Emily Hanford on the Science of Reading

Hello, Thanks for joining us. My name is Katie Pekel and I'm the Executive Director of Educational Leadership in the College of Education at the University of Minnesota. I'm so lucky today to be joined by Emily Hanford, an award-winning journalist who many of you probably know produced the groundbreaking documentary in 2018 called Hard Words, that helped us understand why American children were having such a struggling time learning to read. She followed up that incredible documentary with At a Loss for Words in 2019 and What the Words Say in 2020. It is her most recent podcast though, Sold a Story, that is getting quite a bit of attention, both in the news media and on Twitter. As part of the Higher Education Literacy Partnership's partnership with us at the University of Minnesota, Emily has agreed to do a short interview with us here to kick off our series of modules. And she will also be joining us in Minnesota in February to talk with a larger audience.

Thank you. I'm happy to be here.

So Emily, of course, you have really raised this term, not just for educators like myself and those serving here in Minnesota, but for the general population, this term called the science of reading. Could you just take a moment and explain to us what you mean when you say the science of reading?

That is a good question because I do hear that phrase being, that term being used a lot these days. And I think it's important to talk about what we're talking about. So I hear it being misused and hear it being talked about as a curriculum or a program or a method. It's not. The science of reading is just basically a term to refer to this big body of scientific research that has been done for decades by cognitive scientists and psychologists and other researchers who study how people learn. And what's happened is that over the past, about like 50 years or so, just a huge amount has been figured out about how human beings read and how little kids learn to read, and why there are some kids, more than I think many of us realize, who have a hard time learning how to read. This body of research has been conducted by scientists all over the world, like I said for quite awhile. And they have really solved some of the mysteries of the human mind. I think for a long time, we fought about reading because no one really knew how people learn to read. And science is ongoing. And there's still things that people are figuring out. But there's just a big body of evidence and a consensus about some of the basic mechanisms, some of the basic skills that are necessary for a human being to become a good reader. So that is what I mean by the science of reading. There are some other people who have some good definitions that people can Google. Mark Seidenberg is a cognitive scientist at the University of Wisconsin, he has a good basic definition. The Reading League is an organization that actually convened a group of people, I think it was about a year ago, to get together to try to define this term because they're worried that people are saying it, people are now using it, as happens all the time in our economy and in education. It's now a term that you have to have…a sticker that you have to have on the front of your book for people to buy it. But what does that really mean? And the truth is, it doesn't really mean anything except that there's this big body of evidence about reading and how it works and how people learn to do it. What I've been trying to do in my reporting is invite people in to know more about that research because it's

fascinating and it's profound. And it has really important implications for what instruction should look like in the early grades.

Well, thank you for that. And you're right. You have been doing a nice job of inviting people in from all aspects, I think, of education and outside of education to help us understand that. So you're a journalist by training. Tell us a little bit about what prompted you to originally do this reporting. Maybe what has been some of your key learning or what was most surprising to you?

Yeah, wow, well, we could talk all day about that. I mean, I've been an education reporter for a long time and I didn't know anything about this big body of research on reading and how it works. I think I learned to read pretty easily. My own children did. This is I think one of the reasons why this problem has been so intractable. Some of us don't need much instruction. So my interest in this topic does not come from a personal story. Many people's story with this does. There are a tremendous number of teachers all over the country who've been teaching, reading a particular way. And then they have a child who goes to school, struggles to learn how to read, they triy to teach them using the what they've been doing in their classroom and it doesn't work. And they suddenly have this moment of like what's up here. Because I know that this isn't…I need my kid to read, and what I'm doing to teach him or her isn't working. So I got interested in this a few years ago and it really came out of just doing a lot of long form documentary reporting about education, mostly higher education focused actually. Mostly on the near the end goal part. Like how do people…college and who goes to college and who finishes college, and who's prepared for college? That gets into a lot of really important questions about the role that college can play in helping people have greater economic and other kinds of opportunities in life. We know that there's a lot of inequality built into our education system. I'm really interested in that. I'm really interested in the role sort of family income plays. I also have been very interested for years in how people learn and what cognitive scientists are learning about that. And essentially I was doing a lot of reporting on the higher education side of things. And I a few years ago was doing some reporting at community colleges and just started meeting all of these students who were talking to me about their struggles with reading. And they were, many of them were talking about having dyslexia. So I got into this really with an interest in dyslexia and reading disabilities in particular, something I didn't know very much about. And I discovered a few things, and you asked what was surprising to me. I discovered, I think one big, huge takeaway is that this is not a small problem, right? So I think sometimes people can be like, Oh, well there's people who have dyslexia and that's 10% or 15% or 20%. And I don't know if it really matters if we put a particular percentage, it all depends on where you're setting the cutoff, right? What I learned through parents of kids who are having trouble reading is that there was this big body of research on reading and how it works. And I started getting interested in that. And I started understanding that kids with dyslexia sort of like canaries in the coal mine. They're the ones who are having the most trouble when schools are not teaching kids how to read. And we can talk more about that. But I think many schools across this country haven't actually been teaching kids how to read. And in particular how to read the words, which is only one part of reading, but an absolutely fundamental crucial part of it. You're not going to become a good reader unless you're good at reading the words. And schools have not been for a variety of reasons, teaching all kids the best, most effective ways to read the words. And so I started just

getting really interested in that and I can't even remember the question you asked me at the beginning.

I asked you the last thing I actually asked you was, was there anything that was maybe most surprising to you in five years or so you've been working on this particular topic?

Yeah. Well, I think one of them is that this is not a small problem. That's where I started, right? So there are actually a lot of… it turns out that people who learn to read easily are probably the minority of people, right? Probably at least half of us, maybe more, we really need some good explicit instruction to learn how to read. And then some people need a lot of instruction, right? So you've just got this continuum. I think that's one of the things that was really surprising to me. I think just as a journalist, the reason that I got into this and then I've stayed on it is that I've never had an experience like this before with a story where I was just hearing the same stories over and over again from parents all over the country. And the story was like something was wrong. Something wasn't working. My kid wasn't learning how to read. In very many of the cases the school was saying, No, it's fine, don't worry. She's doing fine. He's doing fine. And the parent was being like, I don't think so. And so I just was hearing the same story over and over again. And just as a reporter, I was thinking like there's something systemic going on here. There's something that's the same. And I started to connect it to, with the help of the parents of these kids with dyslexia, I started to connect it to the instruction. And what I think is really going on ultimately. There are a bunch of kids who have reading disabilities and need more and better instruction. But we have a bigger problem because so many kids are not getting just core instruction when they walk into kindergarten first and second grade. And if you're not teaching kids how to read, you just have all these sort of casualties. And kids with dyslexia are the most severe casualties, but you've got a lot of casualties here. And the only people who are okay in that system are the people who this comes really easily to, or the people who are getting help outside of school. And I think that's what has motivated me and surprised me at first. But mainly what I started to realize is that we look sometimes at the reading scores in this country and we give a couple of explanations, which is, well, we have a bunch of kids who have reading disability and then we have a bunch of kids from low-income poor families who their families aren't reading enough to them. And so that explains some of the issue, but not all of it. I started to look at reading scores and looking and saying, I think the question to ask when you look at reading scores is who's getting the instruction they need? A lot of kids aren't getting it in school, but some kids are getting it outside of school because their parents are teaching them at home. Or their parents are able to afford tutors to help them read. And that is not small. And since, I don't know if anyone has a real good firm idea about just what percentage of kids are getting reading help. But there's thriving tutoring businesses all over this country. And anecdotally, I hear from these parents all the time. And what I just started to realize is some kids are getting the instruction they need. A lot of kids aren't. And certain kids are being more damaged by that than others because they are never getting the instruction they need. There is no parent to write a check at the end of the day. And so many parents who do find a way to help their kids have suffered along the way and their kids have suffered. I am not belittling the suffering they have, but the kids who never get the help, they're really in trouble. And there's a lot of those kids up there. And so we need to care about this for a whole bunch of different reasons because a lot of kids aren't getting what they need.

Thank you for that. One of the things I've been particularly appreciative of in your reporting and I'm impressed by is, really you've taken a systemic view. And as you know, and you've even commented yourself, that I'm not blaming the teachers. And one of the things that go… there's a lot of components, right? If we were to talk about the science of reading. But particularly what you just talked about, which is this focus on systemic phonics instruction. We've actually had research backing those ideas for decades. And so I'm really interested to know why do you think it has taken so long for that research to sort of make it to, not just the educational mainstream, which I would also argue it's sort of just getting to the educational mainstream, but also just the mainstream in general? What do you think is causing that lag in our really understanding that research?

Well I think there's a lot of answers to that question. I think one part of the problem that I am hoping my reporting is helping people understand is that I think that the research on reading the kind of came to the foreground by the late nineties and was sort of robust and big enough to really make an impact and be the basis for this big government spending program Reading First, right? So there were big government reports in the 90s and early 2000s that established that there really was robust research that tell us some basic important things about kids and what they need. And one of the things that we knew is that kids really do need and all kids can benefit from good structured phonics instruction, being taught how they're written language works. And I think one of the things that happened is that the message there was, well, we need to make sure we add phonics. And so that's what started happening. And so in schools across the country, I think it's hard to find a school that doesn't do some phonics instruction. I think there's very important questions to ask about the kind of instruction, whether the teachers really have the training they need, whether kids are getting enough of it, whether the instruction is differentiated in ways that are really helping, right? So I think there's a lot inside the box of phonics instruction. I think it's important to understand that phonics is actually just one little part of knowing the words, right? There's this phonemic awareness part, there's written English is actually a pretty difficult language, so there's actually a lot you need to know about morphology and the history of our language to understand English spelling. At the end of the day, that's actually what you're trying to figure out, is like English spelling and how it works. Um, but I think it became this thing where we just add a little bit of phonics instruction. And what I've been trying to point people's attention to, because it's what I started to see as a reporter, to understand as a reporter as I investigated this, is that people are adding phonics without taking away these ideas that turn out to be not right about reading. And so the basic idea in the podcast Sold a Story is that kids are being taught that when they come to a word they don't know, they can sound it out if they want to. They're getting a little bit of phonics. So you can use your phonics skills. You can sound out the word, but also you have all these other things you could do to figure out the word. So you could look at the picture. The first letter of the word, the last letter of the word. You could think about something that makes sense. And I think this all came from the right place. I think a lot of people wanted to figure out a way to get little kids reading. Give them books, to not have to make them go through lots of lessons and master a skill before we can give them books and the enjoyment of stories. So there was really this movement to get books in kids' hands. But there was this problem, which is they don't know how to read the words. And we and teachers writ large were being trained in how to do that. And so we kind of got on the wrong road. We started handing kids books with words that they didn't really know how to read. We started teaching them shortcuts about how to read those

words. And lo and behold, what happens is that it so happens that those shortcuts we were teaching them are actually the things that struggling readers do when they can't really sound out the words. They don't know what they need to know about the English language. And it turns out that a bunch of kids, if you teach them those strategies when they're little, they're going to hold onto them because they're easier at first. There are things you can do when you don't actually know very much about the written words and how they work. So, yeah, I think the basic problem is we've added phonics without taking away these other strategies that are teaching kids the habits of struggling readers.

So, Emily, you mentioned a little bit there about the history of beliefs about reading instruction. Whether or not maybe teachers or I'll use someone like myself, I was a school principal for nine years before coming to the university. And what our exposure was to understanding about that. So e.g. in the state of Minnesota, I hold a K-12 Principal's License, which means I can legally be a school principal anywhere between kindergarten and 12th grade. I hold a high-school English teaching license, so I can legally teach kids 7th through 12th grade. I have a master's degree, I have a doctorate. In my entire educational career, I was never required to take a course on how kids learn to read. So I appreciate in your coverage, you've really talked about the systemic nature of where we're at today. I want to go back to this idea that historically there have been these beliefs about what's the best way. Some people talk about the idea that the pendulum swings or that we've got the Reading Wars. And my question to you is, where do you think we're at today? There's obviously an emphasis right now on understanding phonological awareness, phonics instruction. I'm not saying that those other components of Scarborough's Rope aren't important as well. But where do you think we're at with that? Do you think that this is here to stay and what's different this time than say the discussions that folks like myself or researchers or education reporters like yourself we're having in the late 90s.

It's a good question. Obviously, I wasn't part of those things in the late 90s, so for comparisons, I have to rely on other people. I have had people say to me that they think that maybe something's different now. So I'm just reporting what other people have said to me. I think things might be different now for a few different reasons. I think the first big effort with this in the early 2000s, I just think there are actually more people who know the basics of this now, right? So the research itself is 20 years older. It's just that much more robust and there's that much more to it. There's that many more people who know about it. There's a lot of people within…if you talk to people, what you'll find is that in any given school or system, there are some people, some parents, some principals, teachers who have been raising their hand for a long time being like, I think this isn't quite right, we're not quite doing this right. But they haven't, they felt alone, right? And there has been this sort of broader consensus that's gone in another direction, I think that now might be different because I think there really is a lot of awareness starting to bubble up. I think there's a parent movement that has really recognized that their kids' reading problems have something to do with the instruction. Maybe not everything, but the instruction is part of it and they're speaking up about it and they're getting those links. And I think there are a number of teachers who have been, maybe they got really good training during Reading First, and then reading first fell apart and went away. And they were supposed to be doing something else or they kept closing their doors and doing what they were doing. Those people have always been in the system and now those people are speaking up being like, hey, meet over here, like I can help you learn some of this. And then there are a

whole bunch of teachers who are new to this. We have lot of teacher turnover and we're talking about 20 years ago. So we have 20 years worth of new people in the system who are learning this stuff and saying like, hey, I want to learn, I want to learn. I've learned the basics of this. This makes sense, I get this. I don't know. I just feel like there might be just kind of more buy-in happening now. And I think it's because of the work that was done in the past. Like I'm not so sure this moment would be happening if Reading First hadn't happened, if the 90s hadn't happened, if we hadn't had those disagreements back then. So I think one way you can look at it as like, oh my god, Deja vu all over again. We wasted all this money. Why are we doing this again? We did this once. And I think the other way to look at it is we wouldn't be where we are today if that hadn't happened before. And I think that's the more accurate and more hopeful way to look at it.

Well, I appreciate the hopefulness of it. I have to say, I just gave you a little bit about my own background. And the first time…I like to think of myself as somebody who doesn't actually consume quite a bit of research and has sort of tracked research across my career. And I can distinctly remember the day that I was out running along the streets of St. Paul, Minnesota where I was living and I had gotten done listening to your first podcast. And I was overwhelmed. And I immediately texted about five of my close friends who are also in education and they were all like, hold on, don't tweet yet. But I was also so taken by the obvious amount of reading that you had to do to be able to get us that, I think it was a 54 minute documentary at the time. In fact, I was so impressed by it. I went to my office that very morning and went to my graduate research assistant and said I'm gonna need you to download and print every one of these articles that she references in this documentary. And that person walked back into my office and she said there's about 80. Can we put those on a Google Drive? So I just wanted to acknowledge because I know there's been this discussion of well she's not she's not an educator or she's not a researcher. And one of the things that I hypothesize, and we're actually going to have some data at the University of Minnesota when you come in February to talk about the influence that you've had, as one of our key researchers have looked at some of the Twitter traffic, but I actually hypothesize that it's how we're also told the story, right? And I think you took some very complex research and you made it very understandable. And part of making that understandable means that then I think people can start to think and talk about it and maybe act on it differently. So that being said, now that you've read a lot more research than maybe even a lot of researchers. When new research does come out, what would you suggest as sort of the ideal path to change? One of the years that we use in education is often takes about 17 years from a research agenda to it reaching what we would call practice, right? So we know that it takes time, but what do you think might be an ideal path? So that change can actually happen at a system level or a school level. Then, which stakeholders do you think we should be holding accountable for that to happen? You've talked quite a bit about curriculum companies, school districts themselves that have really made changes, teacher education programs. We're seeing a lot of legislative work happening now I think largely due to your work. So again, what, what do you think would be the ideal path for research to help inform practice?

So are you asking me what I think researchers should focus on?

Sure. Let's start there. I guess maybe how they should get that research out?

Uh-huh. Yeah. So you ask all the hardest questions.

I'm sorry.

No, that's okay. And as a journalist, I don't know if I know all the answers to your questions. I will say, I'll say a couple of thoughts. You talk about the 17-year research to practice. So if that's true, then this is all happening, right as things are supposed to right? This stuff was really robust and well-known and Reading First was really getting going around 2002, 2003. Now it's…you know what I mean? Like so we're on that path. I think that a lot of the researchers themselves are recognizing that part of the responsibility is on them. Like everyone has to stay in their own lane, right? Not everyone can do everything. And there are people doing basic research who are figuring out things and it's not necessarily their job to translate that to the masses. But I think scientists writ large are recognizing that they need to find ways. Maybe it's not every single individual person within that community who are going to do it. But to get that out to the public and to help educators translate it. It's one thing to know how human beings learn to read and what they need to learn and it's a very different thing to know how to teach that to other people and know how to teach it to a class of 18, 22, or 30 children, which is what a lot of teachers are facing in this country, right? So it's challenging. So people have said this like, well the science of reading is robust and well-known, but the science of teaching reading is still being developed and I think there's really something to that. And all the different pieces that you mentioned, I think are just part of it. Right. So there's… I think we wouldn't be in the situation that we're in today if writ large schools of education had been doing a better job of getting this stuff to the people they were training sooner. But we know that the teacher education system in this country needs improvement all around. We don't invest enough or I think enough time in our teachers. And I think one of the things I've said many times as I think we fight about how to teach reading in the English-speaking world, because written English is actually a very difficult alphabetic language to learn. So there's a lot for teachers to know about how to teach it to little kids. And just a lot of teachers don't know that. So there's really, there's a role of teacher education. A lot of what teachers learn is on the job, which is why I started looking more at the professional development curriculum materials side of things because I was like, you know what? I think a lot of what teachers know about reading and how it works is coming from there. So what's in there? What are the ideas in there? Oh, surprise, surprise. There are a lot of ideas in some very popular materials that really that science had shown us a long time ago were not the ideas that we should be using to base instruction on. I think there's a role for legislators. I mean, I think policy is a blunt force instrument. You know what I mean? So there's lots of perils, there's lots of unintended consequences. But I do..change happens because there's some top-down and there's some bottom-up. And it's like, it's like a system that's trying to change needs both and there's always a back-and-forth. I think one of the reasons why it's potentially different this time is I think there's a lot of bottom-up stuff happening. I think that's ultimately what produces the deepest and widest change is when there are lots of people, and I think it's teachers and parents primarily who are saying there's a problem here and we need to fix it and we all agree. And, you know, at the end of the day, what's happening here is children, little children are not getting what they need. So let's do a better job of that.

I appreciate that. You talked about the role of parents and teachers, which obviously is fundamentally important. Those are the two most strongest factors in student's academic outcomes. Parents followed by teachers. The third is the group that I probably work the most with, which is school principals. We know from research that they account for about 33% of the effects of outcomes for students. I'd argue that because they hire and choose to retain and develop teachers, that they might have even a larger impact on that. So we know that there are many schools and even school leaders of course, that have really bought into, as you mentioned, the effectiveness of the science of reading, maybe even years ago. Even though, as we all know from recent NAEP results and not just because of the pandemic, but our national reading scores remain low. That being said, given all of your reporting and all of the places you've been, there obviously are some success stories of the implementation of the science of reading based practices or instructional models and materials. Are there any stories that you would either highlight or any recommendations that you would make specifically for school and system leaders?

Well, I mean, I have reported on some places in my reporting, but I think there's a lot…Well, let me say this. I think one issue here is that it is actually hard sometimes to figure out what's working and what isn't an education. Establishing cause and effect is very difficult. We have this one very broad tool that tells us, it gives us a way to compare schools to other schools within a state or even school district to school district across states. And it's these reading tests that we give kids in third and fourth grade, which are really there's a lot of noise in those tests. There's, in any particular assessment you're giving to students in a school, there is the hidden factor that we've talked about, which is the role of families and the instruction the kids are getting outside of school. So the problem is we don't have a lot of good measures to really tell us if things are working or not. And then we just had the pandemic. So there's many districts, in particular schools who are making a lot of investments in the science of reading and the pandemic will forever be an asterisk on that one, right? It's not easy to disentangle this stuff. And we want to be driven by data and driven by research in education. But education is very messy. And I think we sort of say things about being driven by data, but that's not necessarily happening and it's hard to know how to do that. And there's not like one program that you can tell everyone to buy and that is not even…school principals out there shouldn't even be going down that road and thinking, the solution here is for me to find the right curriculum and buy it. That's the wrong instinct because there's no perfect curriculum. I think the right instinct is to say, especially to principals, this is what I've heard from people who I think are finding success in making transformation in reading instruction at their schools. The principals have seen that they have to learn along with the teachers. That they have as much to learn as the teachers that they need to know this stuff backwards and forwards too. That they need to really be engaged in the nitty-gritty. They're going to the trainings, they're involved in the professional development, they get it. I think that's really, really important. And I think school principals have a hugely important role to play here because they are really making a lot of decisions about what kinds of professional development teachers are getting, what materials they are purchasing. But it's this combination. I don't think we'd be in the situation we're in now where a lot of people have bought materials that turn out to be, to have some not very good ideas in them if people had known more about reading and how it works, those materials wouldn't have been as appealing as they are. But those materials were appealing because many teachers and principals were desperate for answers. We have a lot of kids struggling with reading. We don't know that much

about how it works. We weren't taught very much about how kids learn to read. Help us. People come along and say, I've got a way to do it. I've got a system, it all works well together. I've got some assessments, I've got books you can give to the kids. I've got some curriculum materials. I've got a routine. When they come along and they've got a whole package it's incredibly appealing. And I think people, what I feel like I've been trying to do is sort of a history of ideas. What are the different ideas that have prevailed about how people learn to read? What have scientists figured out about that? And what ideas are inside these materials or these approaches or whatever. And oh lo and behold, there's an old idea in here that is actually harming some kids and that we should have gotten rid of. And now it's time to really get rid of it.

Well, you just eloquently described what the National Research Council put out, also in the year 2000, in their seminal book, How People Learn, right? So you describe the way that people learn…

I've got it right up there on my shelf.

is their preconceptions have to be engaged. Because if their preconceptions aren't engaged and they have some misconceptions whether it's how to teach reading or what the equal sign means in a mathematical problem, they'll revert to the misconception if those preconceptions aren't engaged. So I do think your reporting has engaged preconceptions. You've clearly provided us with the conceptual framework, which is the second finding. We have to have the deep factual knowledge, but it has to be arranged and that conceptual framework so we can retrieve and apply. Then finally, what I think you're reporting is really doing now is that finding three, which is we have to have opportunities for metacognition. To think about our thinking, to revise that thinking in order to make it work. But how people learn is, as you already pointed out, not easy. And it's not simple. I know that your reporting has certainly ruffled some feathers. I don't think there's any educators out there that set out in 2002 to say, let's use this other curriculum because I don t think kids are going to read as well with it. But the realization that maybe some of the preconceptions that I had or the conceptual framework I was using was harming kids is really hard for people to embrace or move away from. So I know you've ruffled some feathers in your reporting and what you've done, you've gotten some pushback, but I think you've also had some positive feedback from folks. And also you've been really pretty honest and vulnerable about what you've learned and how you've reacted to those. So just share any takeaways that you have about the process and what it's been like for you to tell the story.

Before I talk about myself, I will say, I mean, I think you touched on something that's just really important to acknowledge is that this is difficult for a lot of people. This is very emotional. And there are a lot of teachers around the country who are feeling a lot of regret and guilt and shame and embarrassment. And I think that the teachers are sort of victims here too. And I heartily agree. I think the situation we're in was not what anyone intended. No one is trying to do the wrong thing here. So when it comes to me, I'm a reporter. And I had no idea when I started getting into this few years ago that I would still be doing it. So this has been a very surprising outcome. And I've been surprised and pleased, and it's also been difficult, actually, rhe impact that it's had. It’s kind of awkward to be a journalist and to be part of the story. That's a very hard thing to just kinda contend with. And I don't have all the answers. And I think a really important thing here is no one should be following a person. No person has the answers here.

And this is really about going to a lot of different sources. I mean, doing the thing that journalists do, checking a lot of different sources, talking to a lot of different people, checking the facts along the way. And this is real…teachers have hard jobs and they have a lot to do. And I've brought a lot of attention to the teaching of reading, but teachers have to teach a lot of other things too. Like we've had this incredibly difficult few years as a nation. And I think teachers have had the hardest time. And I recognize just how hard all of this is. So anyway, I don't really know how to bring that back to myself except I'm grateful that this is having an impact. I don't think anyone goes into reporting who doesn't want to have an impact in some way. I mean, that's what's the point of our lives, right? We want to have an impact, but it has been just sort of a tricky thing to navigate. And there's a lot to it and it's exhausting and I need a vacation, like we all do.

You certainly deserve one. I will say I work with school principals across the state of Minnesota, I have for ten years. And I work with a lot of them through a two-year executive development program. And I always say if there's one thing that you're going to walk away from this with, I hope it is that you're asking yourself the question, what does the research say before you do X, Y, or Z. And that's a hard thing to do because "the research"... I think it's Dan Willingham that says, I just love it when like the assistant superintendent of curriculum instruction is like, well, the research says, and it's like, well, that's a pretty big all-encompassing…

I know.

So I appreciate your message about it's hard work. I will say, I actually think that what you have done with your reporting and reading instruction, I'm hopeful actually might be a model for some other education reporters. Because I'll say I have actually a good friend at the University of Minnesota who is a researcher and I will say, Pani, you've done some really great things. But Emily Hanford is going to change how we think about reading instruction in the United States. And she said, absolutely. So I'm hopeful that that reporting on research is something that can come to be.

Well, I'd like to say a couple of things about that. I am incredibly grateful. I feel like I've just been in a very lucky situation. I mean, I started this as a reporter who worked for a place that gave me the time to really dig in. A lot of reporters don't have this situation. And teachers have really hard jobs today. I would like to save journalists have really hard jobs and we are not…they're not dissimilar in that the working conditions have been eroding. The pay, the sort of like stability. I mean, they actually have a lot less stability than teachers in many cases. Journalism is really threatened right now. And journalism is really important, and it's a really important part of a functioning, stable society and democracy. And just over the past few weeks, there have been major layoffs at important news organizations all over the country. And it's really critical that we invest in journalism. It has an important role to play, and I think we need to see it more as a public good and figure out ways to sustain it and fund it as a public good. And it's yeah, So I think all of us…I don't mean to add more drama to the things we used to think about, but we need to think about the fact that journalism is really under attack and that's a problem for all of us.

I agree. I appreciate your sharing that. So my last question, What's next? Are there other areas of education that you might move to focus on? Is there more to come on reading? What's next for you?

Well, I don't know for sure. And there are many other questions that I feel like I want to answer. And I really love being a journalist and I've found ways to cover this topic for five years now. And I don't know exactly what's next, but I am hopeful that there'll be more opportunities to do work that will have a big impact. And I think I will probably be an education reporter for the rest of my life. So we'll see what happens.

Well, I'm glad to hear that. And Emily, we really are appreciative of your time to help us kick off this series that's going to help leaders really be thinking about many of the topics that you cover in your reporting and beyond at a pace that works for them free, thanks to the Higher Education Literacy Partnership and the University of Minnesota, and we're really excited to welcome you to Minnesota in February. More details will be coming on that where we'll have an opportunity to hear you in a few different audiences. So thank you for joining us today.

You're welcome. Thanks for having me.