

Literacy within a Multi-Tiered System of Support Framework

Hello, Minnesota principals. Thank you for joining and watching this video. Literacy within a multi-tiered system of support framework. My name is Kim Gibbons and I'm currently the Director of the Center for Applied Research and Educational Improvement, otherwise known as CAREI at the University of Minnesota. Very happy to be talking today about a topic that I feel very passionately about. Two topics, the multi-tiered system of support framework and how we can leverage that framework to really improve literacy outcomes for students in Minnesota.

This, these videos are a collaborative partnership between the Minnesota Principals Academy and the HELP Committee, the Higher Education Literacy Partnership of Minnesota.

Our agenda for today is, I am going to talk about literacy and the science of reading within an MTSS framework. And I'll share three big ideas around literacy, assessment and instruction. What I'd like you to do while you're listening is reflect on these factors and what implementation looks like within your district or your ability. And really think about and reflect on where you think you need to focus. So I'm going to start with a fictional story called lost in the woods.

You can read it along with me. Lost in the woods. A group of managers got lost in the woods, undaunted. They organized into several teams and began hacking a path through the dense undergrowth. Hours passed, but the managers were cheerful. They had become an efficient operating unit and they were proud of their achievement.

One of the group decided to climb a tree to see how far they had come. But the woman shouted down, stop, we're headed in the wrong direction. We have to change course. The managers all shook their heads in disbelief and defiance and said, but we can't stop now, we're making great progress.

So why would I share that story with you? What do you think the moral of the story is? The moral of the story is that it's hard to give up what we do well, even if it's no longer relevant. So we have to continually reassess our direction and make sure that we're implementing research-based instruction and programs that really will have an impact on increasing achievement levels of all students.

So what we're going to talk about today really is a research to practice gap. I'm going to talk about the science of reading and why this is important now more than ever. But let's start by talking about gaps.

We know that we have gaps. We have achievement gaps in Minnesota for all students compared to proficiency standards and between different groups of students. Students who are English language learners. Students that receive free and reduced lunch, students with disabilities, students from different racial and ethnic backgrounds.

We also know that we have gaps between research and practice. And that's really been my professional mission has been to help close these gaps between what the research says and when it makes its way into practice.

So if we take a look at the first research to practice gap, the first practice gap occurred when lemon juice was shown to be effective in preventing scurvy and sailors on ships. And that was, that was shown in the year 1601. And it wasn't introduced into sailors' diets on ships until 1795. So folks, that is a 194 year research to practice gap.

Another example of a research to practice gap is what's being commonly referred to right now as the science of reading. So let's just unpack that a little bit and find out what this means.

So when we think about the science of reading, here's a few facts. The science of reading is consensus from many related disciplines, including developmental psychology, Educational Psychology, cognitive science, neuroscience, and reading education. So consensus across many different disciplines about how students learn to read, what goes wrong when students don't learn, and the type of instruction that works the best for most students. The science of reading is based on thousands of studies supported by hundreds of millions of research dollars conducted across the world in many languages. And really, the science of reading debunks older methods of reading instruction that were more based on tradition and observation and not evidence.

So let's think about science of reading in terms of fiction. What's not true? A lot of times people will say that reading is as natural as speaking. So we really just need to immerse students in good literature and print. Other folks will say that there are a multitude of ways that children learn to read. So there isn't one set of instructional principles that will work for all children. Then another common piece of fiction is that teaching young children to look at pictures, skip over the wording or guess at words based on the context will help them develop reading comprehension. So all of these three statements are false.

The other thing that I want to point out is that the science of reading is not just a single component of reading instruction. A lot of times people will go towards phonics and say, well, that's what the science of reading is about, is should we teach phonics, the skills to decode words or not. It's not a single component and encompasses all of what we know about teaching students how to read. It's not a one-size fits all approach. It's not a political agenda, an ideology or philosophy, and it's not a single program of instruction.

So let's juxtapose that in terms of what does the science of reading mean within an MTSS framework?

So when we jump over to MTSS, what we know is that MTSS is an integrated comprehensive framework that focuses on the alignment of systems necessary for all students' academic, behavioral, and social success. What we're really trying to do is to help promote, identify, and support systems for alignment of resources at the district level, at the school level and at the grade level. MTSS is a framework that addresses support for all students, including students that maybe have received a label of gifted or high achievement, gifted and talented. It's not just a framework that takes the approach of only working with students who are below expectations at their grade level. MTSS uses evidence-based practices to support the whole child along a continuum, uses a data-based decision-making model to solve systems, group and individual problems. And really tries to focus on removing barriers to learning and at all levels.

So what we know about MTSS is it is a school reform or a school improvement model that focuses on system alignment at all levels to help schools and districts improved. So some of you may be in a district that is implementing a multi-tiered system of support framework. And maybe you have a MTSS plan that you've developed. You may also have a School Improvement Plan. And the goal here is to really integrate the two because MTSS is school improvement. So instead of having two separate plans, how can we really merge those together? So again, it's not just a process of providing interventions to a small group of students.

So when we look at the MTSS framework, there's typically five components and those involve assessments. What types of data our assessment data are we collecting? How do we use those data to inform our decision-making? How do we provide multiple levels of instruction across tiers of support? So thinking about that universal instruction that all students receive, that supplemental or extra instruction that some kids need in order to make increased growth or that more intensive, individualized support that a few students might need in order to maximize their growth. Then finally, fidelity and evaluation. Fidelity refers to measures that will help us know whether we're actually implementing what we intend to implement. And evaluation is how do we use data that come out of the MTSS framework to evaluate our implementation?

Three big ideas about a multi-tiered system of support framework. The first is in the area of assessment of student performance. So we'll unpack that a little bit here.

When we talk about assessment and data-based decision-making, we know that schools need tools, we need reliable and valid ways to measure kids' academic, their social, their emotional success. We talk about screening and really administering rapid and brief screening measures multiple times per year to help us know which students are exceeding our grade level expectations, what students are meeting them, and which students haven't yet mastered our grade level expectations. We also need progress monitoring tools that are reliable and valid that we can give often as much as a weekly that will be really sensitive to change so that we can know if what we're doing with instruction is actually working. If it's not working for individual or for groups of kids, that the data is meant to be formative. So it can help teachers understand that they need to change part of their instruction in order to meet students' needs. Then that last area is data-based decision-making and how do we really work in groups and teams and act upon the data that we're collecting. Both at the broad level, looking at school-level data, grade level data, all the way down to classroom data, even down to individual student data that are, that are receiving extra support.

So when we think about that, it's also very important to think about this term, data literacy. And data literacy is really understanding that every assessment is designed for a specific purpose where we can start to get into trouble a little bit when we don't understand the purpose of an assessment that we're using and we're trying to use it for a purpose that it wasn't developed or intended to be used for. So when we think about the purpose of, purposes of assessments, we're really thinking about four areas. Screening that we do with all students. Diagnostic assessments that we might give to some students to help us understand where we need to concentrate our instructional efforts on. Progress monitoring, so when we're providing extra support, either on the acceleration and to ensure that kids that or above grade level expectations are making

progress or trying to really fill in gaps to bring students up to grade level of proficiency. Then finally, the fourth purpose is outcomes. How can we take our data that we're collecting and our system and use it to inform outcomes decisions about making decisions about whether programs and practices are actually benefiting and causing those increases that we're hoping to see.

So when we talk about screening, typically screening measures are given to all students. And so for that reason, we want them to be pretty quick to administer and not very expensive. And so when I say quick, I'm talking between one and five-minutes. We have to understand that when we collect the screening measure, it's an indicator. It might not tell us everything there is to know using literacy e.g. about everything there is to know about a child and they're reading performance. But it's an indicator that will let us know whether they're off track, on track or need, need some additional support. It tells us what students might be at risk for not reaching grade level standards. And that we might need to gather more data on these students.

When we talk about universal screening in literacy within an MTSS framework. Again, we're focusing on brief, reliable, and valid assessments to all students at multiple points per year. And just again, provides a quick way to identify what students are exceeding, meeting or falling below grade level standards.

We know a lot of us that have taken statistics class. We've heard these terms reliable and valid. Reliable reliability pertains to consistency across different forms of assessment against different people that are administering assessments. But it's that consistency over time. Valid, is really demonstrating that the tools that we're using are strongly associated with the outcomes that we're interested in. So for reading, we would want to make sure that the reading assessments that we're using for screening are strongly predictive and correlated to the broad domain of reading. The third area that often people are less aware of is this notion of diagnostic accuracy. That's, are the tools that we're using providing accurate predictions of whether kids are exceeding our expectations, meeting our expectations, or haven't met our expectations yet?

So when we're talking about literacy assessments, we really need to start to think about that diagnostic accuracy component. And there's two terms that are usually used to help describe accuracy. And those terms are called sensitivity and specificity. Now we're not gonna go deep into this, but I want to put these terms side-by-side because I'm going to talk to you about some popular literacy assessments that are used a lot in Minnesota. And some of the problems that those instruments have in terms of diagnostic accuracy.

Specificity is the proportion of students who are truly not at risk among all of the students that you're screening instrument classified as not at risk. So maybe it's a little easier to understand what this example, if an assessment does not have good levels of specificity, some students who are not actually at risk might be identified as such and receive an intervention. So the other side of the coin is sensitivity. And that's the proportion of truly at-risk students who were identified as at risk by the screener. If an assessment doesn't have adequate levels of sensitivity, then here's where the rub is. Students who actually need an intervention may not be identified as needing help and therefore won't receive the intervention.

So we're going to move over to a popular literacy assessment that's used pretty widely across Minnesota as well as the country. That's the Fountas and Pinnell Benchmark Assessment System. This assessment is administered individually to each student three times a year and it takes about 20 to 40 min per student to administer. There's an oral reading component and a comprehension component, which together provide an instructional level for each student. Independent, instructional, frustration too hard. The problem is that independent studies that have looked at the utility of the font-awesome panel assessments as a universal screener are very limited. There's no studies that have been found using the third edition. And for those studies that do exist, they've only been used at grades 2 and 3.

Some more recent studies really, I think, help to underscore important issues that school districts need to consider when they're selecting a universal screener. We need to think about the time that it takes to administer the assessment, the resources that we have, along with the diagnostic accuracy in order to come up with a final decision. And what we found is the Fountas and Pinnell assessments fall short when we compare them to other widely used measures like curriculum based measures, which would be for those of you that have used the DIBELS system or Aimsweb or FastBridge or easyCBM, along with the Measures of Academic Progress, the MAP. So let me talk to you about a couple of concerns real quick as it relates to these other assessments.

A study by David Parker and colleagues highlighted that one concern with Fountas and Pinnell assessments are that if we use the map, the NWA MAP test, which is highly correlated with the Minnesota Comprehensive Assessment. If we use the map as the 25th percentile as our criterion, oral reading fluency was way more accurate at identifying the overall correct classification than the Fountas and Pinnell assessments. So we can see that oral reading fluency had a higher level of sensitivity, 0.86 and specificity 0.78, then did the Fountas and Pinnell assessments and you can see those lower correlation, 0.31, 0.66. What this means is that in a hypothetical school with 100 students who need an intervention, 86 of the students who actually need an intervention based on their MAP performance would be correctly identified using a measure of oral reading fluency. Only 31 of those students would be accurately identified using the Fountas and Pinnell screening data. So that's a problem.

The other concern is the link to these assessments to guided reading. Guided reading is probably one of the most pervasive practices in K through 5 reading instruction. And is probably that small group work in which students are grouped by their reading level. Many experts have estimated that this practice is happening in 70 to 80% of elementary classrooms. And it's very common and guided reading and balanced literacy classrooms, as well as other popular reading programs Fountas and Pinnell and teachers college reading workshop.

Here's the problem with guiding reading levels and the linkage to assessment. And this is a study from Matt Burns and his colleagues that was done in 2015. And what they found is that when we look at the Fountas and Pinnell data, those data overestimate the reading levels of students at or below the 25th percentile. And they underestimate reading levels for students who are above the 25th percentile. So what does that mean? It means that students who were at or below the 25th percentile, were reading from books that were too hard at their frustration level about 58% of the time. What happens when kids are really trying to read out of material

that's too hard, they are going to spend a lot of time practicing their errors. They are going to become frustrated and disengaged and be off task during their instruction. Students within the 26th to the 75th percentile were reading materials that were too easy for them 71% of the time. So we really want to identify that level that's challenging to students but doable. So what's resulting is that we're getting students that are reading out of material that are either too difficult or too easy most of the time. It's these types of studies that have really called into questions the accuracy of initial reading level.

The other problem with guided reading levels is that there's really nothing about a student's reading level alone that shows what skills they're missing. What do they need to do to grow as a reader? Does a student need support with decoding or fluency? Reading level isn't really going to tell you that. So when you think about it that way, we shouldn't expect grouping by reading level to work because it doesn't actually give teachers cues about how we should be differentiating instruction for small groups of students. It also gives the kids and lower reading groups have steady diet of less challenging text. And over time this starts to become a self-fulfilling prophecy. And you may have heard that quote, leveled texts lead to level lives.

So why should we be concerned? First of all, the length of time for an assessment. A class size of 25 times 30 min per assessment comes out to be 38 h total across the year just on collecting assessment versus an oral reading fluency passage that we can measure in about 3 min. Her students. The lack of diagnostic accuracy should have us concerned because we're going to likely miss students who need support. And then the fact that these assessments are linked to instruction and guided reading levels, which will impact engagement and growth and will cause frustration, will result in behavior problems with students who are reading out of texts that are too difficult. It also gives us a false sense of security in terms of thinking that our reading programs and instruction are getting more students on track than they actually really are.

So again, some of the elementary screening examples would be a measure of oral reading fluency, which is found in DIBELS and Aimsweb and FastBridge and Star CBM, easyCBM. Then there's computer adaptive tests. There's FastBridge's a-Reading, there's Star Reading, and there's the NWEA MAP, which all have sufficient reliability and validity and diagnostic accuracy.

When we think about progress monitoring, we've talked about screening, we now switch to progress monitoring. We also want those tools to be valid and reliable, simple and quick, inexpensive, easy to understand. Something that can be given often. And we're always measuring the same level of difficulty. So it's very easy to compare apples to apples over time.

So again, some other really good progress monitoring tools are really identical to some of the tools that we use for screening. So this is a good example of understanding that some tools can be used for multiple purposes as well. So non examples of progress monitoring would be our statewide accountability tests. They're only given once a year. Running records lack the reliability necessary to make good decisions. The MAP, the MAP is highly correlated to overall reading achievement, but it's not something that we can give on a weekly basis. It's just not sensitive to time. End of the unit checkouts or tests or specific mastery assessments. There

again, our difficulty level is changing and we're not measuring the same thing each time. So it becomes very hard to make comparisons across those measures.

Within an MTSS framework, what we're trying to do is come up with a seamless data system. So having a single system that has a strong oral reading component, is validated for universal screening and progress monitoring, helps educators get really good at interpreting and using data, reduces the need for training, and reduces the costs that are associated when you're interacting and using multiple vendors.

So I'll put up a list here of a number of commonly used data systems and we can find out are they seamless? And we can see, yes, for Aimsweb, for DIBELS, not for MAP. Again because there's not that progress monitoring component. FastBridge is a yes. iReady as a yes. Fountas and Pinnell, not appropriate for universal screening or progress monitoring.

So along with this video, there will be some resources that we can make available to you. We've developed some data literacy, professional learning community guides. Basically just a one-page for each purpose of assessment and talks about what is a screener, what is the progress monitoring measure? What is a diagnostic measure? Gives examples and then has discussion questions to talk about in teams. Also have an assessment inventory that can be really helpful if you're trying to evaluate the different assessments that you're using in your buildings and figuring out if you're hitting those four different purposes. And the extent to which you can identify one system that can help you do that will be a lot more efficient for staff in your building.

Big idea number two, within an MTSS framework is thinking about effective instruction and intervention across multiple tiers of support.

So think about tiers as resources. And our first tier is that first instruction that every student gets, and sometimes that's referred to as core instruction or universal instruction. But this should be available to all students.

We then know that there's some students that might need something extra in order to impact their growth. Again, for acceleration on the gifted, for students that are exceeding grade level expectations, as well as students that haven't yet mastered grade-level standards. We typically refer to that as tier two, so everybody gets tier one. And then some students will require an extra scoop, which we might refer to as tier two.

Then that third tier is, even if we come in with a Tier two intervention, there will likely be some students that just need something more intensive and individualized and that's when we start to talk about Tier three.

So again, tier-1, that first best instruction for all students, tier to some students are going to need something even more intensive and research-based. And then even with an appropriately intensive tier one, tier two, a few students are going to need something that's the most intensive. Tier three often includes students with disabilities, but it also can apply to students who don't qualify for special education services, but have similar needs to students who do qualify.

So let's switch over and talk a little bit about literacy within our tiers of support. And we're going to really focus on that universal tier, that first best instruction. We know in our country that we've got more than a third of fourth graders who don't read on a basic level. We've got another third that are at risk for not achieving grade level expectations. And we've got another third that most likely are kids who would learn to read no matter what type of instruction they received. But they're in the minority. We've got two-thirds of kids who are really going to need that systematic and explicit instruction.

So here's the great debate. There's one side that says, if kids know how the sounds and words are represented by letters, then reading comprehension will follow. So we should focus on really teaching kids how to decode words. The other side would say that if kids are focused on the meaning of what they're reading, they can figure out what the words say. So really focus on teaching kids comprehension. That's the great debate.

The prevailing views right now on reading instruction is that is really based on a belief that if children are read to a lot, that reading should come pretty easily for them. And that the teacher's role is mainly to guide students to create an environment that's conducive to learning how to read. So things like setting up reading groups, reading with kids, helping them find books on their reading level.

But then when this doesn't work, when this approach doesn't work, there's typically two responses that you'll hear from people. One is that maybe there's a problem in the home. The child wasn't read to enough, wasn't exposed to a lot of early literacy and being read to. The second is that there must be a problem within the child that he or she has a disability. But usually it's neither. Most of the time when kids can't read, it's because they weren't taught how to do it. And in parentheses is the acronym ABT, which my mother, who was an English teacher, should close her ears now if she's listing, but that would stand for ain't been taught.

So the problem with prevailing views is that decades of scientific research on reading shows that it's not true. Some kids do learn to read easily, but many students struggle. It doesn't matter how much they're read to or the number of books in their home. They are not going to be good readers unless they are taught how they're written language works.

So talking a little bit right now about the Simple View of Reading is really the reading comprehension can be divided into two parts. Word recognition, that's how we decode words, and language comprehension. So the Simple View of Reading doesn't say how word recognition or language comprehension skills develop. And it does not say how they should be taught, but it does make clear that the first task of the beginning reader is to learn how to decode the words he or she knows how to say.

So if we take that Simple View of Reading and many of you probably have seen Scarborough's reading rope that we're really taking those areas of language comprehension and word recognition and braiding them together. So it's not an either or it's a both and. We need language comprehension and word recognition. And here's all the things that go into language comprehension: your background knowledge, vocabulary, language structures like syntax and

semantics, verbal reasoning and making inferences, understanding metaphors, understanding print concepts, genres. When we get into word recognition, we're talking about the phonological awareness skills that are needed, the decoding skills that are needed. And how students start to learn different sight words. So a common question that I get from principles is they'll say I keep hearing that teachers don't know the science of reading. When I go back and talk to my teachers, they all say that they're teaching phonics. What's really going on? I think you can kinda see in these blue boxes, There's a couple of different things going on. One is that there's a lack of precision and how we talk about these things. So when we say I'm doing phonics, what does that mean? What is phonics instruction? What is a sufficient amount of phonics instruction? We know that phonics instruction needs to be explicit and systematic. Explicit in that sound spelling relationships are directly taught to students. Students are told e.g. that the letter S sounds for the /s/ sound. It's systematic in that it follows a scope and sequence that allows children to form and read words early on. Then we also know that we need to have adequate time allocation.

So there's typically been two ways of teaching phonics. The first that's commonly used in a balanced literacy classroom would be the three cueing method, where we have students look at the picture and guess. If that doesn't work, we look at the first letter. If that doesn't work, then we use context and background knowledge to try to figure out the word. With a science of reading approach, we would really start with telling and teaching students what the sound is for each letter. We would have a scope and sequence of how, what order we would teach letter sounds and we would incorporate spelling using words that include the sounds that are being taught. Then we'd have students practice reading using decodable text that would enable them to actually sound out words that they've just been taught. We know that this needs to happen for about 20 to 30 min per day in early in grades K through 2.

The Matthew Effect in reading, want to just clue you in this really quickly. I'll give you an example to talk about this. The Matthew Effect is this phenomenon that the rich get richer and the poor get poorer. So let's say you start school and you get off to a great start learning how to decode words. Now you can read the words you know how to say. And then through reading, you began to learn the meaning of words you've never heard before. That's how the rich get richer. But one study estimated a fifth grader who reads at the 90th percentile encounters about 2 million words every year. Just in texts they read outside of school. A reader at the tenth percentile encounters just 8,000 words, 2 million versus 8,000. That's how the poor get poorer.

So again, we know that good word recognition skills are only half of the equation. Research shows that once students have mastered the basics of decoding, that their ability to actually understand what they read is largely determined by the level of their language comprehension. There's a lot to language comprehension. That's all the words you know the meaning of, your understanding of how language works.

So again, it's going back to Scarborough's reading rope and really looking at all of the different elements that make up language comprehension.

So I'm gonna put a passage up here right now, and I'm gonna give you about 15 s to read through this passage. Alright? So my question is, how many of you are able to read the words

just fine? That would probably be me. I did get a little bit hung up on Ravichandran, but for the most part I can read the words. But how many of you have absolutely no idea what this passage is about? That would be me.

And the reason is that this passage is from a BBC report on Australia's victory in the 2015 Cricket World Cup semi-final. So if you had no idea what the passage is about you probably lacked the background knowledge about the sport of cricket. I can honestly say, I've never seen a cricket game. I don't think I've ever read about cricket. So that easily, I think translate into why I had no idea what the passage is about. Your ability to comprehend what you read is linked to your knowledge and your background knowledge. And so sometimes we do hear that there's an association between a child's reading comprehension and their family's income. But it often just means that more income means more opportunities for experiences that kids have that really build their knowledge of the world.

So some of you are principals and you might not be elementary principals, you might be middle school or secondary principals. And you might say, well, how does the science of reading apply to me and the students in my building? And so the core concept of the science of reading is that reading instruction has to be guided by research with no limitations on grade level and there are important implications for middle and high-school. So when we think about literacy acquisition, it usually involves two phases. Phase one is, what do we do for students before they've learned the mechanics of reading? And phase two is what do we do after students have learned the mechanics of reading. And recognize with the pandemic, there are many students that will not have mastered the mechanics of reading by grade 3, 4, even 5, they are going to need that explicit instruction.

So when we think about those two phases of literacy instruction, That's where we really talk about phase one being that explicit and systematic instruction around phonics and other foundational skills. And then phase two is really what do we do after students have learned the mechanics. So it's really explicit and systematic instruction around background knowledge, verbal reasoning, vocabulary, language structure, literacy knowledge. It's teaching strategies for comprehension, how to generate questions, mental imagery, graphic organizers, story structure, story mapping, syntax, semantics. And it's really that wide exposure to text to help build the ability to recognize more and more words instantly by sight that really helped to facilitate comprehension. So I think of re-framing literacy in middle and high school. Becoming fully literate is analogous to taking a journey to a far away land. We assume that getting there requires a flight. And the first step in getting to the airport, says you have to exit your driveway and take a right-hand turn and phonics instruction. It's that first right-hand turn. It's the most correct and most efficient for step, but there's a lot more to the journey.

We really need to make sure our understanding and implementation of the science of reading is both broad and comprehensive enough to include the entire research base on what the science says about reading at all grade levels.

So if we go back to the prevailing approaches, the prevailing approaches omit systematic teaching about speech sounds, spelling systems, how to read words by sounding them out. And they're just weak or wrong when it comes to the structure of English language. The most

popular programs are strong and literature illustrations, cross-disciplinary thematic units and motivational strategies. And they often prioritize small group instruction over whole group instruction. So we're just about done here, but I wanted to take a minute and talk a little bit about that priority small group versus whole group.

When we prioritize small group instruction from the teacher, let's say that we have five groups of students that receive about 20 min of reading instruction per day. If we prioritize whole-class instruction, students will actually receive about 80 min of teacher-directed instruction a day, which is three to four times as much.

So, what is three times as much? What does three times as much mean? It means that if we can actually flip our approach and have a little bit more time in whole group instruction with more of an increased focus on systematic and explicit phonics, we're going to provide a lot of time to accelerate student's mastery of the code. More time for them to read and listen to fiction, non-fiction, increased reading and general knowledge. A richer vocabulary will be acquired through abundant reading. But we also know that we need targeted and embedded vocabulary instruction as well. There'll be increased time for discussion. So that'll help kids become confident and articulate speakers and engaging in frequent and purposeful decisions or in discussions about what they read will also leave time for more increased time for writing and writing instruction.

So I am here to really say that the science of reading has been settled. Researchers are no longer debating the importance of systematic multiyear phonics and word analysis instruction and a large academic vocabulary. This was settled in about the year 2000. So remember that research to practice gap. It's been settled, but we're still working on getting this into practice. The scientific community is achieved broad consensus on how children learn to read, what causes reading difficulties, what are the essential reading components of effective instruction, and how to prevent reading difficulties. So the implications are that Reading and Language Arts instruction must include deliberate, systematic, and explicit teaching of word recognition and help students develop that subject matter knowledge, vocabulary, sentence comprehension, and familiarity with language and written text.

To wrap things up, our last big idea is really around collaborative teams using data to help make instructional decisions.

And typically, when we talk about MTSS, we talk about four different types of teams, district team, of building team, a grade level team, and a problem-solving team. And a lot of this work in terms of looking at our reading instruction and our reading data and using it to guide our instruction needs to happen at these grade level or core teams.

So again, some other resources that will be provided to you will be a team inventory. So you can look and see do you have all of those four teams in place? I've got some sample grade level team agendas that can help provoke and prompt discussion around some really important essential questions and a really good teaming and handout to help you understand the various communication loops that needs to be in place, as well as like what should really be happening in those team meetings.

So I would encourage you now to think about what questions you should ask. And the first question is, what does your district or building data say? What does it look like? I think I would just encourage you to really think about the fact that every system is designed to get the results it's getting. So if you keep doing what you're doing, you're going to keep getting what you're getting. If you like what you're getting, if your data look good, keep doing what you're doing. But if you're seeing that you're trying and you're working so hard to try to change outcomes and nothing's changing, then we're going to have to really go back and take a look at our system and see, are we really incorporating these elements of the science of reading? Or are we not? I would encourage you to think about what universal screener or are you using? Are you using guided reading levels and Fountas and Pinnell? Or are you also using technically valid, dated assessments? I would ask you to think about what this phonics instruction look like in your district? How much time is allocated? Do you have decodable books? Do you have spelling and writing included? Are you using evidence-based programs? And last but certainly not least, probably most important is do teachers know how to teach this? So Minnesota has been doing a lot of work around a program called LETRS, which is an evidence-based professional development option that helps teach teachers about the science of reading. There's also something called Enhanced Core Reading Instruction that you can Google that. It's out of the University of Oregon. And they look at a commonly used elementary reading curriculum. And they will align the curriculum with the science of reading and provide you with supplements that you're going to need to use to fully teach within a science of reading framework. And there's also a wonderful resource called the Teaching Reading Sourcebook that I would highly recommend that you get in your teacher's hands. It's just a super good reference book about the five elements of reading: phonemic awareness, phonics, vocabulary comprehension, vocabulary. Really good lesson templates for putting that into action.

So not ending on an optimistic note, which is sometimes 80% is lost when you watch a video like this after 48 h. So I just really want you to think as we wrap this up, what do you think is the most important information for you to retain? And I would challenge you to write that down and make a commitment.

What are two things that you could do with what I discussed today? And what do you think you need to accomplish? Two things. I would encourage you to dialogue with other principles in the Principals Academy. Thank you all for the hard work that you're all doing. Leading buildings and districts to really improve the reading outcomes for our students in Minnesota.

Here's my contact information. If you would like to chat more with me, I'm very open to that. And again, I'm just going to end that again, this is a collaboration between the Minnesota Principals Academy and the Higher Education Literacy Partnership of Minnesota. Thank you very much.