The Science of Dyslexia Practical Applications

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Read Washington
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In This Webinar…

- Review of the basics of the scientific understanding of dyslexia
- Providing intervention in the context of a multi-tiered system of supports
- Characteristics of an effective instructional program for students with dyslexia
  - What should we look for in an intervention program?
  - Making reading instruction more effective for students who struggle with word reading
- A few examples of instructional activities from our research interventions
- Resources

What is Dyslexia?

- Dyslexia is a **word reading disability**.
- The primary characteristic is difficulty ***reading and spelling single words,*** especially when presented in lists.
- It leads to problems reading text, but is not a text-level disability.
- Dyslexia can be mild, moderate, or severe, or anywhere in between.

What is Dyslexia?

- **A language-based disorder**, ***not*** **related to vision.**
- **Primary underlying cause**: Poor phonemic awareness (ability to hear and manipulate sounds in words), NOT "seeing backwards"

Phonemic Awareness is the ability to hear, identify, and manipulate the individual sounds in spoken words.

fff-rrr-ooo-g

The Headlines

- Non-instructional treatments and interventions for dyslexia have *little or no support* from scientific research

 We need to teach them to read!

The Headlines

- **The brains of children who have or are at-risk** for serious reading difficulties or disabilities, including dyslexia, **function differently** than those of children who are not at-risk **when they try to read words**.
- *Instruction* changes how the brain processes information!

The Headlines

- Early intervention can prevent or reduce the severity of word reading disabilities, including dyslexia.
- After about Grade 3, intervention must be provided with high intensity and may be needed over a long period of time.

The Headlines

Reading failure is caused by the *interaction* between features of instruction, the materials used, and student characteristics (including a genetic predisposition for dyslexia and patterns of neurological processing).

Dyslexia should be treated in the context of Multi-Tier Systems of Support (MTSS)

Tier 1: Strong Classroom Instruction for All Students

Tier 2: Supplemental Interventions for Some Students who Struggle
(Usually 10-25% of Students)

Tier 3: High-Intensity Intervention for a Small Number of Students who do not respond well to Tier 1 + Tier 2
(Usually 2-10% of Students)

MTSS for Reading Difficulties

Tier 1

Reading instruction based on scientific research evidence provided to ALL Students; Universal Screening; Progress Monitoring; Differentiated in Classroom

Tier 2

Supplemental *small-group* reading interventions provided to those who need it *in addition to* regular reading instruction; Standard Protocol; Frequent Progress Monitoring

Tier 3

A small number of students need: Highly intensive reading interventions, usually over an extended period of time; Structured Program; Frequent Progress Monitoring


Tier 1 Instruction: Delivered to Every Student

- Grades K-2: Strong, systematic phonemic awareness and phonics instruction for ALL students, with application of skills in text reading
- Grades 3-12: Continued advanced word study instruction for all students
- Adopt an evidence-based core reading program **that INCLUDES systematic phonics and word study instruction with application of these skills in connected text.** Tier 1 should include instruction in vocabulary, reading fluency, and comprehension. Students should read and write connected text.

Tier 1: Critical Content
(Grades for Typically Developing Readers)

- ▶ **Oral Language, Vocabulary (pre k -12)**
- ▶ **Phonological/Phonemic Awareness (pre k-1)**
- ▶ **Phonological Decoding (phonics) (k-2)**
- ▶ **Word Study of Increasing Complexity (k-12)**
- ▶ **Fluency Development (1-6)**
- ▶ **Comprehension (pre k-12)**
- ▶ **Linking Reading, Spelling, Writing (k-12)**

Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade
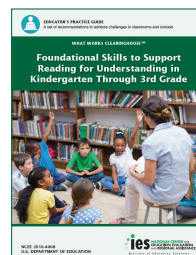
There are also Practice Guides for teaching comprehension, and many other topics.

http://ies.ed.gov/ncee/wwc/PracticeGuide/21

Free materials for Professional Learning Communities (with videos): https://ies.ed.gov/ncee/edlabs/regions/southeast/plc.asp

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Foundational Reading Skills Practice Guide

- ▶ Recommendations of an **expert panel (including educators)** + review of research evidence
- ▶ A **comprehensive search** of the research literature between 2000 and 2014 identified **4,500 citations related to reading instruction**
- ▶ Relevant studies were reviewed using **rigorous standards (56 studies met standards)**

| Panel Member	Affiliation
Barbara Foorman (chair)	Florida Center for Reading Research
Michael Coyne	University of Connecticut
Carolyn A. Denton	University of Texas Health Science Center at Houston
Joseph Dimino	Instructional Research Group
Lynda Hayes	P.K. Yonge Developmental Research School
Laura Justice	Ohio State University
Warnick Lewis	Bond Elementary School
Richard Wagner	Florida State University

WWC Recommendations (Foorman et al., 2017)

1. Teach students academic language skills, including inferential and narrative language and vocabulary
2. Develop awareness of the sound segments in speech *and* link to letters
3. Teach students to decode words, analyze word parts, and write and recognize words
4. Ensure that each student reads connected text every day to support reading accuracy, fluency, and comprehension

Recommendation 3: Teach students to decode words, analyze word parts, and write and recognize words.

Action Step 1: Teach students to blend letter sounds and sound-spelling patterns from left to right within a word to produce a recognizable pronunciation.

Sample Teaching Activities: Blending by chunking with a pocket chart and letter tiles

pocket chart and letter tiles

1. H A T
2. H A T
3. H A T
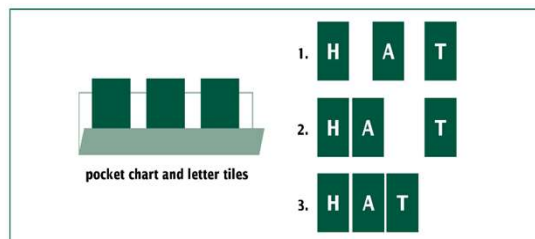
Tier 2 Instruction for Students with Word-Reading Difficulties

- Include supplemental systematic, explicit instruction in phonemic awareness (for those who need it), phonics, and fluent text reading.
- Nearly all students with WRDs will need phonics and fluency instruction, regardless of age.
- Small groups (we suggest 3-5)
- We suggest about 30 min 4 times per week.
- *In addition to* regular reading instruction
- May need to be provided consistently over a period of several weeks or even months!

The Challenge...

Students who are performing below grade level will only close the gap with their classmates if they learn *FASTER* than other students!

More Instruction
Efficient Instruction
More Practice

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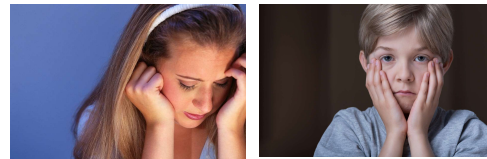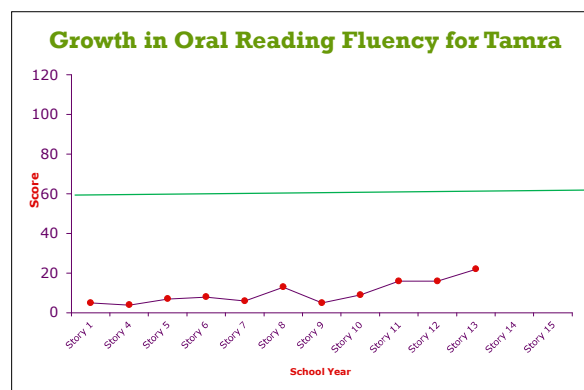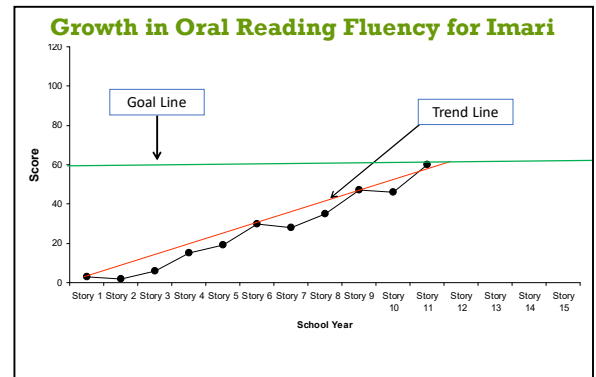
Double Dose of Instruction for Struggling Readers

Quality Classroom Reading Instruction

+

Intervention:
30 minutes, 4 days per week

Tier 3 Intensive Intervention

- Even when Tier 1 instruction and Tier 2 intervention are of very high quality, some students do not have adequate response
- In research projects, between < 1% and about 10% of students needed Tier 3 intervention
- This depends on the quality of Tier 1 and the quality, intensity, and availability of Tier 2

Growth in Oral Reading Fluency for Imari

Goal Line

Trend Line

Score

School Year

Growth in Oral Reading Fluency for Tamra

Score

School Year

For older struggling readers, we suggest a "triage" approach rather than a "tiered" approach. Older struggling readers with severe problems are several years behind.

Tier 2 is probably not necessary. Skip to Tier 3.

Why put off intensive intervention?

Tier 3 Intensive Intervention

What kind of intervention is effective for students who have serious word-reading disabilities, including dyslexia?

What Does *Intensive* Mean?

What kinds of services would you (ideally) receive in hospital **Intensive Care**?

How is that different from services for a "regular" hospital patient?

- −**More attention from specialists**
- −**Constant monitoring**
- −**The best treatments verified by high-quality medical research**
- −**A sense of urgency**
- −**Collaboration among providers**

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What Does *Intensive* Reading Intervention Mean?

- Very small groups
- Increased dosage (longer lessons, more frequent, over a longer period of time)
- Appropriate curriculum verified by high-quality educational research
- Effective instructional methods
- Increased active student involvement
- Constant monitoring
- A sense of urgency
- Collaboration among teachers

Very Small Groups

- 1:1 to 1:3
  - Individualize instruction
  - Maintain attention
  - Active involvement
  - Monitoring and feedback
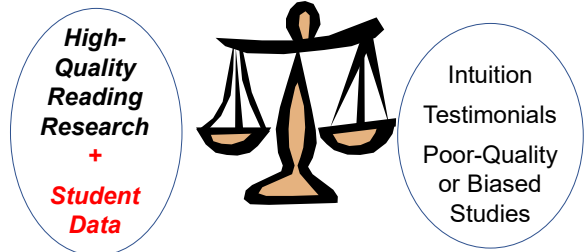 - Less "down time"

Appropriate Curriculum

- Research-validated or has the characteristics of research-validated programs
- Addresses the needs of the students
- Appropriate instructional level

Evidence-Based Instruction

- According to publishers, *everything* is "research-based" or "evidence-based"
- How can we really know what will work best for our students?

High-Quality Reading Research + Student Data

Intuition

Testimonials

Poor-Quality or Biased Studies

Two Acceptable Standards

*Research-Validated Programs

- The programs or teaching approaches themselves were **directly studied**
- Research was of **high quality**
- **Ideally: More than one study** found similar results

Evidence-Based Programs

- Programs and teaching approaches **have characteristics that are known to be effective.**
- These characteristics are **derived from converging evidence** from *multiple scientific studies*.

What should we look for in an intervention program for students with word-reading disabilities?

And what will make my teaching more effective for them?

Effective Instruction for Students With or At Risk for Dyslexia & Other Word-Reading Disabilities

Teach Phonics and Phonemic Awareness/ Phonemic Processing with Application in Connected Text

Provide Consistent, Systematic, Well-Organized Instruction

Provide Clear, Explicit Instruction

Promote *Active* Student Involvement

Provide Extended Practice with Feedback and Scaffolding

Teach Effective Word Identification *During* Reading

Monitor Learning and Mastery of Skills

Students at-risk for *or* with word-reading difficulties and disabilities, *including dyslexia*, need **explicit, systematic instruction in phonics and word study.**

Young students, and *older students who have not mastered* **phonemic awareness** need that instruction as well.

Teach phonemic processing through **mapping sounds to print.**

Phonemic Awareness

- Phonemes: The *individual sounds* that make up speech.
- The ability to hear, identify, and manipulate the individual sounds in spoken words.
- HIGHY predictive of successful reading acquisition.
- Phonemic awareness can be taught!

Phonemic Awareness Activities: Oral Activities

- Phoneme matching and isolation
  - Which word starts with /s/: *sun, bed, hit*; What's the first sound in *sun*? What's the last sound in *sun*?
- Phoneme blending
  - My mystery word is *sss-uuu-nnn*. What's my word?
- Phoneme segmentation
  - Say the sounds in *sun*
- Elision
  - Say *sit*; say it again without the /s/
  - Say plate. Say it again without the /t/
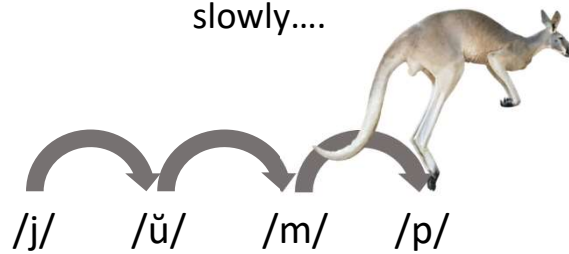 - Say lamp. Say it again without the /m/.

Scaffolding Phonemic Awareness

Say It Slowly

- Say the sounds in a word in a *smooth, stretched-out way* while pulling a Slinky apart.
- Say the whole word while putting the Slinky back together.

Don't break between the sounds when saying a word slowly....

/j/   /ŭ/   /m/   /p/

DO sound out words in a smooth, connected way!

s...m...oo...t^h

Scaffolding Phonemic Awareness

Say It Slowly

- Say the sounds in a word in a smooth, stretched-out way while holding up one finger for each sound.
- Say the whole word while making a fist.

Scaffolding: Make it Easy; Then, Step it Up

Phoneme (Sound) Segmentation:
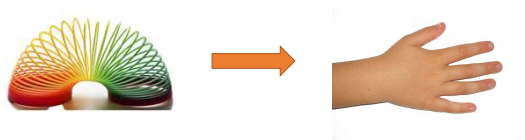
Sound Segmentation for Older Students

• Discreet finger tapping!

Why teach phonics?

English has:
• 44 phonemes
• About 250 ways of writing them
    • Example: a_e, ai, ay, eigh
    Thousands of words!

It's NOT the "bad old" phonics instruction!

• Not boring "skill and drill" worksheets.

• Active student involvement

• Clear instruction + practice activities that are purposeful AND fun!

Sound Pronunciation Guide

SOUND	Key Word	SOUND TYPE
m	mad	continuous
a	ask	continuous
t	top	stop
s	sell	continuous
i	if	continuous
r	rat (rrrr not er)	continuous
d	dog (NOT duh)	stop
n	net	continuous
o	off	continuous
f	fat	continuous
c	cat	stop
p	park (NOT puh)	stop
l	log	continuous
h	hat (NOT huh)	stop
g	go	stop
u	up	continuous
b	big (NOT buh)	stop

Note that some can be held and some cannot be held.

If you can hum it, hold it!

Do NOT add "uh" at the end of the stop sounds. If you must add a vowel sound, add "i".

Word Study Beyond Beginning Phonics

- Recognizing orthographic (spelling) patterns: Teach students to quickly recognize common spelling patterns, such as the silent *e* pattern. Teach some common spelling rules, but minimize the number of rules the most at-risk students have to memorize.

- Reading and Spelling multisyllable words: Recognizing larger patterns in words, such as words that end in consonant + *le* (*bottle*, *sizzle*) and syllables with silent *e* patterns (exer*cise, hate*ful)

- Morphemic analysis: The use of meaningful word parts to understand the meanings of words (prefixes, suffixes, Greek and Latin roots)

What Students Need To Know About Multisyllabic Words

- Understand the concept of a syllable and that each syllable has one vowel sound
- Know that recognizable word parts are found in multisyllable words
- Recognize common prefixes, suffixes, and root words
- How to divide the word into word parts, read each part, and combine the parts to read the word
- How to be flexible when a word has a part or parts that are phonetically irregular

Syllable Types (*Recognizable Patterns*)

- Closed (CVC) (pic-nic) (cat)
- Open (CV) (ve-to) (me, go)
- Silent e (VCe) (de-bate) (cake)
- Vowel team (re-frain; ap-proach) (rain, boat)
- R-controlled (en-ter; birth-day) (her, bird)
- Consonant-le (bot-tle; puz-zle)
- Other (mea-sure; spe-cial; va-ca-tion)

Slide 1

Grades 1-2

READ **BIG** WORDS

1. Find the vowels.

2. Look for parts you know.
   Remember special endings:
   -s -es -ing -er -ed -y

3. Read the first chunk.
   Read the next chunk.
   Sound out if needed.

4. Put the chunks together.

5. Make it sound like a real word.

Slide 2

Step 5: Make it Sound Like a Real Word

- Teach students to be flexible if a syllable does not work according to the rules.
- "Play with the word" until it makes sense.
  - Say the vowel another way.
  - Try a schwa sound ("uh" or "i").
- Check the word to see that it makes sense in the sentence.

pan-da

Slide 3

Read the WHOLE Word!

Middle and High School

- Find the vowels and vowel teams.

  a....e....i....o...u...ai...or...igh

- Look for parts you know. *Be sure* to check the beginning and end.

  re**est**ab**lish**ment

- Read the whole word…one "bite" at a time!

  ultra**con**ser**vat**ism

- Make it sound like a real word.

Slide 4

Effective Instruction for Students With or At Risk for Dyslexia & Other Word-Reading Disabilities

- Teach Phonics and Phonemic Awareness/ Phonemic Processing with Application in Connected Text
- Provide Consistent, Systematic, Well-Organized Instruction
- Provide Clear, Explicit Instruction
- Promote *Active* Student Involvement
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- Monitor Learning and Mastery of Skills

Provide Systematic, Well-Organized Instruction

- Daily lessons follow consistent routines
- Follow a carefully planned scope and sequence
  - Go from *easy to hard*
  - Teach required pre-skills
  - Build in frequent reviews
- Disconnected "mini-lessons" are not sufficient.

- The EASIEST way to do this is to use an evidence-based instructional program that is designed to provide structured, systematic instruction!

SCOPE AND SEQUENCE
Lesson Introduced

Lesson	Phonemic Awareness	Letter-Sound Correspondences	Word Recognition and Spelling		Fluency	Comprehension Strategies
			Word Types	Tricky Words		
1	• Initial Sound	• Mm			• Story Reading	
2	• VC Pattern • CVC Pattern • Initial Sound • Last Sound			• i	• Choral Story Reading	
3	• CVC Pattern (continuous) • Middle Sound	• Aa (short)				
4			• VC Words	• the • The		
5	• CVC Pattern (stop)	• Tt				
6			• CVC Words (continuous)		• Connected Text	
7		• Ss			• Connected Text	
8			• Plurals—s	• is • Is	• Connected Text	
9	• CVCC Pattern (continuous)	• Rr			• Connected Text	
10				• on	• Connected Text • Story-Time Reader 1, *The Baby,* Chapter 1	• Browse to Make Story Predictions

Look for a program that assesses mastery of the skills that are taught. (Mastery tests, Unit tests, Mastery checks).

When confusion is built upon confusion, the result is a mess!

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Please…

- Tell me how it works.
- Show me how to do it.
- Watch me do it and tell me if I'm doing it right.
- Help me practice until it gets easier.

…Sometimes you might have to show me again.

Explicit Instruction

My turn!
I do it

Do it with me!
We do it

Your turn!
You do it
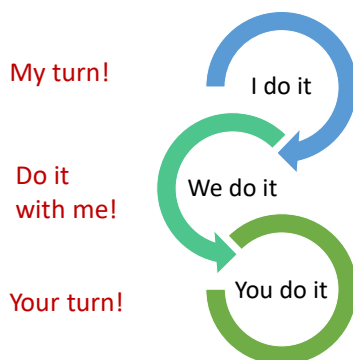
Explicit Instruction Routine

Model and teach ("I do it")
Show students the correct way.
Guided practice ("We do it")
Students do it with teacher support.
Group practice ("Do it together")
Students do it as a group WITHOUT the teacher. (Teacher provides feedback.)
Independent practice ("You do it")
Students practice alone as teacher observes and provides feedback.
Cumulative practice
Students practice new items along with items already learned.

Teaching Blending and Sounding Out

- Start with 2-letter words *with continuous sounds: sounds you can hold*
- **ONLY use decodable words**: Words that can be read **using the letter-sounds the students have been taught.**
- Model sounding out without breaking between the sounds.
- Students practice; provide feedback and model again as needed.

DO sound out words in a smooth, connected way!

s...m...oo...th

Don't break between the sounds when saying a word slowly….

/j/   /ŭ/   /m/   /p/
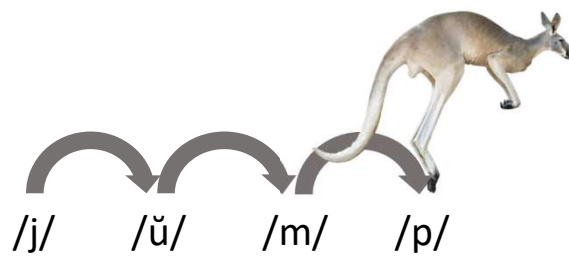
Sounding Out Smoothly

• MODEL

My turn! I'm going to show you how to sound out words. When you sound out words, you are really reading!

• Model sounding out *smoothly* while pointing under the letters. *Don't break between the sounds.*

• *GUIDED PRACTICE*

Do it with me. Let's sound out this word. I'll touch under the letters. You keep saying the sounds until I go to the next letter. Make it smooooth!

Now let's sound out more words.

• *GROUP PRACTICE (without the teacher)*

Your turn. You sound out these words together.

• *INDEPENDENT PRACTICE (without the teacher)*

Each student sounds out 2 or 3 words independently.

Sound Out *Smoothly*

man

tip

truck

feet

64

Effective Instruction for Students With or At Risk for Dyslexia & Other Word-Reading Disabilities

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- Provide Consistent, Systematic, Well-Organized Instruction
- Provide Clear, Explicit Instruction
- **Promote *Active* Student Involvement**
- Provide Extended Practice with Feedback and Scaffolding
- Teach Effective Word Identification *During* Reading
- Monitor Learning and Mastery of Skills

Active Student Involvement

- EACH child gets many opportunities to respond and receive feedback (Smaller groups are better!)
- Little "Teacher Talk"
- Quick pacing, little "down time"
- May include manipulatives/individual white boards, etc.

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- Promote *Active* Student Involvement
- **Provide Extended Practice with Feedback**
- Teach Effective Word Identification *During* Reading
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Why provide feedback?

Practice strengthens connections in the brain.

What we practice becomes a *habit*.

Don't let students practice their mistakes!
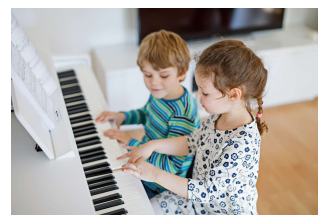
Image Credit: 671228706, romrodinka, iStock /Getty Images Plus

Provide Clear POSITIVE Feedback!

- Tell me what I did *right*!
- Provide specific praise, not just general "good job" statements.
  - "You figured that word out all by yourself!"
  - "You made a mistake there, but you fixed it all by yourself!"

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Meaningful Reading and Writing Practice

- Students apply the word reading skills and strategies they are learning in reading and writing.
- Teacher provides feedback and support.
- At-risk students do not "automatically" apply the skills they have learned.

What Do *You* Do when Reading Gets Challenging?

"As with hypoventilation, mild hypoxemia is relatively common after general anesthesia. Hypoxemia must be suspected in any patient with unexplained agitation, cardiac irritability, obtundation, or bradycardia. The possibility of a pneumothorax must always be considered, especially following any retroperitoneal or intraabdominal procedure in which the diaphragm may have been penetrated." (p. 717)

Bogdonoff, Leisure, Mathes, & Spiekermann, 1998

Reading Behaviors of Skilled Readers

- Use primarily letters and letter patterns in words, rather than context, to identify familiar and unfamiliar words
- Recognize words at sight; process "chunks" (such as syllables)
- Look for recognizable word parts in unknown words
- Use context to confirm that the words makes sense
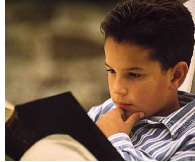
Reading Behaviors of Less Skilled Readers

- Rely heavily on context and guessing
- Read slowly and with effort
- Skip challenging words and sections of text
- Do not monitor their reading to make sure it makes sense

Teach these Key Reading Habits *as Students are Reading Text*

Reading Unfamiliar Words *using the phonics skills students have learned*

Self Monitoring: Does it make sense?

Three-Step Strategy for Reading Words

1. Look for parts you know.
2. Sound it out.
3. Check it! Make sure the word you read makes sense.

Teaching the 3-Step Strategy Before Reading

- Select 1 or 2 tricky words from the text you will read.
- Write one word on a small white board.
- Model using the strategy to read the word (Go through each step).
- Write the other word on the white board.
- Have students apply the strategy, step by step, to read the word.

Scaffolds

Look for parts you know.	Sound it out.	Check it.
· Do you see any letters you know? · What sound does this letter make? · Do you see any parts you know?	· Say it slowly. · Can you sound out this part? · What's the first sound? Now sound out the next part…	· Did that make sense? · Did that sound right?

Denton, Beegle, et al. (2016). *Reading RULES Grade 1: A Tier 1 and Tier 2 intervention in word study, text reading, vocabulary, and comprehension.* Houston: The Children's Learning Institute.

Two Kinds of Text for Learning to Read

Decodable Text	Leveled Text
• Can be read using the letter-sounds and sight words the child has been taught • Students learn to apply the decoding skills they are learning in connected text • **Important scaffold for students with or at risk for dyslexia**	• Children are matched to text at their instructional reading level • Many words cannot be read through letter-sound associations, so students must use pictures and other cues to try to identify the words, *especially at the lower levels*

Decodable Text Can be Meaningful and Attractive

*Flyleafpublishing.com

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- Provide Consistent, Systematic, Well-Organized Instruction
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- Promote *Active* Student Involvement
- Provide Extended Practice with Feedback and Scaffolding
- **Teach Effective Word Identification *During* Reading**
- **Monitor Learning and Mastery of Skills**

- Don't just "cover" critical skills and content; teach it to mastery.
- Look for a program that assesses mastery of the skills that are taught. (Mastery tests, Unit tests, Mastery checks).

Letter-Sound Assessment Lists

List 1	List 2	List 3
m	ch	blew
a	ee	boil
t	ow	soy
s	oa	watch
i	ai	bottle
(continues)	(continues)	(continues)

Quick Phonics Screener

Written by Dr. Jan Hasbrouck

Available from www.readnaturally.com

QPS Quick Phonics Screener — THIRD EDITION

Letter names & sounds   VC/CVC words
Common & advanced digraphs
CVCC/CCVC words   Silent e
R-controlled vowels
Advanced consonant sounds
Vowel combinations   Prefixes and suffixes
Compound & multisyllable words

Oral Reading Fluency Correlates Highly with Standardized Tests of Reading Comprehension (Decreasing above Grade 4)
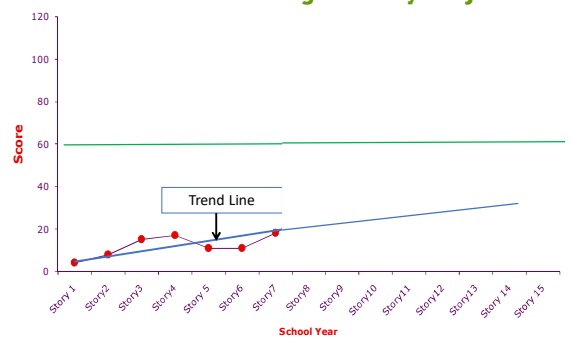
| Measure	Coefficients
Oral Recall/Retell	.70
Question Answering	.82
Oral Reading Fluency	**.91**

Fuchs, Fuchs, Hosp,& Jenkins (2001)

Growth in Oral Reading Fluency for James

If it's not working, **adjust your teaching.**

- Reteach one or more lessons. Sometimes we have to "go back" several lessons and reteach.
- Add additional review and practice for an individual student. Provide feedback!
- Adjust your pacing. Dragging can be as much of a problem as moving too fast.
- Make instruction more explicit.
- Be SURE you are correcting errors when they occur. Look at the students' rate of correct responding.
- Take a look at behavior management and how students can become more actively involved in the lessons.
- If a student is *still* not responding well to instruction, you may need to try a different program...Administer more diagnostic reading assessments.

Growth in Oral Reading Fluency for James
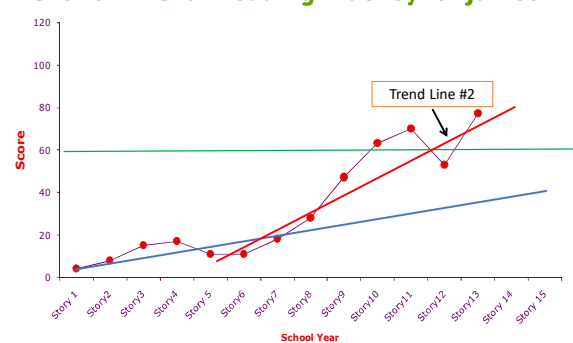
Take-Away Messages from This Day:

If you are committed to preventing and remediating word-reading difficulties (WRD), including dyslexia:

- Teach an evidence-based core classroom reading program that includes systematic instruction in phonemic awareness (grades K-1), phonics (grades K-2 or 3), and word study (all grades).
- Teach students to APPLY the same phonics and word study skills they are learning when they read and write new or difficult words.

Take-Away Messages from This Day:

- Tier 2 and Tier 3: Provide consistent, evidence-based small-group supplemental instruction for students who need it.
- Tier 3 Intervention is delivered with high intensity, in very small groups. Older students with serious reading problems and students with severe dyslexia need Tier 3 intensive intervention.
- Provide *explicit, systematic instruction in phonemic awareness, phonics, and word study, with application in meaningful text.*
- Monitor progress and adjust your teaching

Books

- Hasbrouck, Jan (2020). *Conquering Dyslexia*. www.benchmarkeducation.com
- Denton, Vaughn, Wexler, Bryan, & Reed (2012). *Effective Instruction for Middle School Students with Reading Difficulties*. Brookes Publishing.
  - Assessment and Instruction, with many lesson plans
  - Includes an Appendix with Guidelines for Reviewing a Reading Program
  - https://products.brookespublishing.com/Effective-Instruction-for-Middle-School-Students-with-Reading-Difficulties-P620.aspx
- Fletcher, Lyon, Fuchs, & Barnes. (2019) *Learning Disabilities: From Identification to Intervention* (2nd ed.). Guildford Press.

Resources

- International Dyslexia Association https://dyslexiaida.org/
- Children's Learning Institute (University of Texas Health Science Center at Houston) https://www.childrenslearninginstitute.org/
  - The ENGAGE platform: cliengage.org
- Florida Center for Reading Research https://www.fcrr.org/
- Texas Center for Learning Disabilities https://www.texasldcenter.org/
- Meadows Center for Preventing Educational Risk https://www.meadowscenter.org/
- What Works Clearinghouse Practice Guides https://ies.ed.gov/ncee/wwc/PracticeGuides

Children's Learning Institute (University of Texas Health Science Center at Houston)

Families

- *CIRCLE Activity Collection: Family is* found at cliengagefamily.org
  - for children 0-8 years (can sort activities by age)
  - no login required; English & Spanish

Teachers

- The classroom activity collections are available in English & Spanish; login is required with a free CLI Engage account (cliengage.org)
  - *CIRCLE Activity Collection: Infant & Toddler*
  - *CIRCLE Activity Collection: Pre-K to Grade 2*
  - After logging in, access these collections through the CLI Engage dashboard (or go to https://circleactivitycollection.org/)
- *Family Engagement Resources* for teachers to use in partnership with families: https://cliengage.org/public/tools/quality/family-engagement-resources/

A CLI Engage Account is free to anyone with a Gmail account.

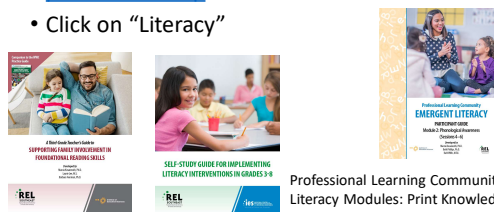### Children's Learning Institute: The AERO Reading Resources
Coming Soon...Fall, 2021

- Access a comprehensive set of activities for providing instructional support in early reading. Access to the AERO Collection will be free of charge with a CLI Engage account (free to those with a gmail account).
- The AERO Collection consists of the activities that comprise the AERO Reading Curriculum. The AERO Reading Curriculum is a comprehensive supplemental early reading curriculum with lessons for providing Tier 1, 2, and 3 small-group instruction.
- Users of the AERO Collection can access all the separate activities in the AERO Curriculum. Teachers may select individual activities, lessons, or units to teach as a supplement to their core reading instruction program.
- Watch this space: https://cliengage.org/public/tools/materials/

Florida Center for Reading Research

- Guide to Reviewing a Reading Program
  https://files.eric.ed.gov/fulltext/ED527205.pdf
- Student Center Activities for Pre-K, K- Grade 1, Grades 2-3, Grades 4-5
  https://www.fcrr.org/student-center-activities

Regional Educational Laboratories: REL Southeast

- https://ies.ed.gov/ncee/edlabs/regions/southeast/publications.asp
- Click on "Literacy"

Professional Learning Community Emergent Literacy Modules: Print Knowledge, Phonological Awareness, Etc.
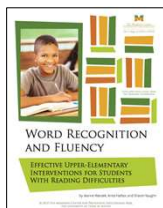https://ies.ed.gov/ncee/edlabs/regions/southeast/elplc/plc_materials_intro.asp

Texas Center for Learning Disabilities
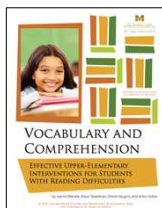https://www.texasldcenter.org/ *See the "Teacher's Corner"

Meadows Center for Preventing Educational Risk
https://www.meadowscenter.org/

Series of Videos for Parents: "Helping Your Kid With…."

https://meadowscenter.org/library/resource/helping-your-kid-with-basic-phonics-at-home

https://meadowscenter.org/files/resources/WordRecog-Fluency_WEB.pdf

https://meadowscenter.org/files/resources/VocabComp_WEB.pdf

Go to the "Library" and search under "Resource Type" for Booklet/Guide and for "Video/Podcast". You may also search under "Audience" for "Parent"

What Works Clearinghouse Practice Guides (and additional resources)
https://ies.ed.gov/ncee/wwc/PracticeGuides

https://ies.ed.gov/ncee/wwc/Docs/ReferenceResources/RemoteReading_Elementary.pdf

Other Practice Guides
- **Teaching Elementary School Students to Be Effective Writers**

- **Improving Reading Comprehension in Kindergarten Through 3rd Grade**

- **Assisting Students Struggling with Reading: Response to Intervention (RtI) and Multi-Tier Intervention in the Primary Grades**

- **Effective Literacy and English Language Instruction for English Learners in the Elementary Grades**