THE GOVERNOR JOHN ENGLER
CENTER FOR CHARTER SCHOOLS
CENTRAL MICHIGAN UNIVERSITY

2021 ANNUAL CONFERENCE

Working Together *for* Tomorrow

AUGUST 17 / NOVI, MI

Welcome!

Unpacking the Science of Reading and Structured Literacy

The science of reading includes all the methods or approaches that have been found, through research, to give kids a learning advantage in reading. The term is often used in literacy education and, while phonics plays a key role, it is part of a comprehensive evidence-base that we draw from. Structured Literacy teaching builds knowledge of language at all levels and uses methods that are explicit, systematic, and cumulative. In this session, we will delve into the science of reading as well as how Structured Literacy incorporates evidence-based skills and strategies.

Betsy A. VanDeusen, Ph.D
Professor and Director, The Literacy Center

COLLEGE OF
EDUCATION & HUMAN SERVICES
CENTRAL MICHIGAN UNIVERSITY

Literacy is equity.

-Robert Pondiscio

Any discussion about “equity” in education that is not first and foremost a discussion about literacy is unserious.

COLLEGE OF
EDUCATION &
HUMAN SERVICES
CENTRAL MICHIGAN UNIVERSITY

Agenda

- What is the science of reading?
- What is the Simple View of Reading?
- What is structured literacy?
- How can we incorporate structured literacy into our instruction?

Norms for today's session

- Technology for learning purposes
- Actively listen and participate
- Keep side conversations to a minimum.
- Be kind and respectful with each

What is the Science of Reading?

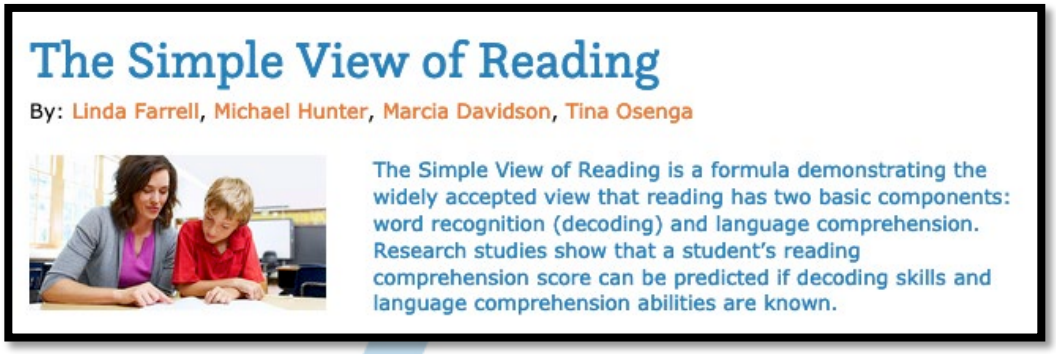
- The science of reading is a body of research that incorporates **insights and research from disciplines** that include (not limited to)
  - developmental psychology
  - educational psychology
  - cognitive science
  - cognitive neuroscience
  - education
  - special education
  - early education

The science of reading has been documented around the world, in all languages and cultures, in studies that cost hundreds of millions of dollars. In short, the science of reading has demonstrated the methods that best help children learn to read, from the earliest steps in spoken language to being able to successfully decode unfamiliar words and make meaning from text.

What is the Simple View of Reading?

(Gough and Tunmer, 1986)

www.readingrockets.org



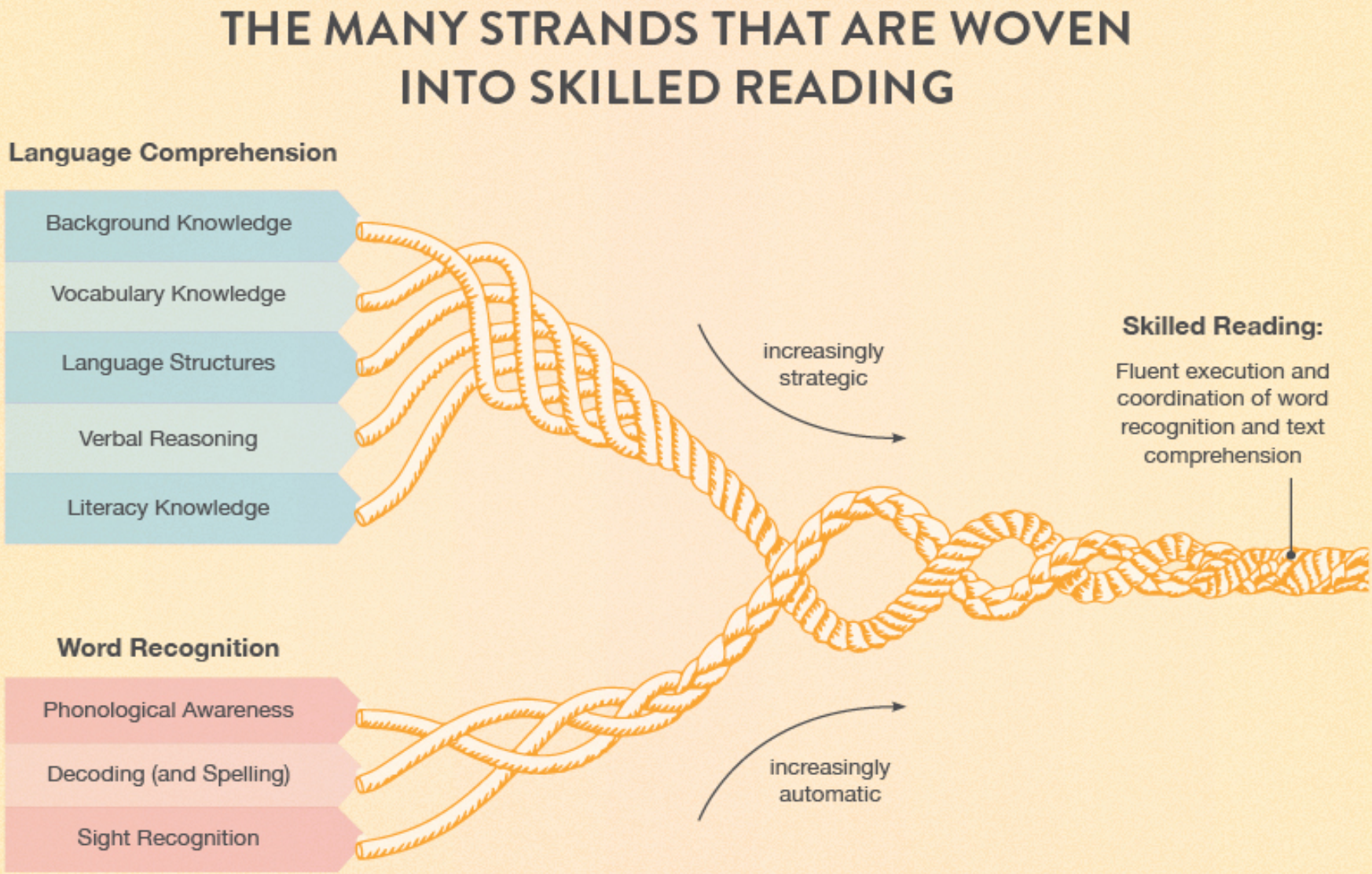
чтение важно

η ανάγνωση είναι σημαντική

The snables tramped the mengs to the dwip. The drip fropped. The mengs clambed the sib boogle. The snables gicked and gicked.

Question 1: What did the snables do to the mengs?
Question 2: What happened to the dwip?
Question 3: What kind of boogle did the mengs climb?
Question 4: What did the snables eventually do?

Scarborough's Reading Rope



SVR and Reading Instruction

Learning these skills does not come naturally.

Both accurate word reading and text comprehension require careful, systematic instruction.

And, once formal reading instruction begins in school, instruction in both of these **areas** should occur on a **daily basis**.

SVR in Action

To read words accurately and fluently:

- Students need strategies to read words they have never seen before in print as well as words they have previously encountered.
- To understand the meaning of texts, students must have sufficient language comprehension skills.
- For example, if a text says, "the little dog barked at the big cat," a proficient reader must be able to read each word accurately and also know what the words mean in this specific sentence.

Comprehending the Meaning of Text

"The little dog barked at the big cat."

To understand the example sentence about "dogs and cats," students must know what dogs and cats are. They must know what "bark" means and understand that "little" and "big" refer to size concepts.

Background knowledge also assists comprehension. Understanding will be improved if students know something about why a dog *might* bark at a cat (which the sentence does not say explicitly). Students might also sense the irony of a *little* dog barking at a *big* cat.

What is Structured Literacy?

- Structured literacy is an approach to teaching oral and written language. It's based on the science of how kids learn to read. The International Dyslexia Association coined the term (2016).
- Structured literacy is especially helpful for kids who struggle with reading. In addition, research shows that it can help all students improve their reading and literacy skills.
- With structured literacy, teachers introduce new concepts and skills in a logical order. They teach in an explicit way that fully explains concepts and skills. Teachers also continually check in on students' understanding.

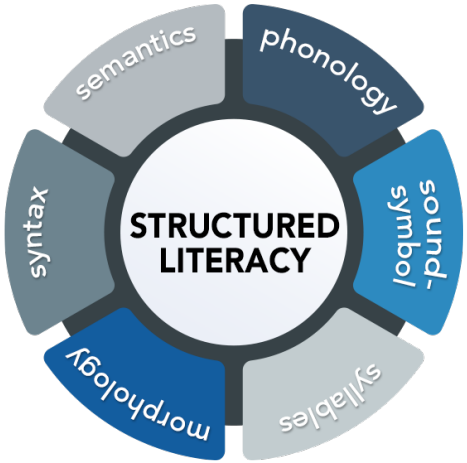
What Research Supports Structured Reading Instruction?

- People must be taught to read.
- While reading, brain activation patterns and locations are observable.
- The brain changes as a person learns to read (Dehaene, 2009).
- Interruptions in the complex reading circuitry (i.e., dyslexia can be detected through neuroimaging [Gentry & Oulette, 2019; Seidenberg, 2017]).

What Should Be Taught?

Essential Components of Reading Instruction

1. Phonological and phonemic awareness
2. Phonics (decoding and word analysis)
3. Fluency
4. Vocabulary
5. Comprehension
6. Writing



How Do We Teach Literacy Skills Effectively and Efficiently?

- explicit, systematic, and sequential teaching of literacy at multiple levels – phonemes, letter–sound relationships, syllable patterns, morphemes, vocabulary, sentence structure, paragraph structure, and text structure
- cumulative practice and ongoing review
- a high level of student–teacher interaction
- the use of carefully chosen examples and non-examples
- decodable texts
- prompt, corrective feedback.

The Ladder of Reading

5% Learning to read seems effortless

35%
Learning to read is relatively easy with broad instruction

40 to 50%
Learning to read proficiently requires code-based explicit, systematic, and sequential instruction

10 to 15 % (Dyslexia)
Learning to read requires code-based explicit/systematic/sequential/diagnostic instruction with many repetitions

Advantaged by a structured literacy approach

Structured literacy approach essential

Artwork by Dean Stanton

(Lyon, 1998; NRP, 2000; IDA, 2015; Hempenstall, 2016)

www.nancyyoung.ca

Nancy Young B.A., M.Ed. Reading Spelling Writing

Typical Literacy Practices compared to SL Practices

Typical literacy practices (TLP)	Structured literacy (SL)
Phonics skills are usually taught but not emphasized, even for beginners. Teaching is often not highly explicit or systematic. Prerequisite skills may not be taught first.	Phonics skills are taught explicitly and systematically, with prerequisite skills taught first. For beginning readers, these skills receive considerable initial emphasis.
Phonics approach may be synthetic but is often analytic (whole to parts) or decoding by analogy (e.g., "word families").	Phonics approach is synthetic (parts to whole). Students learn sounds for common letters and letter patterns (e.g., *sh*, *-ck*) and how to blend them (phoneme blending).
Beginning readers usually read leveled and predictable texts (texts in which words are predictable based on sentence structure, repetition, or pictures) that do not easily lend themselves to application of phonics skills.	Beginning readers usually read decodable texts (texts largely controlled to specific phonics patterns that have been explicitly taught) that facilitate learning to apply phonics skills in reading texts.
Partner reading and independent reading may be emphasized more than oral text reading with a teacher.	Oral text reading with a teacher is included in lessons.

Typical Literacy Practices compared to SL Practices

Typical literacy practices (TLP)	Structured literacy (SL)
When students read text orally, some errors may be overlooked, especially if they do not greatly alter meaning. Teacher feedback to errors may emphasize sentence context or pictures rather than consistent application of decoding skills.	When students read text orally, they are encouraged to look carefully at printed words and apply decoding skills to unfamiliar words.
Spelling is often not taught in an explicit or systematic manner. Students may learn word lists in which words exemplify no particular phonics pattern or spelling rule. Spelling program may be completely distinct from decoding program with different words in the two programs.	Spelling skills are taught explicitly and systematically with prerequisite skills taught first and with instruction in common spelling rules (e.g., rules for adding endings). Spelling instruction reinforces and extends what students learn in decoding.
Some higher levels of literacy may be explicitly taught but usually not systematically and not with strong attention to prerequisite skills.	Higher levels of literacy are explicitly and systematically taught (e.g., sentence structure, paragraphs, discourse), including prerequisite skills.

Guidance for Educators Using a Balanced Literacy Program

The balanced literacy context of individual classrooms and schools can vary dramatically from class-to-class, school-to-school, and district-to-district. If your data shows that *all* your students are achieving at high levels, be sure to maintain what's working well! On the other hand, if your data shows that your students—or a consistent percentage of your students—are not achieving at high levels or could be doing better, the guidance below has been designed for you. Review the "Install This Research-Based Practice Instead" column below to see how you might disrupt practices to demonstrably boost your students' achievement and allow more of your students to become strong and eager readers. Each characteristic described in the left-hand column presents an opportunity to redesign, adjust, or even radically alter instruction, and replace it with a new practice in the right-hand column that is research-proven.

STUDENT ACHIEVEMENT PARTNERS | ACHIEVETHECORE.ORG

If This Is a Characteristic of Your Balanced Literacy Program...	Install This Research-Based Practice Instead...
Text Complexity	
K-2 texts read aloud to students are too easy, so students do not have the opportunity to build their knowledge and vocabularies. *Here's the issue:* An important reason to be concerned about the inclusion of complex texts among the materials used in an early literacy program is because that's how children can become familiar early on with the ways language is used in the more advanced texts they will eventually be reading. That language can be learned in no other way—it is only in complex written texts that students are likely to encounter the many words, expressions, grammatical constructions, and conventions of various academic discourse genres.	**Select read-alouds that are content-rich, high-quality texts worthy of reading and rereading that are well above grade level.** Read-alouds provide children with models of the elaborated language of formal written discourse which they must acquire for themselves over the course of their K-12 schooling. Texts used for read-aloud in K-2 should be at least two years above what students can read on their own (within or above the grades 2-3 band). Qualitative and quantitative tools to determine text complexity can be found here.
Grades 3-5 anchor texts that are read aloud are appropriately complex for the grade, but students do not have opportunities to read these texts on their own. *Here's the issue:* As wonderful as such reading can be, it should in no way be seen as an adequate replacement for having students do such reading themselves.	**Project, photocopy, or otherwise share rich passages, chapters, or sections of the texts read aloud so that students can actively participate in the shared reading of complex texts.** There is no substitute for students having regular practice working together to comprehend complex texts with teacher support. A wide body of research shows providing readers—all readers—with lessons organized around complex texts improves achievement (Burns 2007, Hall et al. 2005, Walpole et al. 2014). See Supporting All Learners With Complex Text.

If This Is a Characteristic of Your Balanced Literacy Program...	Install This Research-Based Practice Instead...
Foundational Skills and Fluency	
The fast-paced introduction of foundational skills means too many students are not getting the exposure they need to become proficient readers. *Here's the issue:* Many students who do not follow a smooth learning-to-read trajectory may have difficulty keeping up. For those who cannot keep pace, this is extremely concerning.	**Increase time—ideally at least 45 minutes per day—dedicated to foundational skills instruction and practice (print concepts, phonological awareness, phonics and word recognition, and fluency).** Foundational skills instruction does not need to be in one sitting. Include practice times such as targeted small group instruction, literacy centers (that are research-based and clearly connected to taught skills) or partner work, transition activities, and rug time. If you do not have materials for foundational skills, consider using an open source, high-quality foundational skills program such as Core Knowledge Language Arts or EL Education.
Practice opportunities are optional or not plentiful enough for all students to master taught foundational skills. *Here's the issue:* Some students need more or far more supported practice and targeted feedback as they are working to master foundational skills. This is not in indication of their intelligence but is necessary in order to support the varied needs of your students.	**Ensure targeted practice opportunities for every student and additional time for those students who need more or far more practice.** The amount and type of practice can vary based on the individual needs of the students in your room, but the content should be available for all. See this list of open-source practice activities organized by foundational skills topic. Be sure to target the specific skills needed by students when using supplemental resources.
Insufficient opportunities for building fluency with grade-level texts. *Here's the issue:* Research has consistently shown a moderate to strong correlation between measures of reading fluency, from the primary through the secondary grades, and measures of oral and silent reading comprehension and overall reading proficiency (Kuhn & Stahl, 2003; National Reading Panel, 2000; Rasinski, Reutzel, Chard, & Linan-Thompson, 2011) and especially for struggling readers (Stevens, Walker, & Vaughn, 2017; Zimmerman et al., 2019). Moreover, studies have found that instruction in fluency leads to improvements in comprehension and overall reading proficiency (e.g., Stahl & Heubach, 2005; Stevens, Walker, & Vaughn, 2017).	**Make fluency practice opportunities part of your regular routine with students.** Ask dysfluent students to engage in multiple reads of a grade-level text and they will improve quickly. Research and scholarly inquiry into reading fluency have identified key instructional strategies for fluency (Rasinski et al., 2011). These include: 1) modeling fluent reading by the teacher or other proficient reader; 2) assisted reading in the form of a less fluent reader reading orally and simultaneously with a more fluent reader through choral reading, paired reading, and audio-assisted reading, in all cases with feedback; 3) wide reading; 4) repeated reading practice of grade-level text; 5) phrasing instruction; and 6) combinations of the above elements into synergistic instruction. Because text increase in complexity across grades and genres, being fluent in one grade does not guarantee fluency in succeeding grades. Free fluency resources from Achieve the Core can be found here.

If This Is a Characteristic of Your Balanced Literacy Program...	Install This Research-Based Practice Instead...
Knowledge Building and Vocabulary	
Whole class read-alouds in K-5 focus on reading strategies and skills without consistent attention to the words and language authors use. Vocabulary supports rely heavily on implicit vocabulary acquisition by readers. *Here's the issue:* Because of the large proportion of instructional time dedicated to student-selected "just-right books," students don't have the teacher supports required for in-depth study of vocabulary.	**Identify key Tier 2 (academic vocabulary) and Tier 3 (domain specific) words found in anchor texts. Tweak lessons so that there is less inferring from context. Provide opportunities for more:** • **Attention to core meanings** • **Focus on high leverage words likely to be encountered in other texts** • **Instruction on word parts/ morphology** For support with identifying academic vocabulary worth of time and attention, use the Academic Word Finder and consider how you will attend to selected words during instruction. Add time to study this language, such as making use of Lily Wong Filmore's juicy sentence guidance.
Most reading is done silently, so students may skip hard words and not comprehend as much as they would if asked to read-aloud. *Here's the issue:* When students frequently read different books than their classroom peers—self-selected and individually-leveled texts—silently during reading time, independent reading is rarely an opportunity for students to build knowledge and vocabulary. Even when students are expected to discuss what they read with a partner, it's easy to imagine that the discussions can be minimally productive given that they are reading different books and guessing the meanings of different words.	**Adopt a buddy system when students are reading. Ask partners to read and discuss the same book.** For younger and weaker readers, silent reading is not as productive as reading aloud to a listener. Reading aloud pressures the reader not to skip or gloss over the hard parts. Reading aloud with a partner, e.g., turn-taking, is socially fun and educative when readers are asked to help each other read and think as they move through the text. That can't happen when students are reading different texts.

By Steve Dykstra

A Change in Thinking About Reading

For the most part, we expect children will learn to read typically until we see clear evidence they might not. What if we flipped that around? What if we expected children would struggle to read until we saw clear evidence to the contrary? Think of the swim test at the public pool. The lifeguards assume everyone is going to drown and no one should go in the deep end until you can prove that you swim well enough. They don't assume everyone is a swimmer. They assume everyone is a non-swimmer.

Excerpted from a Facebook post in the group 'The Science of Reading, What I didn't Learn in College'