How Our Brains Learn to Read

Reading is an important and fun skill that nearly everyone can learn with time and practice. Our brains are naturally set up to learn to speak, but learning to read does not happen on its own. Scientists have found that we must develop certain parts of our brains and build connections between brain areas that were not connected before. The picture below shows four different areas of our brains that we use when we read.

VISUAL CORTEX
This part of our brains helps us see things. We use this part when we look at and recognize written letters and words.

ROLE IN READING: Orthographic Processing

AUDITORY CORTEX
This brain area allows us to hear and tell the difference between sounds in spoken language. When we read, we use this part of our brains to identify the sounds that make up words.

ROLE IN READING: Phonological Processing

ANGULAR GYRUS
This part of our brains helps us make speech sounds, form words and sentences, and understand the meaning of what we listen to and read.

ROLE IN READING: Speech Production, Fluency, and Comprehension

INFERIOR FRONTAL GYRUS
This part of our brains helps us connect sounds with letters and letters with sounds. We use this part of our brains to read words aloud or to ourselves and to put words on a page.

ROLE IN READING: Sound-Symbol Connections and Semantic Processing

We Need to Teach Our Brains to Decode to Become Good Readers

At least 50% of our K-2 reading block time should focus on learning to decode. We must also build our vocabulary and comprehension skills, but learning to decode is a critical first step in becoming a lifelong reader.

Phonological Awareness
It is important that we can recognize all of the sounds in the English language to be able to read well. English has 44 different speech sounds, which is more than many other languages.

Sound walls in our classrooms can help us learn how to make these unique sounds.

Print Concepts
To become readers, we must also recognize the letters of our alphabet, the basic parts of a book, and the special rules that print must follow.

Pointing out the front and back of a book, capital letters, lowercase letters, and punctuation marks can help us understand how writing works.

Phonics & Word Recognition
Once we know our sounds and the alphabet, we can begin to put them together to read words.

We learn phonics when our teachers help us to sound out words and know which letters and combinations of letters make which sounds. When we become good at this skill, we can read and spell many words.

Fluency
Now that we’ve learned about the connections between sounds, letters, and words, we can put it all together by reading sentences and books!

The more we practice sounding out words, the easier it will become to recognize both new and familiar words on the page.

Learn more about the strategies and systems needed to improve students’ reading outcomes by visiting our reading resource center on narrowing the third grade reading gap.