

Adolescent Literacy, Reading Comprehension & the FCAT

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Some definitions of reading comprehension to set the stage:

“Acquiring meaning from written text”

Gambrell, Block, and Pressley, 2002

“the process of extracting and constructing meaning through interaction and involvement with written language”

Sweet and Snow, 2002

“thinking guided by print”

Perfetti, 1985

What we know about the factors that affect reading comprehension

Proficient comprehension of text is influenced by:

Accurate and fluent word reading skills

Oral language skills (vocabulary, linguistic comprehension)

Extent of conceptual and factual knowledge

Knowledge and skill in use of cognitive strategies to improve comprehension or repair it when it breaks down.

Reasoning and inferential skills

Motivation to understand and interest in task and materials

Does the relative contribution
of each of these factors to
performance on measures of
reading comprehension
change with age?

The Florida Center for Reading Research recently conducted a study of the FCAT to answer several important questions:

Among the most important questions were these:

What are the reading, language, and cognitive abilities that are most important in explaining individual differences in performance on the FCAT at 3rd, 7th, and 10th grades?

What kinds of skills and knowledge are particularly low in students who struggle on the FCAT?

The FCAT has some important characteristics

It was specifically created to place high demands on vocabulary and reasoning/inferential skills

“FCAT demands an in-depth understanding and application of information that is not typical of most standardized tests.” (*Lessons Learned*, 2002)

Design specifications call for “application of skills in cognitively challenging situations.”

Proportion of questions requiring “higher order” thinking skills increases from 30% in grade three to 70% in grade 10

The FCAT has some important characteristics

The FCAT may also place special demands on reading fluency, as opposed to “labored accuracy”

Passage length at different levels

3rd grade – 325 words

7th grade – 816 words

10th grade – 1008 words

How the study was conducted:

Gave 2 hour battery of language, reading, nonverbal reasoning, and memory tests to approximately 200 children in each grade at 3 locations in the state

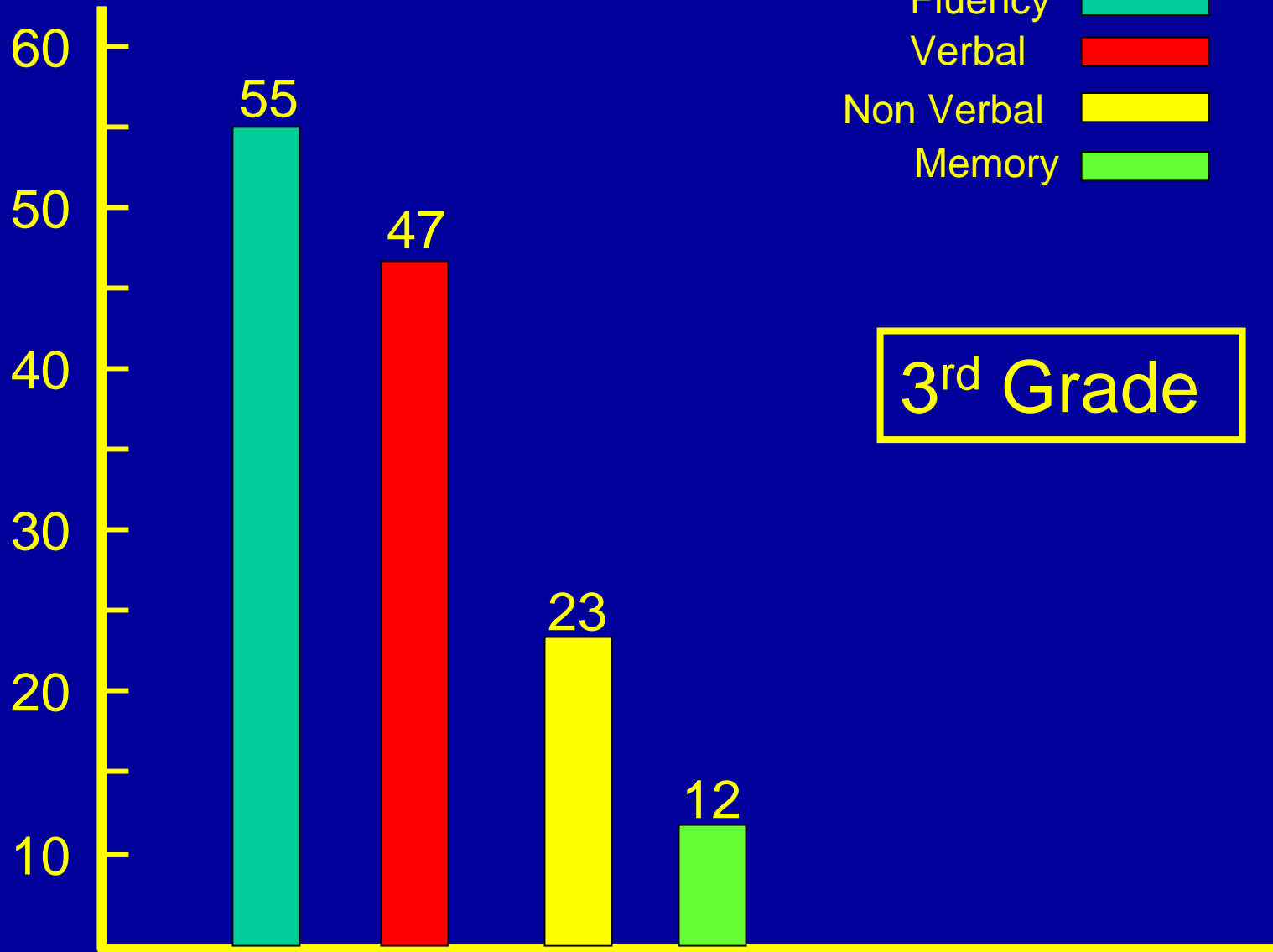
Language – Wisc Vocab and Similarities
Listening comprehension with FCAT passage

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

NV Reasoning – Wisc Matrix Reasoning, Block Design

Working Memory– Listening span, Reading Span

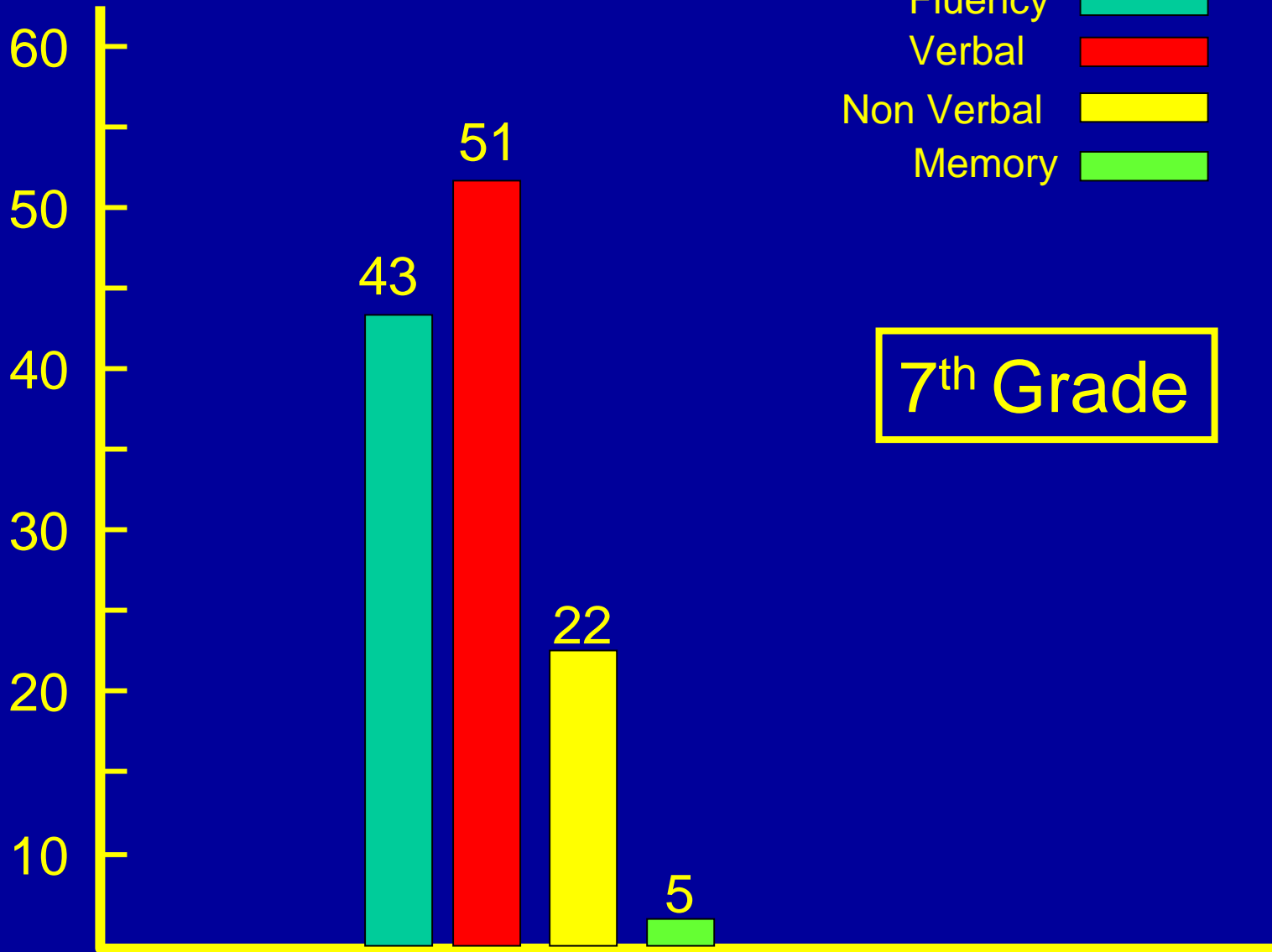
Percent of variance accounted for



- Fluency
- Verbal
- Non Verbal
- Memory

3rd Grade

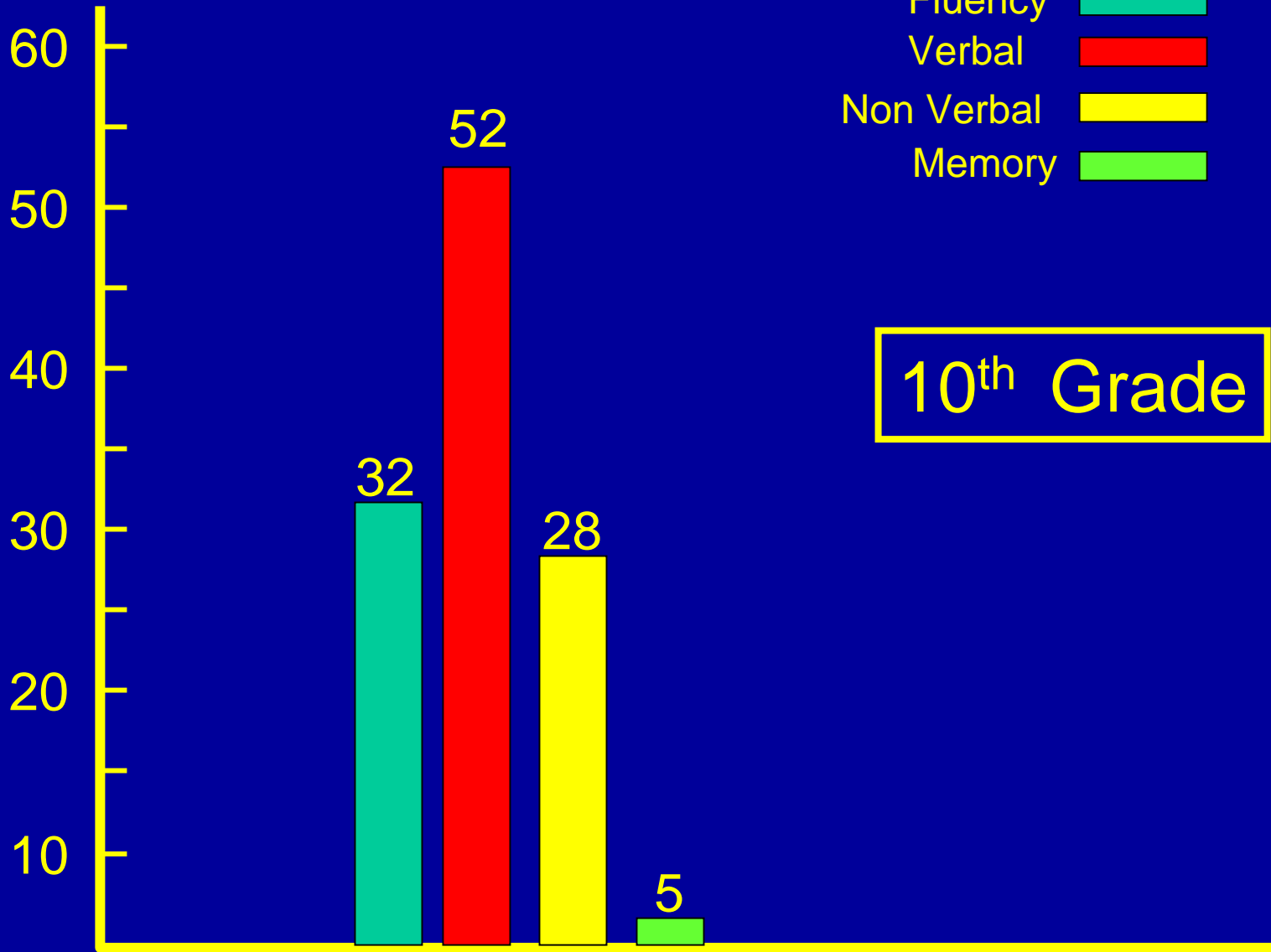
Percent of variance accounted for



- Fluency
- Verbal
- Non Verbal
- Memory

7th Grade

Percent of variance accounted for



10th Grade

What skills are particularly deficient in level 1 and level 2 readers in 3rd grade?

<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 th	32 th	56 th	78 th	93 rd
Phonemic decoding	25 th	45 th	59 th	74 th	91 st
Verbal knowledge/ reasoning	42 nd	59 th	72 nd	91 st	98 th
SAT9 percentile	31 st	45 th	69 th	87 th	95 th

What skills are particularly deficient in level 1 and level 2 readers at 7th grade?

<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 th	25 th	45 th	82 th	95 th
Phonemic decoding	27 th	53 rd	53 rd	74 th	84 th
Verbal knowledge/ reasoning	34 th	45 th	64 th	88 th	93 rd
SAT9 percentile	31 st	51 st	68 th	86 th	94 th

What skills are particularly deficient in level 1 and level 2 readers at 10th grade?

<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 th	30 th	68 th	87 th	93 rd
Phonemic decoding	18 th	27 th	45 th	56 th	72 nd
Verbal knowledge/ reasoning	30 th	60 th	66 th	84 th	89 th
SAT9 percentile	25 th	44 th	62 nd	83 rd	85 th

Important Conclusions from the Study

1. The FCAT performs as it was designed to do: as grade level increases, performance depends more and more on verbal knowledge and higher order thinking skills
2. The FCAT is a very demanding test of reading comprehension. The average national percentile score of students at grade level on the FCAT (level 3) is 69th in 3rd grade, 68th in 7th grade, and 62nd in 10th grade
3. In third grade, the primary problem of students that achieve scores at level one is in the area of reading fluency and accuracy. These students have verbal skills and knowledge only slightly below average, but their reading fluency scores are at the 6th percentile.

Conclusions about the task of Florida's teacher's

1. The most direct way to reduce the number of students at level 1 in third grade is to more powerfully teach and nurture the growth of accurate and fluent reading skills in all children.
2. At the same time, because of the heavy vocabulary, knowledge, and thinking demands of the FCAT beginning in third grade, we must build strong foundations in these areas during early reading instruction

Conclusions about the task of Florida's teacher's (cont.)

3. In late elementary, middle, and high school, we must assure that all children acquire essential content knowledge to keep pace with the accelerating verbal knowledge demands of the FCAT.
4. We must also engage all students in deeply thoughtful interactions with print to that critical, inferential, and analytic skills continue to develop
5. We must also develop sustained interventions to improve the accuracy, fluency, and confidence of significant numbers who have fallen seriously behind in their ability to read text fluently.

Another way to say it:

Preparing children to meet grade level standards in reading comprehension by the end of third grade, and to help students grow in the skills and knowledge required for grade level comprehension after third grade, is a job for all teachers, not just "reading teachers."

It's at least as much about building content knowledge, vocabulary, and thinking skills as it is about helping children learn to read accurately and fluently

Questions,
Comments?