The Urgent need to improve reading instruction and outcomes for our K-12 students

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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.
“Current difficulties in reading largely originate from rising demands for literacy, not from declining absolute levels of literacy”
Rising needs for high levels of literacy in our society demand that schools break the mold of past performance—we clearly must do better than has ever been done before for all students.

Also, schools are currently leaving far too many poor and minority students behind.
Right now, all over the United States, we are leaving too many children behind in reading—2005 NAEP results.

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

Percent of Students Performing Below Basic Level - 37%

- White: 25, 26
- Black: 59, 59
- Hispanic: 56, 54
- Poor: 54, 56
- Non-poor: 23, 25
A positive outcome nationally....

Latest results from the National Assessment of Educational Progress

No difference

Slight long term improvement - No recent difference

Recent improvement is largest in 30 years
However, even students who complete high school successfully at present are not prepared for many post secondary options.

Comparing the difficulty of typical 11th and 12th grade texts with those encountered in college and other post secondary environments.

Estimates based on average Lexiles of text
When all of this data is brought together, it is apparent that society in general and the workplace in particular demand higher levels of reading proficiency than schools. Moreover, many students are barely meeting those minimal education requirements.

(p. 3) -- Pennsylvania Department of Education (2004)
This study calculates the financial costs incurred by Michigan business and institutions of higher learning when students leave high school without learning basic skills. … The best estimate … is $601 million per year. Extrapolating to the entire United States, the lack of basic skills costs a total of approximately $16.6 billion each year.

--Greene (2000)
In fall 2000, 28 percent of entering freshmen enrolled in one or more remedial reading, writing, or mathematics courses. (p. iv)

Negative outcomes associated with low reading skills

Lower levels of literacy have been linked to:

- Higher drop out rates from school
- Higher rates of juvenile delinquency
- Higher rates of underemployment
- Higher levels of imprisonment
Why do such high numbers of students struggle in learning to read

Many students come to school poorly prepared for learning to read because of reduced learning opportunities in their pre-school environment
Development of 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.
Language

Meaningful Differences
in the Everyday Experience of Young American Children

Betty Hart & Todd R. Risley

Foreword by Lois Bloom
Hart and Risley (1995) conducted a longitudinal study of children and families from three groups:

- Professional families
- Working-class families
- Families on welfare
Hart & Risley compared the mean number of interactions initiated per hour in each of the three groups.
Hart & Risley also compared the mean number of minutes of interaction per hour in the three groups.

![Bar chart showing interactions per hour for different groups: Welfare, Working, Professional. The Professional group has the highest interactions.]
Cumulative Language Experiences

Cumulative Words Per Hour

- Welfare
- Working
- Professional
Cumulative Language Experiences

Cumulative Words Spoken to Child
(in millions)

Age of child (in months)

Professional
Working
Welfare
Why do such high numbers of students struggle in learning to read

Many students come to school poorly prepared for learning to read because of reduced learning opportunities in their pre-school environment.

Other students have biologically based, specific language disabilities that interfere with reading.
These children we have referred to as “reading disabled” or “dyslexic”

A new science based definition --

“Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction.” (Lyon & Shaywitz, 2003)
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Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge.”

Why do such high numbers of students struggle in learning to read

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Other students have biologically based, specific language disabilities that interfere with reading.

New literacy standards and expectations may require much more powerful instruction in knowledge and thinking than has ever been provided before.

Until relatively recently, we have not understood reading skill well enough to develop consensus about the best methods for teaching struggling readers.
What we must do to prevent reading failure in grades K-3: The big Ideas

1. Increase the quality, consistency, and reach of instruction in every K-3 classroom

2. Conduct timely and valid assessments of reading growth to identify struggling readers

3. Provide more intensive interventions to “catch up” the struggling readers

The prevention of reading difficulties is a school-level challenge
Evidence from one school that we can do substantially better than ever before.

**School Characteristics:**
- 70% Free and Reduced Lunch (going up each year)
- 65% minority (mostly African-American)

**Elements of Curriculum Change:**
- Movement to a more balanced reading curriculum beginning in 1994-1995 school year (incomplete implementation) for K-2
- Improved implementation in 1995-1996
- Implementation in Fall of 1996 of screening and more intensive small group instruction for at-risk students
“soft bigotry of low expectations”
Hartsfield Elementary Progress over five years

Proportion falling below the 25th percentile in word reading ability at the end of first grade

<table>
<thead>
<tr>
<th>Year</th>
<th>Proportion</th>
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<tbody>
<tr>
<td>1995</td>
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<td>1997</td>
<td>10.9</td>
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<td>1998</td>
<td>6.7</td>
</tr>
<tr>
<td>1999</td>
<td>3.7</td>
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</tbody>
</table>


Screening at beginning of first grade, with extra instruction for those in bottom 30-40%
Proportion falling below the 25th Percentile

Average Percentile


Average Percentile


Hartsfield Elementary Progress over five years
How must we improve reading instruction for students in grades 4-12?

1. Must have very intensive intervention instruction for students who have fallen far behind
Consequences of reading difficulties: an ever widening gap

The gap increases in both depth and breadth

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th
Teaching Reading is Urgent

A student at the 10th percentile reads about 60,000 words a year in 5th grade.

A student at the 50th percentile reads about 900,000 words a year in 5th grade.

Average students receive about 15 times as much practice in a year.

<table>
<thead>
<tr>
<th>Percentile Rank</th>
<th>Minutes Per Day</th>
<th>Words Read Per Year</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Books</td>
<td>Text</td>
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<tr>
<td>98</td>
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<td>90</td>
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<td>80</td>
<td>14.2</td>
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<tr>
<td>2</td>
<td>0.0</td>
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(Anderson, R. C., 1992)
Each year skills and knowledge required to meet standards increases

Must be able to draw upon more extensive background knowledge

Must learn to deal with longer sentences and more complex ideas

Must acquire many new vocabulary words

Must learn to recognize many new words accurately and automatically

1st 2nd 3rd 4th 5th 6th 7th 8th 9th 10th 11th 12th
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1. Must have very intensive intervention instruction for students who have fallen far behind.
2. Must be more effective in teaching all students to think more productively about what they read.
Teaching students how to think about what they read

“Questioning the Author”

Done with whole classes or in small groups

Done by every subject matter teacher or by specialists

Done consistently throughout the year, not necessarily every day or throughout the entire lesson
The basic purpose of Questioning the Author is to make public the processes of comprehension.

Essential features:

1. It treats text as the product of a fallible author, as “someone’s ideas written down.”
Dr. Isabel Beck introducing Questioning...
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2. It deals with text through general teacher-posed questions such as “What is the author trying to say?” or “What do you think the author means by that?”
The role of queries in Questioning the Author
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2. It deals with text through general teacher-posed questions such as “What is the author trying to say?” or “What do you think the author means by that?”

3. It takes place on-line, in the context of reading as it initially occurs.

4. It encourages discussion in which students are urged to grapple with ideas in the service of constructing meaning.
More teacher techniques in Q the A...
<table>
<thead>
<tr>
<th>Learning Strategies Curriculum</th>
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<tbody>
<tr>
<td><strong>Acquisition</strong></td>
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<tr>
<td>Word Identification</td>
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<td>Paraphrasing</td>
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<td>Self-Questioning</td>
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<td>Visual Imagery</td>
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<td>Interpreting Visuals</td>
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<td>Multipass</td>
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<td><strong>Storage</strong></td>
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<tr>
<td>First-Letter Mnemonic</td>
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<td>Paired Associates</td>
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<tr>
<td>Listening/Notetaking</td>
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<td>LINCS Vocabulary</td>
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<td>Error Monitoring</td>
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<td>Themes</td>
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3. Must be more effective in teaching content in areas like science, social studies, and history so that students will acquire more knowledge
Thinking About Critical Content

Knowledge
Thinking About the Curriculum...

Knowledge
Thinking About the Curriculum...

Knowledge

Critical Content

Course
Content Enhancement Teaching Routines

Planning and Leading Learning
Course Organizer
Unit Organizer
Lesson Organizer

Teaching Concepts
Concept Mastery Routine
Concept Anchoring Routine
Concept Comparison Routine

Explaining Text, Topics, and Details
Framing Routine
Survey Routine
Clarifying Routine

Increasing Performance
Quality Assignment Routine
Question Exploration Routine
Recall Enhancement Routine

The Content Literacy Continuum
http://smarttogether.org/clc/index.html
“If it weren’t for students impeding our progress in the race to the end of the term, we certainly could be sure of covering all the content.”

However, the question should not be whether we are covering the content, but whether students are with us on the journey.”  Pat Cross

“Give me a fish while you’re teaching me how to catch my own. That way I won’t starve to death while I’m learning to tie flies.”
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4. Develop a culture of success in which students want to participate in achieving high standards
Quality in Education

“Quality is never an accident; it is always the result of high intention, sincere effort, intelligent direction, and skillful execution; it represents the wise choice of many alternatives.”

Willa A. Foster

If we have an impact on literacy instruction, we improve the quality of our schools in the most central way possible.
A reason for working hard at the task....
Thank You