READING INITIATIVE FOR STUDENT EXCELLENCE
Goals for R.I.S.E.
Reading Initiative for Student Excellence

1. Sharpen the focus and strengthen instruction (based on the science of reading)
2. Create community collaboration focusing on reading
3. Build a culture of reading in the state of Arkansas
Science of Reading Legislation

- 18-19 Districts provide **Science of Reading** Professional Development
- K-6 licensed educators demonstrate proficiency in the SoR by 21-22
  - Prescribed Pathways
  - Two Phases:
    - Phase I: Professional Learning
    - Phase II: Demonstration
- K-12 Special Education educators demonstrate proficiency in the SoR by 21-22.
- 7-12 licensed educators demonstrate an awareness in the SoR by 21-22
  - AETN: Arkansas IDEAS   ideas.aetn.org
    - 18 hours, over next 3 years
What is the Science of Reading?

40 years of evidence based practices that settle the question of how we learn to read
How Many Students Need Intervention?

In a typical class of 25, if only 32% are reading on grade level (NAEP)

8 would be proficient

Out of the 17 that remain,

12 would struggle with decoding and comprehension (70%)

3 would be poor decoders and good comprehenders (20%)

2 would be good decoders and poor comprehenders (10%)

DOES THIS LOOK LIKE YOUR CLASSROOM?
Why Can’t Our Children Read?
Myths of Reading Instruction That Have Driven Reading Instruction

Myth 1 - Reading is natural.
Myth 2 - Skilled reading involves “guessing” the word based on context.
Myth 3 - Words are stored visually.
Learning to Read is Not Natural

- Spoken language is hard-wired inside the human brain. Talking with children guarantees that they will learn to speak (in the absence of pathological interference).

- Some children learn to read with minimal instruction, but unlike learning to talk, it is a mistake to assume that they will.
Shift: Reading skills must be taught!
There is no natural connection between the phonological and orthographic processor. We have to create the connection by teaching explicit systematic phonemic awareness and phonics.
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The Most Common Approach Taught in Universities

3 Cueing Systems Theory

The three cueing systems theory proposes that skilled readers identify words using three interactive cueing systems: contextual, linguistic and grapho-phonetic.

Originally called the Psycholinguistic Guessing Game
The Problems with the Three Cueing Systems Approach

- Skilled word recognition does not require context. Context is helpful in determining meaning of unknown words, but is not a primary factor in recognizing unknown words.

- Poor readers, not skilled readers, rely heavily on context. Weak readers rely heavily on context to guess words due to their limited pool of familiar words as well as their poor phonic decoding skills.
The Problems with the Three Cueing Systems Approach

- **Guessing words from context is not as efficient as phonic decoding.**
  
  Even proficient readers are not skilled at correctly guessing words from context. The accuracy rate is only about 25%.

- **Contextual guessing does not promote sight-word learning in poor readers.**
  
  If weak readers can correctly guess a word from context, they do not have to carefully notice the letter sequence of that word to assist them in making it a familiar sequence for later recognition.
The Problems with the Three Cueing Systems Approach

- **Semantic errors are not a sign of better reading development than phonetic errors.** Poor readers are more likely to make semantic errors in which they substitute a word that fits the context but is not spelled like the word they are attempting to read. Saying hand for wrist is not superior to saying writ for wrist.

- **One of the three cues in the three cueing model is not related to word reading.** There is no correlation between syntactical skills and word-level reading. Syntax is essential for comprehension, but not critical for word reading development.
The Problems with the Three Cueing Systems Approach

The three cueing approach has been the subject of many studies that directly compared it with the phonics approach, also called the code-emphasis approach.

The code-emphasis approach explicitly and systematically teaches students letters and sounds starting in kindergarten.

The code-emphasis approach consistently yields better results in word reading and better reading comprehension than the three cueing systems approach, particularly for weaker readers.
Shift: Skilled readers need to be able to crack the code

Here are my shoulders.

Guess the words based on the first letter and the picture.

Decode the words based on letter/sound correspondence.

Can I nap in Sam’s pan?
Yes, I can!
The Developmental Relationship Between Phonological Skills and Word-Level Reading

Phonological Skill Development

1. Early Phonological Awareness
   Rhyming, first sounds, syllable segmentation

2. Basic Phoneme Awareness
   Blending and segmentation

3. Advanced Phonemic Awareness/Proficiency
   Automatic, unconscious access to phonemes in spoken words

Word Reading Skill Development

1. Letter Names and Letter Sounds
   Phonological storage and retrieval

2. Phonic Decoding and Encoding (Spelling)

3. Orthographic Mapping
   Efficient memory for printed words; rapid sight vocabulary expansion
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How Words Are Stored

• Having a good understanding of how words are stored will determine what we teach, and how we teach it.

• Until we properly understand how to promote permanent word storage, we will continue to have many weak readers.

Kilpatrick, 2015
Words Are Not Stored Visually

- Mixed case experiments
- Word recognition is faster than visual recognition
- Little or no correlation between visual memory skills and word-level reading
- Different regions of the brain are activated when naming objects than when naming written words
- Studies on deaf population
- Temporary forgetfulness of names and objects; We do not forget printed words
- Visual memory is not precise enough for efficient word storage
How Are Words Stored?

While we input written words visually, we do not store them visually.

Written words are stored on multiple levels simultaneously:
- Orthographically (the word’s spelling)
- Phonologically (the word’s pronunciation)
- Semantically (the word’s meaning)
How Are Words Stored?

- Words are not stored according to their visual properties.
- Words are stored based on an alignment between the letter sequence and the phoneme sequence in the word’s pronunciation.
- The letter sequences in words are meaningful because the order of the letters is designed to connect the order of the sounds in spoken words.
- If a student has phoneme awareness, he can recognize this connection.
These Common Practices Do Not Match Research

- Sight word flashcards
- Rainbow spelling
- Shape boxes for high frequency words
- Teaching words as memorized wholes
- Red word strategies that are totally visual

What theory are these practices based on?
Shift: Change the way we teach high frequency words.

- Start with the sounds heard in the words.
- Introduce high frequency words that are regular when you are teaching the syllable type they fall into.
- Teach high frequency words that are irregular by focusing on the part that is irregular.
- Group irregular words by similar spelling patterns.
We Know What Works

● Prevention of Risk
● Successful Intervention
What Works?

Prevention of risk and successful intervention have three things in common:

● Intensive phonemic awareness training, to the advanced level (automatic in phoneme manipulation)
● Systematic, explicit instruction in phonics
● Substantial opportunity to practice with connected texts
Do You Hear/See These In Your Building?

Running Records (Analysis by meaning, structural, visual cues)
DRA for beginning readers
Leveled, predictable texts in beginning reading instruction
Intervention that has word work and books that do not practice the skills learned in word work
Meaning based cueing - What would make sense here? Look at the picture. Skip the word.
Phonics in context (as it comes up; just enough to read one book)
Word Walls of high frequency words
Red word strategy that teaches high frequency words based totally on the visual look of the word
Clinging to an ABC chart for too long
If so, it is time to start asking questions:

What is the purpose of the activity?
Does the assessment help us know what to teach?
Does the science of teaching reading support the activity?
How is it working across grade levels?
Do AR standards support the activity?
Does the activity help our students decode words?
Does the activity help our students comprehend text?
Does the text give students practice in what they have learned about decoding?
What are big shifts in literacy instruction based on the science of reading?

- Systematic and explicit teaching of phonological awareness to the advanced level with automaticity
- Systematic and explicit teaching of phonics
- Practice phonics skills in decodable texts
- Introduce phonology followed by orthography before moving to meaning
- Teach high frequency words using analysis rather than memorization
- Group students based on skills rather than levels
- Use assessments that drive instruction
- Stop teaching ineffective guessing strategies in decoding instruction
- Stop asking students to memorize high frequency words as whole words
- Stop putting beginning readers in leveled books with words that follow phonics patterns that have not been taught
- Stop teaching phonics as an isolated skill followed by practice using leveled texts
The Research is Clear

- Only 2-5% of our struggling readers should experience severe reading difficulties.
- 90-95% of our students can become successful readers!
- Implementing the science of how to best teach reading is the path to lead us to this level of success.
What Research Was Used in Creating RISE Academy?