mom-and-pop store that, you know, hasn't been able to open because of social distancing.

Well, the same thing is happening for people. If you're in the right white-collar profession, you've recovered and you're doing better. But if you're not — and you know, you were laid off — you're still struggling and possibly declining. Well, the concern is the same thing — is happening for literacy. And it's really, you know, the Matthew effect writ large, as Emily talked about. If you are in a household where your family has internet — not worried about keeping a roof over your head or where your next warm meal is coming from — you got, you know, a safe space for learning. Yes, there was probably a dip in the spring, but you've recovered, and you're getting back to where you need to be.

But if you are a child who has all the inherent potential of those children in those households, but your family doesn't have those resources, you're most likely continuing to struggle and decline. And unless we take bold and decisive action, I'm really concerned that "gaps" isn't even a big enough word to describe what's happening. We have children on two entirely

different trajectories. And so, the playbook that we used before, which I think Emily and the rest of our panelists have really aptly showed, has not worked for a lot of children.

And I think, Katharine, your slide about the percent of low-income and minority children that were below basic on the need was just jarring. Those strategies didn't work pre-pandemic. We cannot keep using that same playbook post-pandemic and expect that we're going to get, you know, better outcomes, much less get these kids off the bottom half of the K.

Carey M. Wright: Katharine, can I follow up with a comment?

Katharine B. Stevens: Yes, yes, thank you, Carey.

Carey M. Wright: I want to follow up on something that Ralph said and something that Munro just said. And I think focusing on the subgroup data is critical because I'm a firm believer in using data. But I've said, "Behind every data point, there's a face." And you need to know exactly who that child is in order to be able to meet their needs. There is not a one-size-fits-all for children in poverty. There's not a one-size-fits-all for children that are African American — or students with disabilities — whatever the subgroup might be.

But that is one thing that we've been spending a lot of time on here in Mississippi. And one thing I failed to say: In our NAEP scores, Mississippi has the highest rate of poverty in the nation — the highest rate in the nation. And our children in poverty — on the NAEP assessment — outscored all of their counterparts across the nation, whether they were white, black, or Hispanic. And I think that makes a difference when you're trying to think about who is it that we need to be focusing on. Because if you're not focusing on an individual child, that's not going to happen.

And to Munro's point about families — absolutely, we need to be engaging our families more. That is one thing I can say — that our department, since March, has been doubling down on the number of resources that we have been pushing out to our families via our social media — our website. So that they have resources at their disposal at home, in order to be able to help their children with reading when they're not in school. So, I just really want to echo both Munro and Ralph's point: It is a family-oriented thing, but it's also a specific child-oriented thing at every single school. It's not just one large group; it is each specific child — and what does each specific child need.

Katharine B. Stevens: Margaret, I had a question for you — kind of going back to the, sort of, big-picture long term. How much of a difference, based on your experience — how much of a difference do you think it would make if education schools universally taught teachers to teach reading the way you have learned is successful? How much of a difference would that make in the picture, do you think? Can you remember, unmute. Thanks.

Margaret Goldberg: It would make absolutely a huge difference for all incoming teachers. And there's a flood of teachers who come into the profession every year. But one of the things that I think is really important is that it always has to be this *and* this approach. So for example, if we focus our efforts on teacher preparation only, then what's going to happen is that new teachers will come into a system that is not functioning. They're going to come into a system where they're led by administrators who don't understand what they're supposed to be looking for, what practices they're supposed to encourage, and what materials they need to equip teachers with.

So, in order to fix such a large system, we do have to focus on teacher preparation. We also need to focus on professional development for administrators. We also need to focus on providing teachers with better tools. We need better curriculum. We also need to make sure that we have clear expectations about what data needs to be collected, because as long as our primary data points are going to be leveled books, we're going to have students who are struggling at the lowest levels. We need to revamp the entire system in order to give teachers the support they need in order to put in place the practices that they're learning and high-quality professional development.

Katharine B. Stevens: Yes, and I guess, you know — it seems as though it's pretty clear that if schools accomplished only one thing — and that was teaching all children to be good readers — that would be a gigantic win. I mean, it just seems as though it's abundantly clear that of everything that children learn in school, this is by far the most important. So, we can hope that people increasingly realize that and align — really what are massive resources around tackling this issue.

So, we are just about done. I'm going to ask each of you to just take a minute to share last thoughts — sort of, what's come out for you as most important — what you feel you really want to raise up as a critical issue. Margaret, do you want to start?

Margaret Goldberg: I was just thinking, what would I share? So I mean — I guess one thing that I would say is that one of the things that gives me the most hope is that I think that there's an increasingly targeted focus on primary grade education. I think that there are more parents, there are more activists, there are more people who are looking at this issue. I think a good portion of the reason for that motivation comes from Emily's reporting and also from the massive amount of articles that have come to light recently.

I think one of the things that is going to be really important is that we take what you were saying and make sure that that is actually a message that's consistently messaged. Because for me, as a teacher, I do not consistently hear that my primary job is to teach reading. I hear that my primary job is to meet the social-emotional needs of my students, or it's to have strong classroom management; it's to unpack my implicit bias. It's — for me — to make sure that they have rich art experiences, or they're supposed to do exploratory learning. Like, I'm told 1,000 different things that I'm supposed to focus on.

And I think, if we gave teachers permission to focus on teaching reading well and gave them the supports that they needed, then we could actually get somewhere with this problem. So, what we need to work on is simplifying what our expectations are and being really clear about raising those expectations.

Katharine B. Stevens: Thank you. Carey, do you —

Carey M. Wright: Well, I'm a firm believer that teachers come to work every single day wanting to do the very best job that they can. I believe that in my heart of hearts, and I believe that building teacher and leader capacity is key to that. And I think that there are some teachers that hit the ground and are able like Margaret to figure this out and capitalize on that, but there are others that can't.

And so, I think our job as state leaders and district leaders is to make sure that we're doing the best that we can to build teacher capacity so that they are doing the kinds of things that we need them to do in classrooms. The principals are recognizing that, because you cannot

thank a teacher enough. And I view it as part of my role as just — to give them the resources and the skill sets that they need in order to meet every student's needs regardless.

Katharine B. Stevens: Thank you, Carey. Emily.

Emily Hanford: I guess I'll just add: We've been arguing about how to teach reading for a really long time, and the fights often are around phonics. And I think that the bigger thing here that might really be the tussle is, sort of, the idea of whether children, especially little children, need to be directly taught things or whether they can kind of figure them out on their own. And Munro was talking about that. Like, that there are these two differences — there was the sort of code-focused approach versus the meaning emphasis approach. And then there was the, sort of, teacher-directed approach versus the, like, "kids figure it out on their own."

One of the things that's so consistent in the scientific research on reading is that the thing that really makes a difference is direct and explicit teaching. And one of the things that I am sort of questioning as a reporter — as there's more awareness of what needs to be done to teach reading — is whether or not a lot of these efforts to teach reading better will succeed as well as they might or they could, if there's not a greater embrace of the need for direct and explicit teaching. And there is just a gigantic body of research on how effective that is. There's also a huge amount of evidence that very few schools really embrace it or do it. There's sort of a belief that that's not good for little children.

And I think that's buying into the same belief that's perpetuated myths about reading — that essentially it's something that sort of develops naturally. And as long as you kind of guide kids and give them a little bit of this and a little bit of that, it'll add up to reading — poof — magic. And it does for some kids, but for most kids, it doesn't, and I think as a nation, we really need to look at that. We really need to look at what the research really tells us about what's effective in education. And if kids need to know something, we've got to teach it to them and not expect that they're going to figure it out on their own.

Katharine B. Stevens: Thank you, Emily. Munro.

Munro Richardson: So, I couldn't agree more with Emily's last point. You know, learning to read is the most important job of children in elementary school, and children don't teach themselves to read. It's the adults in their lives that have to do that. So, I'm just grabbed by the fierce urgency of now — everything that Ralph talked about in terms of what's happening with the pandemic. And, you know, we've done extraordinary things across the world in developing new approaches to developing vaccines, which is completely ripping up the playbook from how we used to do it. And we still need them to be safe and effective. But I think, similarly, we're going to have to rethink the way that we do things. And I'm talking about at systems level.

I couldn't agree more with Dr. Wright around focusing on the needs of each individual child. But then we also need to think about systematically — what do we need to put in place so that we're also similarly — for education — rising to meet this challenge, because absolutely literacy is a critical part of the recovery from the pandemic.

Katharine B. Stevens: Thank you, Munro. Ralph.

Ralph Smith: When I listen to Margaret and I listen to teachers across the country, what comes to my mind is the opportunity we now have. I'm old enough to remember when

disruption meant something bad. We're now at the point where we see a disruptive event as fraught with possibility and opportunity. And I think we have the possibility and the opportunity to transform teaching, not only by paying attention to the science but also by equipping teachers with the benefits of the technology we have. Teachers need more information, they need more analytics, they need access to more of what we call tech to support this range of obligations, responsibilities, and opportunities that they face.

And essentially, we have allowed schools to operate under resourced and unable to provide the high-tech, high-touch combination of input and support that would make a big difference. And in this moment of disruption, we have the opportunity to really do both and not make an either-or choice. That is the exciting possibility of this one — with the disruption, and we should seize it.

Katharine B. Stevens: Thank you, Ralph. Well, we're now 15 minutes over, so — with apologies to any of our audience that is still with us. I've just found this fascinating. I wish we had another hour. I'm thinking of follow-up events we might be able to do to flesh out some of the really important ideas that have come up. As I've mentioned, the video of the event, along with resources, will be posted on the event page. And people who registered for the event, you'll get an email in the next couple of days with that information in case you want to go back and listen to any of the pieces again. So with that, I want to thank my panel very, very much for a phenomenal conversation. Thanks very much.