The Crisis

Reading proficiency isn’t in and of itself the magic key to competence. It’s what reading enables us to learn and to do that is critical. In the information age, the key to economic and political achievement is the ability to gain new knowledge rapidly through reading and listening.

-E. D. Hirsch, Jr.
The Knowledge Deficit
A Snapshot of Reading Achievement in the U.S. (NAEP, 2011)

- 66% of fourth graders failed to meet the Proficient standard.
- 33% of fourth graders failed to meet the Basic standard.
Percentage of 4th Graders Performing at Each Achievement Level (NAEP, 2011)

<table>
<thead>
<tr>
<th>Year</th>
<th>below Basic</th>
<th>at or above Basic</th>
<th>at or above Proficient</th>
<th>at Advanced</th>
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<td>8</td>
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<td>2007</td>
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<td>8</td>
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<td>2005</td>
<td>36*</td>
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<td>30*</td>
<td>62*</td>
<td>29*</td>
<td>6*</td>
</tr>
</tbody>
</table>

* Significantly different (p < .05) from 2011.

Accommodations were not permitted for this assessment.

NOTE: Data may not sum to totals because of rounding. Some apparent differences between estimates may not be statistically significant.

Challenges to American Education: The Fairness Gap

On average, children from lower-income families lag far behind their peers from higher-income families.
No Growth in 12th Grade Reading Achievement
(NAEP, 1971–2012)


Scale score

- All students

- Revised assessment format
- Original assessment format

*Significantly different (p < .05) from 2012.
† Original assessment format.

NOTE: The NAEP Long-Term Trend Reading scale ranges from 0 to 500. Some apparent differences between estimates may not be statistically significant.

Challenges to American Education: The Quality Gap
Misconception #1

Learning to read is a natural process that does not require systematic decoding instruction.
Explicit Phonics Instruction Works!

Research shows that the most efficient and effective way to teach decoding is through persistent, systematic, explicit instruction, starting no later than kindergarten.
Misconception #2

Becoming a skilled decoder makes one a good reader.
The “Fourth Grade Slump” Shows There’s More to Reading than Decoding

http://teacher.scholastic.com/products/ReadAbout/overview/new_slump.htm
Vocabulary Is Key
It’s learned bit by bit, through multiple exposures in multiple contexts

Example: excrescence

• To calculate fuel efficiency, the aerospace engineers needed an accurate estimation of *excrescence* drag caused by the shape of plane’s cabin.

• *Excrescences* on the valves of the heart have been known to cause a stroke.

• The wart, a small *excrescence* on his skin, had made Jeremy self-conscious for years.

• At the far end of the meadow was what, at first glance, I thought a huge domed building, and then saw was an *excrescence* from the cliff itself.
Excrescence

Decoding

ex·cres·cence

Comprehension

excrescence: noun—a projection or outgrowth especially when abnormal
Meaningful Differences in Opportunities to Learn Vocabulary

Young children differ in:

- the **numbers** of words heard
- the **richness** of the language heard
  (different words, multi-clause sentences, verb tenses, types of sentences)

Hart & Risley Study: Number of Words Heard

- **13 professional parents**
- **23 working-class parents**
- **6 welfare parents**

Words addressed to the child vs. Age of child in months.
Meaningful Differences

The **number of words per hour** heard at age 3 was strongly related to the child’s:
- rate of vocabulary growth,
- vocabulary use, and
- IQ.

**Rate of vocabulary growth** at age 3:
- was strongly predictive of language development and reading comprehension in third grade

**Quantity and richness of language** heard at age 3:
- was strongly predictive of language development in third grade.
Misconception #3

Reading is a general skill that, once mastered, easily transfers from one text to another.
Background Knowledge Is Critical to Reading Comprehension

Who will better comprehend a text about baseball: good readers with little knowledge of baseball, or poor readers with lots of knowledge of baseball?
Conclusion:
Knowing about the subject matter makes you a better reader.

“Good Readers”
Who didn’t know about baseball:
18 out of 40 Correct

“Poor Readers”
Who knew about baseball:
27.5 out of 40 Correct

Two Keys to Reading

- Decoding
- Language Comprehension
How do we *teach* comprehension?

Twenty-five lessons in reading strategies are no more effecting than six lessons.


Why?

Comprehension depends chiefly on having prior knowledge of the topic, not on applying strategies.
Comprehension = Word Knowledge + World Knowledge
Misconception #4

Reading follows a growth course that is different from talking and listening.
What Is Language?

Oral

Written
Receptive Language

Oral

Listening

Written

Reading

The cat is on the mat
Expressive Language

Oral

Written

Speaking

Writing
Language Development

Oral

Written
At what age, on average, is students’ reading comprehension just as strong as their listening comprehension?
Meta-analysis by Thomas Sticht (1984) shows that listening comprehension outpaces reading comprehension on most measures until children are 13 years old.
Written Language Uses Richer Vocabulary

Hey, stop by my house later!

You are cordially invited.
Building a rich vocabulary, and the broad knowledge that goes with it, takes time.

A coherent, cumulative, content-rich curriculum that immerses students in two- to three-week domains of instruction is the most effective and efficient approach.
Kindergarten Domains
An example of building knowledge in a coherent, cumulative way.

- Nursery Rhymes and Fables
- Five Senses
- Stories
- Plants
- Farms
- Native Americans
- Kings and Queens
- Seasons and Weather
- Columbus and the Pilgrims
- Colonial Towns and Townspeople
- Presidents and American Symbols
Filters

• Begin with familiar concepts
• Follow chronological order or geographic history
• Start with geography/maps before events in those areas or integrate geography and maps
• Address pre-requisite understanding/vocabulary before concepts that contain them
• Devote at least 2 weeks to a single domain
• Consider school calendar/holidays
• Round days up to full week(s) to plan for review/assessment
• Move from micro to macro or macro to micro as appropriate (i.e. consider how to move from specific instances to general concepts or vice versa)
Let’s cover Kings and Queens before we cover Columbus.
Let’s cover Plants and Native Americans before we cover Columbus.
Misconception #5

A longer language arts block will solve the reading crisis.
## Instructional Time

**Grades 1–4**

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Average Hours per Week</th>
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<tbody>
<tr>
<td>Language Arts</td>
<td>11.7</td>
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<tr>
<td>Mathematics</td>
<td>5.6</td>
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<tr>
<td>Science</td>
<td>2.3</td>
</tr>
<tr>
<td>Social Studies</td>
<td>2.3</td>
</tr>
</tbody>
</table>

The way to solve the reading crisis is to systematically teach decoding *and* devote more time to building academic knowledge and vocabulary in the early grades.

Instructional Implications

How should these understandings inform our approach?
Research-Based Understanding

- Oral language precedes written language development.
- Most vocabulary is acquired through repeated exposure.
- Written speech uses larger, more rich vocabulary than oral speech.
- Twenty-five lessons in reading strategies have as little effect as six lessons.
- Knowledge builds on knowledge.
- A broad base of background knowledge is required for reading comprehension.

Instructional Implications

- Instruction should begin with listening and speaking.
- Instruction should impart knowledge through student opportunities to listen.
- Minimal focus should be placed on teaching comprehension strategies.
- Instruction should expose children to rich vocabulary.
- Instruction should stay on topic long enough for students to become familiar with its topics and vocabulary.
- Instruction should build on prior knowledge.
- Instruction should be based on a content-rich curriculum.

Language Arts Programs should include:

- Systematic phonics
- A focus on development of language and comprehension through read-alouds
- Attention to the development of domain specific knowledge
Read-Aloud Domains

Grouping read-alouds by domain to build broad knowledge, along with listening comprehension and language skills, kills two birds with one stone.
How do the CCSS address these instructional implications?
Instruction should include a systematic approach to phonics instruction.
COMMON CORE STATE STANDARDS INITIATIVE

• ELA standards call for the mastery of foundational skills, as well as the ability to infer, imply, reason, evaluate and synthesize information.
COMMON CORE STATE STANDARDS INITIATIVE

• Outlines foundational skills in:
  – Print Concepts
  – Phonological Awareness
  – Phonics and Word Recognition, and
  – Fluency

• “These foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program.”
Instruction should include a focus on development of language and comprehension through read-alouds.
• ELA standards call for an integrated model of literacy that reflects the developmental nature of language and the interrelation of all aspects of literacy:
  – Listening
  – Speaking
  – Reading
  – Writing
ELA standards call for students to develop a range of broadly useful oral communication and interpersonal skills, including but not limited to skills necessary for formal presentations.
COMMON CORE
STATE STANDARDS INITIATIVE

• Many titles listed in the Texts Illustrating the Complexity, Quality, and Range of Student Reading K–5 section are denoted as books to read along with a teacher or that are read aloud to students to build knowledge and cultivate a joy in reading.
Instruction should include attention to the development of domain-specific knowledge.
COMMON CORE
STATE STANDARDS INITIATIVE

• ELA standards call for the integration of content into the language arts block, thus the standards title:

  Common Core State Standards for English Language Arts & Literacy in History/Social Studies, Science, and Technical Subjects
COMMON CORE
STATE STANDARDS INITIATIVE

• ELA standards call for the standards to be part of a coherent, “well-developed, content rich curriculum designed to build strong content knowledge.”
COMMON CORE
STATE STANDARDS INITIATIVE

• ELA standards call for a balance of fiction and nonfiction text taught during the language arts block, so that by 4th grade, 50% of the texts students are reading are informational/explanatory texts and 50% are fiction.
• ELA vocabulary standards call for students to develop understanding of words and phrases, their relationships, and their nuances and to acquire new vocabulary, particularly general academic and **domain-specific** words and phrases.
Oral language precedes written language development. Instruction should begin with listening and speaking. Instruction should impart knowledge through student opportunities to listen. Most vocabulary is acquired through repeated exposure. Instruction should expose children to rich vocabulary. Written speech uses larger, more rich vocabulary than oral speech. Instruction should include read-alouds. Vocabulary learning is more efficient when words are learned in context. Instruction should stay on topic long enough for students to become familiar with its topics and vocabulary. Knowledge builds on knowledge. Instruction should build on prior knowledge. A broad base of background knowledge is required for reading comprehension. Instruction should be based on a content-rich curriculum. Listening comprehension outpaces reading comprehension until middle school years. Systematic phonics instruction that includes decodable readers sequenced to ensure that students are not asked to read words that go beyond their code knowledge. Reading = Decoding + Comprehension. Reading instruction should include a systematic phonics component. Systematic phonics instruction is effective. Instruction should include both attention to decoding and attention to comprehension. Twenty-five lessons in reading strategies have as little effect as six lessons. Instruction should include both attention to decoding and attention to comprehension. Written speech uses larger, more rich vocabulary than oral speech. Minimal focus should be placed on teaching comprehension strategies. Twenty-five lessons in reading strategies have as little effect as six lessons. Written speech uses larger, more rich vocabulary than oral speech. Minimal focus should be placed on teaching comprehension strategies. Twenty-five lessons in reading strategies have as little effect as six lessons. Written speech uses larger, more rich vocabulary than oral speech. Minimal focus should be placed on teaching comprehension strategies. Twenty-five lessons in reading strategies have as little effect as six lessons.

**Systematic Phonics**

Language development and comprehension through read-alouds

**Instructional Implications**

Instruction should include both attention to decoding and attention to comprehension.

Instruction should expose children to rich vocabulary.

Instruction should stay on topic long enough for students to become familiar with its topics and vocabulary.

Instruction should build on prior knowledge.

Instruction should be based on a content-rich curriculum.

**Systematic phonics instruction** that includes decodable readers sequenced to ensure that students are not asked to read words that go beyond their code knowledge.

**Read-aloud** plus discussion and extension activities designed to foster listening comprehension and oral language development.

**Explicit focus on exposure to domain-related vocabulary.**

**Domain-based units** that use content specific read-alouds to provide in-depth coverage of content knowledge and repeated use of domain-specific vocabulary.

**Research Based Understanding**

- Systematic phonics instruction is effective.
- Oral language precedes written language development.
- Listening comprehension outpaces reading comprehension until middle school years.
- Twenty-five lessons in reading strategies have as little effect as six lessons.
- Written speech uses larger, more rich vocabulary than oral speech.
- Most vocabulary is acquired through repeated exposure.
- Vocabulary learning is more efficient when words are learned in context.
- Knowledge builds on knowledge.
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**Instructional Method**

Core Knowledge Language Arts

- Systematic phonics instruction that includes decodable readers sequenced to ensure that students are not asked to read words that go beyond their code knowledge.
- Read-aloud plus discussion and extension activities designed to foster listening comprehension and oral language development.
- Explicit focus on exposure to domain-related vocabulary.
- Domain-based units that use content specific read-alouds to provide in-depth coverage of content knowledge and repeated use of domain-specific vocabulary.
Core Knowledge Language Arts

• CKLA Skills
  Explicit phonic instruction that includes decoding and encoding (writing)

• CKLA Listening & Learning
  Domain based units that use content specific read-alouds to provide in-depth coverage of content and repeated use of domain specific vocabulary.
  Read-aloud discussion and extension activities designed to foster oral language development.
Core Knowledge

- Supports **COMMON CORE STATE STANDARDS**
- Leverages the undeniable connection between language, knowledge, and reading comprehension to close the achievement gap.
CKLA: Skills Strand
Skills Strand

• One hour of ELA block
• Reading and writing are taught in tandem, reinforcing each other.
• Decodable readers are 100% decodable—made up entirely of words and sounds the students have been taught.
CKLA: Listening & Learning Strand
Listening & Learning Strand

• One hour of ELA block
• Comprised of read-alouds and oral language exercises, that build on students’ listening comprehension abilities.
• Read-aloud domains go well beyond standard ELA fare and include important historical and scientific content from the Core Knowledge Sequence.
Overview of Domain Structure

• Core Content Objectives
• Language Arts Objectives (CCSS aligned)
• Read-Alouds
  – Domain Anthology Read-Alouds
  – Supplementary Trade Book Recommendations
• Core Vocabulary
• Sayings & Phrases
• Lessons
• Assessments
• Pausing Points Activities
Standard Listening & Learning Lesson

Lesson Part A (35/40 minutes)
• Introducing the Read-Aloud (10’)
• Presenting the Read-Aloud (10/15’)
• Discussing the Read-Aloud (15’)
  - Comprehension Questions (10’)
  - Word Work (5’)

Lesson Part B (later in the day)
• Extensions (15/20 minutes)
Preschool Domains

- All About Me
- Families and Communities
- Animals
- Plants
- Habitats

*Interspersed throughout the year:
- Classic Tales
- Important People in American History
Kindergarten Listening & Learning Domains

- Nursery Rhymes and Fables
- Five Senses
- Stories
- Plants
- Farms
- Native Americans
- Kings and Queens
- Seasons and Weather
- Columbus and the Pilgrims
- Colonial Towns and Townspeople
- Presidents and American Symbols
First Grade Listening & Learning Domains

- Fables & Stories
- The Human Body
- Different Lands, Similar Stories
- Early World Civilizations
- Early American Civilizations
- Astronomy
- History of the Earth
- Animals and Habitats
- Fairy Tales
- A New Nation
- Frontier Explorers
Second Grade Listening & Learning Domains

• Fairy Tales and Tall Tales
• Early Asian Civilizations
• The Ancient Greek Civilization
• Greek Myths
• The War of 1812
• Cycles in Nature
• Westward Expansion
• Insects
• The U.S. Civil War
• The Human Body
• Immigration
• Fighting for a Cause
Third Grade Listening & Learning Domains

- Classic Tales
- Classification of Animals
- The Human Body
- The Ancient Roman Civilization
- Light and Sound
- The Viking Age
- Astronomy
- Native Americans
- European Exploration of North America
- Colonial America
- Ecology