The Knowledge Gap: Why Our Approach to Boosting Reading Comprehension Isn’t Working—and How to Change It

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The Income-Based Gap in Test Scores Has Either Grown ...

Education Gap Grows Between Rich and Poor, Studies Say

By SABRINA TAVERNISE  FEB. 9, 2012

WASHINGTON — Education was historically considered a great equalizer in American society, capable of lifting less advantaged children and improving their chances for success as adults. But a body of recently published scholarship suggests that the achievement gap between rich and poor children is widening, a development that threatens to dilute education’s leveling effects.

It is a well-known fact that children from affluent families tend to do better in school. Yet the income divide has received far less attention from policy makers and government officials than gaps in student accomplishment by race.

Now, in analyses of long-term data published in recent months, researchers are finding that while the achievement gap between white and black students has narrowed significantly over the past few decades, the gap between rich and poor students has grown substantially during the same period.
... Or Just Stayed the Same

A Persistent Achievement Gap between Haves and Have Nots (Figure 1)

For students born between 1954 and 2001, the achievement gap between students in the top and bottom deciles of the socioeconomic distribution remained as wide as a full standard deviation—the equivalent of three to four years of learning. The gap between students in the top and bottom quartiles also persisted over this near half century.
The “Problem”: High School
The “Bright Spot”: Elementary School
READING

• Decoding

Foundational skills:
  Phonemic Awareness
  Phonics
  Fluency

• Comprehension
<table>
<thead>
<tr>
<th>Skills</th>
<th>Strategies</th>
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<tbody>
<tr>
<td>Identify Main Idea &amp; Details</td>
<td>Make Connections</td>
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<tr>
<td>Determine Author's Purpose</td>
<td>Ask Questions</td>
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<tr>
<td>Identify Cause &amp; Effect</td>
<td>Make Inferences</td>
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<tr>
<td>Classify &amp; Categorize</td>
<td>Visualize</td>
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<tr>
<td>Compare &amp; Contrast</td>
<td>Determine Important Information</td>
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<tr>
<td>Draw Conclusions</td>
<td>Monitor Comprehension</td>
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<tr>
<td>Determine Fact &amp; Opinion</td>
<td>Understand Text Structure</td>
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<tr>
<td>Describe Figurative Language</td>
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<tr>
<td>Identify Genre</td>
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<td>Describe Plot</td>
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<td>Identify the Point of View</td>
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<td>Make Predictions</td>
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<td>Sequence Events</td>
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<td>Describe Story Structure</td>
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<td>Identify Explicit Information</td>
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<td>in Non-Fiction Text</td>
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<tr>
<td>Determine Theme</td>
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<td>Summarize</td>
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Note: In my research, I couldn’t find a difference between Make Inferences and Draw Conclusions. Where one person defined them one way, another has defined them the opposite way. Most of the research leans toward using the term Make Inferences as a Comprehension Strategy and Draw Conclusions as a skill. I have included both in this packet with similar graphic organizers.
### Progress Monitoring by Instructional Text Reading Level

<table>
<thead>
<tr>
<th>GRADE</th>
<th>MONTHS OF THE SCHOOL YEAR</th>
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<td>1</td>
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<td>4</td>
<td>P/Q Q Q Q R R R S S S</td>
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<td>S/T T T T U U U V V V</td>
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<td>6</td>
<td>V/W W W W X X X X Y Y</td>
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<td>7</td>
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Much depended on the two overnight batsmen. But this duo perished either side of lunch—the latter a little unfortunate to be adjudged leg-before—and with Andrew Symonds, too, being shown the dreaded finger off an inside edge, the inevitable beckoned, bar the pyrotechnics of Michael Clarke and the ninth wicket.
THE BASEBALL STUDY

Measure of Comprehension

- Reading ability
- Knowledge
A moa builds a nest because it is a bird. The moa looked in his nest and found his hat.

A kona eats seeds because it is a bird. The kona looked in his bucket of seeds and found his hat.
A moa builds a hive because it is a wug
The moa looked in his hive and found his hat.
Much depended on the two overnight batsmen. But this duo perished either side of lunch—the latter a little unfortunate to be adjudged leg-before—and with Andrew Symonds, too, being shown the dreaded finger off an inside edge, the inevitable beckoned, bar the pyrotechnics of Michael Clarke and the ninth wicket.
Just Google It?
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“leg-before”?  

The LBW Law Made Simple 

For a batsman in a cricket match to be given out leg before wicket (LBW) a strict set of rules apply, to do with where the ball has struck the pitch and then hit the batsman’s pad. This figure takes you through all the possibilities.
A - Not out. Ball striking pad outside line of stumps. Ball would not have hit stumps.
B - Out only if the batsman did not play a shot. Ball pitched outside the line of off-stump.
C - Out, if the umpire feels the ball would have hit the stumps and not missed the top.
D - Out. Ball pitching on line of leg stump, and would have hit the stumps.
E - Not out. Ball pitched outside the line of the leg stump.
Ways of getting out: Leg before wicket

The leg before wicket (lbw) law is to Leg before wicket cricket what the offside rule is to football - confusing.

However, you do not need a PhD from Oxford or Cambridge University to work it out - just this simple guide.

The umpire will consider an lbw decision if he believes the ball would have hit the stumps had it not been obstructed by the batsman’s pads.

But the umpire also has to take other factors into consideration.

- Our full, illustrated guide to the lbw law

OUT: ball has pitched and struck pad in front of the stumps

NOT OUT: ball has pitched outside leg stump
What Knowledge Do You Draw On to Understand a Newspaper Article?

“Two appeals by the president, in his private capacity and represented by private lawyers, have reached the Supreme Court in the past week. One, Trump v. Vance, is a formal appeal from a ruling by the federal appeals court in New York upholding the validity of a grand jury subpoena obtained by the Manhattan district attorney, Cyrus Vance, and served on the president’s accountants for his personal and business tax records.”

From Linda Greenhouse, “Can the Supreme Court Save Itself?”, NYT 11.24.19
What Does This Have to Do with Testing?
No child left behind

Is this the test to test us for the test to see if we are ready for the test?
The Narrowing Curriculum

• Reading
• Math
• Social Studies
• The Arts
• Science
In one of the most remote places in the world, the Canadian Arctic, a people have survived over a thousand years. They are the Inuit. For the Inuit, the Arctic is a place teeming with life. Depending on how far north they live, the Inuit find everything from caribou herds and polar bears to beluga whales.
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What Does This Have to Do with High School?
Knowledge Is Like Velcro
The Matthew Effect

Gap widens as time goes on. The earlier you catch literacy difficulties, the less there is to fix.
The Other Gap: The difference between what we assume high school students know and what many do know
The Knowledge Gap

The Hidden Cause of America's Broken Education System—and How to Fix It

Natalie Wexler
Where did this *come* from?
John Dewey, 1859-1952: Father of the Progressive Education Movement
5 Pillars of Early Literacy

1. Phonemic Awareness
2. Phonics
3. Fluency
4. Vocabulary
5. Comprehension

The National Reading Panel
Where can we go from here?
New content-focused literacy curricula
Listening Comprehension Exceeds Reading Comprehension
A tale of two classrooms

Main Idea:
The most important idea about a topic.

Details: bits of information that tell more about the main idea.

Daedalus and Icarus

What happened because Icarus did not use foresight?

Desperately Plummeted

To fall straight down

Wildly with panic

Foresight means thinking ahead.

Once you helped

The most important idea about a topic.

Causes:

King Minos was upset with Daedalus for helping Theseus to defeat the Minotaur.

Daedalus and his son up in a high tower.

Effects:

King Minos locked Daedalus and his son up in a high tower.

Daedalus saved crumbs to attract birds.

Daedalus convinced the soldiers to bring them food and candles.

They used the wings to fly from the tower.

Daedalus used the feathers and wax to make wings.

He flew too close to the sun.

Icarus loved flying so much that he began doing tricks and flying higher.

His wings melted and he plummeted into the sea.
HOW WRITING CAN BUILD KNOWLEDGE

• Retrieval Practice or the Testing Effect
  Recalling information that has been slightly forgotten

• The Protégé Effect
  Explaining something to another person in your own words
Because, But & So

• Andrew Jackson was a popular president because ________________.
• Andrew Jackson was a popular president, but ____________________.
• Andrew Jackson was a popular president, so ____________________.
Because, But & So

• Andrew Jackson was a popular president because he was the champion of the common man.

• Andrew Jackson was a popular president, but there were many critics of his “kitchen cabinet” and “spoils system.”

• Andrew Jackson was a popular president, so he easily won reelection in 1832.
Curriculum Is Not Enough ... But It’s the Place to Start
WESTWARD EXPANSION