How Do We Solve this Reading Crisis?

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PBIDA
October 9, 2017

“No other skill taught in school and learned by school children is more important than reading. It is the gateway to all other knowledge. Teaching students to read by the end of third grade is the single most important task assigned to elementary schools.” —American Federation of Teachers

“Children who get off to a poor start in reading rarely catch up. We wait—they fail. But it does not have to be this way.”


Topics

- Discuss how basic reading skills develop.
- Provide examples of effective evidence-based interventions that are matched to developmental levels.
- Discuss how technological innovations can help address reading failure.
- Consider the importance of teacher preparation and training.

Reading Development
How Do You Pronounce a Word You’ve Never Seen Before?

Homioothermal

Strategies for Word Identification

1. By segmenting and blending sounds.
2. By pronouncing common spelling units (e.g., syllables).
3. By recognizing sight words from memory.
4. By creating analogies to known words.
5. By using context cues to predict words.
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Skilled Reading
The key to efficient text reading is automaticity (the ability to read words by sight automatically). Allows readers to process words in text quickly w/o conscious attention to words. All other cuing systems require conscious attention.


Phases of Sight Word Development

Pre-Alphabetic Phase
Makes connection between salient visual cues and word meaning
Does not use letter-sound relations to aid in word identification

Partial Alphabetic
Makes connections between some of the letters and sounds
Relies more on first and final sounds
Lacks full knowledge of alphabetic system, particularly vowels
Reads same word inconsistently and confuses words with similar letters (e.g., cap and camp)

Full Alphabetic
Has complete connections between letters and phonemes
Can decode words never read before by segmenting and blending letters
Remembers how to read sight words

Consolidated Alphabetic
Recognizes larger letters units instantly (e.g., morphemes, syllables, onset/rimes)
Has consolidated units in memory (e.g., -est, -tion, -ing, -le)
Is sensitive and recalls spelling patterns observed in words
Reads words rapidly and easily

1. What phase is Charlie in Ehri’s Sight Word Development?

2. On what area of reading does he primarily need to work?

Different People require Different Approaches at Different Developmental Stages

Three Tiers of Service Delivery

- Tier I: All students are provided with evidence-based instruction and progress is monitored.
- Tier II: Students who do not respond may receive more intensive interventions in small groups.
- Tier III: Students who still do not respond receive more targeted, intensive interventions. Consider eligibility and need for special education.

What can be weird, about three tiers?

- the different types of interventions
- the lack of flexibility in the system

“In summary, the results of this randomized controlled trial revealed that immediately providing Tier 2 and 3 interventions to students who qualify led to generally stronger reading outcomes by the end of first grade, in contrast to typical RTI, which waited for students to respond to Tier 1 for 8 weeks before providing intervention, thus resulting in the most intense interventions being delayed…”

Al Otaiba, S. et al. (2014). *Exceptional Children, 81*

Prevention Program

“A prevention program should have its inception at the earliest school age and be continued coordinately with correction through high school” (p. 343).

The Upper Grades

“... provision for correcting reading disability in the upper grades and high school should be a major responsibility of teachers and administrators”
(Williamson, 1939, p. 347)

“A variety of programs must be available for children who have a variety of needs”
(p. 194).

Source:

Letters, Phonemes, and Graphemes

How many letters in the alphabet? ______

How many speech sounds? ______

How many graphemes? ______  (a letter or grouping of letters that represent a single speech sound)

The Alphabetic Principle

The systematic use of alphabetic letters to represent speech sounds - how speech sounds are represented in print

phoneme  grapheme

/f/  f

Moving from Pre-Alphabetic to Partial Alphabetic: Phonological Awareness to Print

- Teach segmentation (necessary for spelling) and blending (necessary for reading).
- Teach sounds and then how the sounds are spelled with letters (e.g., use Elkonin boxes, Phoneme-Grapheme Mapping, Making Words).
- Progress from regular patterns (e.g., CVC) to more complex patterns.
- Introduce and provide systematic review of words with irregular elements (e.g., once).

Two most important phonological awareness abilities for early reading and spelling:

- Sound blending: provides the basis for learning phonics.
- Segmentation: provides the basis for sequencing sounds when spelling.
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Training Sound Blending Ability
Ability to push together sounds

- Start the instruction with continuous sounds that can be prolonged (e.g., /s/, /f/, /m/)
- Progress from compound words to syllables to onsets-rimes to phonemes
- Present words with two sounds, three, and then four (e.g., /m/ /e/, /sh/ /oe/, /c/ /a/ /t/, /s/ /a/ /n/ /d/)
- Gradually increase the interval between sounds from 1/4 second to 1 second break

Segmentation

1. Break compound words into words (e.g., cup-cake.)
2. Count the number of syllables in a word (e.g., car-pen-ter).
3. Break into onset-rime (e.g., c-at).
4. Count the number of phonemes (e.g., s-e-g-m-e-n-t).

Road to the Code

Adapted Elkonin Procedure (Pre-Alphabetic)

1. Select a simple line drawing.
2. Place a rectangle for a word under the drawing divided into squares equal to number of phonemes.
3. Say the word slowly and push a marker forward for each sound.
4. Color-code markers for vowels and consonants.
5. Progress to letter tiles

Making Words


- Give each student 6-8 letters with one or two vowels.
- Have each student make 2 then 3 letters words using the letters.
- Continue a pattern, increasing word length one letter during each step.
- Example: it, sit, slit, split, splint
- Practice with morphemes: ed, ing, er

Modifying Making Words

- Focus on CVC patterns
- Progress from changing initial to final to medial sounds
- Integrate with a reading/writing activity
- Pair at-risk student with tutor
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Phoneme-Grapheme Mapping
• What do you hear?
• What do you write?
• One chip = one sound

Talk-to-Yourself Chart
(Adapted from Benchmark School, Gaskins)
1. The word is ____________.
2. When I stretch the word, I hear _____ sounds.
3. There are _____ letters because _____________.
4. The spelling pattern is _____________.
5. This is what I know about the vowel:___________________.
6. Another word I know with the same vowel sound is:_________.
7. Other words that share this same spelling pattern are:____________.

Moving from Partial Alphabetic to Full Alphabetic
• Synthetic Phonics Approach
• Multisensory Approach (e.g., Fernald)
• Multisensory Phonics Approach (e.g., Orton-Gillingham)

Phoneme-Grapheme Mapping

Builds on phonemic awareness
Phoneme-Grapheme Mapping builds the bridge between sounds and letters

Kathie Grace, PG Mapping, Voyager Sopris Learning

1. The word is right.
2. When I stretch the word, I hear 3 sounds.
3. There are 5 letters because it takes i-g-h to represent the i sound.
4. The spelling pattern is ight.
5. This is what I know about the vowel: the vowel is the only vowel in the word and it says its own name.
6. Another word that I know with the same vowel sound is: ride.
7. Other words that share this same spelling pattern are: light, fight, flight, right, night, might, tight, sight, fright, plight.
Three Basic Types of Phonics Approaches

**Synthetic:** Start with single sounds and letters

**Analytic:** Start with word parts and words (e.g., word families, onset-rimes, analogies)

**Embedded:** Teach sound-symbol relationships in the context of text. Highlight unknown patterns.

Synthetic phonics approaches are needed for students with the most severe dyslexia.

### Examples of Synthetic Phonics Programs
- Barton System (can be used by parents)
- Corrective Reading
- Herman method
- Lindamood Phoneme Sequencing Program (LiPS)
- Language! (and Language! online)
- Mindplay Virtual Reading Coach (online)
- Orton-Gillingham
- Phonic Reading Lessons
- Project Read
- Read, Write, and Type (computer)
- Slingerland
- Sonday System
- Spalding method
- Wilson Reading System (Fundations)

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**Principles of Effective Phonics Instruction**

1. Teach sound blending.
2. Provide instruction in decoding. (grapheme to phoneme)
3. Provide instruction in encoding. (phoneme to grapheme)
4. Have the student practice skills in decodable text.

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**Phases of Sight Word Development**

**Pre-Alphabetic Phase**

**Partial Alphabetic Phase**

**Full Alphabetic Phase**

**Consolidated Alphabetic Phase**

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**Color Coding**

- **Green:** Phonically regular words: (e.g., cat, swim)
- **Yellow:** Irregular but frequent patterns (e.g., night)
- **Red:** Irregular (e.g., once)

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Moving from Full Alphabetic to Consolidated

- Emphasis is on structural analysis; teach prefixes, suffixes, Latin and Greek roots.
- Glass-Analysis
- Six Syllable Types
- REWARDS (Archer, Gleason, & Vachon, Voyager/Sopris West) ( multisyllabic words and reading fluency ). Intermediate and secondary  
www.sopriswest.com
- Morphology (Henry & Redding, PRO-ED) 
Patterns for success in reading and spelling 
www.proedinc.com

Glass Analysis Method
Easier to Learn, Box 329, Garden City, NY 11530
- Identify the whole word and the letters and sound of the target cluster
- Give the sound(s) and ask for the letter or letters
- Give the letter or letters and ask for the sound(s)
- Take away letters and ask for the remaining sound
- Say the whole word

Structural Analysis
Breaking apart words by prefixes and suffixes ( affixes ) and other meaningful units.

pre/script/ton

Three Skills for Pronouncing Multisyllabic Words

Analysis: Where to divide a written word into syllables
Pronunciation: How to pronounce the individual syllables
Synthesis: How to combine the syllables into a spoken word.

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Affixes

Introduce the prefix or suffix in isolation. Underline the affix in words. Practice reading the word part. Have students read the word twice.
1. Read the prefix or suffix, say the entire word.
2. Read the entire word.

friction instruction deduction
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Voyager Sopris Learning

REWARDS Strategy
Circle the prefixes.
Circle the suffixes.
Underline the vowel in the root word.
Draw scoops under the parts and say:
What part? What part? What part?
What word?

Tips for Teaching Fluency
1. Multiple readings improves speed and accuracy (three to four times)
2. Instructional level text
3. Decodable text with struggling readers
4. Short, frequent periods of fluency practice with concrete measures of progress


Rapid Word Recognition Chart
Method for practicing quick word reading
1. Use a chart composed of five rows of 6 irregular (or high frequency) words.
2. Time how long it takes the student to read the chart.
3. Count and record number of words read successfully.
4. Review any missed words.


Interventions for Reading Fluency
- Rapid Word Recognition Chart
- Speed Drills
- Repeated Readings
- Books on CD
- Great Leaps

Rapid Word Recognition Chart

pretty said who there they what
said pretty there who what they
there who they said pretty what
who what said they there pretty
they there pretty what who said
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Great Leaps Reading (C. Mercer & K. Campbell)
Daily timing (one-minute each) and charting of three areas: Phonics: sounds in isolation to cvc, cvvc, cvce patterns; Sight Phrases; and Stories

Versions for all levels:
- K-2 (also has a Sound Awareness section)
- Grades 3-5
- Middle school
- High school
- Adult

1-877-GRLEAPS or www.greatleaps.com

Increasing Fluency
- 15 minutes of time to read aloud to an adult who will help with the difficult words, three times a week for at least 10 weeks
- Provide choices among text that can be read with more than 85% accuracy.
- Use both repeated reading and continuous reading -listener provides assistance as needed


Improving Reading Fluency
A listening passage preview in combination with repeated reading (reading the passage at least 4 times) was most effective for improving the reading fluency of students with reading disabilities.


Mindplay Virtual Reading Coach
• Builds an individualized prescriptive plan for each student.
• Provides as much feedback and repetition as needed.
• Puts students in charge of their own learning
• Increases all aspects of reading (phonological awareness, phonics, fluency, grammar, vocabulary, and comprehension).


Mindplay Virtual Reading Coach
www.mindplay.com
home version: www.myreadingteam.com
MindPlay Virtual Reading Coach
Goal: All students reading at grade level

Student requirements
30 minutes a day, 5 days a week using MVRC
Change happens within 10 hours
Gains start to happen at 25 - 30 hours
Most students reach grade level within 50 hours of use

MINDPLAY Online Comprehensive Course (50 hours)
Increases teachers’ understanding of how to provide explicit instruction in:
• Phonological awareness
• Phonics
• Grammar
• Fluency
• Vocabulary
• Reading Comprehension

Knowing what is needed to help students is not the same thing as being able to provide it.

The Solutions
• Early intervention with a structured, systematic phonics program is critical, followed by methods to increase reading rate, build grammar and vocabulary, and improve comprehension.
• Highly trained teachers and technology are the keys to ensuring that all children learn to read.
• All school personnel have an obligation to understand and meet the needs of struggling readers in all grades.


MINDPLAY TEACHER COMPANION (8 hours)
• Increases teachers’ understanding of English language structure and research-based reading instruction.
• Demonstrates scientifically-based reading instruction using MVRC
• Provides 8 hours professional development credit

“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.”

Solutions

- Be eclectic in methodologies.
- Select reading interventions based on a student’s developmental levels.
- Ensure that teachers have adequate time to teach reading.

“In the final analysis, reading difficulties can be prevented to the degree that the teacher has a professional understanding of her work” (p. 245).


“Make dyslexia a national priority by Sally E. Shaywitz, M.D. and Bennett A. Shaywitz, M.D Rep. Bill Cassidy (R-La.) has introduced a House Resolution on Dyslexia (H.Res. 456, 113th Congress...“As physician-scientists, we have seen the devastating impact on children and families resulting from the failure by our schools to recognize and address dyslexia; as scientists we know the powerful scientific knowledge that both explains dyslexia and offers an evidence-based route to remediation. Often we wish there were more knowledge to address a problem. In the case of dyslexia, we have the knowledge to do much better for our children and our nation and so rather than a knowledge gap, there is an action gap which H.R. 456 – by bringing science to education - takes a major step to close.”

“The ultimate power of text is not from its understanding but from its broader interpretation, its critique, its extension through the reader’s own knowledge and thought and to the reader’s own needs and interest... It is this power, most of all, that we want to give all our children.”