Leaving No Child Behind in Reading: What Every Teacher Should Know

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First Reader
By Billy Collins

I can see them standing politely on the wide pages that I was still learning to turn, Jane in a blue jumper, Dick with his crayon-brown hair, playing with a ball or exploring the cosmos of the backyard, unaware they are the first characters, the boy and girl who begin fiction.

Beyond the simple illustrations of their neighborhood, the other protagonists were waiting in a huddle: frightening Heathcliff, frightened Pip, Nick Adams carrying a fishing rod, Emma Bovary riding into Rouen.

But I would read about the perfect boy and his sister even before I would read about Adam and Eve, garden and gate, and before I heard the name Gutenberg, the type of their simple talk was moving into my focusing eyes.
It was always Saturday and he and she were always pointing at something and shouting, “Look!” pointing at the dog, the bicycle, or at their father as he pushed a hand mower over the lawn, waving at aproned mother framed in the kitchen doorway, pointing toward the sky, pointing at each other.

They wanted us to look but we had looked already and seen the shaded lawn, the wagon, the postman. We had seen the dog, walked, watered and fed the animal, and now it was time to discover the infinite, clicking permutations of the alphabet’s small and capital letters. Alphabetical ourselves in the rows of classroom desks, we were forgetting how to look, learning how to read.
Why is this country currently engaged in the largest initiative to prevent reading problems ever conducted?

1. Far too many poor and minority children are being “left behind” when it comes to growth of proficient reading skills
Right now, all over the United States, we are leaving too many children behind in reading—2003 NAEP results.

And, a large share of those children come from poor and minority homes.

Percent of Students Performing Below Basic Level - 37%

- **White**: 26%
- **Black**: 61%
- **Hispanic**: 57%
- **Poor**: 56%
- **Non-poor**: 25%
The nature of our current reading crises....

“Current difficulties in reading largely originate from rising demands for literacy, not from declining absolute levels of literacy”

Report of the National Research Council
Increasing demands for higher levels of literacy in the workforce require that we do better than we have ever done before in teaching all children to read well.
Factors that limit literacy outcomes in the United States

1. Many elementary schools are not organized or focused in ways that most effectively promote literacy in all children.

2. Teachers often do not possess the special knowledge or teaching skill to effectively teach children who experience difficulties learning to read.

3. Many families and neighborhood environments do not provide experiences that prepare children to learn to read well.

4. There is significant variability in the language-based talents required for learning to read.

5. Many schools do not really expect children from low wealth or minority backgrounds to learn to read well.

6. Teachers often do not have adequate materials or instructional time available to them to effectively promote literacy in all their children.
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“soft bigotry of low expectations”
Why is this country currently engaged in the largest initiative to prevent reading problems ever conducted?

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2. Prevention of reading problems is far more effective and humane than trying to remediate after children fail
Reading stimulates general cognitive growth—particularly verbal skills.
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3. New discoveries from scientific research about reading can provide the basis for improved outcomes for all children
How the “new research” is different--

1. It is much, much more extensive

2. It has been much better funded, so it has been of higher quality – better measures, longitudinal designs, larger samples of children

3. It has involved a convergence of findings from both basic science on the nature of reading and from instructional studies that implement those findings
In 1995, the U.S. Department of Education and the National Institutes of Health

National Academy of Sciences

Report from the National Research Council
1998
Teaching Reading Is Rocket Science

What Expert Teachers of Reading Should Know and Be Able To Do

American Federation of Teachers
In 1997, United States Congress

National Institute of Child Health and Human Development & U.S. Department of Education

Report of the National Reading Panel

An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction
Available from:
National Institute for Literacy
1-800-228-8813
EdPubOrders@aspensys.com
www.nifl.gov
The top 5 discoveries

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   The orthography of a language refers to the way the language is represented in print

   An orthographic representation is a representation of a word’s spelling that is stored in memory

   A fully developed orthographic representation allows a word to be read accurately “at a single glance”
The top 5 discoveries

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The orthography of a language refers to the way the language is represented in print.

An orthographic representation is a representation of a word’s spelling that is stored in memory.

A fully developed orthographic representation allows a word to be read accurately “at a single glance.”
These are interesting and challenging times for anyone whose professional responsibilities are related in any way to literacy outcomes among school children. For, in spite of all our new knowledge about reading and reading instruction, there is a widespread concern that public education is not as effective as it should be in teaching all children to read.
The report of the National Research Council pointed out that these concerns about literacy derive not from declining levels of literacy in our schools but rather from recognition that the demands for high levels of literacy are rapidly accelerating in our society.
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Which is the real word?

smoak  smoke

circus  cercus

wagon  wagun

first  ferst

traid  trade
The top 5 discoveries

1. Skilled, fluent reading by third grade depends on the development of many thousands of highly specified orthographic representations for words.

2. Skilled reading by third grade also depends upon the development of extensive word knowledge (vocabulary)-this becomes particularly important to comprehension performance at about third grade.

3. Skilled reading by third grade also depends on skill in the use of a variety of comprehension strategies and thinking skills.

4. Early establishment of efficient phonemic decoding skills is critical to the development of later accurate and fluent reading.

5. Many children struggle in learning in acquiring phonics skills because they are slow to develop phonemic awareness.
Effective early reading instruction must build reading skills in five important areas by providing instruction that is both engaging and motivating.

- **Phonemic Awareness**
- **Phonics**
- **Fluency**
- **Vocabulary**
- **Comprehension strategies**

Taught by methods that are...

- Identifying words accurately and fluently
- Constructing meaning once words are identified

Engaging & motivating
What we know from science about the growth of reading skills:

1. It is very important to get off to a strong start in learning to read during early elementary school

   Children who “catch on to reading” early get much more reading practice than those who “catch on” late

   Children who “catch on early” are more accurate readers—accuracy is important as children form memories for words that allow them to identify words “by sight.”

   Children who read more have more opportunities to add words to their vocabulary

   Children who “catch on to reading” early develop stronger motivation for reading
What we know from science about the growth of reading skills:

1. It is very important to get off to a strong start in learning to read during early elementary school.

2. It is critical that children acquire skill in use of the alphabetic principle to help accurately identify unknown words early in development of reading skill.

“From all these different perspectives, two inescapable conclusions emerge. The first is that mastering the alphabetic principle is essential to becoming proficient in the skill of reading....” (Rayner, et al., 2001)

Why is it important for children to acquire good phonemic decoding skills (phonics) early in reading development?

Because learning to read involves everyday encounters with words the child has never before seen in print.

Phonemic analysis provides the most important single clue to the identity of unknown words in print.
The most efficient way to make an “accurate first attempt” at the identity of a new word is:

First, do phonemic analysis and try an approximate pronunciation

Then, close in on the exact right word by finding one containing the right sounds, that also makes sense in the sentence.

(chapter 10, Preventing Reading Difficulties in Young Children (2000)
The connection to reading fluency:

To be a fluent reader, a child must be able to recognize most of the words in a passage “by sight”
These are interesting and challenging times for anyone whose professional responsibilities are related in any way to literacy outcomes among school children. For, in spite of all our new knowledge about reading and reading instruction, there is a widespread concern that public education is not as effective as it should be in teaching all children to read.
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The connection to reading fluency:

To be a fluent reader, a child must be able to recognize most of the words in a passage “by sight”

Children must correctly identify words 3-8 times before they become “sight words”

Children must make accurate first attempts when they encounter new words, or the growth of their “sight word vocabulary” will be delayed—they will not become fluent readers
Words likely to be encountered for the first time in first grade

animal
faster
happy
never
time
sleep
rabbit
Words likely to be encountered for the first time in second grade:

- amaze
- beach
- comfortable
- example
- interesting
- grease
- stiff
- sweep
the middle, it was the for a to wear his full set of whenever he in - even in times of! When a believed he was friends, he would his. This of showed that the felt and safe.
During the middle ages, it was the custom for a knight to wear his full set of armor whenever he appeared in public - even in times of peace! When a knight believed he was among friends, he would remove his helmet. This symbol of friendship showed that the knight felt welcome and safe.
What we know about the growth of reading skills:

1. It is very important to get off to a strong start in learning to read during early elementary school.

2. It is critical that children acquire skill in use of the alphabetic principle to help accurately identify unknown words early in development of reading skill.

3. Children who are delayed in the development of alphabetic understanding and skill struggle to become fluent readers.
Oral Reading Fluency – Assess4, Third Grade

29,475 students

Ave. WPM = 105
35th percentile

23% high risk

Std. Dev = 36.87
Mean = 105.3
N = 29745.00
Paths to poor reading fluency in 3rd grade

1. Don’t learn phonetic decoding strategies very well at all. That way, you will remain an inaccurate reader, and you won’t read independently because there are too many words you can’t decode on your own.

2. Wait until mid second grade or early third grade to learn to use phonemic decoding strategies – that way you will miss out on 1 or 2 years of productive reading practice.

3. Go ahead and learn phonemic decoding skills early and well, but don’t read very much. That way you won’t have the opportunity to learn to recognize 1000’s of words at a single glance.
At the beginning of 2nd grade, most of our students had not achieved the 1st grade benchmark for phonemic decoding.

At the end of second grade, we still have more than 20% of our students who have not achieved the first grade benchmark in phonemic decoding.
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4. Accurate and fluent word reading skills contribute importantly to the development of reading comprehension.
The very best teachers of children who struggle in learning to read are

**Relentless**

in their pursuit of every child
The first commandment of Relentlessness

Let no child “escape” from first grade without being proficient in phonemic decoding skills
The second commandment of

Relentlessness

As children become accurate and independent readers, encourage, cajole, lead, beg, support, demand, reward them for reading as broadly and deeply as possible.
What we know about the growth of reading skills:

5. Oral language vocabulary and other forms of verbal and conceptual knowledge also contribute importantly to the development of reading comprehension.
Relationship between Vocabulary Score (PPVT) measures in Kindergarten and later reading comprehension

End of Grade One -- .45

End of Grade Four -- .62

End of Grade Seven -- .69

The relationship of vocabulary to reading comprehension gets stronger as reading material becomes more complex and the vocabulary becomes more extensive (Snow, 2002)
What we know about the growth of reading skills:

5. Oral language vocabulary and other forms of verbal and conceptual knowledge also contribute importantly to the development of reading comprehension.

6. Children must also develop and actively use a variety of comprehension monitoring and comprehension building strategies to reliably construct the meaning of text.

As students develop, reading comes more and more to be...

“Thinking guided by print”
What we know about the growth of reading skills:

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6. Children must also develop and actively use a variety of comprehension monitoring and comprehension building strategies to reliably construct the meaning of text.

7. Motivation for learning to read is important to early reading development, and continued motivation to read is critical for reading development after basic skills are well established – growth of reading skills after 3-4th grade is heavily influenced by amount of reading the child does.
The third commandment of Relentlessness

Beginning in Kindergarten, teach vocabulary and thinking skills as intensely, and robustly as possible
What we know about things that make reading difficult:

1. Early weaknesses in phonemic awareness and knowledge about letter sounds makes it very difficult to acquire skill in phonemic decoding that leads to the development of reading fluency.

Children can have difficulties acquiring phonemic awareness and phonemic decoding skills for at least two reasons:

- Biologically based lack of “talent” in the phonological language domain
- Lack of language and print experience in the pre-school environment
Development of Phonological Sensitivity

Children at Risk for Reading Difficulties
Development of Phonological Sensitivity

SES Differences in Phonological Sensitivity

⇐ Cross-sectional study comparing the performance of 250 children from higher income families to 170 children from lower income families.

⇐ Children were between two- and five-years of age.
SES Differences in Phonological Sensitivity

Children completed tests of phonological awareness that assessed their ability to detect, blend, or elide words, syllables, onset-rimes, or phonemes.
SES Differences in Phonological Sensitivity

← Children from lower SES backgrounds have significantly less well developed phonological sensitivity.

← Children from lower SES backgrounds experience significantly less growth in these skills during the preschool years compared to their higher SES counterparts.
What we know about what makes reading difficult:

1. Weaknesses in phonemic awareness and knowledge about letter sounds makes it very difficult to acquire skill in phonemic decoding

2. Weaknesses in vocabulary and oral language interfere with the development of reading comprehension skills
The Effects of Weaknesses in Oral Language on Reading Growth
(Hirsch, 1996)

5.2 years difference
What we know about what makes reading difficult:

1. Weaknesses in phonemic awareness and knowledge about letter sounds makes it very difficult to acquire skill in phonemic decoding

2. Weaknesses in vocabulary and oral language interfere with the development of reading comprehension skills

3. Lack of appreciation for the importance of learning to read, or failure to acquire a motivation and interest in reading also limits reading growth
What we know about reading instruction:

1. Systematic and explicit approaches to instruction are consistently more effective than approaches that depend on student discovery and inference.

   “From all these different perspectives, two inescapable conclusions emerge. The first is that mastering the alphabetic principle is essential to becoming proficient in the skill of reading.... and the second is that instructional techniques (namely phonics) that teach this principle directly are more effective than those that do not.” (Rayner, et al., 2001)

This seems to be especially the case for children who are at risk in some way for having difficulty learning to read.
What we know about reading instruction:

1. Systematic and explicit approaches to instruction are consistently more effective than approaches that depend on student discovery and inference.

2. The need for explicit instruction extends beyond phonics to fluency, vocabulary and comprehension strategies.
Big ideas from “Bringing Words to Life”

First-grade children from higher SES groups know about twice as many words as lower SES children.

Poor children, who enter school with vocabulary deficiencies have a particularly difficult time learning words from “context”.

Research has discovered much more powerful ways of teaching vocabulary than are typically used in classrooms – generalization to reading comprehension.

A “robust” approach to vocabulary instruction involves directly explaining the meanings of words along with thought-provoking, playful, interactive follow-up.
Four Critical Elements for More Robust Vocabulary Instruction

Select the right words to teach – Tier 2 words

Develop child-friendly definitions for these words

Engage children in interesting, challenging, playful activities in which they learn to access the meanings of words in multiple contexts

Find a way to devote more time during the day to vocabulary instruction
An anecdote from a friend..

“While teaching a learning support lesson to my 6th grade struggling readers, the word carpenter was used. I ask my students to tell me what a carpenter did. They said, "A person who lays carpet." This happened in more than one class.”

“These same students are being ask to learn primogeniture, degenerate, and omnipotent in their regular 6th grade Language Arts class. Wow! This is a tough situation. I work with my students to learn these required words so that they can pass their language arts class but what a waste of good learning time. When I returned today, not one of the students in my second period class remembered what a carpenter did. I got the correct answer in my third period class. Hurray! How long do you think they will remember their regular language arts words?”

Noreen Beattie, 6th grade learning support, Tallahassee, FL
“…. Although some children will learn to read in spite of incidental teaching, others never learn unless they are taught in an organized, systematic, efficient way by a knowledgeable teacher using a well-designed instructional approach.” (Moats, 1999)
A final concluding thought....

There is no question but that “leaving no child behind in reading” is going to be a significant challenge...

It will involve professional development for teachers, school reorganization, careful assessments, and a relentless focus on the individual needs of every child...

But, its not the most difficult thing we could be faced with...
Thank You