

## **What is The Science of Reading? How is Madison Public Schools applying the Science of Reading?**

The US Department of Education established a National Reading Panel to examine research in order to determine the best ways to teach our nation's children how to read in 1999. The findings described 5 key core concepts now called the 5 pillars of reading: phonemic awareness, phonics, fluency, vocabulary, and comprehension. Connecticut adds that the curriculum must also focus on competency in oral language and rapid automatic name (RAN) or letter name fluency although these elements are not considered "pillars."

After a short description of each of the five pillars, we listed the materials/programs Madison Public Schools utilize to support our locally developed and Board of Education-adopted curriculum. The Madison curriculum can be found on the sequential tabs on this website. All of the materials listed in this summary are actively used in the posted units.



**Phonemic Awareness:** Phonemes are the smallest parts of spoken language that combine to form words. Phonemic Awareness is the ability to notice, think about, and work with individual sounds and includes blending sounds into words, segmenting words into sounds, and deleting and playing with the sounds in spoken words. The results of 52 studies indicate that phonemic awareness is most effective in kindergarten and first grade.

- The Heggerty Phonemic Awareness Program

**Phonics:** The relationships between the letters (graphemes) of written language and the sounds (phonemes) of spoken language is called Phonics. The alphabetic principle

is the idea that letters represent the sounds of spoken language. Decoding is when we use letter-sound relationships to translate a printed word into speech.

- Wilson Foundations K-3.

**Fluency:** The ability to read orally with adequate speed, accuracy, and expression is called Fluency. Poor oral reading fluency is one of several factors that impact reading comprehension. The research from The National Reading Panel tried to examine the effectiveness of a specific method with a given age, but no conclusions could be drawn from the studies. They concluded that across grade levels, guided repeated oral reading routines that include guidance and feedback from teachers, peers, or parents had a positive impact on word recognition, fluency, and comprehension. Decodable books are simple books that are written for the beginning reader and contain the specifically learned grapheme-phoneme correspondences. Readers can use their developing segmenting and blending skills to read words in order to develop automaticity, or the ability to recognize words quickly and effortlessly and experience independent reading success.

- The following decodable readers follow the explicit skills taught in Foundations:
  - Heggerty Toucan Series
  - Pioneer Valley decodable books
  - Flyleaf Publishing
  - Jump Rope Readers
  - Geodes pilot
- Materials and resources from The Megabook of Fluency, Dr. Timothy Rasinski
- Poetry, Song and Repeated Oral Reading

**Vocabulary and Comprehension:** The National Reading Panel examined the **complexity of comprehension and concluded that it could not be separated from vocabulary.** The ability to understand oral and print vocabulary has an impact on comprehension. The greater the vocabulary, the easier it is to make sense of what is read. The Panel did validate that vocabulary can be learned incrementally through reading and listening as well as explicitly taught. Dependence on a singular method was determined not effective.

- Building Vocabulary Kits Dr. Timothy Rasinsky
- Word Ladders Dr. Timothy Rasinsky
- Read Alouds
- PreK-Grade 8 Word Study and Morphology scope and sequence

- Unit-specific vocabulary identified (black unit button- Stage One knowledge) and taught in every content area (ELA, Math, SS, Science, etc). Additional vocabulary is linked to read-alouds, morphology, and the materials listed above.

Once the pillars of phonemic awareness, phonics, fluency and vocabulary are established with young readers, the Panel was able to identify 7 types of instruction that could improve the pillar of comprehension: self-monitoring; cooperative learning; organizers; questioning and answering; question generation; story structure, and summarizing. Because students need to adjust strategies as appropriate, teachers need to be skilled at being responsive to students' needs and teaching students how to navigate increasingly complex texts.

- Reading Strategies Jennifer Sarravallo
- Raz Plus Learning A to Z
- Extensive Classroom Libraries with thematic collections, fiction, and nonfiction books
- Specific titles of Read Alouds in every Unit
- Specific lessons in each and every Unit that specifically resource and embed the 7 types of instruction cited by the National Reading Panel.

**Madison Public Schools (MPS)** has been recognized for its long-standing commitment to provide exemplary professional development and local curriculum development. We engage with experts to validate and extend our work. This ensures alignment to research and continuous growth.

### **Alignment**

The following staff developers have worked with us to train, grow our understanding and implement the science of reading:

- **Dr. Rachael Gabriel** University of Connecticut/International Reading Association/author/researcher
- **Dr. Benjamin Powers** Yale/Global Literacy Hub/Haskins Laboratory
- **Dr. Timothy Rasinski** Kent State University/author/researcher

Each expert has independently reviewed our entire K-3 curriculum and all resources. Each expert has found the MPS curriculum to meet all of the key elements from the National Reading Panel and Structured Literacy.

## **Continuous Growth**

In the summer of 2024, a committee with representation of teachers from each grade and school, special education, literacy coaches, and administrators examined longitudinal disaggregated Universal Screening data and standardized test scores against criteria set by The Reading League. Madison students continue to show strong achievement in all pillars of literacy and in test scores. The committee examined materials from three published materials from the state approved list. The committee was in strong consensus that our current curriculum and materials had strong evidence of effectiveness and impact for all learners. They were united in a recommendation to pilot additional decodable books in each grade level for additional fluency work in non-fiction. Geodes will be piloted this year in addition to the continued application of the programs referenced in the cited materials.

## **So, is Madison implementing the Science of Reading?**

Madison applies the Science of Reading in the design of its curriculum, use of resources, work with experts to refine implementation, and engagement with inquiry to continuously improve. This ensures we are not only aligned in name, but in practice.