

**Educating Children with Dyslexia and ADHD:
Classroom Strategies that Work**

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**Our Mission is to
EMPOWER TEACHERS**
to ensure that every child learns
to read well by third grade.

Our Core Values
guide our intentions, actions and character.

- Accountability**
- Passion**
- Lifelong Learning**
- Professionalism**
- Collaboration**
- Empowerment**



We believe that every child has the right to read.

We know that 95% can be taught to read.
Literacy is the language of opportunity.

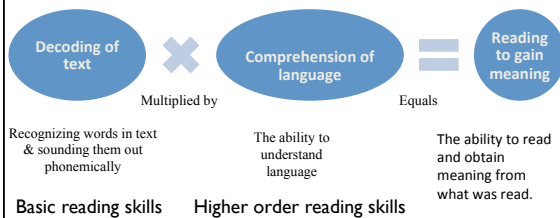
We believe that teachers--not programs or products--
teach students to read, write and spell.

So we empower teachers with the best ways to teach.

Today's Big Ideas

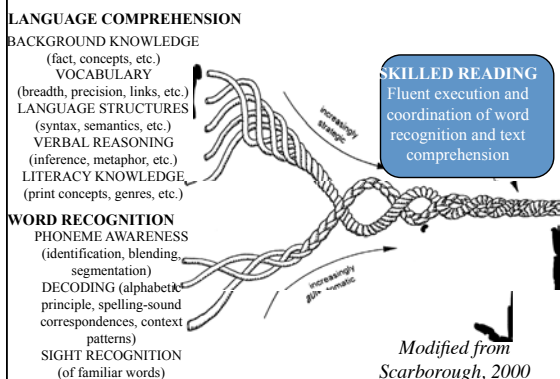
- Explain the *Simple View of Reading* as the context for how/what to teach students who struggle with reading.
- Define the core components of comprehensive literacy instruction and provide some key research findings.
- Suggest a few research-based practices for each core component.
- Describe essential components of effective instruction.
- Urge teachers and parents to find and nurture their students'/children's strengths – whatever it takes!

Simple View of Reading



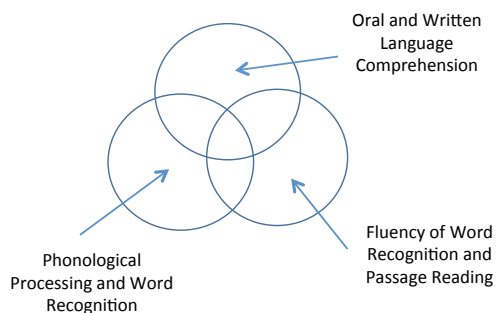
Gough and Tunmer (1986)

Research Findings: The Many Strands of Reading Success



“Dyslexia today is clearly defined as a developmental disorder in which children **do not easily learn to accurately decode written words and/or develop fluent single-word recognition when provided quality instruction**. Because problems in decoding the sounds within single written words – and possibly other weaknesses, such as **rapid naming or working memory** – have an effect on broader reading efficiency; these children **frequently have correlated problems in reading fluency and comprehension**. Because of these basic struggles at the word level and their influence on reading fluency and comprehension, such impairments have **broader impacts on vocabulary, background knowledge development, and children’s motivation to read.**” *Robin Morris, Unraveling Reading Comprehension, 2013*

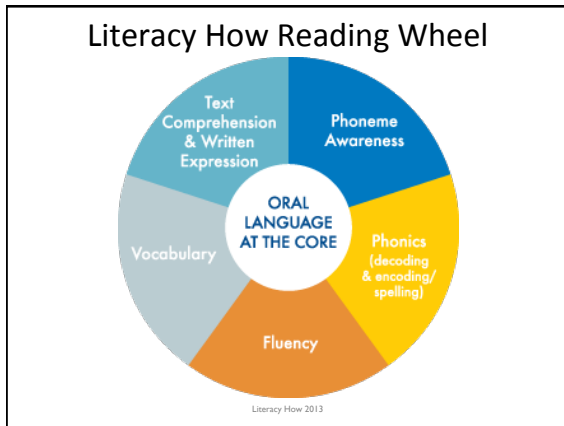
Subtypes of Reading Difficulty



One Size Doesn't Fit All

Student’s difficulties must be identified and interventions adjusted to meet each one’s individual needs.

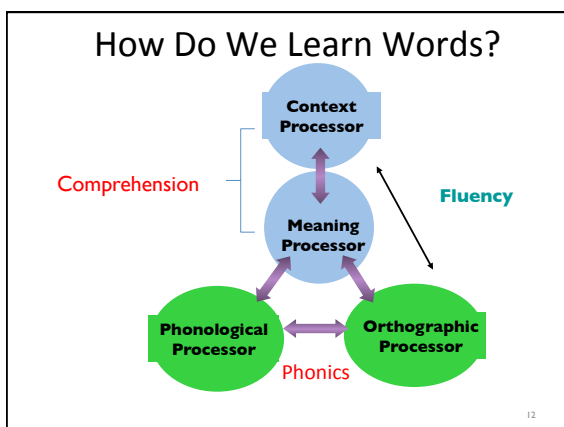




Components of Instruction by Grade

Written Expression							
Comprehension Skills/Strategies							
Passage Fluency							
Vocabulary							
Advanced Phonics/Decoding							
Basic Phonics							
Phonological Awareness							
Grade	K	1	2	3	4	5	6+

Louisa Moses 11



Phoneme Awareness Definition

Phoneme awareness is an awareness of and the ability to manipulate the individual sounds (phonemes) in spoken words.

Research

- Phonemic awareness constitutes a necessary underlying skill for mapping alphabetic symbols to spoken words and **can be developed through instruction** (Ehri, 2004).
- It is **one of the strongest predictors** of reading success (Blachman, 1989; Adams, 1990).
- Teaching phoneme awareness **reduces the incidence of reading problems** (Fowler, 2001).
- **Linking phoneme awareness with letter instruction** facilitates transfer to reading and spelling (Ehri, 2004).
- Instructional **approaches that are the most phonemically explicit** have the greatest impact (Torgensen, 2002).

What to Do

- Picture sorts
- Say It and Move It (Blachman, Road to the Code)
- Elkonin Boxes
- Lindamood Phoneme Sequencing Program (LiPS)



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Linking Sounds to Letters

- Speech to print – invented spelling/writing in the preschool years
- Efficacy of explicit instruction in phoneme awareness
- Once students understand the alphabetic principle, capitalize on that understanding to explicitly teach the sound-letter connections.
- Begin with the most transparent patterns (i.e., one-one match – sounds that have one grapheme that represent them....short a vs. long a).

Phonics Definition

Phonics is the study and use of sound/spelling correspondences and syllable patterns to help students read written words.

Research

- **Systematic phonics instruction is more effective** than instruction that includes nonsystematic or no phonics instruction. (National Reading Panel, 2000).
- Word recognition skill fosters comprehension (Ehri, 2004)
- Skill in word recognition and reading comprehension are well correlated, especially in beginning readers (Shankweiler et al., 1999).
- **Teaching the vowel patterns** ensures that about 85% of words can be decoded accurately (May, 1988).

Integrated Decoding and Encoding Instruction

“Findings from this research suggest the need to encourage teachers to implement direct, explicit encoding instruction and guided encoding practice. Allowing multiple opportunities to practice manipulating previously taught phoneme–grapheme combinations is also likely to give students tools for acquiring the alphabetic principle and developing fully specified orthographic representations of words, both of which are necessary to learning to read, spell, and write for all students of varying abilities.”

Weiser, 2012

What to Do

- Practice the speech to print match (mapping sounds to letters).
- Begin with the most transparent patterns first (closed syllables).
- Sequentially teach the syllable/vowel patterns to mastery.

t	ou	gh		
th	r	ough		
kn	ow			
s	t	r	ea	m
f	l	u	ff	

Dyslexia and Spelling

- While most individuals with dyslexia can learn to decode words accurately, the majority will never spell well.
- Accommodating for spelling difficulty is essential!
 - Grade work on content.
 - Use assistive technology and proofreading assistance.
 - Encourage students to turn in rough drafts so that spelling errors can be checked and corrected spellings can be incorporated into revisions.

Fluency Definition

Reading fluency refers to reading text with sufficient speed, accuracy and expression to support comprehension.

What It Takes to Be a Fluent Reader

- Accuracy (know the spelling patterns)
- Automaticity (recognize and apply the patterns in words instantly – i.e., less than one second)
- Phrasing (group the words in grammatical entities – i.e., elaborated noun phrases, prepositional phrases, verb + adverb phrases)
- Intonation (read it as though you're telling someone a story or conveying information)

Research

- Fluent readers are better able to comprehend because they process information quickly (LaBerge & Samuels, 1974).
- Oral reading rate and accuracy (i.e., fluency) are closely related to reading comprehension (National Assessment of Educational Progress, 2005).
- After it is fully developed, reading fluency refers to a level of accuracy and rate where decoding is relatively effortless; where **oral reading is smooth and accurate with correct prosody**; and where attention can be allocated to comprehension (Wolf, 2003).
- Fluency ... should be part and parcel of how we teach reading and how we teach teachers of reading. In other words **we should be as explicit in how we help a child learn to read fluently**, as we are in teaching a child to decode a word accurately (Wolf, 2003).

**Problems that Impact Fluency
(a broader definition)**

- Attention and concentration
- Slow processing speed
- Automaticity of lower-level skills
 - Automatic production of alphabet letters
 - Knowing spelling patterns
 - Poor handwriting

Dyslexia and Fluency

What To Do

- Develop accurate reading using decodable text.
- Use repeated reading to develop prosody.
- Understand that oral reading is difficult for most students.

What Not To Do

- Promote memorization of sight words.
- Emphasize speed.
- Use the 3 Cueing System model.
- Drill and kill.

Interventions That I've Used

- Orton-Gillingham
- *RAVE-O*
- *Wilson*
- *Lindamood-Bell*
- *Read Naturally*
- *Lexia*
- *Language!*

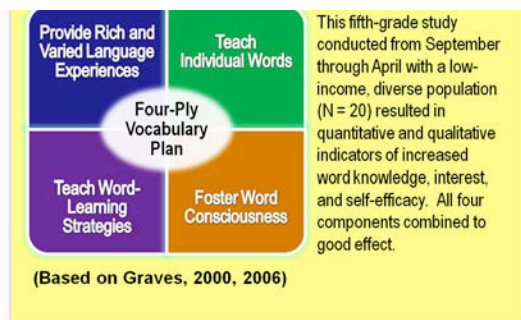
Vocabulary Definition

Vocabulary refers to the body of words and their meanings that students must understand to comprehend text.

Research

- There is a 30 million word gap by age 3 between children in poverty and those who are in middle class families (Hart & Risley, 2003).
- Vocabulary is foundational to reading but its role in comprehension is complex (McCardle et al., 2008).
- The major challenge facing beginning readers is **accessing a word that they know which is in their lexicon (mental dictionary) but have never seen before in print** (Gough & Hillinger, 1980).
- Vocabulary is the best predictor of reading and language comprehension by grade 3 or 4 (Biemiller, 2011).
- **Robust vocabulary instruction is not only effective for learning meaning of words, but also for affecting reading comprehension** (Beck et al., 1982, 2001).

What to Do



<http://vocablog-plc.blogspot.com/>

Explicit and Engaging Vocabulary Instruction

- Teach 'juicy' (i.e., Tier 2) vocabulary words.
- Encourage active learning and reinforce meaning through action.
- Frame instruction around context.
- Use student-friendly definitions (vs. dictionary).
- Include examples vs. non-examples.
- Use the word in many different contexts throughout the day.
- Repeat the word to establish phonology.
- Ask students to generate their own context.

Adolescent Literacy

'Word Generation is a research-based vocabulary program for middle school students designed to teach words through language arts, math, science, and social studies classes. The program employs several strategies to ensure that students learn words in a variety of contexts.'

<http://wq.serpmedia.org/>

Text Comprehension & Written Expression Definition

Text comprehension, the ability to make meaning, is the ultimate goal of reading. It requires specific skills and strategies, vocabulary, background knowledge and verbal reasoning skills.

Written expression refers to a highly complex, cognitive, self-directed process. Components of the process include planning, drafting, sharing, revising, editing, evaluating, and publishing.

Research

- The development of reading comprehension is explained by several skills including general cognitive ability, vocabulary knowledge and word reading. Discourse skills (inference and integration, comprehension monitoring, and knowledge and use of story structure) make an additional and important contribution (Cain, 2012).
- Comprehension skills develop along with basic language skills and have their roots in early narrative comprehension (Cain & Oakhill, 2007).
- **Text structure can be taught** to students and this awareness can improve reading comprehension (Carlisle & Rice, 2002).
- Narrative discourse skills predict later reading achievement and academic success (Cain & Oakhill, 2007).
- Skilled readers strive to build coherence in order to understand what a text is trying to communicate (Beck & McKeown, 1981, 1986).
- Teachers should **provide direct instruction and modeling for specific writing strategies and processes**, and then scaffold learning until students master each strategy on their own (Graham & Perin, 2007).
- There is a corresponding improvement in children's reading comprehension skills as they write more (Graham & Hebert, 2010).

Causes of Reading Comprehension Differences

1. Cognitive Factors (i.e., executive function, working memory, background knowledge)
2. Comprehension factors and processes (i.e., coherence building, inference generation)
3. Text comprehension factors and processes (i.e., use of strategies, knowledge of text and sentence structure, reading motivation)

Helder et al, 2013

Comprehension Problems

- Not entirely determined by higher-order factors and processes.
 - “Differences in such basic skills as decoding and in vocabulary (which may be related to background knowledge) strongly determines the input to the higher-order processes as well as the available attentional resources to execute these processes.”
- Deficits are not usually traced to a single process or skill.

Helder et al, 2013

Skilled vs. Unskilled Comprehenders

- They acquire information about word forms and meanings from word-learning events.
- ***They understand words and integrate their meaning into a mental model of the text (Perfetti, Stafura, and Adolf, 2013).***

Observing a comprehension **process** rather than a **product**.

What to Do

- Teach students text structure (narrative and expository) – Story Grammar Marker®* and Theme Maker (aka macrostructure).
- Explicitly focus students' attention on syntax/sentence comprehension (aka microstructure).
- Emphasize inferential comprehension vs. literal comprehension.
- Use queries vs. questions (a la Beck et. al., *Questioning the Author*).

MindWing Concepts, www.mindwingconcepts.com

Other Comprehension Resources

Keys to Literacy:

<http://www.keystoliteracy.com/>

Read Works:

www.readworks.org

Concept-Oriented Reading Instruction:

<http://www.cori.umd.edu/>

Written Expression: A Complex Process

Writing requires the simultaneous and sequential integration of many subprocesses:

- Lower-level skills
 - Handwriting (gross and fine motor)
 - Spelling
- Higher-level (language and higher order cognition)
 - Sentence structure
 - Text structure (narrative vs. expository)
 - Ideation
 - Vocabulary
 - Executive Functions (i.e., attention, organization, working memory, self-monitoring)

Handwriting Instruction



- Handwriting automaticity at an early age (writing alphabet letters quickly from memory) is a strong predictor of the quality of composition in older, normally developing writers.
- If letter production is automatic, then the child is able to attend to higher level composing processes, such as deciding what to write about, what to say, and how to say it.

Literacy How, Inc. 2010

Executive Function (Including Working Memory)

- Metacognition, attention and memory, self-regulation
- Cognitive processes that have a great impact on academic performance, including writing
- These functions affect a writer's ability to plan, organize, monitor, and revise text

(Singer & Bashir, 2004)

Forming letters, mechanics, spelling patterns, memory for facts and ideas, vocabulary and word finding

Writing Strategies

- The goal of teaching writing strategies is to get to the point where students will use the strategies in a self-regulatory way.
- Students need to know when and how to use the strategies
- Students must be motivated to use the strategies.
- Students must be shown explicit information regarding the usefulness of the strategies.

POW

P Pick my Idea
O Organize my Notes
W Write and Say More

TREE

T TOPIC Sentence
Tell what you believe!

R REASONS - 3 or More
Why do I believe that?
Will my readers believe that?

E EXPLAIN Reasons
Say more about each reason.

E ENDING
Wrap it up right!

<http://kc.vanderbilt.edu/casl/srsd.html>

Technology: The Great Equalizer

CAST is an educational research & development organization that works to expand learning opportunities for all individuals through Universal Design for Learning (UDL).

www.cast.org

Learning Ally (Reading for the Blind and Dyslexia) provides audiobooks and textbooks to students with LD.

www.learningally.org

www.bookshare.org

<http://readeasy.si.edu/>

It's All About the Teacher!!

“One of the most important conclusions from research is that for children with learning problems, learning is hard work. A corollary to this finding is that for their teachers, instruction is very hard work and requires an enormous amount of training and support. Children who have difficulty learning to read or completing mathematics problems will likely not benefit from ‘more of the same’ but require an alternative method of teaching to assist their learning.”

Semrud-Clikeman, 2005

Common Elements of Successful Interventions

1. They include multiple instructional components, but always focus on **explicit** and **systematic** instruction in **phonology** and the **alphabetic code**.
2. They are **engaging** and **interactive**, often incorporating manipulatives.
3. They allow students **many opportunities to respond**.
4. Students are provided **many opportunities to practice** through **cumulative reviews** to support **mastery learning**.
5. Data are used to **monitor progress** and ensure **intervention fidelity**.

Al Otaiba, Connor, et al., 2009

Essential Components of Interventions:

3 Main Ingredients

- **Explicit teaching**
- **Systematic**
- **Student Response and Feedback**
- Repetition
- Practice
- Intensive
- Relentless
- Appropriately paced
- Frequent progress monitoring

Principles of Instruction

- Begin a lesson with short review of previous learning.
- Present new material in small steps with student practice after each step.
- **Ask a large number of questions and check the responses of all students.**
- Provide models.
- Guide student practice.
- Check for student understanding.
- Obtain a high success rate.
- Provide scaffolds for difficult tasks.
- Require and monitor independent practice.
- Engage students in weekly and monthly review.

Rosenshine, American Educator, 2012

Explicit and Systematic Instruction

- Clearly teaching each step and/or process necessary to understand a concept, apply a specific strategy, or complete a task
- Breaking down complex tasks into smaller chunks or discrete pieces of information that are more manageable and effective
- Requires careful consideration of how the discrete skills relate to the overall learning goal
- Sequencing the 'chunks' from easier to more difficult
- Uses scaffolds to manage the level of difficulty
- Each skill/step requires mastery before moving on
- Cumulative knowledge before full integration
- **Must know students well!! (i.e., regular progress monitoring is required)**

Student Response and Feedback

'Students need to practice new material. The teacher's questions and student discussion are a major way of providing this necessary practice. The most successful teachers (in these studies) spent more than half of the class time lecturing, demonstrating, and asking questions. Questions allow a teacher to determine how well the material has been learned and whether there is a need for additional instruction. The most effective teachers also ask students to explain the process they used to answer the question to explain how the answer was found.'

Rosenshine, 2012

Depersonalize the Problem

' I find it helpful in a variety of cases to take a sort of physical therapy approach. If you've ever had PT then you understand the idea that you go to PT for your shoulder/knee/neck/hand, whatever it is. I don't go. My neck goes. I take my neck to PT. I don't need PT, my neck needs PT. I'm fine, it's my neck that's all messed up.'

Steve Dykstra

Embrace Dyslexia

- <http://www.embracingdyslexia.com/>
- *The Dyslexia Empowerment Plan: A Blueprint for Renewing Your Child's Confidence and Love of Learning*, Ben Foss
- dyslexicadvantage.com (Fernette and Brock Eide)
- Neurodiversity – Cerebrodiversity in the Classroom (Gordon Sherman)

Knowledge and Practice Standards

- <http://www.interdys.org/standards.htm>
- The document will serve as a guide in endorsing programs that prepare teachers of reading and/or programs that specialize in preparing teachers to work with students who have reading difficulties and disabilities.
- Common Core State Standards
<http://www.corestandards.org/>

Thank You!!

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