



## Triple R Teaching

Hello! I hope everyone is doing well this week. We've got some excitement going on at our house because my oldest son, who was about four years old when I began The Measured Mom website, is going to be thirteen on Sunday. He's taller than I am and has bigger feet than I do, it's crazy!

I've got to say though, one thing I've noticed about teenagers, because he has an older sister who's fourteen, is that they like to be right.

It's probably no surprise that my fourteen year old and my soon to be thirteen year old are often having "discussions" about things that feel really important to them in the moment, but things which honestly are not important even for the short term, because they forget about it as soon as they're done arguing.

However, there are some things that really are worth having big discussions about! One of those, of course, is the science of reading.

Unfortunately, a lot of discussions around the science of reading lead to a lot of disagreements and hurt feelings. I talked about that last week.

Last week was the first in our series, The Science of Reading Bootcamp. We talked about three reasons there's so much disagreement around the science of reading. If you haven't listened to that episode, I recommend that you go back and listen to it. When you understand why there's so much disagreement, you're ready to be the calm voice that helps people on both sides have a thoughtful discussion.

Today we're going to listen to the audio from one of my video lessons in the course, Teaching Every Reader. In this lesson, I talk about orthographic mapping, what that means, and why it's so important when it comes to understanding the research about how we learn to read.

"When it comes to getting into a cold swimming pool, there are different approaches. One would be the slow, torturous way of stepping in, shivering all the while as the water level slowly climbs up your body. Then there's just jumping in, getting cold all at once and getting used to the water right away.

Well, when it comes to diving into the science of reading, we're going to go with the second approach. We're going to start with a big, heavy concept - orthographic mapping.

We've chosen to start with this instead of gradually getting our feet wet because it's such a key concept! When we think about orthographic mapping, we often think about David Kilpatrick, who is a professor of psychology for the State University of New York College at Cortland. He has 28 years of experience in schools. He's a reading researcher and has authored two books, "The Essentials of Assessing, Preventing, and Overcoming Reading Difficulties" and "Equipped for Reading Success". He is not the originator of the concept of orthographic mapping, that's actually Linnea Ehri, but I would say he's responsible for bringing it to the attention of more and more teachers and explaining it in a way that makes sense.

I have heard David Kilpatrick speak in many online workshops and webinars. He often talks about this. How do we go from this, "c-a-t, cat", to this, "cat"? How do children go from sounding out words letter by letter to recognizing words instantly. In other words, how do words become part of our permanent sight vocabulary? How do we recognize words instantly without needing to sound out or guess?

Spoiler alert: it's not that we store individual pictures of each word in our brains.

This is what a lot of people think. It makes sense, but it's not the case. It's not possible. You recognize 30,000 to 70,000 words instantly, and your brain simply cannot store all those words as wholes. Also, scientists have done a mixed case studies where they had children read words in lowercase, uppercase, and mixed case - upper and lower case. Once they got used to reading words in upper, lower, and mixed case, they could read any words instantly. If we really did remember all these words as wholes, we would not be able to read them instantly in mixed case or in just uppercase.

Also, think about how you quickly read words in different fonts, including cursive. We recognize words instantly, not because we have pictures of all the words in our brains, but because we are good at two things. We are good at phonetic decoding and orthographic mapping. I know you're familiar with phonetic decoding, that is sounding out words. Orthographic mapping, however, is remembering words for the future for instant retrieval so you do not need to sound it out.

To be good at phonetic decoding, you must know letters and sounds and be able to blend phonemes. A few months ago, I started teaching my five-year-old to read. When he saw the word cat he could do out, "c-a-t, cat". He knows his letters and sounds, and he knows how to blend phonemes to make words. However, every time he saw the word cat, he still had to go, "c-a-t, cat". He had not orthographically mapped the word.

A few months later, he can see cat and read it instantly, but that's not true with every word that he reads. To be able to do orthographic mapping, you must have letter sound proficiency and phonemic proficiency. Let's look at the word spin, for example. Because my little guy right now is just learning to read words with beginning blends, he has to sound out this word spin and then he can read spin, but he can't read it automatically by sight. Orthographic mapping is still happening for him. It's still a process that he's working on through practice sounding out words.

Why does this even matter? Well, let's apply this to how we teach children to read. Except for learning letters of the alphabet, word reading is not a visual memory process. Therefore, we should teach students to sound out words! We should teach them to connect the phonemes - the sounds, to the graphemes - the letters, so they build orthographic connections, so that the words can be remembered for the future.

It's important to think about that. Reading practice is not just solving the word in the moment. It's helping build connections in the brain so students can read the word in the future! Words are anchored in memory by connecting pronunciations of phonemes to written spellings. We're connecting phonemes - the sounds, to graphemes - the letters. When children see the word "cat", they know that /c/ is represented by the "c", /a/ is represented by the "a," and /t/ is represented by the "t". They're connecting the known - the sounds, to the new - the print.

Again, why is this important? Well, we promote orthographic mapping - that is automaticity with word recognition - by teaching letter sound proficiency and phonemic proficiency. So matching letters to sounds quickly. This is not going to happen with a haphazard approach to phonemic awareness and phonics!

We must have systematic explicit instruction. We should avoid word identification strategies that undermine the development of orthographic mapping. Therefore we should avoid teaching long lists of high-frequency words through memorization, and we should avoid teaching children to identify words by using the picture, context clues, or only the first letter of the word."

I hope you enjoyed that lesson from Teaching Every Reader. I want to let you know that the full course is going to be open on October 4th. Mark your calendar if you want to get on the wait list. Go to [teachingeveryreader.com](http://teachingeveryreader.com).

We'll be back next week with another episode in our Science of Reading Bootcamp!