Triple R Teaching

Hello! You are listening to the Science of Reading Bootcamp, Episode Five, and we're going to talk about what the research says about the Big Five.

As we stated previously, the science of reading is not a curriculum. It's not a fad, and it's not a pendulum swing. It's a body of research. Today we're going to look at what this body of research has to say about phonological and phonemic awareness, phonics, fluency, comprehension, and vocabulary - the Big Five!

Before we do that, though, I'd like to tell you a little bit about our online course, "Teaching Every Reader", which will open for enrollment on October 4th. Inside that course, we have eight modules. Each module is a mixture of video and text, and all the videos have transcripts that you can print and read. The first module is called "The Big Picture". In that module, you'll get a solid understanding of the science of reading.

Module two is about building a foundation of oral language and modules three to seven are about The Big 5. Finally, module eight is all about putting it together, taking the science of reading and applying it to how you set up your daily schedule, how you form small groups, how you differentiate, how you keep the other students busy and learning. It's the nuts and bolts. What sets our course apart from other courses about the science of reading is the huge amount of student resources. When you join, not only will you get permanent access to all the modules, you will also get dozens and dozens of printable student materials, including editable activities that will help you as you teach the Big Five! So remember to mark your calendar and head to teachingeveryreader.com to join the waitlist.

In today's episode, we're going to take a look at some research related to each of the Big Five, and then give some specifics as to how this would impact your teaching. Let's start with phonological and phonemic awareness. As always, I like to give definitions because these terms are easily confused.

Phonological awareness involves identifying and manipulating units of oral language. It's an umbrella term. It includes word awareness, rhyming ability, syllable awareness, understanding of onsets and rimes, alliteration, and phonemic awareness. Phonemic awareness has to do with the smallest part of a word, the phoneme, the individual

sounds.

Phonemic awareness has to do with the ability to isolate, blend, segment, and manipulate individual sounds in words. The key thing that research tells us about phonemic awareness is that phonemic awareness is central to developing a large sight word vocabulary.

Really quickly, let's review. How do words become part of our permanent sight vocabulary? How do we recognize them instantly without needing to sound out or guess? It's not that we store individual pictures of each word in our brains. We recognize words instantly because we're good at two things, phonetic decoding and orthographic mapping. Phonetic decoding is sounding out words and orthographic mapping is remembering words for the future for instant retrieval so you don't need to sound them out. Otherwise reading would be extremely tedious if we had to do that every time we were reading, if we had to sound out every word letter by letter! You don't need to do that anymore! Unless perhaps you come to a surprise word, perhaps a long scientific word that you've never read before.

To be able to do phonetic decoding, you must know letters and sounds and be able to blend phonemes. To be able to do orthographic mapping, you must have letter sound proficiency and phonemic proficiency, so you have to be very good at phonemic awareness.

Remember words are connected in memory by connecting pronunciations to written spellings. For the word "cat", we connect /k/, /ă/, /t/, to the letters of the word. we're connecting the known - the sounds, to the new - the word "cat". That's why phonemic awareness is so important. It helps us remember words for the future!

What implication does this have for your classroom? Well, particularly in pre-k, kindergarten, and first grade, perhaps even in second grade, we're going to make phonemic awareness instruction part of the day. This should include oral exercises that help students learn to do all the parts of phonemic awareness, particularly phoneme manipulation, which is what is going to help them become strong readers. Phoneme manipulation has to do with adding and subtracting phonemes or substituting phonemes.

As for what you should use to teach phonemic awareness, many teachers enjoy the program Heggerty, which is just a collection of oral exercises that you do every day for about 10 minutes. Also, there are some one minute phonemic awareness activities in the back of David Kilpatrick's book, "Equipped for Reading Success". There's even a free phonemic awareness curriculum you can get at "Reading Done Right," and that's

high quality as well. You could try any of those!

As we talked about last week, cumulative practice, that constant review, is a key practice of structured literacy. So I think that in addition to doing these oral activities, it's very helpful to put phonemic awareness activities at your centers.

Now, the challenge of course is how can they build phonemic awareness at a center when it's an oral activity and there's no teacher there to do the oral work? Actually, I've created a whole bundle of phonemic awareness games that students can play. The games use pictures, and this allows them to practice phonemic awareness to get that cumulative practice in when you're not sitting right next to them. In fact, if you'd like to get this bundle of games for 40% off, you can do that when you visit reachallreaders.com/phonemicawareness. Be aware that as soon as you get to that

them for the 40% off, but that timer should give you enough time to read through the page and see if that bundle of activities is right for you. Again, that link is reachallreaders.com/phonemicawareness.

Let's move now to phonics. What is phonics? A definition from Wiley Blevins in "A Fresh Look at Phonics" is that, "Phonics instruction teaches students how to map sounds onto letters and spellings." Research tells us a lot about phonics instruction, and I'm just going to focus on some key summaries of the research.

In 1967, Jeanne Chall wrote her book, "Learning to Read: The Great Debate". She analyzed the data, did a ton of research, and concluded that, "by an overwhelming margin, the programs that included systematic phonics resulted in significantly better word recognition, better spelling, better vocabulary, and better reading comprehension, at least through the third grade."

In 1985, there was a study of research which was published as a report, "Becoming a Nation of Readers". The report stated that teachers of beginning reading should present well-designed phonics instruction. Phonics is more likely to be useful when children hear the sounds associated with most letters, both in isolation and in words, and when they are taught to blend together the sounds of letters to identify words.

Finally, we have the National Reading Panels report published in the year 2000, and the report stated that phonics instruction enhances children's success in learning to read and systematic phonics instruction is significantly more effective than instruction that teaches little or no phonics. Phonics instruction increases the ability to comprehend text for beginning readers and older struggling readers.

All right, so that's the research. What we've basically learned is that systematic phonics instruction is important. Systematic is much better, much more efficient, and more effective than a haphazard approach.

Let's go back to what we talked about last week with the key practices of structured literacy and apply those to how we teach phonics.

Number one, your phonics instruction needs to be explicit. You will come right out and say what you want your students to know. Rather than giving them a list of words that have the letters "ee" and help them try to figure out how the words are the same and what those letters might be saying, you're just going to come out and say it. You'll say, "In some words, we use the letters "ee" to represent the long e sound. Here is a list of words that use "ee" to represent the long e sound."

Your instruction also needs to be systematic. You will have routines in your phonics lessons that help your students master the content. My recommendation for a good solid phonics lesson includes the following: phonemic awareness warmup, explicitly teach the new skill, practice blending with the new sound spelling pattern, do word building with the new sound spelling pattern, read decodable text featuring the new sound spelling pattern, and do guided writing, such as dictation, which again features the new sound spelling pattern.

Let's go back to the key practices of structured literacy again. Your phonics lessons should be sequential. You will go in order using a solid scope and sequence.

Your phonics instruction will be cumulative. You will mix in review, likely at literacy centers.

Finally, it will be diagnostic. You won't just blindly follow your curriculum without testing your students first. You will assess them, see where they're at, and then know where to begin and when to slow down and repeat. Personally, I recommend a small group rather than whole group phonics lessons. We'll talk more about that next week.

The third of the Big Five is fluency. As you know, fluency is the ability to read accurately, at an appropriate rate, and with proper expression.

As we think about fluency, it's important to think about its role in the simple view of reading. Decoding, or word recognition, is the ability to read and understand the words on a page. To build the skill of decoding, we teach phonemic awareness and phonics.

The next part of the simple view of reading is language comprehension. It's the ability to make sense of the language we hear and the language we read. To build language comprehension, we teach vocabulary and text comprehension. When you multiply decoding and language comprehension, you get reading comprehension.

So fluency is not explicitly presented in the simple view of reading, but here's where it fits in. Fluency is the automatic application of decoding and language skills. It's often talked about as a bridge between the early stages and the later stages of reading. The early stages include oral language, phonemic awareness, and phonics, as well as high-frequency words. Later stages include increased reading skills and comprehension.

Jan Hasbrouck is a big expert in the field of reading fluency. She wrote a book with Deb Glaser called "Reading Fluency". In that book, they write this, "If readers do not develop adequate levels of fluency, then they can become stuck in the middle of the bridge, able to decode words, but with insufficient automaticity to adequately facilitate comprehension. These students typically become our reluctant readers, often with dire consequences for themselves."

They have another metaphor for fluency. "Fluency is a doorway that leads to comprehension and increased motivation." According to Hasbrouck and Glaser, "If that fluency door remains closed than access to the meaning of print and the joy of reading is effectively blocked."

You see research tells us that for comprehension to occur, fluency must be present. And this means we cannot leave fluency building to chance! There are things we must do to make sure fluency develops.

Number one of course is to teach phonic decoding because without that students cannot be fluent. Number two, is to actually plan for and schedule activities that promote fluency. As tough as it sounds, I recommend incorporating fluency practice every day in grades one to three, and there are many ways to build fluency.

Let's just list a few of those. Number one, you can do whole class or small group echo reading. You model how to read a text and students echo you, matching your phrasing

as much as possible as they reread it. Please note, this is not a recitation activity. It's actual reading. Make sure you gradually increase the amount of text that students echo so they're not just relying on their memory. They're actually reading the words after you read the words, but they're trying to match your phrasing and your expression.

You can also do whole group or small group choral reading. You will read together! It will give them practice, again developing automaticity and expression.

You may have heard of timed repeated reading, but I have read through the research that this is not recommended for everybody. It's more of an intervention strategy, and they have found a lot of success with it when they use it with students who really need to build their fluency, so their words per minute are very low. This is when a student reads for one minute, and then tries to beat their rate and accuracy with successive one minute readings. Don't use this with everyone. It's best as an intervention strategy for slow but accurate readers who need intense practice to increase automaticity. That's from the CORE "Teaching Reading Sourcebook".

You can also have your students play word reading games because one way they're going to be more fluent, more automatic, is to know those high-frequency words. So it's a good idea to play games, and practice those words they're going to see over and over.

You could do partner plays or reader's theater. I have both partner plays and reader's theater scripts in my shop. I'll link to those in the show notes.

And finally, you want to give your students daily time to read text at their independent or instructional level. A lot of times when you read things about the science of reading or structured literacy, people will often say that a structured literacy classroom does not have a lot of time for students to read independently. I really don't like that. I think that's a mis-characterization of what structured literacy is all about.

What they really mean is that you shouldn't have kids have a time of the day where they pick any old book and then sit down and read it. Because for some kids, they're not actually going to be reading. The most struggling readers aren't going to have success with that, and it's not going to help them. Whereas your strong readers are probably reading in their free time anyway.

I recommend making sure that each student in K-2 has a bag of decodable books they can read every day. For students who are ready for leveled books, those should be in

the bags as well. I did not say they should grab any old book off the shelf and read for fluency practice. Work with them to choose their books and hold them accountable. Listen to them read whenever possible, and when they're ready, help them choose new books that will help them practice what they have learned.

Let's move on to the next one of the Big Five, and that is reading comprehension. What does research say about reading comprehension? Well, here's what it doesn't say. It doesn't say we have to choose between teaching strategies or building knowledge. That's like choosing between process and product. It doesn't have to be one or the other. It also doesn't say that our focus should only be on decoding because comprehension will just happen and doesn't need to be explicitly taught.

Unfortunately, these false ideas exist even within the science of reading community. That's why it's important to educate ourselves on what the research really says! In their summary of the research in the book, "Fundamentals of Literacy Instruction and Assessment", Hougen and Smartt wrote this,

"For comprehension to occur successfully, readers must purposefully and actively construct meaning as they navigate their way through the text. They do this by relying on background knowledge and making connections while considering the meanings of words and how the text is organized. Readers also make inferences, determine what information is most important in the text, and create mental images of the text."

I know that was pretty deep. Let's look at some highlights from a recent article in "The Reading Teacher" called "The Science of Reading Comprehension" by Nell Duke, Alessandra Ward, and David Pearson. Here's some highlights from their article. Number one, word reading is necessary, but not sufficient for reading comprehension. And you knew this, right? It's obvious from the simple view of reading. Children need to be able to sound out words, but that's not enough. They must also have language comprehension.

Next, reading comprehension is not automatic, even when fluency appears strong. Even though a student may sound like a fluent reader, that doesn't guarantee comprehension. It's not automatically achieved when students can read words quickly. This is when it's helpful to remember Scarborough's Reading Rope. There are many strands in the language comprehension domain. The research also tells us that comprehension instruction should begin early. Here's a quote from that science of reading comprehension instruction article.

"Research has supported a simultaneous rather than sequential model of reading instruction. Along with development of phonological awareness, print concepts and

alphabet knowledge, young learners in preschool and early elementary school benefit from efforts to develop oral language comprehension, including efforts to develop oral comprehension of written language. As young learners begin to read texts themselves, comprehension instruction alongside phonics and other foundational skills instruction has an important place."

Have you ever heard people say that in the primary grades children learn to read, and in the later grades they read to learn? I hear that all the time, and I used to really, really hate that. But the fact is there's a lot of truth to it. At the very early stages, students cannot comprehend what they're reading because they're not reading fast enough. They really have to develop some automaticity with word recognition and fluency of rhythm to be able to free up more of their brains for comprehension.

So there's something to be said for in the early grades they learn to read, and that in the later grades they read to learn, BUT that doesn't mean that we just put comprehension off to the side until students get to third grade. At first, students benefit from oral language comprehension, which we can develop through whole class read alouds. Then as they begin to read the texts themselves, more specific comprehension instruction can take place.

Research tells us that teaching text structures and features fosters reading comprehension development. The research also tells us that vocabulary and knowledge building support reading comprehension development, and it tells us that comprehension strategy instruction improves reading comprehension.

Now those strategies include things like inferring, monitoring comprehension, predicting, and so on. I want to be clear that some teachers, myself included, have gone about comprehension strategy instruction in the wrong way. We viewed it as a product rather than a process, but poor implementation of it in the past does not justify abandoning comprehension instruction. There's been a history of doing it wrong, but that doesn't mean it's not important! We just need to do it right.

Here's a quick summary of the application of the research regarding reading comprehension. We are going to teach text structures and text features. We're going to build background knowledge. We're going to teach reading comprehension strategies, but we primarily do all these things through interactive read alouds until students can read longer texts that lend themselves to instruction and practice with these skills.

Finally, we are now on the last of the Big Five: vocabulary. Vocabulary is the knowledge of words and their meanings. For many decades, researchers have noted that there is a strongly correlated relationship between vocabulary knowledge and reading

comprehension. And that makes perfect sense, right? If you try to read a manual for repairing something and you don't know what all the parts are, the manual is not going to make a whole lot of sense. If you're great at sounding out words, but you're reading a textbook about something you don't understand and have never studied, it's not going to make sense to you. We've got to know those vocabulary words.

In the book, "Creating Robust Vocabulary", the authors give us a summary of some of the research and they tell us that in 1999 and 2002 researchers discovered that kindergarten vocabulary knowledge could predict reading comprehension of students two years later in second grade. A 1997 study found this relationship held through fourth grade. Another 1997 study showed that vocabulary knowledge in first grade predicted students' reading comprehension in their junior year of high school.

Unfortunately, research also tells us that traditionally vocabulary instruction in schools has not been strong. It isn't to say that reading programs don't give attention to new vocabulary words. They do. Typically, there are new vocabulary words introduced with each story, but the attention paid to these words in the curriculum is brief, and there are very few opportunities to review.

Let's look at some more research. In "The Vocabulary Book", Michael F. Graves tells us that instruction that involves activating prior knowledge and comparing and contrasting word meanings is likely to be more powerful than simply combining context and definitions. He also tells us that more lengthy and robust instruction that involves active learning, connecting to prior knowledge, and frequent encounters, is likely to be more powerful than less time-consuming and less robust instruction. In other words, briefly discussing a new word is not enough. Looking up words and copying their definitions won't cut it.

According to Michael Graves, there are four components of an effective vocabulary program, so this is our application of the research. You want your students to be doing wide or extensive independent reading. Now, of course, with our early, early kids, that's going to be us reading to them. You want to give instruction in specific words to expand the understanding of the text that has those words. So when you're reading aloud to your students, you want to pull out words and spend time with them, not necessarily during the reading, but after or before. You're going to give your students instruction in independent word learning strategies. In other words, you'll show them how to use context or a dictionary to find word meanings, and you can do word consciousness and wordplay activities.

That may be our longest podcast episode so far! We talked about the Big Five and what the research says about them, and how you can take that research and apply it to what you're doing in your classroom.

Next week is the final episode in our Science of Reading Bootcamp, and that's where we get into the nuts and bolts. What exactly could your day look like when you are applying the recent research?

Again, remember that you can check out our course, and teachingeveryreader.com is where you could get on the wait list. The course opens on October 4th.

Thanks so much for listening and I'll talk to you again next week!