## Wisconsin Joint Education Committee Meeting 3.2.2023

## Machine generated transcript

[00:00:00] Joel Kitchens (Wisconsin Assembly Co-Chair R Sturgeon Bay): Okay, thank you. Um, so today is National Reading Day. I wish I could say that I planned this around that, but kind of a coincidence. But, um, anyway, we're gonna be hearing from experts on reading and, and how children learn. There won't be any public testimony. Just be invited speakers. Um, just remind everybody to turn off their cell phones if they would please.

[00:00:17] Um, and I guess I'd just like to, as a little background for this, um, over the last couple sessions, we've been working on reading a little bit two sessions ago, um, representative Culp did some bills, uh, dealing with dyslexia that were fairly modest that we, that passed last session. We had a bill on on early screenings (AB446), which the governor ended up vetoing.

[00:00:38] But I think over time, as the evidence is mounted, our sides have really come together a whole lot more. And I think we really have an opportunity now. You know, we've seen what other states have done. I think we can see what works, what maybe doesn't work so well. And I think we have an opportunity to. To, to come up with something that could really move Wisconsin forward in this area.

[00:00:56] So the purpose of this today is sort of to provide some [00:01:00] background. First of all, I think, you know, amongst the committee there's varying degrees of, of background on this. So hopefully everyone can learn a little bit and, and then we'll hear from some experts that'll tell us what other states are doing, what we're doing here in Wisconsin, and some ideas of what we might want to do going forward during this session.

[00:01:17] Um, I guess I'd like to keep it away from putting blame on people of what's happened in the past, cuz our, our reading scores in Wisconsin are not good. And, and hopefully focus more on what, what we can do going forward. Um, you know, certainly with teachers, I don't blame them for what has happened. I think that, you know, they were doing what they were taught just now we know better.

[00:01:38] I, I guess, and how to deal with that. Uh, so Senator Jagler, did you wanna say anything? *John Jagler (Wisconsin Senator R-Watertown)* Thank you, uh, Mr. Chair, and, and I appreciate the attention being put on this. I also appreciate the assembly chair's optimism, um, on this issue and dealing with, with some of the. The players involved in, in the administration.

[00:01:54] Uh, it must be true because the Journal Sentinel says there's bipartisan agreement on this issue. So, uh, [00:02:00] there's a bipartisan agreement. I think that there is something clearly wrong in how we're teaching reading and how our teachers are being taught. Um, and so the rubber hits the road here, and, and I hope we can come to that agreement, uh, and move forward with some real solutions.

[00:02:17] Uh, representative Shelton. *Kristina Shelton (Wisconsin Assembly D-Green Bay)* Thank you, Mr. Chair. Uh, and thank you Senator Jagger. Um, thank you to everyone for being here today. Uh, I wanna start by thanking, uh, the educators that are in the room with all of us. Those of you that have been champions around the literacy and reading focus, appreciate your attendance today.

[00:02:33] I think this is the first of many conversations we're going to be having and the role that the legislature plays to ensure that our teachers and our kids are supported and that we're following evidence-based strategies and supports, um, in our schools. Um, today, uh, we are excited to hear from the speakers.

[00:02:51] Uh, we are excited to hear specifically about how we can do what's best, how we can support our teachers in the long term. Uh, I look forward to hearing what other states [00:03:00] are doing so that we can take what works for us and leave the rest behind. We don't have to exactly model, uh, what other states are doing.

[00:03:06] Wisconsin is strong and our support for our public schools and our teachers and will continue to do that. Um, and I look forward today to, uh, hearing those key priorities from the people who know this issue the best and the closest. So with that, Mr. Chair, I'll turn it over to you. Thank you. *Joel Kitchens*: Okay. Thank you.

[00:03:22] Um, the first speaker today is Dr. Mark Seidenberg from, uh, sorry, from the University of Wisconsin Madison. Uh, Dr. Seidenberg is really one of the, the leading authorities and pioneers in this area. Um, he's conducted research on the nature of skilled reading, how children learn to read developmental reading impairments and, uh, the brain basis of reading.

[00:03:42] So he's the author of, uh, Of the book Language at the Speed of Sight and how we read and why so many can't and what what can be done about it. So I really appreciate him being here today to speak to us. *Dr. Seidenberg*.

[00:03:59] Thank you. [00:04:00] Thank you. I'm really glad to be here, but I need water. So, um, I'm in the, I'm gonna talk to you about what the science of reading is, uh, discuss a little bit about why we're talking about it, uh, what the potential is, uh, what the challenges are, uh, what we could do here in Wisconsin. Uh, and also a little bit about the potential pitfalls cuz it's useful to know those going in.

[00:04:28] Uh, who am I? I, I'm one of the scientists, so, uh, I've been at the UW Madison since 2001. Uh, uh, and have conducted research on reading dyslexia language for many years. Um, and for about the last 15 years or so. I have been looking at how the science relates to what we do in a classroom. I taught a course in the Department of Psychology here at UW Madison on the Psychology, on the Science of Reading.

[00:04:54] And its educational implications. Try to connect the two. It's one of the only courses in the country of that sort. [00:05:00] Um, and you know, the motivation here is the science in this area is really great. We've learned an enormous amount, and after a while you begin to ask if the science is so great, how many, how come there's so many kids who can't read?

[00:05:14] Maybe we could make better use of this research. And that's turned into a kind of movement. Uh, so let me just try to set up some of the issues. What's the science of reading? Uh, there's a huge amount of research, uh, that relates to reading. It's about reading itself. It's about language. It's about how children develop, it's about the brain bases of all these things.

[00:05:36] Uh, it it's about learning and, um, , uh, it's a rich area of research for people who are interested in, you know, human intelligence and, and behavior. Um, and, uh, it's research that's gone on for many, many decades in labs around the world. Um, another thing we look at is variation in how kids develop, in how they enter into [00:06:00] reading, and the whole range of factors that can influence their progress, either promoting it or interfering with it.

[00:06:07] So the so-called Science of Reading is the movement that has emerged among people who are interested in bringing this research to bear on what teachers are taught about reading, how to teach reading and what they, how, what, what's done in the classroom. Um, that movement is, has emerged in the last several years or so, and it's a work in progress.

[00:06:31] You know, we're trying to change a lot of, uh, beliefs and attitudes here. It takes time. And so, um, this. From my perspective as a researcher, that movement is underway and is doing good things, but there's a lot more that can be done, um, in terms of bringing science to bear on education. So the actual science is really deep.

[00:06:52] The science of reading movement is kind of, uh, in a work in progress. Okay, so why are we talking about it? [00:07:00] Well, you would think that research about how reading works, how children develop, how language, how, how la the structure of language, nature of language, uh, the kinds of, uh, uh, experience, how kids learn.

[00:07:11] You would think that those would provide the basis for teaching curricula, deciding what you're gonna do in a classroom, what it's the basic research about learning, about reading and how, and how, how kids learn. And the problem is, historically, this body of research has really, um, been off to the side. Uh, so you know, Okay.

[00:07:38] The, it provides an obvious basis for, um, teaching teachers and developing curricula and practices, but it hasn't, and people are trying to change that. Um, so that would mean changing how teachers are taught, what they're, what

their professional training entails. [00:08:00] Um, it, it would involve changing the curricula.

[00:08:04] Every school system spends vast amounts of money on commercial curricula. Are they any good? What kind of ideas do they incorporate? Turns out they're part of the problem. Uh,

[00:08:17] changing the way we assess kids' progress based on a better understanding of how kids' progress when they're proceeding, typically kind of within the sort of normal range and, and, and in, in, in atypical ways because of various kinds of conditions. That interfere. Uh, we're also looking to change things in terms of having practices that work for all children.

[00:08:41] So a lot of the materials and, and activities that, that, uh, are, are, are in the classroom now, kind of land better with some kids than others. The language they use, the circumstances they describe, there's lot of [00:09:00] information in those texts that works for some kids who are familiar with it but doesn't work with the full range of kids.

[00:09:06] And so, in a sense, the materials that are being used to teach reading have the impact of favoring some kids and disfavor other kids. So it's a mechanism by which schooling can actually magnify differences between kids. Um, Yeah, so bringing science to bear on these various parts of education isn't gonna fix everything.

[00:09:36] We are not talking about lead poisoning. We are not talking about homelessness, we are not talking about all of the other kinds of conditions that, that kids' progress. However, we're talking about something that matters a great deal and it's something that we can address while we're dealing with these other kinds of issues.

[00:09:57] So, um, [00:10:00] lemme give you some examples of how the science is relevant. Clearly there's a lot of detail here I'm not gonna bore you with. I can certainly give you more information if you're interested. Um, the slides from the talk from the to that was sponsored by the session from the sponsored by the Tommy Thompson Center a couple weeks ago, uh, can be made available.

[00:10:19] That was actually a very, very good and informative agenda. . Um, but let me give you some examples of where this kind of research could make a difference. Um, so for a long time, uh, teachers and the people who were teaching them, um, had the idea that learning to read was sort of a, um, a mission of discovery and that the goal was to set up an environment.

[00:10:46] We're talking about kindergarten, first grade, second grade, in which literacy is very prominent. Books are very prominent that children are engaged in, in motivated to pay attention and learn about books. Uh, they're given various

[00:11:00] activities that in, uh, involve books like making copies of books and taking books home.

[00:11:06] There's lots of literacy activities. And the idea was that if you build it, they will come. If you create a literacy rich environment and you motivate the kids, they're gonna discover how reading works. That was the fundamental philosophy has been. Continues to be in many places, it's flawed for a really basic reason.

[00:11:29] Reading Invi, we know from a vast amount of research that learning to read requires instruction. You have to tell the kid, this is print. There's a code here, there's a task reading. Kids have to find out that reading is something to be, that, that, that it's a, it's a thing. Uh, so we have this code, spelling, written language.

[00:11:55] Kids need to have some instruction in order to figure out how that, understand how that [00:12:00] code works. Once you give them that, then they can go off and do lots of other things with, with texts and with learn from books and so on. So relying on kids to just discover how it works, because they're motivating in a literacy rich classroom, that's not good.

[00:12:18] And of course, they're specific studies that address these. Yes. Um, uh, what, what's the alternative, of course, is spending some time on helping the kid get into the print part of reading and, um, so they can move on to, uh, other things. Uh, here's another example. Reading aloud to children, reading aloud to children.

[00:12:41] Everybody agrees that reading and aloud to children is really important. Has lots of benefits for the kid, for the parent or caregiver, whoever, reading, I'm not gonna ruin anybody's, you know, experiences reading aloud to their kids. It's important, but you know, it's also something everyone can agree on, right?

[00:12:58] Uh, but the problem is it's [00:13:00] sometimes there's so much emphasis on it. People are led to believe that that's all you need to do to teach a kid. For a kid to learn how to read, that's not true. So, you know, uh, when a child is struggling with reading, and I've heard this from many, many parents over the years, you know, when somebody's struggling with reading, the first thing that the teacher or the.

[00:13:21] Uh, the educational, uh, o other educator will ask them is, did you read to your kid? Are there books in the home? And so on. Um, reading to kids is important. It's necessary. It's not sufficient. It's very rarely involves somebody actually teaching kids to read. You're interested in the story, the experience.

[00:13:40] You're teaching them many things about language and about the world of that's described in the books you're not teaching them to read. So, um, we can have so much emphasis on this wonderful activity that we ignore the fact that it actually is instruction to get going. Okay, these things have been studied, and of course you [00:14:00] might think it's obvious once I say them to you, but yet given

the beliefs that are out there and, and the lack of shared knowledge, people actually have to do research to explore these things and pin them down.

[00:14:13] Okay, so all this probably seems pretty rational, but they're enormous challenge. We're, we're asking for a sea change in the culture of education. So, you know, we're asking people and institutions to modify pretty deeply entrenched beliefs and practices, and that is hard.

[00:14:39] So, for example, um, these issues have been around quite a while.

[00:14:48] They aren't new. We've piled up even more and more evidence, of course, uh, and, and the arguments have become, uh, [00:15:00] more and more clear. But we have a history with trying to bring this research into education that goes back 20 or 30 years. And what we've seen is enormous resistance. On the part of principally schools of education that are responsible for teaching teachers and other educators, and the people who come out of those programs are the people who write the write the careers.

[00:15:29] Uh, you know, I go through this in my book. The historically, there's just been schools of education have been very isolated from other parts of campus. And essentially there's no history there of actually making use of this kind of basic research in planning curricula and planning educational, instructional activities and so on.

[00:15:53] And teaching teachers, it's just not part of their ecosystem. So now, after many, [00:16:00] many decades of this sort of educational, uh, it's like the rainforest, you know, there's a complex educational ecosystem there that's developed over the past a hundred years without this kind of research asset part of. Now we're introducing, saying, well, you need to take this into account.

[00:16:18] It's obviously the relevant stuff to teaching kids to read. It's very hard to introduce new ideas and new kinds, new information, new new attitude, scientific attitudes into a discipline that really has grown and, and frankly thrived, uh, with except well has grown, let's say, uh, uh, without benefit of this kind of input.

[00:16:43] So now to ask for it clearly is, uh, evokes, uh, a certain kind of resistance. You're asking people to change their, uh, their, their beliefs, their approaches to their, you're asking, uh, educators, the people who teach the teachers to learn new things. It's tough. It's, and, and [00:17:00] indeed, it, it does elicit resistance.

[00:17:03] Um, you know, schools of education haven't really, you would think that they would teach teachers what the best methods are for teaching kids to read. Historically, they haven't done that. What they basically said is, every classroom is different, every situation is different, and you are gonna have to find the methods that will work for you. [00:17:27] Essentially invent, create a teaching philosophy that's very different from saying, look, here's methods that are known to be effective. Here's the ones you want to avoid. You need to create a classroom in which you take these things into account. So, um, I personally view the legislation that's been related to this science of reading, uh, dyslexia, screening, uh, other ti, other issues that's going on in many [00:18:00] states as kind of, um, it's kind of the last resort.

[00:18:04] I mean, it's, it's really something that has been pursued after really kind of several decades of resistance. From the educational, um, establishment, and that's unfortunate. One would like it to have emerged from within, but for various historical reasons, cultural reasons, extensive history, that hasn't happened.

[00:18:34] You're gonna get resistance from teachers. Teachers are, I I, I, I agree with the chairman. Of course, we're, we're not blaming the teachers though. We could blame the people, teach the teachers and who create the materials that they're using. Um, but you're asking teachers to change things that they might have been actually misled about.

[00:18:55] And it's, of [00:19:00] course, it elicits kind of a kind of hesitation. You're asking a lot of teachers to learn something new, to change the way that they do things. To modify approaches that were well-intentioned but are actually ineffective.

[00:19:19] There are issues here about having government tell you what to do in the classroom. Teachers, I don't think, in my experience, they don't really react well to that. In fact, they got a lot of people telling them what to do already. So further intervention, telling teachers what to do or what they, which kinds of approaches they can use, which ones they can't, which materials they can use, which language they can use, et cetera.

[00:19:42] That doesn't necessarily go down well. It may be necessary to do some of it, but it certainly will elicit concern, resistance, and so on. Um, there's also the issue of placing greater demands on teachers to [00:20:00] actually up their game at a time when the job is losing its appeal for other reasons. Um, let me try to, um, Skip ahead to things that we could actually do.

[00:20:13] So Wisconsin's pretty late to the table, but we can benefit from what's happened elsewhere. Uh, the science of reading movement is a work in progress. It's not a done deal. Uh, you, you need to understand that what's being done in these other states is impressive and necessary, but it's also, these are experiments, they're large scale experiments, and we're gonna find out eventually the results, were they effective or not.

[00:20:40] Um, we can make use of the results that are coming in about what's, what's working, what's not working. And so in a sense, being late to the table could be an advantage here cause we could do things a lot better. There's certainly a lot of research that's done being left on the table that we could incorporate.[00:21:00]

[00:21:01] So, um, if I could just be a little bit more specific, uh, Dr. Burke, who's gonna be speaking. Can give you the blueprint for a large scale effort to improve literacy involving numerous stakeholders and lots of different, uh, groups that have to pull together. And that's an impressive amount of work. And she is the expert about those components.

[00:21:30] And what has happened in terms of trying to fit them together. There can be ways to improve them. Still, in my view, the, we, the hardest thing to do is to actually get the research into the system because there's been so little. It's been, there's been so little of it in the system until now. It's very hard to start bringing in stuff when people don't know anything about it.

[00:21:57] And so you end up starting with very simple things [00:22:00] and we really need to kind of, um, grow up, grow things up out from there. Um, as an example of just the experiment kind of notion here. So one of the things, emphasis in every attempt to improve literacy is, uh, give the teachers additional skills. So do, do in service training, professional development.

[00:22:26] Now, the first thing to be said is that's like remedial education for teachers. I mean, you're, you have teachers who are on the job already for any number of years, who are now being taught things that they should have learned in in college. So the first thing would be, in an ideal world, we'd be teaching them better in the first place.

[00:22:43] So they're better prepared for the job when they show up in the classroom. Um, we would empower teachers because we'd be giving them tools that would allow them to do the jobs that they want to do and be more successful with. [00:23:00] The problem is we're still figuring. So the problem is we don't have that in place.

[00:23:04] The pipeline is not filled with people who. Who are coming into the profession now with a better understanding of all this research and how it can be used, we don't have that yet. In the meantime, what can we do? We can try to provide supplemental instruction for teachers while they're on the job. That's a second best alternative.

[00:23:25] Indeed. Right now, people are just relying on sending teachers off to take mandating. The teachers take something like a a brief course. The most popular one is called letters, and that that will give them suddenly all the tools they need to incorporate this research and make use of it in their practices.

[00:23:45] I don't think that's true. I don't think it's realistic. And moreover, if you put all your eggs in that basket, what happens if it's not right? What happens if it's promoting practices that aren't ideal? So we're at an early stage and we can do things [00:24:00] better. We can improve professional development, we can improve how teachers are taught.

[00:24:06] These things are taking time. And so it's not a situation which Wisconsin would wanna just say, well, there's an off-the-shelf solution here. Let's just do it. We have to look at it and improve on what's been done. Here's some things that we could actually be doing. Here's a few examples. One thing is, uh, in pre-K, so uh, children show up at the first day of school.

[00:24:30] Some are more ahead relative to learning areas relevant to learning. Three, some are behind and we know from various studies that those differences increase. They don't get smaller. So that invites looking at what's happening to kids before they get to school. And what most people do when they look at this, these are facts.

[00:24:51] When they look at these facts, they say, ah, well we need to start teaching reading earlier. And so you actually see some places where pre-K, four year olds are being [00:25:00] taught things about, you know, print and sound and phonics and things like that. That's the wrong conclusion. What's happening is there's a huge amount of variability among children for a variety of reasons.

[00:25:11] In terms of experiences that are gonna either, that are relevant to learning to read, those are mainly about language and they're, and the things we use language to talk about. So children's language experiences vary. Chil their language background's very great deal. It's something I've studied quite a lot.

[00:25:32] There are kids who are English language learners. There are kids whose everybody has speaks a dialectic English. The dialect that they speak may or may not be closely related to the one they need for school. There are a lot of differences in his experiences before they get to school that have an impact on reading and it doesn't involve teaching them to read.

[00:25:52] It involves greater exposure to the language that's going to be relevant to the classroom, to seeing how people [00:26:00] who speak somewhat differently communicate. To filling in knowledge about animal habitats or parts of the body or other things that are actually gonna be the subject matter that they're gonna be getting to in school.

[00:26:13] That's something that could, could be done inexpensively. It's not teaching kids language, it's having a lot of language wash over them because children that age are fantastic language learners That would level the playing field quite a lot. The second thing would be continuing reading instruction after third grade.

[00:26:31] So right now, for historical reasons, reading instructions, there's basically a, the clock is ticking. Children are supposed to be able to, uh, acquire the, have mastered the basics of reading by the end of third grade. And what happens is, you know, up till third, through third grade, there is time devoted to reading instruction, teaching the kid about the code, and you know how print works and giving them practice with that, which is important and so on.[00:27:00]

[00:27:00] that comes to us an end because they're, they've timed out on that. It's time to move on to other things like teaching kids about science and, and, and, uh, uh, math and, and lots of other things. So, um, reading instruction comes to an end, but we know from a huge amount of evidence that lots of kids are not actually reading adequately at the end of third grade.

[00:27:27] They're left at sea. So we need to have continuation to allow those kids to catch up and not to stop because, because of the calendar, um, coaching, uh, Dr. Burke can talk about coaching. I think that's one of the key elements of their, their approach. Uh, coaches are people who know about, uh, reading and, and, uh, a lot of these issues and can actually.

[00:27:54] Uh, there, be there for the teachers in the schools as, uh, issues about what to do [00:28:00] come up. It's very concrete translation of the science into practice. Um, dyslexia. It's a controversial topic. The basic thing is within an education, it was, uh, really not recognized as an actual condition. It was a really terrible intellectual sort of failure.

[00:28:22] People were told that dyslexia is just an excuse for poor teaching, and that's wrong. There are conditions that interfere with learning to read. They have a biological basis. They're not just experiential and we need to deal with those kids. There are ways, of course, to deal with those kids. Uh, if we identify them and follow through professional training, we could change, change how teachers are taught so that they are better prepared for the job when they show up.

[00:28:48] That would make it easier for them to succeed. And indeed, Increase the likelihood that they'll stay in the field. Right now we have huge exits from the percentage of people who are exiting the field within five [00:29:00] years. Give the teachers the tools that'll allow them to succeed. The idea that they're gonna figure it out on the job and come up with a personal philosophy.

[00:29:08] No, we have basic principles and about learning and experience that'll can be translated into practices that will work. Um, there's a lot more science out there right now. It has to do with different kinds of balancing, different kinds of experiences, how much you explicitly teach kids, which is what people are doing now, versus creating other conditions that allow children to do a lot more learning on their own.

[00:29:37] There is, we have barely, um, we're just at the surface right now of bringing, um, this research into practice. We could do more. Uh, I, as I've said, it is very hard to. Change attitudes that are pretty entrenched. Programs that are entrenched. But there's a need obviously, [00:30:00] and hopefully, um, it's being recognized here.

[00:30:02] Now do you want, I've been speaking a long time. Do you want me to give you any of the potential pitfalls?

[00:30:10] Uh, teachers have to be on board. They have to really believe that it's for their benefit, cuz otherwise it's just coercion and you won't get, it's not gonna work. Uh, curricula. So some states are trying to, uh, legislate, they are legislating which curricula? Commercial curricula. These are expensive line item purchases.

[00:30:31] They're the big books Teachers are supposed to teach from often they sit in the classroom, uh, unused, uh, uh, because teachers are, um, developing materials for themselves and distributing them online. And so, uh, you can weed out bad materials. So, , getting rid of the things that are really bad or forcing those authors and publishers to change those materials.

[00:30:57] Legislation can do that. But if you [00:31:00] think that legislation will allow you to focus on, these are the ones that work, these are the ones that don't. The problem is we need new materials. None of them are really great. The best you can hope to do is get rid of the ones that are terrible. You know, identifying bad practices is a first step, but then you gotta go through them.

[00:31:18] Uh, legislation. I'm just an observer here, but, you know, it's like not too much and not too little just right kind of situation. Cuz if it, I look at some of the legislation in some states and think it's just way overbearing because somebody told them how, they talked to some expert about how reading works and then they literally took the language and put it in the, in the ordinary, in the, uh, code.

[00:31:43] And it's kind of a balancing act there. Uh, I, I think, uh, blame. There's plenty of blame to go around. There's plenty of blame to go around. And these are not new issues. They're not [00:32:00] specific to Wisconsin, they're not even specific to the us. The situation in other English speaking countries like England and Australia, they're already similar.

[00:32:10] So blame, it's not gonna help. And it's too, it's too easy. Um,

[00:32:20] so, um, what's the bottom line? Of course, there's a lot that can be done. We can build on the programs from elsewhere, but I think we can do better because we're coming in now and, um, we can perhaps talk about, um, uh, the, the, uh, things that are likely to yield really big payoffs and how to achieve the goals that we all have to share.

[00:32:47] Thanks.

[00:32:54] *Joel Kitchens:* That's why I have him here, . Anyway, um, you know, there has been a big [00:33:00] change in attitude and I hear it with, you know, administrators, with teachers. I mean, the big five school districts in Wisconsin have now announced they're moving towards science of reading. So there has been that change. You've been at odds though with the College of Education, obviously for quite a while.

[00:33:13] Do you sense any change there? Well, first of all, there's two parts to your question. The first is people are getting on board. Yes. And my caution to you is you can make it really superficial and it won't be better. And I'm concerned about that. So getting people on board is the first step. Now doing it right is the next one.

[00:33:32] Schools of education are a tough nut and, uh, is, again, we'd like to think Wisconsin especially in this regard, but it's not, um,

[00:33:44] I can't speak to what's going on in every, um, school of education. nationally, it has been very, very hard to get movement and, you know, the professional in-service, uh, pd, professional development that people are doing letters and so on, [00:34:00] in a sense that's taking the heat off the schools of education because, you know, they're saying, well, they're gonna get, you know, what the stuff they need while they're in service, while they're teaching.

[00:34:08] Great. So, um, I, I think many things follow from the fact that we are not teaching teachers as well as we're not giving the right professional training. The curricula are a consequences that the practices that are lots of things follow. So that is really important. And nationally, it has been very hard to get movement.

[00:34:33] I know that UW Madison has indeed reviewed the various teacher education programs denied towards reform. I don't know what's happening with this. Okay. Thanks, Senator Jagler, do you have any questions? *John Jagler*: Yeah, just briefly. I, I mean, you've been talking about resistance. You've, you've been coming before the various education committees for years, um, and, and butting heads with your, your own university on, on, on this.

[00:34:57] Oh, no. I, I get along quite well in my university. In fact, I just [00:35:00] retired from it and, and will now be emeritus. But, um, , yes. Um, but, but what I'm wanna, it's hard to change entre institutions, isn't it? Sure. And, and with that, with that in Gar. And so I, I, I, I really appreciate everyone's optimism. I'm, I'm coming to a solution here, but I'm also trying to be a realist on what we can do.

[00:35:17] The baby steps that you're talking about that move forward. And I keep on going back to eliminating bad curriculum, you know? Is that a question? Should I say? Yes. Uh, I I mean, would you, because if you eliminate the, the ones that we know that are bad Yes. That's important That, so that you, that you've scientifically proven are bad if those are off the table.

[00:35:36] *Mark Seidenberg:* Yeah. Um, wouldn't that force the, the colleges to adjust how they. teach or, or at least move them closer into identifying that, oh, this is such a great question, but it's actually, um, so there's two things. One is, oh, the curricula are a really important element in this because [00:36:00] it's a massive market and they're, they're, it's a, it's a case, it's a very interesting case for people to study about whether the mar competition in the market produced better materials.

[00:36:10] What it produced was materials that wouldn't offend people. So it included, included every approach That's bad because it then shifts the responsibility to the poor teacher to figure out what out of this, you know, the teacher's manuals are literally this. So I don't think the companies have, actually, the big publishers have actually responded.

[00:36:31] They have, and, and the, the legislation in some states really did in fact get their attention. So you are seeing people who are interested in maintaining their market share. It's a very big business who are modifying their materials. Good. Are they gonna be good materials? Who knows? They're, they're, they're people who are being asked to include things that they said was the devil's work.

[00:36:54] So, I mean, it's just really not clear. Uh, so the curricula are a big part [00:37:00] of the problem. And what I would say to you folks is the instinct is always to buy something these, and so you get the curricula, you get the in school support, you get the software, you get the blah, blah, blah. I think the curricula are part of the problem.

[00:37:13] And indeed weeding out the ones that are just really, really based on just horrible assumptions about learning. Tus and Patel would be an example. Uh, getting that out of the system is healthy, but what's gonna be left? These big curricula basically have some of the good stuff and also have a lot of the others.

[00:37:34] Done will the ED schools follow? So I don't see the curricula as being the solution. I see the investment in the people and the ideas. So they have the tools as being the solution. Uh, what about the ED schools? I can't, I, I can't tell you man. I mean, uh, the ED schools, I, I wrote about this in my book. These things arose a hundred years ago in the create way.

[00:37:55] The ed schools were created on major campuses. They're [00:38:00] literally the part. Ed schools have a lot of parts. The part, we're only talking about the part where they're teaching teachers and other educators, right? Special ed and so on, on most large campuses, they're literally in a different building. They're just off to themselves and they've developed this sort of ecosystem that really kind of has some unat, not not healthy properties.

[00:38:21] How do you change that? I wouldn't have said this a few years ago now. I would say they need to push, they need to push.

[00:38:35] *Kristina Shelton*: Thank you, Mr. Chair. Thank you Dr. Seidenberg, for being here. I really appreciate your comments and your passion and your work on this issue. Um, I just wanna fir first off, uh, just sort of remark on your, um, your testimony today and that, uh, you started off by talking about we're here to talk about reading and more broadly literacy.

[00:38:53] Then you shared the many complexities that we're up against because as you know, our teachers are not technicians and our [00:39:00] students aren't

robots, and they're work, they're working and learning and and functioning. Because learning is, is a, it's within a social dynamic, if you will. Right. You just, you know, you brought up workforce challenges.

[00:39:13] Yeah. Teacher turnover, professional development, teacher voice. I just wanna tell you how much I appreciate those highlights because I think while we can't do everything here today, it's also important as we think about one key, part of the issue that we truly understand the, the broader picture. Uh, that we need to keep in mind and, and where we're going.

[00:39:32] So I wanted to just thank that you, and I assume we're gonna get into that a little bit more today. Some of these challenges. I wanted to specifically ask you about the teacher prep programs, uh, because have you looked at the National Council on Teacher Quality, uh, the teacher prep review from 2020? Have you looked at this?

[00:39:51] Yeah, because I'm curious. So I was looking at this. This is a study for those of you that may be aware, that assesses this is from 2020 assesses teacher [00:40:00] prep programs, adherence to phonemic awareness, phonics, fluency, vocab, and uh, comprehension. There's 25 Wisconsin schools. Don't quote me on the numbers. I did this a quick count while you were talking, and it looks like 18 of Wisconsin's teacher prep, both undergrad and graduate, received an A or a B on their integration.

[00:40:22] Of those five pieces that I understand to b, evidence-based phonemic and decoding, Skill-based practices, and I'm not a reading specialist, so that's what I'm seeing in six schools that received a C or a D. Now, clearly we need to work on those, those teacher prep programs that are struggling, but specifically within the UW system, 10 out of 11 received an A or a B.

[00:40:47] So I'm curious if you can reflect on that given the significance of our supporting our teacher prep. Because if the majority of our teacher prep programs are from this study, just citing this one, [00:41:00] integrating the five pieces of e evidence-based, phonics-based reading skills, what is happening then at the classroom level, then that where we may see teachers not integrating these skills that they likely learned in college into the classroom.

[00:41:17] See, thank you for letting me get to my point. I appreciate that. Yeah, no, I, I, you know,

[00:41:25] I don't actually believe those. Great. Um, it's pretty easy to check off these boxes. So the boxes you're talking about are from the National Reading Panels report, which is 20 years old and actually doesn't cover the whole range of things. My, but it's, it's a start. Um, look, if you say you need to have the science of reading, everybody's going to say they have the science of reading, they're, everybody's gonna check off those boxes.

[00:41:53] Question is, what are teachers being told about how this stuff actually works and is relevant to, um, [00:42:00] how it's relevant to their practices? It, it, so, so when, when Wisconsin introduced the fort, which was kind of raising the bar on, um, future certification, uh, what we found happening was, um, people, so they need to know these concepts, like what a phony is.

[00:42:20] And um, what we found was that, um, either people were being, uh, , they were coming to my graduate students to get a crash course and this stuff so that they could pass it. And it was really seen as just another hoop that they had to go through. Hold your nose, learn this stuff, pat, get through the hoop. It's not gonna have any bearing on what you actually do in the classroom, because you're gonna find your personal teaching philosophy.

[00:42:44] So one thing is, you know, be wary. You know, people will check off the box and say, oh yeah, we got that covered. I think I know that my university, again, we have many teacher education projects. I can't speak to the details of everyone. I do [00:43:00] know people believe that they are covering these issues and the coverage is not adequate.

[00:43:06] That's the point. Um, so, uh, uh, one thing that happens is, well, how is this deep? Or is this just checking the boxes? The second thing is, let's say you learned a lot of really great things. Then you get into a school system where they're using Founders Patel, and then you're gonna have to modify things or you're gonna have to work around it, or you're gonna have to, I mean, Uh, whether you can actually follow through on this stuff, uh, is a huge, huge, so, uh, honestly, I, I, I think we need a more serious revision of teacher education, and it's not just taking a course.

[00:43:43] Uh, I, I have some suggestions about that.

[00:43:49] *Kristina Shelton*: Thank you, Dr. Seidenberg. Um, I agree that the curriculum review is an important piece. If you have evidence to, um, back up or if you have anything to share after the today's meeting about [00:44:00] your personal assessment on this, I would love to see it. Um, I, I appreciate it, but I, I would love to see what other evidence you have just, you know, just show where the gaps may be.

[00:44:09] So I'd love to see that if you have anything at a further time. Thank you. Any other questions for Dr. Seidenberg, uh, or Senator Larson?

[00:44:22] *Representative Deb Andraca D-Whitefish Bay*: Oh, okay. Representative. Thank you, Mr. Chairman, and thank you Dr. Seidenberg. Um, I really appreciate your, your testimony here today and the problems that, uh, you're highlighting. Um, I've experienced, uh, a number of them myself. Uh, before I was elected, I was an elementary school teacher. I passed the four. So all of this is, is very, uh, fresh in my mind.

[00:44:41] Um, we're talking an awful lot here. Um, and in your book, which, um, I'm not all the way through, but I'm, no one is . I'm kind of, actually, I'm actually kind of stuck on the first, uh, couple chapters on languages because it's kind of a interest of mine. Um, and now I develop, but we can talk about that later. Um, but my real question is, [00:45:00] as we talk about the need to change the schools of education and the way teachers are taught, I think about my own experience and going into a new.

[00:45:09] And I'm hired and I say, Hey, there's this great new science of reading, and why would they listen to me? Because I've just graduated. And so I, I agree. I, I had, I, I think a, a a pretty decent, and I got lots of different sides, uh, when I did my teacher education course. But I struggle with how, uh, anything that we can do here as legislators can actually change what's happening in the classroom.

[00:45:39] We could have, like brand new minted, uh, teachers show up with great ideas, but if the, uh, if the more experienced teachers in the classroom who I look to as my mentors, can't help me implement what the, what those strategies are, then how do we as affect change [00:46:00] in our classrooms in Wisconsin? Yep. Well, that.

[00:46:04] *Mark Seidenberg*: That's, there you go. There's your problem. So, um, one thing, , one thing is that, uh, you know, there are people who've been in the system and learn, doing things one way, who can actually learn new things and embrace them. Teachers are learners and they're, I don't wanna say, you know, there's all this stuff that no one will change.

[00:46:25] I don't think that's security. Uh, I mean, it's not always true. Um, the other thing is, uh, uh, you have to have the principles and the superintendent on board. So one of the obstacles is the principles don't understand this. So, you know, you say teachers don't learn about it. Reading research, I don't call it the science, it's like research relevant to reading and learning.

[00:46:47] Uh, um, they don't learn about this stuff in, in, in, in their preparation for the job. Neither do the principals. They learn even less. And so teachers will often, the, the buck ends, you know, [00:47:00] stops with the principals. So, Having the principals and the superintendents on board actually would be really, really crucial.

[00:47:06] I don't see very much going on there at all. That's one thing. *Deb Andraca:* Can I ask one follow up questions? Um, in, in terms of implementing them in the classroom, I mean, when I remember when, when I was in third grade, and I third grade is really pivotal because that's where we're changing from learning to learning, to read, to reading, to learn.

[00:47:26] Yeah. Um, you know, I had to do recess duty for at least two or three times a week cuz I didn't have many planning periods because we were, we were doing recess duty. We had, you know, all of these other tasks. We were being asked

to, uh, just do all kinds of things that I wouldn't necessarily say is, is preparation for existing curriculum.

[00:47:46] Yeah. Let alone a new curriculum. And sometimes I had to go through, as you said, the, these, they're very chewy. They're, you know, these teachers manuals are very, very long and it takes a very long time to prep for them. [00:48:00] Um, so. Uh, would you, a, would one of your recommendations be, uh, more either smaller classes, coaches in the classroom?

[00:48:09] How can we do this? Cause the ideas are good, but as we all know, the, uh, the implementation is where the rubber hits the room representative. I am so glad that you said that because I, it, what I'm saying is actually consistent with your experience. Um, I don't know any teacher who doesn't want to learn new things of course, because people who like to learn, that's why they're teachers.

[00:48:34] Right. *Mark Seidenberg:* And you don't know what you don't know. So you have to tell, you know, people have to be told Right. But, uh, and brought into the system and we can do better at that. Certainly I think that good professional development and, and pre and post, we can do better at that. Um, the thing that I'm concerned about is that we wanna raise the bar and we wanna make additional demands on teachers who already don't have time to do what they're doing and also have these other things that they [00:49:00] do besides teach reading.

[00:49:01] So, uh, come on. Uh, what's gonna be actually, um, feasible here? Uh, one thing is right now the curricula, uh, really, uh, shift the burden of planning what to do and what to choose. And out of all this mess, uh, onto the teacher, they're spending hours, as you say, doing the prep and just figuring out what to do.

[00:49:21] That's really a defect of the materials. If the materials were better, then there, there would be guidance about what to do, and it would still leave room for the teacher to do it for their classroom, but they wouldn't have to be selecting that through all these various alternatives. So that is one of the pernicious things about the curriculum, if they just leave them, shift the burden to the teacher and waste a lot of time that could have been spent out thinking about teaching their kids.

[00:49:45] Uh, the other thing you talk about is assistants and coaches. I, I do think there is a pretty good track record for, um, uh, uh, people in the, uh, uh, reading core kinds of people who, um, are, uh, [00:50:00] not. Not doing the, not, not usurping the teacher, but actually, um, providing additional, uh, help, uh, individual instruction and practice for smaller groups of kids.

[00:50:10] You know, the, the, the training that you need in order to be good at that is, you know, it's not is as much as, you know, you need to be able to run a classroom. Uh, and so bringing such people into classrooms to help with spend, you know, there's a limited amount of time to spend on these things. A teacher who's doing one thing can't be doing something else.

[00:50:29] At the same time. Having these sorts of, uh, assistance in, in the classroom, I think is relatively inexpensive as I understand it, but also, uh, likely to be a good investment. The other thing is coaches, and we, you know, we don't know from the Mississippian related, uh, uh, efforts yet what it is that's actually relevant about all the thing effective about all the things they're doing.

[00:50:50] Um, which of the parts that are kind of crucial and which with, you know, et cetera. Um, my guess is that it's the coaches. It's really man, [00:51:00] It's having people who know quite a lot about reading and our either teachers or former teachers who can communicate, who are on the ground, visiting the schools, uh, helping to problem solve, uh, that, that seems to be a really crucial element.

[00:51:15] And, uh, schools of education, of course, would be a place to develop a certification programs for coaches and o o other kinds of people, people. So, yeah. I, I don't know if that answers your question, but thank you very much. Okay. *Senator Chris Larson D-Milwaukee*: Uh, Senator Larson, thank you. And, um, thank you Mr. Seidenberg for coming to speak with us today, uh, and sharing your, your knowledge with us.

[00:51:38] Um, I think one of the things that I've, as I was listening to you, um, in talking about this is, is this ideal environment that's almost, um, uh, assumed in the discussion that you're having. And I appreciate you mentioning, um, at least in passing, about the importance of other contributing factors to a student's ability to learn.

[00:51:58] Including, [00:52:00] um, lead poisoning, homelessness and, uh, funding. Um, but I think given, given the, uh, outsized influence that they have on a, a student's ability to learn, I feel like that that kind of eclipses everything else. Um, and, and the other pieces is the, um, the idea of, of professional teachers being in classrooms.

[00:52:22] As you may know, um, private schools in the state of Wisconsin, which receive public money. You don't have to have a teaching certificate, just have to have a degree, uh, to be able to teach in. And, uh, we also changed, I think we've changed the qualification and I'm just trying to, uh, scratch my memory where even public schools now, uh, can have emergency certification, uh, for having anybody who has a degree.

[00:52:48] And that is something that has been used repeatedly to fill in classrooms. I know it's the case for substitutes, and I know that principals are., um, have been doing that just to say anybody with a degree without a professional [00:53:00] teaching background. Um, inherent to everything that you said was what is happening within people getting a teaching degree mm-hmm.

[00:53:08] or a higher education certificate. And so I'm, I'm just curious of, of, you know, given the, uh, deprofessionalization of teaching and given that anybody can be, you know, blessed by a principal and say you're a teacher, go in there. Uh, what

if that's something that you endorse? And if that's something that, that may be a contributing factor, uh, to not just having, um, you know, programs followed, but just being able to, to make sure that learning is happening within a classroom.

[00:53:40] *Mark Seidenberg*: Yeah. So I have to take issue with the, um, things that you said at the outset. So, uh, of course everyone knows that there are many factors that influence how kids do in school. and it's not a competition between different like [00:54:00] onerous conditions. Like if, if there's poverty or lead poisoning, we can only look at that We, we can't look at also these other things that actually might be within our control more, more within our control.

[00:54:13] But the, I think the thing also about your assumptions is that the reading problems are only for kids who have lead poisoning or who are poor. The first thing is poor kids are entitled to an education. We're not doing adequately for them and we need to change that. Diane Rabbit chooses a very famous, probably the best known educator in the country, believes that the education system is doing just fine because it succeeds with kids who are gonna succeed anyway.

[00:54:38] They are middle class and higher kids who go to good schools for whom lead poisoning and homelessness are not issues, diet, et cetera. If you only look at the kids at the high end, we're doing great. You know why? Because what happens in school doesn't matter for those kids. There's highly educated parents in the home.

[00:54:55] There's all sorts of resources. And by the way, if, if there's a problem in the school, we can just [00:55:00] pay to have somebody teach. So, you know, uh, poor people, everybody is entitled to an appropriate, effective education. And to, and to, I I think it's possible to use poverty as an excuse, which some people like Ravage, uh, does, uh, uh, for just failures to actually do things that are appropriate for kids under those circumstances.

[00:55:25] Here's an example. Uh, you wanna pick curriculum and decide which ones you'll let in the gate, open the gate for pick ones that don't assume that a lot of the teaching is gonna be done in the home or in the community. Like, you know, at the, at the, uh, uh, the, uh, the learning center or bio bio, someone you hire to do the teacher.

[00:55:45] So a lot of the curricula actually do the basics in school and then say, well go home and do all the practicing and fill in the DA details. That's not gonna work for everyone equally well. And so what you could do in picking your curricula is [00:56:00] pick the ones that actually make a commitment to doing it well in school.

[00:56:03] And of course you can supplement it with what's outside of school, but if you assume that it's gonna come from what's outside of school, then you're just gonna magnify the differences between the haves and have nots. So, um, look, uh,

poverty, uh, uh, environmental toxins. Uh, of course there are many things that influence reading, uh, and schooling and development.

[00:56:25] Um, uh, so do many other conditions. However, uh, your, your, your line of questioning implies that the issues about reading are only about those kids and they're not, uh, we are not doing well across the board and we're doing especially poorly with kids for whom what happens in school really matters the most.

[00:56:45] So, um, I don't think that those factors that you're talking about eclipse everything else. Yeah. *Chris Larson*: I apologize for, um, I may have distracted you with the beginning part of my question. I didn't hear an answer to the second part of my question, which is about the deprofessionalization of teachers. One in three teachers leaves [00:57:00] a profession within five years right now.

[00:57:02] Yeah. *Mark Seidenberg*: So this is a, a circle, it's a, it's a vicious cycle which goes like this. Teachers aren't adequately prepared for the job. Um, and then, um, uh, go into the job and have to learn, uh, on the job, which is really hard, especially for something like reading. And, um, so many of them end up, uh, stress. It's a stressful situation and a lot of people leave.

[00:57:23] Um, so which one step many states have taken is raise the bar on entry. So make sure, that'll be a way to make sure that the people, um, are people, teachers are exposed to the right sorts of, uh, instruction, um, uh, when they're in school. The problem with certification using. I'm in favor of that. I think having the bar there is great, would be great, uh, because it would indeed, there are certain things that people should know, uh, to be, uh, uh, licensed to teach.

[00:57:55] However, historically there's a [00:58:00] flaw in this. Unfortunately, it's very easy to undercut the effects of that because you have to have enough body just to mount the program. If you don't have enough people passing the test, then you have to have an alternative means of certification that has happened over and over again.

[00:58:15] Does it mean you shouldn't try to raise the bar? No. Does it mean it's easily undercut or worked around? Yes. That's what happens. How can you increase the professionalization level of professionalization in the, in, in edu in elementary education? Make it a better job and give people better training. Okay.

[00:58:34] Representative Myers? *Rep Lakeshia Myers D-Milwaukee:* Thank you, Mr. Chair. Uh, Dr. Seidenberg, uh, thank you for your testimony. I had one question, uh, with regard. Well, two questions really. One, with regard to kind of some of your testimony. You talked about three things that we could do and what we should look at. So in my mind, I'm envisioning a triangle.

[00:58:54] You talked about professional development on the job. One of the programs in which you [00:59:00] referenced was letters. I happened to be letters trained cuz I did it in Madison. Yeah. How'd that work for you? It worked very well.

Good, good. Because I enjoyed all the principles. We all had to do that. Yeah. As well. So one of the things with looking at, um, what we could do, when you talked about what a legislative response could be, kind of going back to Senator Jagger's point, what can we do to help the situation?

[00:59:21] When you look at scrutinizing, and I'm using that word purposefully, scrutinizing curricula. Yeah. Are there steps that we can take to guide our 421 school boards on how to effectively look at what curriculum should be in place? What are some mechanisms that we could do legislatively, if there is anything, to try to weed out the bad stuff so that we could get the triangle going on purpose by having adequate professional development on the job for people that are already in the profession.

[00:59:54] And also working with the colleges of education to train folks. Let's say if we're using letters, I'm just [01:00:00] using that as an example, to train folks in letters at the COE level. Yeah. And then they would have that repetitive training on the job, in the professional development portion, and then possibly by adding the coach at the school level to help do that.

[01:00:15] I think you've just described the model for trying to change things. The question is how do you get all those moving parts Okay. Working together. Okay. So the curriculum issue is really, uh, it's not black. It's, it's tough. You have to think of it as an interim. What can you do in the interim while we're waiting for better materials to come?

[01:00:33] Mm-hmm. and what? It's just really tough because I can't, you know, people always say to me, well, what, which curriculum are you, do you wanna recommend? And I I I, I have to say to 'em, I, I feel terrible, but I, uh, I can't actually recommend them because they're filled with, you know, uh, some good stuff, but often just so, uh, it's very hard when you can't point to the good stuff cuz it's really still coming into the pipeline.

[01:00:56] What you can do is weed out the bad stuff and you, what's [01:01:00] happening is it's compelling authors of the bad things that are flawed to incorporate some of these ideas. I think it may just be checking off boxes and what my message to you is, yes, you can provide some guidance about, um, curricula to avoid or ones that are better or worse.

[01:01:17] Sometimes people combine different curriculas, so you might have one that's related to like letters and letter skills and phonics and stuff like that along with something else. There might be ways of combining things to make up for gaps, but you know, there's no miracle to be found in the materials that are out there.

[01:01:33] You could. Make sure that you exclude the, uh, the bad ones and, um, you can give more teachers more guidance about how to use the materials that they got. That's what the coaching is about, basically. Um, so would that be, I'm sorry. You know, would that be something that I know in this particular body, I think it was

last session of the session before when the conversation developed around a committee to create the dyslexia guidebook [01:02:00] Yeah.

[01:02:00] Came about, yeah. Would that committee that we helped to put together in this com with, with us, we helped instruct who the people were that were supposed to put that guidebook together, is could this possibly be an extension of their work to put parameters in place on how to scrutinize curricula? Would that be something that we could possibly do?

[01:02:22] Possibly not in addition to the other opportunities that not just, well, you have to do something like that. If you're gonna assess, make recommendations about the, the curricula that go beyond. You know, these other kind of, um, agencies that have done their own, uh, the, it depends how it's done. Of course, the, the risk, of course, is that you get a compromise that's not, doesn't satisfy you anymore.

[01:02:41] Right. Uh, representative Wickers, thank you. *Rep Chuck Wichgers R-Muskego*: And, uh, thank you for being here. So, uh, when you talked about poverty and those kids that don't have the resources at home to get the support that they [01:03:00] need to bring homework home, do homework and, and progress and reading in math, and then, uh, through that experiment, when they started implementing things like whole language and whole math because it was easier for the kids to do without homework and then, uh, moving forward, they saw that with dual income families, the kids were going home and there was less parental support because.

[01:03:29] Parents were exhausted, they were working overtime, working different shifts, taking on multiple duties. Um, so even with kids that have dual incomes living in the suburbs and they have a nice home, and they were educationally in poverty as well. So when you go to the school board meetings all through the eighties and nineties, they were saying the kids aren't doing homework.

[01:03:54] We have to give them a curricula that they can handle within the timeframe that we have [01:04:00] them. Yeah. And so we keep implementing experimental curricula that we now know that in the employee pool, the employers are telling us it didn't work. We have to reeducate kids in the workplace. Yes. Everything you've described seems pretty accurate, but what, what can I, what would you like me to add please?

[01:04:22] So if we're gonna have an, if we're gonna, if, if we're moving towards a new curriculum and we have. both in poverty and in the suburbs. We have, yeah, the same problem, but in different ways. Yes. So I, what, what curriculum do we have if kids aren't gonna do homework? Well, it's not, um, notions about what homework is and how it's done are changing as the technology and stuff changes.

[01:04:47] *Mark Seidenberg*: But, um, I think the important point that you're getting at is, um,

[01:04:54] these issues about don't just arise for poor kids. [01:05:00] They arise for a variety of reasons. And, um, what, what you're pointing to is the idea of flawing, a general flaw, which is, again, there's only so much time in the school day, only so much time devoted to reading. In particular, I myself think it needs to be used as efficiently as possible, and that it's not right now, that's something we can improve, but nonetheless, there's only a certain amount of time.

[01:05:27] and, and, um, you, um, um, what, what people end up doing is say, well, you'll fill it in at home. So, uh, to take a pretty neutral example, the multiplication tables teacher might explain the multiplication tables in class, but the practice in the, uh, actual, you know, the practice and, and using the system that's necessary, uh, is, is really, uh, farmed out, uh, to the home.

[01:05:57] Now, a certain amount of that is, [01:06:00] is, is, uh, is is tolerable, but, um, you can farm out so much stuff that you're overwhelming the parents or other caregivers, whether they're poor or, you know, you, as you say, it can affect a range of people. So, um, what does it point to? It says, do a better job in the time you have in school.

[01:06:21] Uh, use it as efficiently as possible. That's why it's really critical to get it right. And, um, you know, it's a moving, it's a trajectory, man. We're, we're, we're moving towards something better. We have the vision of what it's gonna be like. We just don't quite have the materials to put it in place yet. Um, but we can see where, what, what, what the, uh, lines of a pollution would be like.

[01:06:43] And hopefully we'll stay on track to get there. Clearly outsourcing the teaching to the parents is not a great idea. In general, being a parent and a teacher is not a great comfortable situation for a lot of people like me. Uh, my kids, uh, uh, [01:07:00] parents have other, um, responsibilities, um, besides, uh, they're not necessarily teachers.

[01:07:05] Uh, you know, I think timeless. We expected schools to have professionals who would teach children things like about how to get into reading. And, um, over time we outsourced a lot of that to the parents in the name of like homeschool cooperation. I think we have to be careful about that. You want homeschool cooperation, but you don't want the.

[01:07:25] Expect the, um, parents to carry the weight of instruction. Any other questions? Thank you very much. Really appreciate you being in here. Thank you.

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