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# Adolescent Literacy: An overview of skill and knowledge requirements

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K-12 Literacy Seminar for Regional Centers

# Adolescent Literacy: The Domain

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The term *Adolescent Literacy* can be used to encompass both more than reading, and reading in many and varied forms

“The privileging of one form of literacy (academic literacy) over multiple other forms (e.g. computer, visual, graphic, and scientific literacies) has been criticized for ignoring the fact that different texts and social contexts (reading for whom, with what purpose) require different reading skills.”

(Alverman, 2001)

# Adolescent Literacy: The Domain

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In the present context, we are most concerned about academic literacy.

The kinds of reading abilities that support success in the classroom

The kinds of reading abilities that are assessed on state level accountability measures of reading comprehension

Our purpose is to provide assistance to States that will help them, in turn, establish policies and provide supports that will improve levels of academic literacy in their states.

# Adolescent Literacy: The Questions

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1. How is adolescent literacy growth different than growth in K-3
2. What are the most important instructional challenges
3. What instructional improvements need to occur in middle and high schools

# Reading K-3 vs. 4-12

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## Reading K-3

Acquire strategies for “decoding” unfamiliar words

Build “sight word vocabulary” of many thousands of words

Learn to coordinate skills for fluent reading of text

Begin extension of vocabulary beyond oral language limits

Acquire variety of strategies for enhancing  
comprehension, or repairing it when it breaks down

Develop or maintain a positive attitude about reading and  
view it as an important skill for learning and for  
pleasure

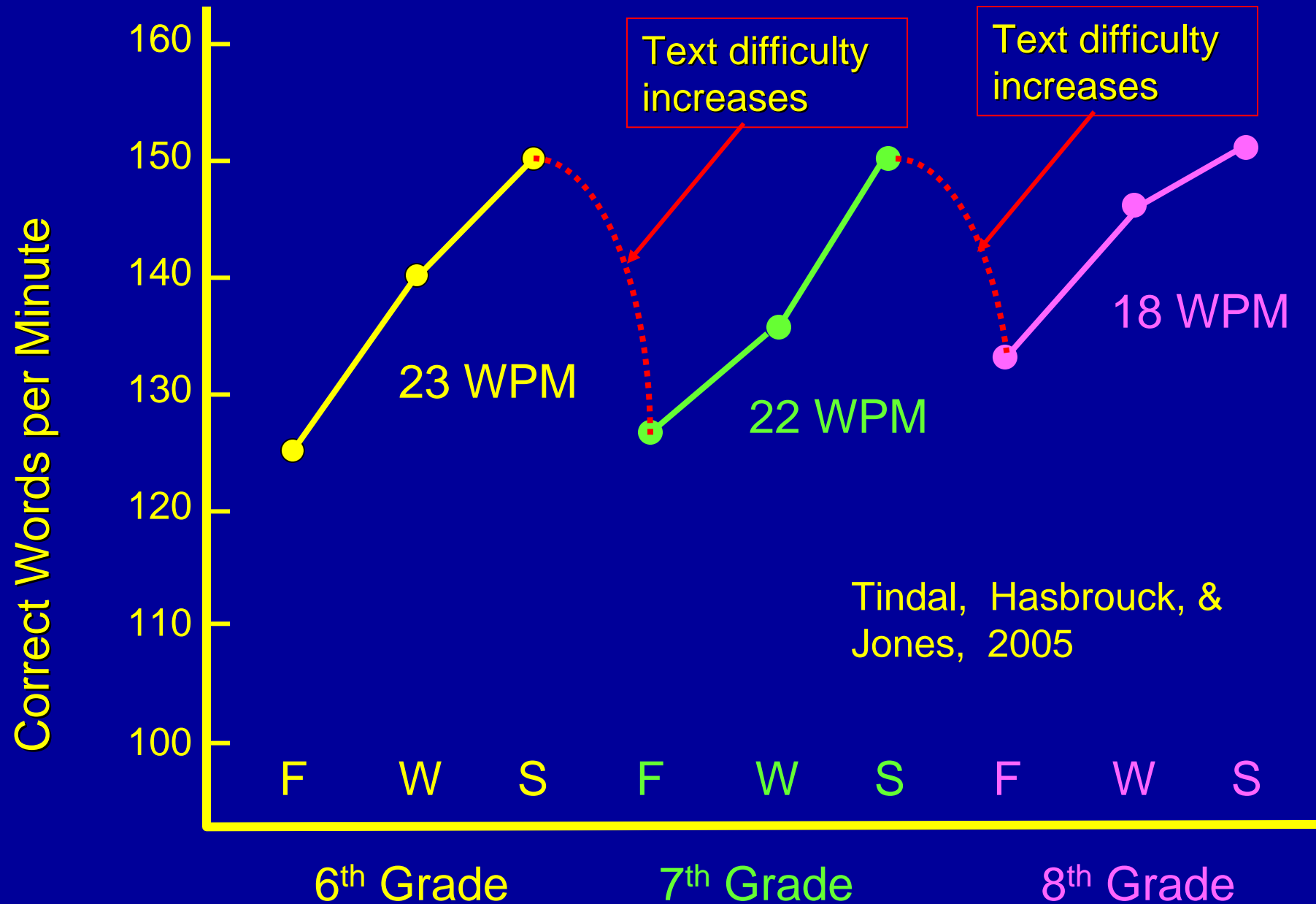
# Reading K-3 vs. 4-12

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## Reading 4-12

Extend “sight vocabulary” to unfamiliar words in increasingly challenging text

# Correct Words per Minute on Grade Level Text





# Reading K-3 vs. 4-12

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## Reading 4-12

Extend “sight vocabulary” to unfamiliar words in increasingly challenging text

Learning meanings of thousands of new words – vocabulary expansion

# Why Oral language experience is not enough

## Frequency of Word Use in Major Sources of Oral and Written Language (Hayes & Ahrens, 1988)

### Rare Words per 1,000

#### I. Printed texts

|                   |      |
|-------------------|------|
| Newspapers        | 68.3 |
| Popular magazines | 65.7 |
| Adult books       | 52.7 |
| Children's books  | 30.9 |
| Preschool books   | 16.3 |

#### II. Television texts

|                  |      |
|------------------|------|
| Adult shows      | 22.7 |
| Children's shows | 20.2 |

#### III. Adult speech

|                               |      |
|-------------------------------|------|
| College graduates             | 17.3 |
| talk with friends/<br>spouses |      |

# Reading K-3 vs. 4-12

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## Reading 4-12

Extend “sight vocabulary” to unfamiliar words in increasingly challenging text

Learning meanings of thousands of new words – vocabulary expansion

Increasingly detailed knowledge of text structures and genres

Expansion of content knowledge in many domains

Thinking and reasoning skills increase

Reading specific comprehension strategies become more complex

# Reading K-3 vs. 4-12

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“Ensuring adequate ongoing literacy development for all students in the middle and high school years is a more challenging task than ensuring excellent reading education in the primary grades, for two reasons: first, secondary school literacy skills are more complex, more embedded in subject matters, and more multiply determined; second, adolescents are not as universally motivated to read better or as interested in school-based reading as kindergartners.”  
Biancarosa & Snow, (2005)

Assuming a focus on academic literacy:

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How does the contribution of various reading and language/cognitive skills to performance on academic literacy tasks change with development?

# An Example: The FCAT test

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What reading and language factors are most strongly related to individual variability in performance on the FCAT at grades 3, 7, and 10

What reading and language factors are most deficient in students who perform below grade level on the FCAT?

# Changes in the factors that influence reading comprehension from grades 3 to 10: An example from the FCAT

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## About the FCAT

It was specifically created to examine students increasing abilities to comprehend complex text

It requires students to read relatively long passages before asking them to answer questions.

Passage length at different levels

3<sup>rd</sup> grade – 325 words

7<sup>th</sup> grade – 816 words

10<sup>th</sup> grade – 1008 words



# How the study was conducted:

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Gave 2 hour battery of language, reading, nonverbal reasoning, and memory tests to approximately 200 children in each grade (3<sup>rd</sup>, 7<sup>th</sup>, and 10<sup>th</sup>) at 3 locations in the state

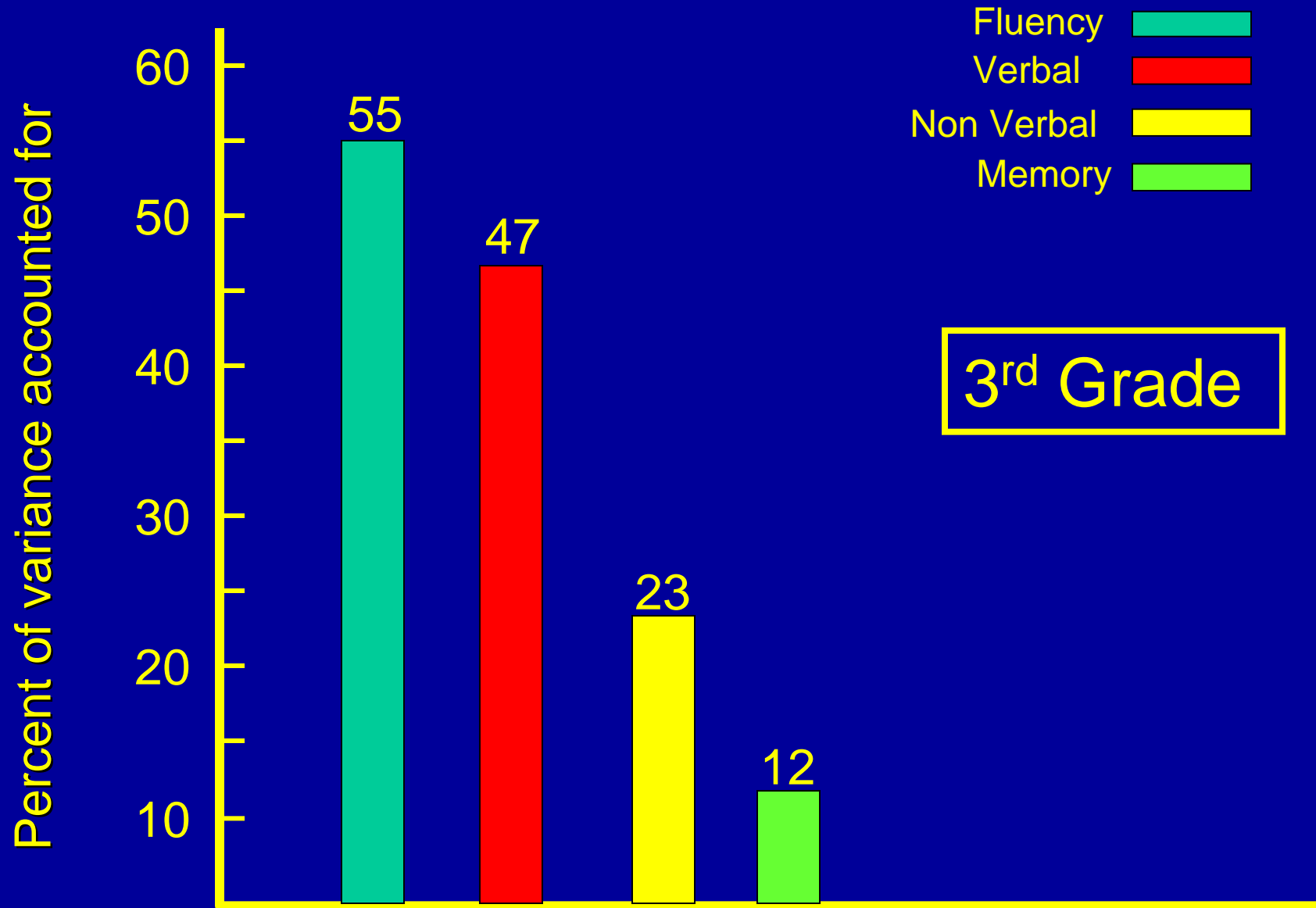
Language – Wisc Vocab and Similarities

Listening comprehension with FCAT passage

Reading– Oral reading fluency, TOWRE, Gray Oral Reading Test

NV Reasoning – Wisc Matrix Reasoning, Block Design

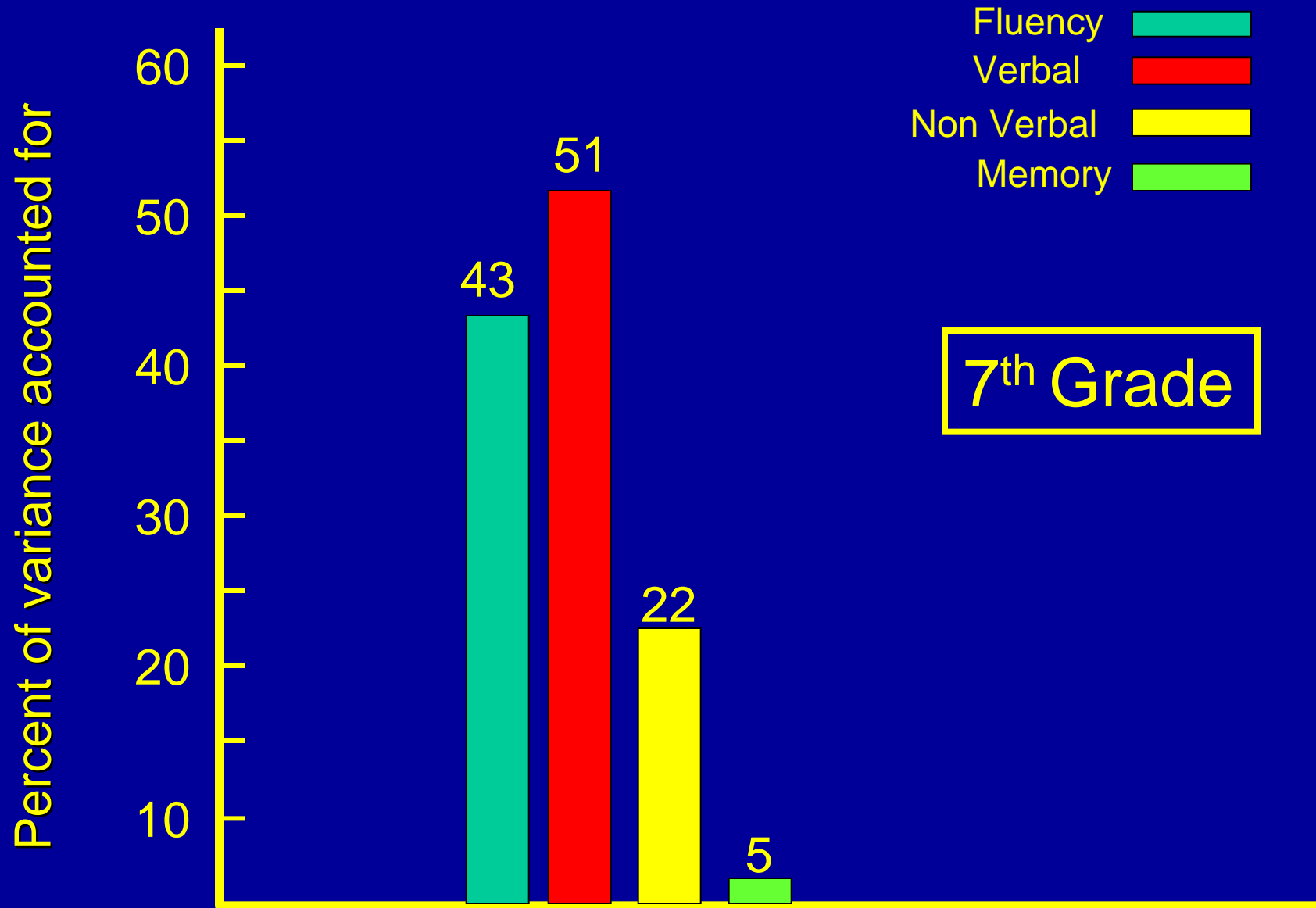
Working Memory– Listening span, Reading Span



# What skills are particularly deficient in level 1 and level 2 readers in 3<sup>rd</sup> grade?

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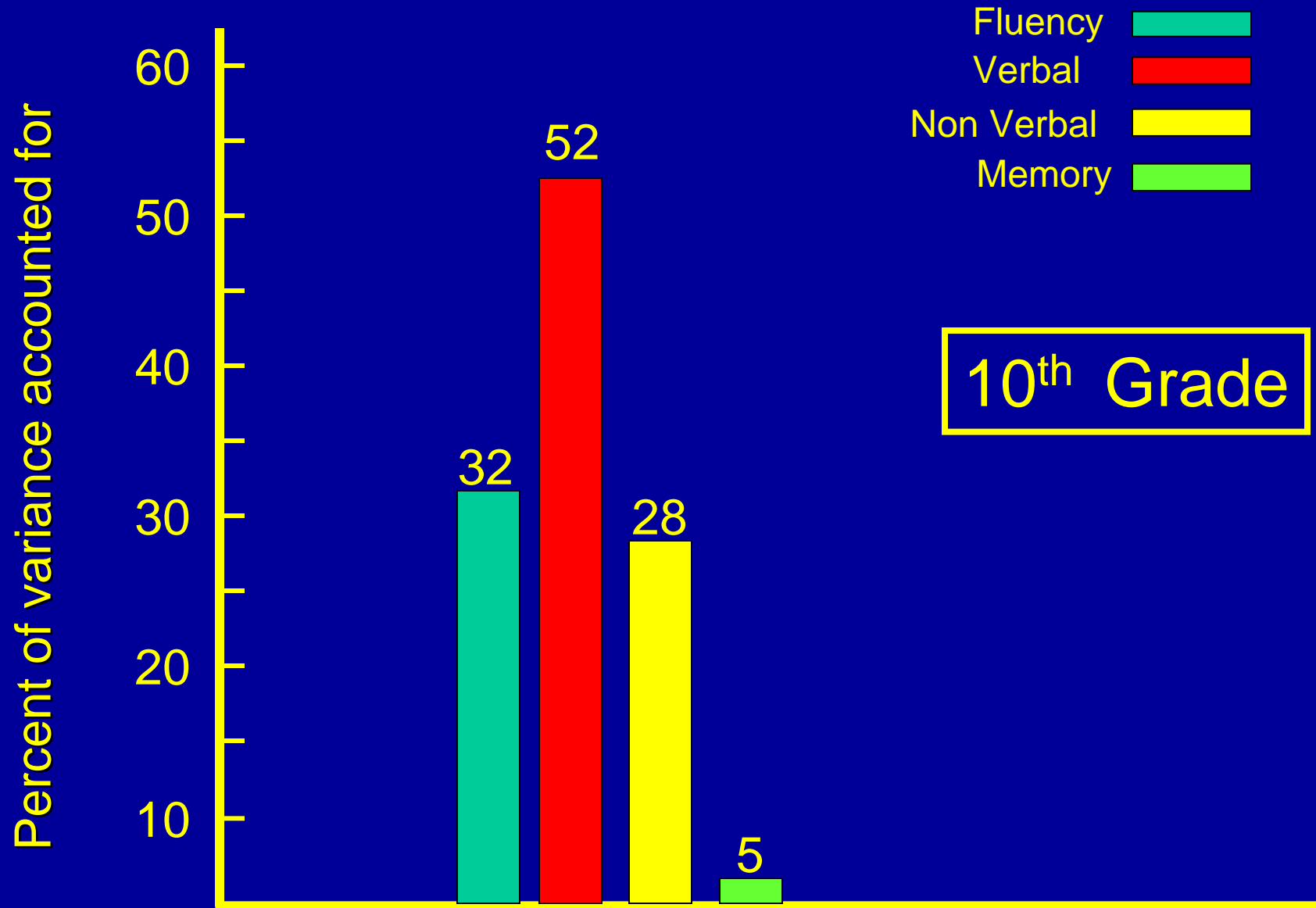
| <u>Skill/ability</u>           | <u>FCAT Performance Level</u> |                  |                  |                  |                  |
|--------------------------------|-------------------------------|------------------|------------------|------------------|------------------|
|                                | 1                             | 2                | 3                | 4                | 5                |
| WPM on FCAT                    | 54                            | 92               | 102              | 119              | 148              |
| Fluency percentile             | 6 <sup>th</sup>               | 32 <sup>th</sup> | 56 <sup>th</sup> | 78 <sup>th</sup> | 93 <sup>rd</sup> |
| Phonemic decoding              | 25 <sup>th</sup>              | 45 <sup>th</sup> | 59 <sup>th</sup> | 74 <sup>th</sup> | 91 <sup>st</sup> |
| Verbal knowledge/<br>reasoning | 42 <sup>nd</sup>              | 59 <sup>th</sup> | 72 <sup>nd</sup> | 91 <sup>st</sup> | 98 <sup>th</sup> |



# What skills are particularly deficient in level 1 and level 2 readers at 7<sup>th</sup> grade?

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| <u>Skill/ability</u>           | <u>FCAT Performance Level</u> |                  |                  |                  |                  |
|--------------------------------|-------------------------------|------------------|------------------|------------------|------------------|
|                                | 1                             | 2                | 3                | 4                | 5                |
| WPM on FCAT                    | 88                            | 113              | 122              | 144              | 156              |
| Fluency percentile             | 7 <sup>th</sup>               | 25 <sup>th</sup> | 45 <sup>th</sup> | 82 <sup>th</sup> | 95 <sup>th</sup> |
| Phonemic decoding              | 27 <sup>th</sup>              | 53 <sup>rd</sup> | 53 <sup>rd</sup> | 74 <sup>th</sup> | 84 <sup>th</sup> |
| Verbal knowledge/<br>reasoning | 34 <sup>th</sup>              | 45 <sup>th</sup> | 64 <sup>th</sup> | 88 <sup>th</sup> | 93 <sup>rd</sup> |



# What skills are particularly deficient in level 1 and level 2 readers at 10<sup>th</sup> grade?

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| <u>Skill/ability</u>           | <u>FCAT Performance Level</u> |                  |                  |                  |                  |
|--------------------------------|-------------------------------|------------------|------------------|------------------|------------------|
|                                | 1                             | 2                | 3                | 4                | 5                |
| WPM on FCAT                    | 130                           | 154              | 175              | 184              | 199              |
| Fluency percentile             | 8 <sup>th</sup>               | 30 <sup>th</sup> | 68 <sup>th</sup> | 87 <sup>th</sup> | 93 <sup>rd</sup> |
| Phonemic decoding              | 18 <sup>th</sup>              | 27 <sup>th</sup> | 45 <sup>th</sup> | 56 <sup>th</sup> | 72 <sup>nd</sup> |
| Verbal knowledge/<br>reasoning | 30 <sup>th</sup>              | 60 <sup>th</sup> | 66 <sup>th</sup> | 84 <sup>th</sup> | 89 <sup>th</sup> |

Two definitions of reading that summarize the findings from the study and identify shifting instructional challenges

“Reading is translating between oral and written language.” (Perfetti, 1985)

“Reading is thinking guided by print.”  
(Perfetti, 1985)



# Adolescent Literacy: The Questions

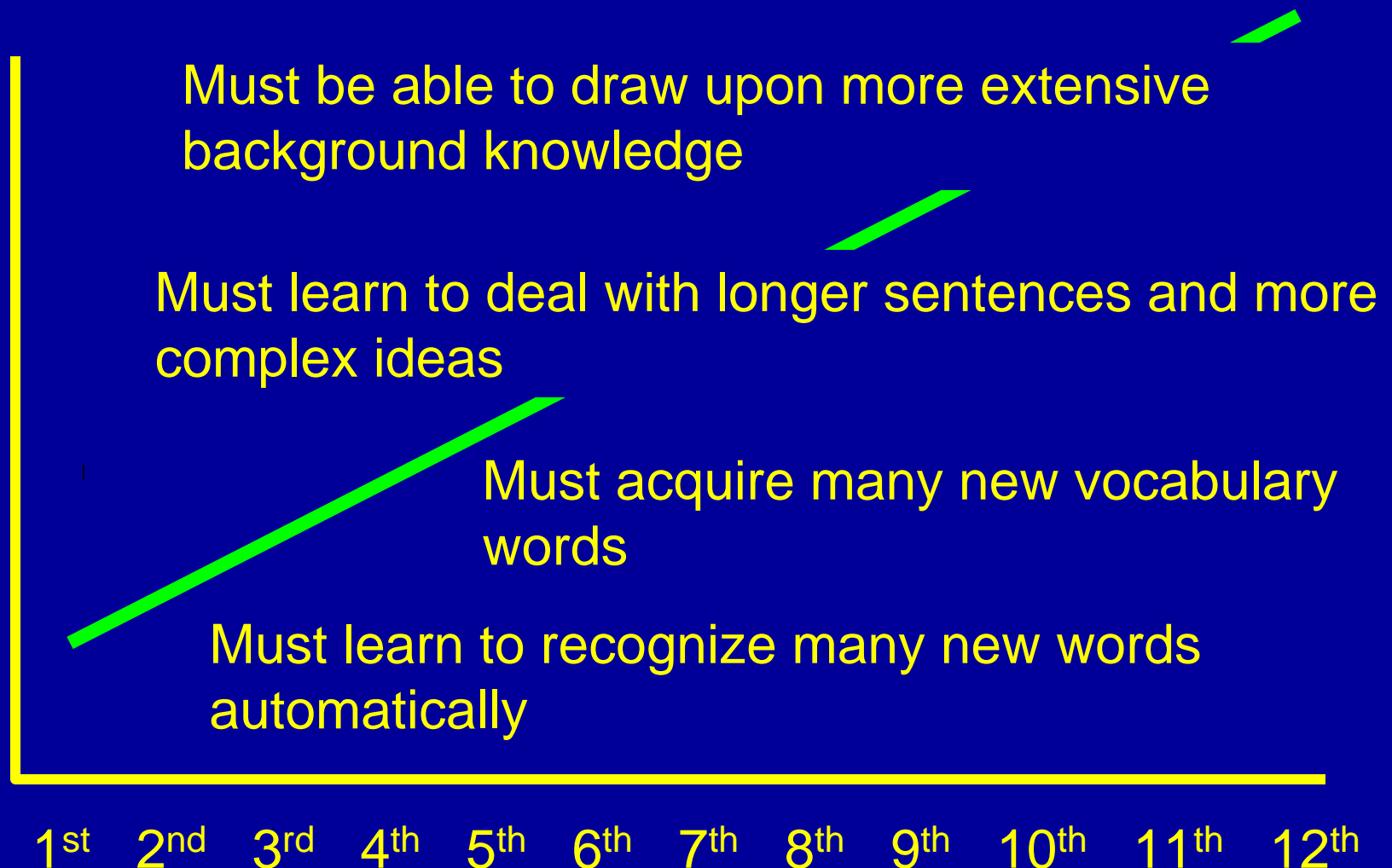
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1. How is adolescent literacy growth different than growth in K-3

2. What are the most important instructional challenges

3. What instructional enhancements need to occur in middle and high schools

# Each year skills and knowledge required to meet standards increases



## NAEP 4<sup>th</sup> grade level

Just what Tom's thoughts were, Ned, of course, could not guess. But by the flush that showed under the tan of his chum's cheeks the young financial secretary felt pretty certain that Tom was a bit apprehensive of the outcome of Professor Beecher's call on Mary Nestor. "So he is going to see her about something important, Ned?" "That's what some members of his party called it." "And the're waiting here for him to join them?" "Yes, and it means waiting a week for another steamer. It must be something pretty important, don't you think, to cause Beecher to risk that delay in starting after the idol of gold?" "Important? Yes, I suppose so," assented Tom. – Victor Appleton, *Tom Swift in the Land of Wonders*

## NAEP Grade 12

Pierre had been educated abroad, and this reception at Anna Pavlovna's as the first he had attended in Russia. He knew that all the intellectual lights of Petersburg were gathered there and, like a child in a toyshop, did not know which way to look, afraid of missing any clever conversation that was to be heard. Seeing the self-confident and refined expression on the faces of those present, he was always expecting to hear something very profound. At last he came to Mono. Here the conversation seemed interesting and he stood waiting for an opportunity to express his own views, as young people are fond of doing – Leo Tolstoy War and Peace

More low frequency words –

More complex and longer sentences

More complex and longer sentences

Deeper and broader knowledge assumed

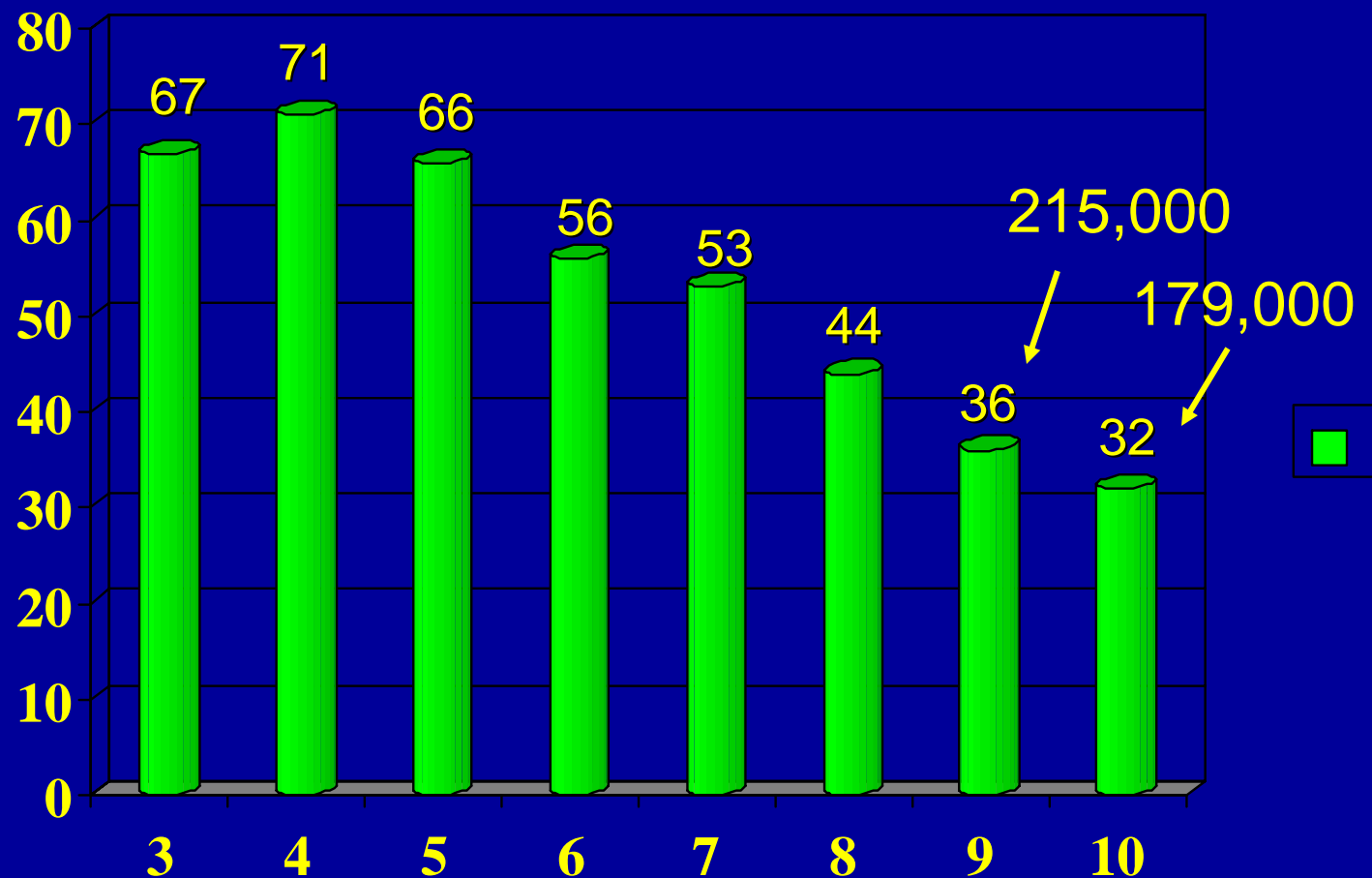
# Instructional challenge #1

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1. Who is responsible for providing instructional support for the continued growth of literacy skills from 4<sup>th</sup> through 12<sup>th</sup> grades for students reading “at grade level?”

# Percent of students at grade level or above from grades 3 through 10 in 2005

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# Instructional challenge #1

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1. Who is responsible for providing instructional support for the continued growth of literacy skills from 4<sup>th</sup> through 12<sup>th</sup> grades?

If we decide who is responsible, what would it look like?

Need strong support for lots of reading-engaging reading contexts

Need powerful instruction in essential, or core knowledge

Need more powerful strategies for dealing with a variety of texts and reading challenges

Struggling readers are typically lagging behind in several critical areas:

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Poor readers in 6<sup>th</sup> grade have struggled with reading from the beginning—they have lots of bad habits

Poor readers in 6<sup>th</sup> grade have, for several years, engaged in much less reading than their grade level peers



# Teaching Reading is Urgent

A student at the 10<sup>th</sup> percentile reads about 60,000 words a year in 5<sup>th</sup> grade

A student at the 50<sup>th</sup> percentile reads about 900,000 words a year in 5<sup>th</sup> grade

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

| Percentile Rank | Minutes Per Day |      | Words Read Per Year |           |
|-----------------|-----------------|------|---------------------|-----------|
|                 | Books           | Text | Books               | Text      |
| 98              | 65.0            | 67.3 | 4,358,000           | 4,733,000 |
| 90              | 21.2            | 33.4 | 1,823,000           | 2,357,000 |
| 80              | 14.2            | 24.6 | 1,146,000           | 1,697,000 |
| 70              | 9.6             | 16.9 | 622,000             | 1,168,000 |
| 60              | 6.5             | 13.1 | 432,000             | 722,000   |
| 50              | 4.6             | 9.2  | 282,000             | 601,000   |
| 40              | 3.2             | 6.2  | 200,000             | 421,000   |
| 30              | 1.8             | 4.3  | 106,000             | 251,000   |
| 20              | 0.7             | 2.4  | 21,000              | 134,000   |
| 10              | 0.1             | 1.0  | 8,000               | 51,000    |
| 2               | 0               | 0    | 0                   | 8,000     |

(Anderson, Wilson, & Fielding, 1988)

# The consequences of early and continuing reading difficulties

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Lack of reading practice-affects fluency

Lack of wide reading-affects growth of vocabulary and knowledge of the world

Lack of wide reading- affects growth of strategic reading skills

Limited reading of classroom assignments-affects growth of essential knowledge

Loss of interest in reading and learning

## Primary Characteristics of Struggling Readers in Middle and High School

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They are almost always less fluent readers—sight word vocabularies many thousands of words smaller than average readers

Usually know the meanings of fewer words

Usually have less conceptual knowledge

Are almost always less skilled in using strategies to enhance comprehension or repair it when it breaks down

Will typically not enjoy reading or choose to read for pleasure

# Instructional challenge #2

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How do we engineer interventions intensive enough, and broad enough, to “close the gap” for struggling readers

- Some student will need intensive instruction in basic word reading strategies including phonics

- Most students will need instruction and orchestrated practice to build reading fluency

- Most students will need explicit and systematic instruction to build vocabulary

- All students will need instructional support to enhance active use of efficient comprehension strategies

- All students will need instruction that pays particular attention to engagement in reading for meaning

# Instructional Enhancements required in middle and high school

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## 1. Intensive Reading Classes for students reading below grade level

Offer a continuum of intensity based on need – at least two levels

Intensity is manipulated by instructional group size or by length of instruction

# Improving reading skills in middle and high school

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1. Schedule a 90 minute block every day for students with reading skills more than two years below grade level with word level difficulties

Word level skills- accuracy and fluency

Strategy instruction and engagement in thinking about text

Both embedded and systematic vocabulary instruction

Lots of guided, supported practice in reading

# Improving reading skills in middle and high school

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1. Schedule a 60 minute block every day for other students reading below grade level with less impaired word level reading skills

Word level skills- fluency

Strategy instruction and engagement in thinking about text

Both embedded and systematic vocabulary instruction

Lots of guided, supported practice in reading

# Instructional Enhancements required in middle and high school

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1. Intensive Reading Classes for students reading below grade level
2. Provide professional development to content teachers to improve instruction in content knowledge and understanding-critical thinking about content
3. Provide professional develop to content teachers to improve their skills in teaching students how to learn from reading
4. Ongoing formative assessments as well as end of year outcome assessments



A Report from Carnegie Corporation of New York

# READINGNEXT

A VISION FOR ACTION AND RESEARCH IN  
MIDDLE AND HIGH SCHOOL LITERACY



ALLIANCE FOR  
EXCELLENT EDUCATION

A very recent report on “what works” with middle and high schools students.

Contains a 15 point research- based “action plan” for middle and high schools

Download at:

<http://www.all4ed.org/publications/ReadingNext/ReadingNext.pdf>

A considered opinion of five eminent researchers in adolescent literacy...

“....enough is already known about adolescent literacy—both the nature of the problems of struggling readers and the types of interventions and approaches to address these needs—in order to act immediately on a broad scale.”

(Biancarosa & Snow, 2005)

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