

# **A Study of Hispanic Boys: Non-Proficient Readers Versus Skilled Readers on the Florida Comprehensive Assessment Test at Grade 4**

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December 2007



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## EXECUTIVE SUMMARY

To better understand the reasons why disproportionate percentages of Hispanic boys in the elementary grades perform at levels 1 and 2 on the five-point *FCAT Reading* SSS (*FCAT*), an in-depth qualitative study was carried out collaboratively by reading coaches, the Department of Elementary Education's Language Arts Team, and a program evaluator from the Department of Assessment and Accountability. This action research involved case studies of 50 Hispanic boys including both low- and high-achievers, fourth graders in 50 elementary schools. Students coded LY-A (non-English monolingual) or LY-B (non-English predominant) were excluded from the sample. The intent was to focus on students not served by special programs.

Rather than look at a limited amount of data for a large number of students, this action research was designed to study in great depth a limited number of Hispanic boys to better understand their low level of achievement in reading. As members of the study team discussed how to select the boys in a way that would be purposeful in providing the most information-rich cases possible, they arrived at the conclusion that including boys at both the low and the high ends of the *FCAT* scale would be helpful. The overarching question for the action research conducted was as follows: **What is different about Hispanic boys who score at level 1-2 (below criterion) versus level 4-5 on *FCAT Reading*?**

The low achievement levels obtained by some of the boys on the *FCAT* were perplexing because they seemed to be making normal progress in reading, performed well on other tests, and had never been retained. In other students, reading difficulties were more readily apparent. The study was designed to get beneath the surface of those *FCAT* numbers to understand the barriers to success.

Multiple methods were used to collect data of interest, including data not readily available in the student data base. Instead of simply looking at test scores, study participants observed students to gain information about their modus operandi in taking a test, listened to them read test passages orally, asked them to explain why they had selected certain answers and rejected others. Approximately a thousand examples of students explanations of their answers were collected and analyzed. The boys and their teachers were asked to share their knowledge and insights about the problem. The work was of a qualitative nature and the analysis labor intensive. Based on similarities in their profiles of strengths and weaknesses in reading, the students were assigned to groups.

## Highlights of Findings

Key findings embedded in the report are listed in the summary at the end of the document; in the Executive Summary the findings about the school history of the boys and their strengths and weaknesses in reading and language development are highlighted.

### SCHOOL HISTORY FROM KINDERGARTEN TO FOURTH GRADE

Most of the *FCAT* level 1-2 readers were similar to the level 4 readers in their school history.

#### Pre-Kindergarten and Kindergarten:

Slightly more non-proficient readers than skilled readers attended district pre-kindergarten and kindergarten programs.

#### Mobility:

A majority of boys in both groups attended only 1 or 2 schools from kindergarten through grade 4.

#### Retention:

Most proficient readers (83%) and most non-proficient readers (70%) had not been retained (K-4).

#### Attendance:

The non-proficient readers had a slightly better attendance rate (96%) than did proficient readers (94%)

#### Behavior:

The majority of boys in both groups had no record of a disciplinary incident. An increase was observed for non-proficient readers in grade 4 but the number of incidents was typically small.

#### Subsidized Lunch:

All of the boys in the study received a subsidized lunch.

#### Home and Native Language:

The percentages of various combinations of home language and native language (Spanish or English) were similar for the two groups.

#### Participation in Programs for English Language Learners:

More than half of *FCAT* level 1-2 students in the sample (56%) had not participated in programs for ELL students in comparison to 43% of proficient readers.

## READING ACHIEVEMENT

### Reading Comprehension Scores on Five Assessments

- < Almost all of the Hispanic boys in the study who scored at level 4 or 5 on the *FCAT Reading* (87%) scored in the above-average range (stanines 7-9) on the *FCAT Norm-Referenced Test*.
- < Of particular interest, almost all of the Hispanic boys who scored at level 1 or 2 on *FCAT Reading* (93%) performed in the average range (stanines 4-6) on the nationally-normed *FCAT Reading NRT*. In other words, although they performed in the average range on a nationally-normed reading achievement test, these students were unable to demonstrate reading proficiency on the *FCAT*.
- < On a new form of the district's *FCAT Reading Practice Test* (Grade 4, Form C), 87% of the proficient readers (*FCAT Reading* levels 4-5) correctly answered 70% or more of 20 comprehension questions while 92% of the non-proficient readers (*FCAT Reading* levels 1-2) answered less than 70% of the comprehension questions correctly.

### Word Reading Accuracy

- < All of the Hispanic boys who were judged to be proficient readers on the *FCAT* in grade 4 read with an overall accuracy rate of 95% or higher on the passages of the district's *FCAT Reading Practice Test*.

- < Of the Hispanic boys who were judged non-proficient readers on the *FCAT* in grade 4, 89% were able to read with 94% accuracy or higher, a degree of accuracy sufficient to support comprehension. For almost all of the grade 4 Hispanic boys designated non-proficient readers, difficulty in accurately reading words is not the cause of their low level of achievement in reading.
- < Substitutions of one sight word for another generally did not interfere with comprehension (e.g., Emma-Jean loved <sup>the</sup>~~her~~ power).
- < When students miss multi-syllable words, they almost always begin the word correctly and frequently read the end of the word right; the middle of the word is problematic, seemingly a blur of letters. Students often generate non-words (*consuputation*, *consumation* and *consupitation* for *consumption*). As is evident from the example, errors in multi-syllable content words are likely to affect comprehension.
- < Proficient readers were more likely to correct their errors (30% correction rate on the narrative passage and 27% on the expository passage) than non-proficient readers (18% correction rate on the narrative passage and 14% on the expository passage).

### **Reading Rate**

- < A clear and marked difference in the two groups was evident in reading rate: proficient readers read an average of 44 words correct per minute more than the non-proficient readers. Their slow rate of reading puts the non-proficient readers at a clear disadvantage in completing classroom assignments and, in particular, lengthy tests such as the *FCAT*. Based on their oral reading rates, ten minutes into the test, the non-proficient readers would be 440 words behind the proficient readers. The difference would likely be greater with a silent reading rate.

## **TEST-TAKING STRATEGIES**

### **Observations During Testing**

- < Students in both groups were observed to typically read each passage and then the questions and answers in turn. Proficient and non-proficient readers alike typically went back to the passages to look for information and clues to answer some questions.
- < Of interest, proficient and non-proficient readers alike most frequently reread in response to the same type questions, that is, questions that asked how a term was used in the passage and when the question called for specific details found in a graph or caption accompanying a photo.
- < On both types of passages, proficient readers went back to the text more often than did non-proficient readers and did so with relative ease.
- < Non-proficient readers who did not return to the passages almost always did very poorly on the test, which was not true of proficient readers.

### **Reading Coaches' Observations Based on Discussion of Answers**

- < The typical Hispanic boy in grade 4 rated a proficient reader on *FCAT* (levels 4-5) understood and held in mind questions; eliminated obviously wrong answers; justified answers by citing relevant text or by pointing out to the coach or reading aloud words in the passage that supported his answer; quickly located relevant text; made use of all the information provided, including pictures, captions, and graphs; and understood meanings of key words in the passages.
- < The typical Hispanic boy in grade 4 who was rated a non-proficient reader on the *FCAT* (levels 1-2) understood and held in mind some questions; did not consistently eliminate obviously wrong answers; justified his answers by citing relevant information he remembered from the passage, although frequently his rationale was incomplete or illogical; often cited his own knowledge and experience in justifying answers; did not always attend to all the information provided in the passage (e.g., captions of pictures, tables); and at times struggled with the meanings of key words (e.g. 'consumer') or interpreted them literally or concretely.

- < High and low achievers on *FCAT* differ in their understanding of question stems and effective steps to take to identify the correct answer. Examples follow of systematic errors.
  - C Highlighted below is an observation not called to attention in our prior study of African-American boys in grade 4. Some non-proficient readers are unable to distinguish between two similar question stems utilized in the *FCAT*: (1) Which two words have the SAME meaning? and (2) How are  $x$  and  $y$  ALIKE? They understand the first question stem as having the same meaning as the second stem as illustrated below:

WHICH TWO WORDS HAVE THE SAME MEANING (AS USED IN THE PASSAGE)?

- |                  |  |
|------------------|--|
| calories, pounds | <ul style="list-style-type: none"> <li>• Because if you eat a lot of calories, it would make you gain pounds.</li> <li>• If you get too many calories, that makes pounds.</li> <li>• Because of T.V. - they say let's lose weight and burn off all those calories.</li> </ul>                  |
| weaken, disease  | <ul style="list-style-type: none"> <li>• When you have a disease, you are tired and weakened.</li> </ul>   |
| rolled, pushed   | <ul style="list-style-type: none"> <li>• It's almost the same. If you 'rolled' something, it would be moving, and 'pushed' would be the same thing.</li> <li>• 'Rolled' and 'pushed' are the same because when people are in wheelchairs, they can have someone roll it or push it.</li> </ul> |
| prince, queen    | <ul style="list-style-type: none"> <li>• These are the same because they are both like bosses.</li> </ul>  |
| replied, asked   | <ul style="list-style-type: none"> <li>• 'Replied' is like you say something; 'asked' is the same thing.</li> <li>• They almost mean the same thing: 'replied' means he asked the question and 'asked' means she asked the question.</li> </ul>  |

The words do not have the SAME meaning but have in common an attribute, function or context, something that is ALIKE.

This common error pattern across different test questions makes salient the need to help children better understand various question stems.

- C When asked to explain what caused a certain outcome, students sometimes selected a restatement or elaboration of the effect (a true statement) rather than a causal statement as illustrated below:

Question: *What caused Emma Jean's change in feelings toward Vincent?*

Preferred Response: *She thought about how it would be in a wheel chair.*

Student Response: *She felt sorry she had been mean to him. [the change in feelings!]*

### **VOCABULARY/LANGUAGE DEVELOPMENT**

Two tests used to assess vocabulary development were administered to the Hispanic boys in the study: the *PPPV-IIIB*, a measure of receptive vocabulary, and the *DAR Word Meaning*, which asks students to explain the meaning of words pronounced by the examiner.

- < On the *PPVT-IIIB*, the Hispanic boys in the model reader group (*FCAT* Levels 4-5) performed in the average (52%) or above-average stanines (48%). The non-proficient readers (*FCAT* levels 1-2) performed in the average (63%) or below-average stanine ranges (33%), although one non-proficient reader had an above-average vocabulary (stanine 9). The mean standard score was a 112 (NP of 79) for the skilled readers and 94 (NP of 34) for the less skilled readers, a marked difference. Eighty-three percent of the proficient readers scored in the 6<sup>th</sup> stanine or higher while 85% of the non-proficient readers scored in the 5<sup>th</sup> stanine or lower.
- < On the *DAR Word Meaning*, the median and modal grade equivalent scores were both grade 5 for the model readers at the end of grade 4. The median (3.5) and modal (3.0) grade-equivalent scores for the non-proficient *FCAT* readers were both below their grade placement at the end of grade 4.
- < Based on the two tests in combination, most of the Hispanic boys who have not yet demonstrated proficiency on *FCAT* would benefit from instruction to strengthen their vocabulary as would some of the proficient readers.

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## **RECOMMENDATIONS**

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### **Recommendation 1:**

Continue effective instructional practices in developing students' word reading accuracy.

**Recommendation 2:** Increase instructional focus on strategies to improve accuracy in reading multi-syllable words and to unlock their meaning. The Reading/Language Arts Team and reading coaches should agree on a few simple rules to teach children about breaking words into syllables.

Focusing on meaningful parts of the words, that is, root words, prefixes and suffixes is particularly effective because they are used in a generative way in our language. Teachers should take advantage of opportunities to teach many related words at one time. When teaching *aqua*, one can easily call attention to words with the same Latin root: *aqueduct*, *aquamarine*, *aquarium*, *Aquarius*, *aquatic*, *aquifer*. Combining a root word with various prefixes and suffixes helps students understand the building blocks of words; for example, the root *port* (carry) changes meaning depending on the affix(es) *report* (carry back), *portable* (able to be carried), *porter* (one who carries), *misreport* (carry back incorrectly), *reporter* (one who carries back).

**Recommendation 3:** Locate useful materials to teach understanding of morphemes, or units of meaning. The study team is in agreement that Houghton Mifflin and Scholastic materials treat this content superficially. Recommended materials include Pat Cunningham's *Making Big Words* and EPS workbooks. This kind of word play can be both enlightening and fun for students if structured in an effective way.

**Recommendation 4:** Design exercises for literacy centers and for small group instruction to improve reading rate and overall fluency.

**Recommendation 5:** When focusing on improving fluency, use materials that the student can read relatively easily.

**Recommendation 6:** Repeated reading is key. From an early age, children should be encouraged to reread (e.g., to classmates, to parents, siblings, grandparents, the dog, a doll). Reading along with a tape is helpful. Taping oneself and listening to how one sounds is valuable feedback.

**Recommendation 7:** Identify and encourage use of materials to develop reading rate and other aspects of fluent reading. Suggested materials include *Phonics and Poetry Lessons* (Fountas and Pinnell), the *Fluency First Kit/CD* that is currently available in Reading First schools, *Readers' Theatre* (Benchmark Education Company), and activities suggested by Timothy Rasinski, who has been a conference presenter on many occasions in this district.

**Recommendation 8:** At a minimum, focus on students who, based on their oral reading, obviously need to become more fluent. However, many students can benefit from and enjoy these activities.

**Recommendation 9:** Help non-proficient readers realize that their classmates who do better in reading go back to reread more often than they do when answering questions. Consider asking skilled readers to explain how they judge if they need to check their answers.

**Recommendation 10:** Continue to encourage students to go back to the passage to find answers to questions about very specific information (e.g., how a word was used in the passage, data likely to be found in a table or graphic, a small detail). Many students know to do this; others need to learn this effective strategy as a first step.

**Recommendation 11:** Encourage students to think more as they read and model the process for them. Students need to develop a better schema about how a passage they read is organized so that they are able to quickly locate information needed. Students should be able to say that certain information is located near the beginning, towards the middle, or towards the end of the passage. Students should learn to quickly look ahead and preview what they are to read, glancing at the title, any headings, and graphics.

**Recommendation 12:** Sequence of events matters in many types of text, both fiction and non-fiction. Help students learn to recognize other ways text is structured, for example, comparison/contrast, cause and effect. During classroom instruction, students might be asked to read a limited amount of text, a paragraph, or page, and answer a question or briefly summarize what they have read thus far. Encourage students to use simple graphic organizers to keep track of what they read. The goal is for non-proficient readers to be more like proficient readers, who often are able to go right to the relevant part of a passage to justify their answer choice without spending excessive time searching. Modeling and practice are essential.

**Recommendation 13:** Recommended materials include Stephanie Harvey's work on summarization; *Guided Readers and Writers*; *Thinking While You're Reading*; and *Exploring Non-Fiction* by Teacher Created Materials

**Recommendation 14:** During classroom instruction and during short periods of test preparation continue to help students be detectives when answering questions; continue to use the "test prep" approach developed in conjunction with the district's study of African-American boys in grade 4 as all of the same issues are evident in our study of Hispanic boys at the same level.

**Recommendation 15:** Of great importance, help non-proficient readers understand that their answers should be grounded in the material they have read, not outside experiences; rereading is important when in doubt.

**Recommendation 16:** Help students understand the specialized vocabulary used in tests and common question stems. Model for students by thinking aloud about what the question is asking for and how to eliminate some answers. For example, in response to the question cited above (*Which two words have the SAME meaning?*), proficient readers that we observed immediately tossed out word pairs that were opposite in meaning; in contrast, non-proficient readers went through each pair trying to think of a way they were alike. Use of examples and non-examples is helpful.

**Recommendation 17:** Continue to search for effective ways to help students realize that if an illustration and caption, an inset, or other graphic material is included in a passage, the answer to one or more questions is likely to be found therein.

**Recommendation 18:** Emphasize to teachers the importance of probing deeper when a student first answers a question. Students' explanations are a window into their thinking and offer opportunities to move them to higher levels of understanding and, over time, more robust justifications for their answers.

**Recommendation 19:** Finding time in the day to fit in all that is required is a challenge; reading coaches should be ready to help with schedules and with alternative settings and ways to meet students' instructional needs with respect to understanding what they read and responding to questions.

**Recommendation 20:** Recommended materials include the *Comprehension Tool Kit* and guided practice with the *FCAT Reading Practice Tests*, particularly in finding evidence to justify their answers.

**Recommendation 21:** Do not neglect “read alouds” and “interactive read alouds.” Selections that incorporate vocabulary above the students’ reading levels provide one of the best opportunities to enhance students’ understanding of words, particularly in the primary grades but also in the intermediate grades. Identify in advance a few words to emphasize and develop but also be responsive to students’ queries.

**Recommendation 22:** Word work is beneficial in instruction in all content areas; coaches should help teachers figure out how to incorporate these activities in their schedules. Writing instruction is one very logical place for building vocabulary. Keep charts on display of examples of word categories (e.g., ways to move: *walked, raced, hurried, paced, strolled, meandered, ambled, sauntered, stumbled*). Continue to encourage students to use their thesaurus to choose words that aptly convey the meaning they intend.

**Recommendation 23:** Promote district-wide use of *Making Meaning* (K-2 Developmental Study Center) and the *Primary Comprehension Test Kit* (firsthand-Heinemann) when it becomes available. Identify other valuable resources to develop students’ lexicon.

**Recommendation 24:** Encourage students to read widely in various genre from an early age, an important element in the development of vocabulary. Let children share words they discover that they particularly like, either because of the sound or the meaning.

**Recommendation 25:** When opportunities arise and through planned activities, help students move beyond their initial and often literal understanding of words to understanding their figurative use (similes and metaphors) and help students understand common idioms that often are a barrier to students whose native language or home language is other than English. Help students move from concrete to more abstract thinking.

**Recommendation 26:** Consider reinstatement of screening entering kindergarten students for speech/language problems, as is done for hearing and vision. This would be useful as well for young students new to the district who are achieving below level. If this is not feasible at all schools, initially implement at schools most in need.

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## **Introduction**

To better understand the reasons why disproportionate percentages of Hispanic boys in the elementary grades are rated at level 1 and 2 on the five-point scale of the *Florida Comprehensive Assessment Test (FCAT) Sunshine State Standards (SSS) Reading*, an in-depth qualitative study of 50 fourth grade Hispanic boys, 27 at *FCAT* levels 1-2 and 23 at *FCAT* levels 4-5 in the third grade, was carried out. The 50 boys included in the final sample each participated in a case study conducted by the reading coach at their school (one student per participating school). In addition to one-on-one assessments and interviews administered by the reading coaches, data were obtained from the boys' teachers and from the district's student data base. As described in the section that follows, this study continues and extends a series of program evaluations focused on reading achievement in the elementary grades, studies conducted to improve instructional practice in reading to meet the needs of all students.

## Context and Need for Study

In 2005, the district completed an in-depth study of the reading achievement of African-American boys in grade 4. Conducted collaboratively by elementary school reading coaches, the Department of Elementary Education Language Arts Team and program evaluators from the Department of Assessment and Accountability, the study was designed to get beneath *FCAT Reading* scores of African-American boys to understand how non-proficient readers (levels 1 and 2) differ from highly proficient readers (levels 4 and 5). Findings of the study (Albritton et al., 2005) were shared with district decision makers and in faculty meetings across the district; a video of African-American boys answering questions from a district-developed *FCAT Reading Practice Test* at their grade level was viewed and discussed in all elementary schools; the video incorporated suggestions for improving test preparation. New staff development offerings were generated to improve reading instruction and students' reading knowledge and skills.

This study replicates the earlier study, but with Hispanic boys. The need to understand the barriers to improved reading of minority boys was clearly evident in the findings of a series of reports generated in the evaluation of the K-3 Reading Coaches initiative (Albritton, 2003). Data aggregated by both race/ethnicity and gender revealed that disproportionate percentages of minority boys were rated non-proficient readers on the *FCAT* in grade 3, despite the fact that teachers perceived that many of these boys were making satisfactory progress in the classroom. *FCAT* data for 2006, reading level by gender by race/ethnicity, indicate that a reading achievement gap continues to exist for black and Hispanic boys versus white and Asian boys in grade 4. Approximately 64% of African-American and 51% of Hispanic boys were non-proficient readers on the 2006 *FCAT* (level 1 or 2) in comparison to approximately 28% of white boys and 22% of Asian boys in grade 4. Note that within all racial/ethnic groups except American-Indian, girls outperformed boys in reading; only a small number of American Indians were in the population tested.

**Table 1. 2006 FCAT Reading Achievement by Gender by Ethnicity**

	N	Percent Scoring at FCAT Reading Levels*					
		1	2	3	4	5	3-5
<b>Males</b>							
White	3,172	14.7	13.2	32.0	31.7	8.4	72.1
Black	1,530	44.4	19.5	24.9	9.7	1.4	36.0
<b>Hispanic</b>	<b>1,966</b>	<b>32.6</b>	<b>18.6</b>	<b>29.9</b>	<b>16.3</b>	<b>2.6</b>	<b>48.8</b>
Asian/Pacific Islander	176	10.2	11.4	30.7	34.7	13.1	78.5
American Indian	16	12.5	18.8	25.0	37.5	6.3	68.8
Multi-racial	399	19.5	18.3	29.8	25.6	6.8	62.2
<b>All Males</b>	<b>7259</b>	<b>26.0</b>	<b>16.2</b>	<b>29.8</b>	<b>22.6</b>	<b>5.4</b>	<b>57.8</b>
<b>Females</b>							
White	3,008	9.2	10.7	30.8	34.9	14.3	80.0
Black	1,541	30.5	21.6	29.5	16.2	2.2	47.9
Hispanic	1,852	21.6	18.0	35.3	21.2	3.9	60.4
Asian/Pacific Islander	213	6.6	5.6	28.2	36.6	23.0	87.8
American Indian	15	20.0	20.0	33.3	13.3	13.3	59.9
Multi-racial	390	10.3	13.3	33.1	35.1	8.2	76.4
<b>All Females</b>	<b>7019</b>	<b>17.2</b>	<b>15.1</b>	<b>31.7</b>	<b>27.2</b>	<b>8.8</b>	<b>67.7</b>
<b>TOTAL</b>	<b>14,278</b>	<b>21.6</b>	<b>15.7</b>	<b>30.7</b>	<b>24.9</b>	<b>7.1</b>	<b>62.7</b>

\* All students tested (program ran 8/31/07)

The 2006 FCAT Norm-Referenced Test (NRT) stanine scores are displayed in Table 2. Note that in comparison to a national sample, 21% of African-American boys and 15% of Hispanic boys in grade 4 performed in the below-average range (stanines 1-3) in Reading Comprehension. The difference in achievement as measured by the two tests is informative. Even though their achievement in reading as measured by the norm-referenced test may be interpreted in a more favorable light, still the percentages of African-American (21%) and Hispanic boys (15%) performing below average were 2 to 3 times greater than the percentage of white (7%) and of Asian (6%) boys performing at that level in grade 4. Note that within all racial/ethnic groups, girls outperformed boys in reading. Of particular interest, observe that not enough Asian girls scored in the below-average range to even show up in the statistics. (Perhaps we should study Asian girls in the future!)

**Table 2. 2006 FCAT NRT Reading Scores by Gender by Ethnicity**

	N	Stanines		
		1-3 (Below Average)	4-6 (Average)	7-9 (Above Average)
<b>Males</b>				
White	3,155	7.4	40.7	51.9
Black	1,520	20.7	63.0	16.4
<b>Hispanic</b>	<b>1,960</b>	<b>15.4</b>	<b>57.4</b>	<b>27.3</b>
Asian/Pacific Islander	175	6.3	39.4	54.3
American Indian	16	6.3	50.0	43.8
Multi-racial	396	6.1	56.3	37.6
<b>All Males</b>	<b>7,222</b>	<b>12.2</b>	<b>50.7</b>	<b>37.0</b>
<b>Females</b>				
White	2,991	3.2	36.5	60.2
Black	1,532	9.5	64.5	26.0
Hispanic	1,842	7.0	57.7	35.2
Asian/Pacific Islander	212		30.6	69.4
American Indian	15	6.7	46.7	46.7
Multi-racial	388	2.6	43.9	53.6
<b>All Females</b>	<b>6,980</b>	<b>5.5</b>	<b>48.5</b>	<b>46.0</b>
<b>TOTAL</b>	<b>14,202</b>	<b>8.9</b>	<b>49.7</b>	<b>41.4</b>

(\* Program ran 9/07/07)

Additional detail is provided in the following table that presents the percentage of students performing in each stanine by gender by race/ethnicity.

**Table 3. 2006 FCAT NRT Reading Stanine Scores by Gender by Ethnicity**

	2006 N	Percentage Scoring in Each Stanine on the FCAT NRT								
		1	2	3	4	5	6	7	8	9
<b>Males</b>										
White	3,155	0.6	2.3	4.5	7.1	12.8	20.8	21.1	21.1	9.7
Black	1,520	0.5	4.3	15.9	21.3	23.5	18.2	8.9	5.7	1.8
<b>Hispanic</b>	<b>1,960</b>	<b>0.7</b>	<b>4.1</b>	<b>10.6</b>	<b>14.2</b>	<b>21.0</b>	<b>22.2</b>	<b>13.8</b>	<b>10.4</b>	<b>3.1</b>
Asian/Pacific Islander	175		2.9	3.4	6.3	13.1	20.0	20.0	23.4	10.9
American Indian	16		6.3			25.0	25.0	12.5	6.3	25.0
Multi-racial	396		0.8	5.3	13.1	16.4	26.8	13.6	15.9	8.1
<b>All Males</b>	<b>7,222</b>	<b>0.5</b>	<b>3.1</b>	<b>8.6</b>	<b>12.3</b>	<b>17.5</b>	<b>20.9</b>	<b>16.1</b>	<b>14.7</b>	<b>6.2</b>
<b>Females</b>										
White	2,991	0.0	0.3	2.9	5.6	11.4	19.5	19.9	24.7	15.6
Black	1,532		2.3	7.2	16.1	25.3	23.2	13.2	9.7	3.1
Hispanic	1,842	0.1	1.5	5.4	11.2	20.9	25.6	17.1	12.2	5.9
Asian/Pacific Islander	212				4.2	9.4	17.0	15.1	33.5	20.8
American Indian	15		6.7		20.0	6.7	20.0	26.7	13.3	6.7
Multi-racial	388		0.5	2.1	7.5	13.7	22.7	22.7	21.1	9.8
<b>All Females</b>	<b>6,980</b>	<b>0.0</b>	<b>1.1</b>	<b>4.4</b>	<b>9.5</b>	<b>17.0</b>	<b>22.0</b>	<b>17.7</b>	<b>18.2</b>	<b>10.1</b>
<b>TOTAL</b>	<b>14,202</b>	<b>0.3</b>	<b>2.1</b>	<b>6.5</b>	<b>10.9</b>	<b>17.3</b>	<b>21.5</b>	<b>16.9</b>	<b>16.4</b>	<b>8.1</b>

\* All students (program ran 9/07/07)

In sum, the data from both the FCAT criterion-referenced and norm-referenced reading tests indicate that girls outperform boys within all racial/ethnic groups and that black and Hispanic boys obtain the lowest scores of all in reading in grade 4.

## Review of Literature

This literature review is focused on two principal areas of research relevant to our study of the reading achievement of Hispanic boys. A series of reports generated by researchers involved with the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K) provide information about the reading achievement of Hispanics in comparison to other racial/ethnic groups and of boys in comparison to girls. Sometimes data were reported by race/ethnicity by gender (e.g., Hispanic boys). Data concerning a variety of risk factors that affect reading development were incorporated in these reports. Another line of research reviewed included studies that investigated barriers to successful performance on the standardized reading assessments typically administered in districts in conjunction with state accountability systems. While the ECLS-K studies provide a frame of reference about what is understood about the development of reading knowledge and skills of Hispanics and of boys in the elementary grades, studies of barriers to demonstrating proficiency in reading on assessments employed in accountability systems influenced the methodology of our study.

### Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K)

The ECLS-K reports are a rich data source providing a background of understanding about how various child, family and school characteristics relate to reading development in the elementary grades. While group differences in achievement are of considerable interest, the authors of these reports typically remind the reader that a wide range of achievement is generally found within all groups.

In the longitudinal study, a common developmental reading scale was used across the grades in measuring student achievement in reading knowledge and skills ranging from letter recognition to evaluating non-fiction. While the way the data were reported varied to some extent across the studies, most researchers reported an overall reading achievement score but also provided data about achievement of specific skills. Information was also included about the prevalence by subgroup of various risk factors that are related to reading achievement. Summarized in this report is information selected from the comprehensive ECLS-K reports that is pertinent to understanding the range of reading knowledge and skills of Hispanic boys in relation to their peers. The data highlighted from each report are presented in tabular form and are described in a brief narrative.

Selected data from *America's Kindergartners* (West, Denton, and Germino-Hausken, 2000) are presented in Table 4. The authors reminded us that in the climate of pressure to raise standards and to monitor the progress of all children, the nation's kindergartners are increasingly diverse in race/ethnicity, language, culture, social and economic background and differ in their experiences prior to kindergarten.

The mean t-score in reading of Hispanic children entering kindergarten was 46 in comparison to 52 for whites, 47 for blacks and 55 for Asians. Keep in mind that 30% of Hispanic children were excluded from the testing as English language learners. Lower percentages of Hispanic and of black children (15% each) achieved in the top 25% in comparison to white and Asian children (30% and 39%, respectively). Conversely, the percentages of Hispanic children (42%) and black children (34%) in the bottom 25% were greater than the percentages of white and Asian children (18% and 13%, respectively). Children's performances in reading are linked to the mother's level of education. Sixty-four percent of Hispanic children whose mother lacked a high school diploma demonstrated reading achievement in the bottom 25%. The reading achievement of boys was slightly lower than that of girls. More boys performed in the bottom 25% than did girls (29% vs. 22%); and boys were less likely than girls to perform in the top 25% (22% vs. 28%). Older children likewise outperformed younger children. Children whose family is on welfare, whose home language is not English, and whose family is headed by a single mother did less well than their classmates whose family is more advantaged economically, whose home language is English and who live with both parents.

In terms of specific skills, Hispanic and black children entering kindergarten were less likely than their white or Asian classmates to demonstrate proficiency in letter recognition and beginning and ending sounds. In turn, Asians outperformed whites in all three skill areas. Very small percentages of children recognized sight words or comprehended written text.

Much information was collected about children's books and records, tapes and CDs available in the home, parents' reading aloud and singing to their kindergartners. The number of books available varied by the mother's educational level and socioeconomic status. Activities such as reading and singing also varied by family risk factors. For example, more than half of Hispanic children (52%) had fewer than 25 children's books and more than three-fourths (77%) of Hispanic children whose mothers did not finish high school had fewer than 25 children's books in the home.

**Table 4. Selected Data from *America's Kindergartners***

Measure	Total	Race/Ethnicity*				Mother with Less than High School Diploma				Mother with High School Diploma or More				Sex		AFDC (Welfare)		Primary Home Language		Family		Age Born	
		W	B	H	A	W	B	H	A	W	B	H	A	Male	Female	No	Yes	English	Other	2-Parent	Single	1-7/92	9-12/93
Mean Reading t-scores	50	52	47	46	55	45	43	41	48	53	48	48	56	49	51	50	44	50	46	51	47	53	47
% Bottom 25%	25	18	34	42	13	43	52	64	28	16	30	35	11	29	21	22	49	25	44	22	36	15	33
% Top 25%	25	30	15	15	39	8	4	4	12	31	18	19	43	22	28	27	8	25	16	28	14	34	16
<b>Percent Demonstrating Concepts of Print</b>																							
0 Skills	18	14	29	24	15	12	27	22	14	26	40	32	22	20	17	17	32	18	26	26	16	11	27
3 skills	37	45	21	27	43	47	23	31	46	22	11	15	19	37	38	40	19	38	28	25	41	50	26
Mean General Knowledge t-scores	50	53	44	46	48	47	40	42	41	54	44	48	49	50	50	51	43	51	43	52	46	56	46
% Bottom 25%	25	14	51	41	34	34	66	63	60	12	48	35	30	25	25	22	51	24	53	20	40	11	42
% Top 25%	25	34	6	12	19	9	1	2	5	36	7	15	22	26	24	27	6	26	6	30	12	47	12
<b>Percent Proficient (Entering K)</b>																							
Letter Recognition	66	73	55	49	79	47	34	29	60	75	59	55	82	62	70	69	41	67	49	70	53	76	56
Beginning sounds	29	34	19	19	43	12	7	6	20	36	22	23	47	26	32	31	11	30	20	33	18	38	20
Ending sounds	17	20	10	10	29	6	3	3	9	21	12	13	32	15	19	18	5	17	12	19	10	24	11
Sight words	2	3	1	1	9	<.5	<.5	<.5	1	3	1	1	10	3	2	4	1	2	3	3	1	5	1
Words in context	1	1	<.5	1	5	<.5	<.5	<.5	1	1	1	1	5	1	1	1	<.5	1	2	1	<.5	2	1
<b>Percent children's books in home</b>																							
<26 books	26	9	50	52	46	30	69	77	72	7	46	38	39	27	25	23	52	20	65	21	40	18	30
>100 books	17	25	4	6	8	10	2	1	<.5	26	5	9	10	16	17	18	7	19	3	19	10	24	15
<b>Percent children's records/audio tapes/CDs</b>																							
None	13	7	22	22	14	25	39	38	41	5	17	13	9	14	12	11	26	11	25	19	11	11	14
>21	20	25	13	11	21	13	8	4	7	26	14	14	25	19	21	21	11	22	9	15	22	26	18
Percent of parents who read to child daily	45	49	35	39	47	43	32	33	34	50	35	42	49	43	47	44	38	46	38	47	39	44	49
Percent of parents who sing to child daily	45	44	54	41	35	44	55	37	45	51	52	35	22	40	50	44	49	46	38	44	51	42	47

\* Approximately 30% of Hispanic and 19% of Asian children not tested (ELL)

In *An Uneven Start: Indicators of Inequality in School Readiness* (2002), Richard Coley of the Educational Testing Service built upon the findings of *America's Kindergartners* by using the ECLS-K kindergarten data to examine group differences in reading achievement not only by various student and family characteristics but also, most importantly, by considering the interactions among these variables (see Table 5). This was one of the few reports that provided data by gender by race/ethnicity; thus we could examine the performance of Hispanic boys in particular. Other interactions studied included socioeconomic status by gender, and age by gender and by race/ethnicity.

Rather than looking at overall scores in reading, Coley reported on the percentage proficient in each reading skill assessed. Among his findings was that white and Asian students entering kindergarten were more likely to be proficient than other racial ethnic groups across the range of reading skills tested. In his summary, however, Coley called attention to the finding that almost all racial/ethnic differences in reading disappeared when students were grouped by SES, which in this study incorporated parents' or guardians' education, income and occupation.

Overall, differences by gender favored girls in the recognition of letters and beginning and ending sounds; the gender difference was also significant within the group of white students. No gender differences were found in recognizing sight words and understanding words in context; however, only small percentages of beginning kindergartners demonstrated these skills. Across all reading tasks, students in higher SES groups were more likely to be proficient than students in lower SES groups. Older kindergartners were more likely than younger kindergartners to demonstrate various reading skills. Within the same age group, Asian and white students outperformed other racial/ethnic groups.

Interesting data on children's home reading experiences were reported. About half of parents read to their kindergarten child daily. Both Asian and white parents were more likely to read to their child each day than were black parents, and white parents were more likely to do so than Hispanic parents. Large differences (a half a standard deviation) were observed in high versus low socioeconomic groups in reading to children at home. Racial/ethnic differences in reading at home did not hold up when students were grouped by socioeconomic status. White parents were more likely to read daily to a daughter than to a son, although the difference was small.

Coley emphasized first and foremost that to reduce "pervasive inequalities" in student success in school, differences that exist prior to school must be addressed. Policy makers have to be sensitive to the complexity of school readiness and take into account interactions between race/ethnicity, gender, socioeconomic status and age in determining which students are at risk and for what subject.

**Table 5. Selected ECLS-K Data from *An Uneven Start***

	Total	Males				Females				High SES (Quintile 5)				Low SES (Quintile 1)				Older (Quartile 4)				Younger (Quartile 1)									
		W	B	H	A	M	W	B	H	A	F	W	B	H	A	W	B	H	A	W	B	H	A	M	F	W	B	H	A		
Percentage of Kindergartners who(se)																															
recognize letters	65	67	54	45	79	61	75	61	54	81	69	86	77	73	93	45	41	30	60	69	77	77	66	59	83	52	63	65	49	42	78
understand beginning sounds	30	31	19	16	41	27	87	22	24	46	33	52	42	41	64	12	8	8	17	34	41	41	25	28	47	18	25	26	15	14	38
understand ending sounds	17	18	10	8	26	15	22	11	13	31	19	33	26	25	46	6	3	3	8	21	25	26	14	16	31	10	13	14	7	7	24
recognize *common words	2	3	1	1	8	2	3	1	1	9	3	6	3	5	17	1	0	0	1	4	4	5	2	2	10	1	1	2	1	1	6
read* words in context	1	1	1	0	5	1	1	0	0	5	1	2	1	3	9	0	0	0	1	2	2	2	1	1	6	0	0	0	0	0	3
parents read to them every day	46	47	33	40	48	44	52	37	44	49	48	63	49	59	57	45	30	34	37	-	-	-	-	-	-	-	-	-	-	-	-
look at picture books outside school every day	50	47	42	42	47	45	60	53	52	54	57	62	55	62	59	52	40	44	39	-	-	-	-	-	-	-	-	-	-	-	-
* Number rounded																															

In *The Kindergarten Year*, West, Denton and Reaney (2001) reported that kindergartners gained approximately a standard deviation from the beginning to the end of the year in reading achievement and that gains did not differ markedly by child, family and program characteristics (see Table 6). However, the similarity in gains in overall reading achievement masked differences at the skill level.

Illustrative of differential rates of acquisition of various specific skills are the data for groups of children with 0, 1, or 2 or more of the following risk factors: mother with less than a high school education, a single-parent home, welfare assistance received, and a primary home language other than English. In the lower level skill of letter recognition, the percent proficient among children with no family risk factor increased from 73% to 91%; among children with one family risk factor, the percent proficient increased from 57% to 91%; and the percent proficient among children with two or more risk factors increased from 40% to 85%. The students with more risk factors entered kindergarten with lower levels of achievement in letter recognition but made greater gains during the year than their peers with fewer family risk factors, thereby reducing the achievement gap for this particular skill.

In contrast, on the higher level skill of sight word recognition, students with fewer family risk factors were the ones who made greater gains, expanding the gap in achievement. The percentage of children proficient in sight word recognition increased from 3% to 16% with no family risk factor, from 2% to 9% with one family risk factor, and from 1% to 4% with two or more risk factors. While considering the impact of risk factors, keep in mind that almost three fourths (72%) of Hispanic and black children come from families with one or more risk factors in contrast to Asian (61%) and white children (29%), according to data cited from Zill and West (2000) by West, Denton, and Reaney.

A pattern of closing of the gap in letter recognition but a widening of the gap in sight word recognition also was evident when the data were sorted by race/ethnicity (see Table 6). In letter recognition, the percent proficient increased from 79% to 98% among Asian children and from 71% to 96% among white children; however, much larger gains were evident among black and Hispanic children whose percent proficient increased from 57% to 90% and from 50% to 90%, respectively. In the higher-level skill of sight-word recognition, in contrast, racial/ethnic groups that were ahead when they entered kindergarten made the greater gains in percent proficient: Asian children (from 9% to 29%) and white children (from 3% to 15%) versus black children (from 1% to 8%) and Hispanic children (from 1% to 10%).

The authors called attention to the fact that while overall gain scores tended to be similar among the various subgroups studied, the gaps in overall reading achievement among various subgroups evident when they started school persisted at the end of the kindergarten year. Differences favored older students, students whose mother was better educated, white and Asian children and children from families with fewer risk factors. Students who were behind their peers entering school made greater gains in lower level skills (e.g., letter recognition) but fell further behind in “more sophisticated” reading skills (e.g., sight word recognition).

**Table 6. Selected Data from *The Kindergarten Year***

Measure	Date	Total	Race/Ethnicity				Sex		Age - Born		Mother's Education		Risk Index		
			W	B	H	A	M	F	1-8/ 1992	9-12/ 1993	≥ Bachelor's Degree	<High School	0	1	2
Mean Reading Scale Score	Fall 1998	22	23	20	19	26	21	23	25	20	27	17	24	20	18
	Spring 1999	32	33	29	30	38	31	33	34	29	37	26	34	30	27
	Gain	10	10	9	11	12	10	10	10	9	10	9	10	10	9
Percent Demonstrating Specific Reading Knowledge/Skills:															
Letter Recognition	Fall 1998	65	71	57	50	79	61	69	75	57	84	38	73	57	40
	Spring 1999	94	96	90	90	98	92	95	96	89	99	84	96	91	85
	Change	29	25	33	40	20	32	26	21	32	14	46	23	34	45
Beginning Sounds	Fall 1998	29	34	20	20	43	26	32	39	21	49	9	36	21	11
	Spring 1999	72	77	59	65	85	68	76	77	61	86	49	78	65	51
	Change	42	43	40	45	42	42	43	39	40	37	40	42	44	40
Ending Sounds	Fall 1998	17	20	10	11	28	15	18	25	11	31	4	21	11	5
	Spring 1999	52	57	39	45	68	48	56	59	40	69	29	59	44	31
	Change	35	38	29	34	40	34	37	35	30	38	25	38	33	25
Sight Words	Fall 1998	2	3	1	1	9	3	2	4	1	6	*	3	2	1
	Spring 1999	13	15	8	10	29	12	15	18	9	24	3	16	9	4
	Change	11	12	7	8	20	9	12	14	7	18	3	13	8	4
Words in Context	Fall 1998	1	1	*	*	5	1	1	2	1	2	*	1	1	*
	Spring 1999	4	5	2	3	14	4	5	6	3	9	1	5	3	1
	Change	3	4	2	2	9	3	4	4	2	7	1	4	2	1

\* <.5  
 Note: Due to rounding, spring scores minus fall scores may not equal the change score.

Denton and West (2002) reported overall ECLS-K data as well as proficiency in specific reading skills from the start of kindergarten through the spring of first grade as displayed in Table 7. Only students assessed in English in all three testing cycles were included in this study. Differences in reading achievement present upon entry to kindergarten were observed to persist through first grade. White and Asian students outperformed black and Hispanic students in reading in all three test administrations. In their summary of findings, however, the researchers specifically called attention to the improved performance of Hispanic students over their first two years of schooling. Poor students as a group consistently performed below the national average in kindergarten and first grade. Academic advantage accrued to children with specific cognitive knowledge and skills (e.g., knowledge of letters when entering kindergarten), children read to three or more times per week by a family member, children with a positive approach to learning, and children with very good to excellent health.

In terms of specific reading skills, almost all students (by ethnicity, by gender, by poverty level) demonstrated proficiency in letter recognition, beginning and ending sounds. At the higher reading proficiency levels tested at the end of first grade, sight word recognition (reading simple words aloud) and understanding words in context (listening comprehension and reading simple text passages), the percentage of students rated proficient varied to a much greater extent by various subgroups. The Hispanic percent proficient in these two skill areas at the end of first grade was 10-12 percentage points lower than whites and Asians but 7 percentage points higher than blacks. Note that percentages proficient for Hispanics and blacks had been comparable at the beginning and end of kindergarten, with almost no students in either group proficient. The researchers specifically highlighted in their summary the fact that girls were more likely than boys to be reading, as measured by sight words and understanding words in context. The lowest percentage proficient was obtained for children whose family income fell below the federal poverty level.

**Table 7. Selected ECLS-K Reading Data: End of First Grade \***

Reading Measure	Times Tested	Total	Race/Ethnicity				Sex		Below Poverty (K)
			W	B	H	A	M	F	
Mean Reading t-score	Fall-Kindergarten	51	52	48	47	55	50	51	46
	Spring-Kindergarten	51	53	48	49	55	50	52	46
	Spring- 1 <sup>st</sup> Grade	51	53	48	50	55	51	52	47
<b>Percent Demonstrating Proficiency in Reading Skills:</b>									
Letter Recognition	Fall-Kindergarten	67	74	59	51	79	64	71	46
	Spring-Kindergarten	95	97	92	91	99	94	96	89
	Spring- 1 <sup>st</sup> Grade	100	100	99	100	100	100	100	99
Beginning Sounds	Fall-Kindergarten	31	36	21	21	44	28	34	13
	Spring-Kindergarten	74	80	60	68	84	71	77	56
	Spring- 1 <sup>st</sup> Grade	98	99	96	98	99	97	98	95
Ending Sounds	Fall-Kindergarten	18	21	11	11	29	16	19	6
	Spring-Kindergarten	54	60	41	47	66	52	57	35
	Spring- 1 <sup>st</sup> Grade	94	96	90	93	97	93	95	88
Sight Words	Fall-Kindergarten	3	3	1	1	7	3	2	<.5
	Spring-Kindergarten	14	16	9	10	28	12	15	5
	Spring- 1 <sup>st</sup> Grade	83	88	71	78	90	80	85	67
Words in Context	Fall-Kindergarten	1	1	<.5	<.5	4	1	1	<.5
	Spring-Kindergarten	4	5	2	2	12	4	5	1
	Spring- 1 <sup>st</sup> Grade	48	53	34	41	62	45	50	27
* Only students tested in English all rounds who first entered kindergarten in 1998, and who were promoted to 1 <sup>st</sup> grade in fall 1999.									

End-of-third-grade overall reading achievement, reading gain scores and scores on specific reading skills were among the ECLS-K data reported by Rathbun, West and Hausken (2004). Overall reading scores varied by race/ethnicity and various risk factors. For purposes of this report students were assigned points (0-4) for the following risk factors: family below the federal poverty level; mother's highest education less than a high school diploma; single parent household; primary language other than English. Keep in mind that three-fourths of the white students had no family risk factors in comparison to a third of black students, 40% of Hispanics, and approximately half the Asian children.

White and Asian students obtained higher reading scale scores (112 and 111, respectively) than black (98) and Hispanic (105) students did. Hispanic students outperformed black students in overall reading achievement. However, a regression analysis indicated reading achievement of Hispanics comparable to that of whites and Asians when controlling for gender, family risk factors, kindergarten program type, and types of schools attended. Each family risk factor (listed above) yielded a decrease in reading scores of about 6 points. No substantive differences in overall reading achievement by gender were found.

The average gain in reading from the beginning of kindergarten to the end of third grade was 81 points on the developmental reading scale. White, Hispanic, and Asian students made greater gains (84, 81, 81, respectively) than black students (73) did over the first four years of school. The same pattern of differences emerged in a regression analysis that controlled other factors, with black students making reading gains 6-7 points lower than other racial/ethnic groups. Children with more risk factors made greater gains than children with fewer risk factors. For each family risk factor, reading gain scores fell by 4 points. No substantive difference in reading gain scores by gender was found. In terms of reading gains, while the gap between black students and other racial/ethnic

groups widened, Hispanic students appear to have made the greatest reading gain. An achievement gap between students with no risk factors versus students with multiple risk factors also widened.

By the end of third grade, almost all children were able to identify ending sounds of words, name sight words, and recognize words in context. However, group differences were evident in some reading skills. With respect to racial/ethnic differences in specific reading comprehension skills, Hispanic third graders were less likely than white third graders to demonstrate proficiency in deriving meaning from text (use background knowledge and sentence cues to understand use of homonyms) and in making interpretations beyond text (make connections between problems in the narrative and similar life problems). However, Hispanic third graders, along with whites and Asian classmates, were more likely to demonstrate proficiency than black third graders in three comprehension skills: making literal inferences, deriving meaning from text, and making interpretations beyond the text.

Also noted was the fact that although their overall reading status scores did not differ substantively, boys were less likely than girls to demonstrate proficiency in most of the higher level reading skills. Children with more family risk factors were also less likely than classmates with fewer risk factors to be proficient in reading comprehension skills.

For the first time in the longitudinal study, in third grade, students responded to questionnaire items about their competence and interest in reading. Girls tended to have greater interest and perceived competence in reading, according to the researchers. This finding held after controlling for race/ethnicity, number of risk factors, and early school experiences.

In their executive summary, Rathbun, West and Hausken stated that the findings of this report are consistent with the three prior ECLS-K reports in that the knowledge and skills demonstrated by children at the end of third grade varied by race/ethnicity and family risk factors. *Moreover, the achievement gaps between disadvantaged and more advantaged children identified at the beginning of school (West, Denton and Germino-Hausken, 2000) grew wider over the first four years of school attendance (p. x).*

**Table 8. Selected ECLS-K Reading Data: End of Third Grade**

Reading Measure	Times Tested	Total	Race/Ethnicity				Sex		Risk Factors		
			W	B	H	A	M	F	0	1	≤ 2
Mean Reading Scale Score	Spring of 3 <sup>rd</sup> Grade	108	112	98	<b>105</b>	111	<b>107</b>	110	113	105	95
	Fall of 1 <sup>st</sup> Grade	27	28	25	24	30	26	28	29	25	22
	Gain*	81	84	73	<b>81</b>	81	80	83	84	79	73
<b>Demonstrated Reading Knowledge and Skills (%)</b>											
< Ending sounds		100	100	100	<b>100</b>	100	<b>100</b>	100	100	100	99
< Sight words		99	99	98	<b>99</b>	99	<b>99</b>	99	100	98	97
< Words in context		95	97	90	<b>93</b>	98	<b>93</b>	96	98	93	86
< Literal inference		78	84	63	<b>74</b>	82	<b>76</b>	81	85	73	57
< Deriving meaning		46	53	27	<b>39</b>	48	<b>43</b>	49	54	39	24
< Interpret beyond text		29	34	15	<b>23</b>	31	<b>27</b>	31	34	24	14
* Discrepancies due to rounding errors											

In *Fifth Grade: Findings From the Fifth Grade Follow-up of the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K)*, Princiotta, Flannagan and Hausken (2006) provided descriptive data obtained from 9,796 students, their parents, teachers and schools in the Spring of 2004, when most students in the ECLS-K sample were in fifth grade (sixth data wave). While 23% of white students scored in the lowest third of the distribution of reading scale scores, 56% of black students and 48% of Hispanic students were in the lowest third. Even higher percentages of students in poverty throughout the study (67%) and students whose mother had not graduated from high school (66%) scored in the lowest third.

Of particular interest, the researchers reported percentages of students in various categories who demonstrated specific reading knowledge and skills of increasing difficulty. Percentages of various ethnic groups who demonstrated understanding of words in context were very similar across racial/ethnic groups: white (98%), black (95%), Hispanic (96%), and Asian (98%). Most students in all groups also demonstrated literal inference (*making inferences using cues that were directly stated with key words in the text*): white (91%), black (78%), Hispanic (82%) and Asian (90%). As the difficulty of the reading task increased, percentages began to diverge. The percentages deriving meaning from text (*identifying clues used to make inferences*) were more variable although most students in each group demonstrated this skill: whites (79%) and Asians (77%) outperformed blacks (54%) and Hispanics (60%). The same was true for interpreting beyond text (*demonstrating understanding of author's craft and making connections between a problem in the narrative and similar life problems*), with greater percentages of white (51%) and Asian students (49%) demonstrating the skill than black (31%) and Hispanic (36%) students. Only small percentages of students in any group demonstrated evaluating non-fiction (*comprehending biographical and expository text*): white (10%) and Asian (8%) versus black (2%) and Hispanic (4%) students.

Girls outperformed boys in each of these comprehension skills but the percentages demonstrating proficiency were not markedly different.

**Table 9. Selected Data from the ECLS-K Fifth Grade Follow-Up**

Reading Measure	Times Tested	Total	Race/Ethnicity				Sex		Risk Factors	
			W	B	H	A	M	F	Below Poverty (all rounds)	Mother Less than High School
Mean Reading Scale Score		138	143	126	130	142	136	139	118	118
% Lowest Third		33	23	56	46	26	35	32	67	66
% Highest Third		33	43	17	20	39	31	35	8	7
<b>Percent Demonstrating Reading Skills</b>										
< Understand words in context		97	98	95	96	98	97	98	93	93
< Make literal inferences		86	91	78	82	90	85	88	71	71
< Derive meanings from text		70	79	54	60	77	68	73	41	42
< Interpret beyond text		44	51	31	36	49	43	46	23	24
< Evaluate non-fiction		7	10	2	4	8	7	8	0.7	0.7
* Discrepancies due to rounding error										

Across the elementary grades, as captured in the *Early Childhood Longitudinal Study* data, Hispanic children make solid progress in reducing the achievement gap in reading but continue to face significant challenges. When they entered kindergarten, they obtained the lowest mean t-score of all racial/ethnic groups on the reading assessment used throughout the study. Most Hispanics scored in the bottom 25% of all kindergartners. They were less likely than their peers to recognize letters of the alphabet, for example. Along with black children, Hispanic children were much more likely to come from families with one or more risk factors linked to lower levels of achievement: a mother with less than a high school education, a single mother, family receiving welfare assistance, and a primary language other than English.

Yet Hispanic children manage to some extent to close the gap between their reading achievement and that of their white and Asian classmates. The percentage of Hispanics at the low end of the distribution of reading scores decreases and the percentage of Hispanics at the high end of the distribution increases through the elementary grades. Several researchers studying the ECLS-K data specifically called attention to the progress made by Hispanics. However, their gains tend to be greater in skills at a lower level on the continuum of the skills assessed. For example, in kindergarten they make great gains in letter recognition, a skill many children have in hand when they enter kindergarten. Girls outscore boys in reading, particularly at the higher end of the skills continuum, although the differences are not large.

Family risk factors appear to be strongly linked to lower levels of reading achievement, particularly poverty and lack of education of mothers, not only in the elementary grades but through secondary school as well. This finding is supported even among students demonstrating high levels of achievement in secondary school. For example, in the Educational Testing Service Policy Information Report *Fragile Futures: Risk and Vulnerability Among Latino High Achievers*, Patricia Gándara (2005) provided evidence of an achievement gap at the upper end of the distribution of SAT Verbal scores between Latinos and whites. She indicated that high-achieving Latino students are more likely to come from economically and educationally disadvantaged backgrounds. In her words:

*... Even those poor and otherwise disadvantaged children who rank at the upper end of the achievement spectrum may not be supported by rich educational resources in the home. Their academic futures may be hanging by a thin thread of hope that nothing will go terribly wrong in their extended families, or their relationship to school, to dash their dreams. And, even if they manage to make it through their entire K-12 education as outstanding students, they remain at very high risk for not realizing their academic promise beyond high school. Their academic futures could, perhaps, be characterized as 'fragile.'* (p.5)

In addition to providing data on the high level achievement gap, the author summarized case studies of the life stories of a number of Latino students with high potential for a college education. Their complicated lives, responsibilities, and lack of resources all too often limited their options.

Many articles and research reports describe the negative effects of low levels of reading achievement in the lives of individuals but also warn of the impact on the nation's future. *America's Perfect Storm* (Kirsch, Braun, Yamamoto and Sum, 2007) is a prime example. What is the "perfect storm"? According to the authors, the first force contributing to the perfect storm is the disparities in educational achievement between whites versus Hispanics and blacks; large numbers of adults (16 years of age and older) lack the literacy and numeracy skills to function in the competitive work environment. A second force was described as comprised of "seismic changes in our economy" such that professional, managerial, technical and high level sales positions are expected to generate almost half of all job growth between 2004 and 2014. Innovation, globalization, and restructuring of the work force have yielded new sources of wealth, new patterns of trade, and a shift in the balance between capital and labor. The third force described in *The Perfect Storm* reflects the

pronounced demographic changes in our population, which is aging while immigration accounts for more than half the population growth. The bottom line is that over the next 25 years, better educated individuals leaving the work force will be replaced by individuals who typically have lower levels of education and skills. In 2004, nearly half (57%) the Hispanic population in this country was foreign born; half the immigrant Hispanics lacked a high school degree and most of these did not speak English. Who will fill those positions that require higher levels of education and skills? That is the question.

Directed at policy makers, *The Perfect Storm*, crystallizes some of the implications of gaps in achievement and the importance of understanding the causes of such gaps and taking appropriate action. The next category of research focuses on elementary school children and what stands in the way of higher levels of reading achievement in the early grades.

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### **Studies That Were Instrumental in Shaping the Research Methodology**

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Several studies that were seminal in shaping our action research are described in detail in this section of the report.

#### **Buly and Valencia**

One such report was *Below the Bar: Profiles of Students Who Fail State Reading Assessments* by Marsha Riddle Buly and Sheila W. Valencia (2002), who were concerned about assumptions made by policy makers that low-level performance on high-stakes reading assessments was due to difficulties with basic decoding skills and that policy decisions were being made about instructional programs and inservice training based on such assumptions. The authors aptly summarized what was known:

*. . .lacking more detailed analyses of student performance, the only conclusion was that students who had failed the test, had not correctly answered comprehension questions (p. 222).*

Buly and Valencia sought to remedy the problem of insufficient data concerning the nature of the reading difficulties experienced by students who “failed” the State of Washington’s fourth grade reading test in 1998. They did so by administering a variety of assessments to a representative sample of 108 students from 17 of 20 schools in the district who scored at level 1 or 2 of 4 on the state test and who were not served in Exceptional Student Education programs. Subsequently they analyzed the patterns of strengths and weaknesses exhibited by those students. In addition, they compiled background data, including socioeconomic status and home language.

Components of reading assessed during the study included phonemic awareness, word identification, reading fluency, vocabulary and reading comprehension. Two subtests from the *Comprehensive Test of Phonological Processing*, Phoneme Deletion and Phoneme Segmentation, were used to measure phonemic awareness. Two subtests of the *Woodcock-Johnson Psycho-Educational Battery-Revised (WJ-R)*, *Letter-Word Identification* and *Word Attack*, were utilized to measure word identification skills. The *Peabody Picture Vocabulary Test-Revised (PPVT-R)* served as a measure of receptive vocabulary.

Of particular utility was the *Qualitative Reading Inventory II (QRI-II)*, which provided information about a number of components of reading: reading accuracy, reading comprehension and reading fluency. The researchers recorded errors verbatim as students read aloud narrative and expository passages from the *Qualitative Reading Inventory II*, an individually administered informal reading inventory, and then analyzed the errors made by students. Students also answered comprehension questions. This instrument provided a measure of reading rate, which was supplemented by the use of the four-point *NAEP* scale to rate reading expression.

Buly and Valencia also supplemented the scores available from the state's performance-based reading assessments with students' oral reading of one narrative and one expository passage from the test, of approximately 200 words each. Thus, a direct measure of students' ability to decode the actual test selections was obtained.

Descriptive statistics indicated that students who fell below proficiency level on the state reading assessment performed below grade level, on average, on all components of reading measured. A factor analysis yielded these factors: word identification, fluency and meaning. The authors summarized their findings with respect to word reading: *for many students, poor performance on the test was likely not due to a fundamental lack of decoding or word identification ability* (p. 226).

With respect to meaning, which included both vocabulary (*PPVT-R*) and comprehension measures, students *struggled to demonstrate meaning* (p. 227). The scale score of 90 on the *PPVT-R* was two-thirds of a standard deviation below the mean while the grade equivalent scores on the *QRI-II* comprehension measures were high 2<sup>nd</sup> grade when students were tested in the fall of 5<sup>th</sup> grade. The authors arrived at the following conclusion:

*Although difficulty with word identification could contribute to difficulty with comprehension, overall these students could decode at a higher level than they comprehend. For example, only 24% of the students scored at a 4<sup>th</sup> grade instructional level for comprehension on the narrative *QRI* passage, yet 65% of the students were able to adequately decode the words in these passages at an instructional level (i.e., 90% accuracy or better). There were similar discrepancies between decoding and comprehension for the expository passages. These data suggest that many students struggled more with meaning than they did with word identification.* (p. 227)

Finally, with respect to fluency (reading rate and expression), students in this study *averaged just 85 words per minute, substantially below the 'basic' and 'below basic' students on NAEP* (p. 228). Students averaged just over 2 on the four-point *NAEP Fluency Scale*. The authors noted that in the *NAEP* sample (National Center for Education Statistics, 1996), students who scored 1 or 2 on the same scale were judged to be non-fluent readers; on average they read at a rate of 89 words per minute and scored below the basic level on comprehension.

A very informative and interesting part of the study was the cluster analysis, which moved beyond group averages to examine patterns of individual students within the larger group. The general pattern that emerged from the group means and factor analysis, that is, performance slightly below grade level in word identification but substantially weaker in comprehension and fluency, did not fit all or even a majority of the students, according to Buly and Valencia. The table below displays the various profiles identified, the percentage of students assigned to each, as well as a basic description of each profile. The authors used individual students to illustrate the clusters; these descriptors are presented in a more general form in the table.

**Table 10. Profiles of Students Who Do Not Read at Proficiency Level on State Assessments**

CLUSTER/PROFILE NAME	PERCENTAGE OF SAMPLE	DESCRIPTION
Clusters 1 and 2: "Automatic Word Callers"	18% of the Sample	<i>The students in Clusters 1 and 2 have a similar pattern: they are relatively stronger in word identification and fluency than in meaning. We call these students 'automatic word callers' because they can read the words quickly and accurately but fail to read for meaning. More than 60% of the students in these clusters are second language learners; most of them are poor and receive free and reduced-price lunch. (p. 229)</i>
Cluster 3: "Struggling Word Callers"	15% of the Sample	<i>Students in Cluster 3 look somewhat similar to those in Clusters 1 and 2; they are relatively stronger in fluency and word identification skills than they are in meaning. However, unlike the students in Clusters 1 and 2, the Cluster 3 profile represents students who are experiencing some difficulty in word identification. (p. 230) [Note that some students in this cluster were former ESOL students]</i>
Cluster 4: "Word Stumblers"	18% of the Sample	<i>[This] cluster is comprised primarily of students from English-speaking families, the majority of whom are not considered poor, especially compared to students in the other clusters. Meaning is a relative strength for [these students who have] considerably more difficulty with word identification (p.230), which in turn may contribute to low fluency scores. The student used to illustrate this cluster relied heavily on context and with persistence was able to correct many of her initial errors.</i>
Clusters 5 and 6: "Slow and Steady Comprehenders"	24% of the Sample	<i>... members of this cluster. ... came from homes in which English was spoken, performed in the average range on the PPVT-R, and scored 'proficient' on the state writing assessment. ... students in these clusters. ... read slowly, yet their word identification and comprehension abilities are relatively strong (p. 231).</i>
Clusters 7 and 8 "Slow Word Callers"	17% of the Sample	<i>The students in these clusters are word callers like those in Clusters 1 and 2. However, these students are not automatic; they lack fluency. Overall, these clusters best represent the pattern suggested from the overall descriptive data: accurate readers who are both slow and struggle with meaning. A high percentage of this group performed at level 1 on the state reading assessment (pp. 231-232). Based on the examples for this cluster, some students have difficulty with receptive vocabulary, others with complex reading material in a second language.</i>
Clusters 9 and 10: "Disabled Readers"	9% of the Sample	<i>These students were low in all these areas: word identification, fluency and meaning. Most telling, however, is their dramatic difficulty with word identification which placed most of these students at 1<sup>st</sup> grade level or below in word identification. With word identification so low, fluency and comprehension difficulties are likely to follow, creating readers who are struggling on all fronts. Not surprisingly then, the majority of the students in these clusters performed at level 1 on the state's 4<sup>th</sup> grade reading assessment. (p. 232)</i>

As the researchers make abundantly clear, notification that a child failed to meet the proficiency standard on a state assessment does not signal what the child needs to learn to achieve at a higher level. Even if one administered a battery of diagnostic tests to the group of low achievers and looked at the average score in the various components of reading, one would not have the whole story, as

*Reading failure is multifaceted and it is individual. In short beneath each failing score is a pattern of performance that holds the key to improved reading instruction and, consequently, improved reading ability. (p. 232)*

Based on the study conclusions, Buly and Valencia made policy recommendations regarding curriculum, alignment, indicators, resources and evaluation of progress. Rather than mandating the use of specific, predetermined (read "one size fits all") curricular programs and instructional strategies, policies should support probing beneath test scores to avoid superficial interpretations and actions. The use of *multi-faceted indicators* of student reading abilities and *finer grained analysis* of the problem were suggested. In regard to curriculum alignment with assessment and content standards, the authors reminded us *The aim is not simply to teach the standards, it is to teach the student* (p. 234) and endorsed the use of curriculum frameworks that articulate grade-level expectations but also a developmental perspective. Instructional resources suitable for a wide range of reading abilities are among their recommendations. They noted that students reading substantially below grade level need more instructional time and instruction that is more precisely targeted to their specific needs. The authors emphasized the importance of intensive staff

development as another important resource. Finally, as they evaluate the success of reform efforts, policy makers, researchers and administrators were urged to take seriously the complexity underlying test performance and the variability among students. They concluded their discussion of the research with the following statement:

*In sum, this research is a vivid reminder of the complexity of reading performance and the potential danger of policy that fails to acknowledge this complexity or strategies for dealing with it. No single measure or intervention can possibly meet the needs of all, or even most, of the students who are experiencing reading difficulty. If we take seriously the intent of standards-based reform, which is to improve the quality of instruction and student learning rather than simply to measure and report it, then policies are needed that support people in becoming more knowledgeable, focused and responsive. We must remember that 'below the bar' are individual children with different needs, and behind them are teachers who need policies that support thoughtful teaching and learning. (p. 235)*

### **Research of Lucy Calkins and Colleagues**

*A Teacher's Guide to Standardized Reading Tests: Knowledge Is Power* by Lucy Calkins, Kate Montgomery and Donna Santman with Beverly Falk (1998) also influenced the study team at the planning stage of our research. This book reports on the work of a study group that included staff from the Teachers College Reading and Writing Project, classroom teachers, principals and reading specialists from Project schools, and two educational psychologists from the Educational Testing Service (ETS), who observed children as they took simulated tests, documented current test preparation methods, and focused attention on ways to do wise and effective test preparation. Among the reasons they listed for more effective methods was the following statement:

*If we make our methods of test preparation more potent, we can condense test preparation into short, powerful bursts at just the right times. We can feel more in control as a teacher, and there will be less risk that the test preparation will leak out all over the curriculum spoiling everything. (p. 8)*

These professionals brought to this work their concerns that test preparation not dominate the entire reading curriculum but also realized that if their students were to do well on the required tests, they deserved practice and coaching. The members of the study group realized that they had not approached test preparation in the thoughtful way they studied other aspects of the curriculum and instructional practice. In reflecting on the customary way of preparing students by giving them a practice test, one of the group coined the phrase *Test practice is not test preparation*, which they said to themselves time and again in the course of the study. The group wondered why they had not followed in test preparation their instructional model of discussion, modeling, practice, observation and coaching that served them well in other areas of curriculum.

To increase their understanding, the team began by observing what they as adults did as they worked through a fifth grade test. In their discussion they realized that their own approaches to the test varied considerably. Some of them looked first at the questions; others read the passage first but with awareness that they would soon be answering questions. Most went back and forth between the questions and passage. They agreed they didn't read as they normally would; instead, they behaved as they would behave in solving a puzzle, playing a game or participating in a contest.

Next the team turned their attention to their students, particularly those that were skilled at taking tests, to see if common patterns were evident; both observations and interviews of students occurred. The children who were skilled readers mirrored the adults with some first reading the questions and some the passages. All moved back and forth from the questions to the passages with ease. In the context of a test situation, the skilled readers didn't spend time relating the passage to their own lives or evaluating whether they agreed with some action. The study team concluded that reading a test as one would read a book of interest is not particularly helpful. The teachers in the study think that helping children realize that this kind of reading is different from what they do day to day is useful: *We decided it was important to help children read in a sit-up, take-hold-of-their-pencil, find-out-what-they want kind of way* (p.84). The team tried to help children read the test passage as if they were playing a video game they wanted to ace. One teacher used the analogy of a scavenger hunt, with a list of questions instead of objects; she reported a remarkable transformation in the classroom with children leaning forward and exclaiming as they spotted relevant information *Got it!* or *There it is*. The children were not passive in their approach but leaning forward and engaged. Students were encouraged to mark the test passages even though the test directions indicated otherwise; the testing personnel involved in the project knew of no adverse consequences for students who did so. Over time, the study group developed a repertoire of strategies to be used by test takers. One teacher used an overhead projector and modeled for students how she would take a reading test. She did some underlining as she worked through the passage.

Another finding of the study team was that although students read with anticipation of answering questions, after they picked out an answer they did not go back to the passage to confirm their choice, instead relying on memory. Once they persuaded children of the importance of going back to verify, the teachers realized they needed help in doing so efficiently. They encouraged children to jot key words in the margin; this strategy proved to be effective for some students but not for others. Some children were put off by the dense print; teachers enlarged examples to show the children that the appearance didn't mean they couldn't read the words.

The authors made the point that reading on a standardized test is like no other kind of reading. Orienting children to test formats is helpful, such as passages followed by answers versus cloze-type passages where missing words are to be supplied by the person tested. The team also spent time discussing the language of tests with students, sometimes referred to as "hyper-English"; some of these words are found in the questions rather than the passage.

Perhaps the most interesting part of the book was Chapter 8 - *Mastering the Tricks and Avoiding the Traps*. The authors noted that in classrooms across the country teachers do one thing as test preparation: they give kids a practice test and then go over the correct answers; these questions will not be on the test. Calkins and her colleagues recommended another approach:

*We discussed with students how it's important to look for evidence from the text, instead of personal opinions, to support answers, and how they might write key words alongside paragraphs to help them go back to the right part of the passage for answers. Or we discussed strategies for deciding what the question is really asking. Our emphasis was always on teaching the students strategies they could use again and again, for many passages, on many tests.* (p. 106)

The members of the study group experimented with various ways to understand children's reasoning as they worked on tests; one such method was to interrupt a child working on a test to ask questions about what the child was observed doing. Asking the child not just why he chose an answer but rather requesting the child to walk the teacher through the process the child followed in selecting an answer proved to be particularly helpful. Another strategy that proved fruitful was to ask the kids why they rejected certain answers. Specific suggestions included the following questions:

- C Why did/didn't you choose this answer? And why/why not this one? And this one?*
- C What was your thinking as you worked through this question? Can you show me all the thinking you went through before you came to this answer?*
- C I noticed you doing. . . Why? Why did you look up at the first paragraph/look down at the question/turn back the page/stop for a minute/do it quickly/do it slowly/roll your eyes?*
- C Interrupt them to ask, What are you doing/thinking/where are you looking right now?*
- C When you have a hunch or theory, ask a particular question to confirm or disprove it: Do you know what that word means? Is all the print on this page distracting you, or is it fine? Do you think this is a confusing question? (p. 110)*

A caution was not to accept students' first response but to follow up with probing questions. Over time students understood more clearly that the expectation was that they would be able to explain their reasons for selecting a particular answer. Above all, the authors advised those studying this issue to assume the student chose a particular answer for a reason and that if you understand his rationale when in error, you have the key to improving performance. If students justify their answer based on a conversation with a parent or a television show they saw, you know where to begin. Relying on opinions, memories, or personal experiences is what we do in conversation but is not effective when taking a test.

Each of these studies, one formal and the other more informal, provided a useful frame of reference in thinking about what we needed to know and possible ways to gain insight about the test-taking strategies employed by the African-American boys in our earlier study and Hispanic boys in the current study. Buly and Valencia confirmed our own view that different youngsters fail to demonstrate reading proficiency for a variety of reasons and that we need to understand the types of problems the boys are experiencing as well as their prevalence. The hands-on work with children reported by Calkins and her colleagues convinced us of the insights to be gained by more informal action-oriented research. As the reader continues with the study methodology, the influence of these studies will be readily apparent.

## Evaluation Purpose, Questions and Methodology

This section of the report provides information about the purposes of the action research and the methodology.

### Purpose and Questions

The purpose of the collaborative research conducted by reading coaches with support from program supervisors and a district program evaluator was to study in depth a sample of boys performing at level 1-2 on *FCAT* Reading; to identify salient patterns of strengths and developmental needs across the sample; and to determine how best to help increase their level of reading competence. A group of skilled readers (*FCAT* level 4-5) was included for purposes of comparison. The overarching question for the action research conducted was as follows: **What is different about Hispanic boys in grade 4 who obtain level 1-2 scores versus level 4-5 scores on the state reading assessment?** Specific questions included, but were not limited to, the following:

1. What do in-depth case studies of a sample of Hispanic boys who scored at *FCAT* Reading levels 1 and 2 in fourth grade reveal to us about the level of text that they can read with comprehension as well as their strengths and weaknesses with respect to the components of the reading process? How do their profiles compare with profiles of Hispanic boys who are skilled readers (*FCAT* Reading levels 3, 4 and 5)?
2. What other factors may contribute to the gap in the reading achievement within the sample of Hispanic boys? Do poor readers differ from skilled readers with respect to these factors?
  - Participation in pre-kindergarten and kindergarten programs
  - Mobility
  - Participation in summer school programs
  - Retentions
  - Attendance
  - Behavior
  - Socioeconomic status (subsidized lunches as a proxy)
  - Limited English proficiency status, home and native language, participation in programs for English language learners
  - Access to books and other print materials
  - Family support for reading
3. What factors contribute to low levels and high levels of reading performance in the particular setting of a group-administered standardized test?
  - Are students able to read accurately the level of text that they encounter on standardized tests?
  - Is reading rate a barrier to success because of the number and length of test passages?
  - Do students understand the questions posed on the test?
  - What strategies do students use to select an answer? Do they go back to the passage to look for clues.
  - Do students select plausible answers but ones not embedded in the selection?

4. When the in-depth case studies of the sample of Hispanic boys are compared and analyzed inductively, what different profiles or clusters of strengths and weaknesses become salient? How do these profiles compare to the profiles of Hispanic boys who are skilled readers?
5. Based on their analysis of the data, what recommendations does the study team make to meet the needs of Hispanic boys who are not considered proficient readers (based on the *FCAT*)?

The questions are illustrative of types of information sought but in no way were considered a barrier to searching, reflection, and personal insight on the part of reading coaches, district staff, teachers or the children themselves as to the nature of the problem of why Hispanic boys are disproportionately poor readers on the *FCAT*. The findings and recommendations are relevant to decision makers at many levels, first and foremost at the school level. As mentioned, the study supports the district goals of increasing the percentage of students scoring at level 3 or higher on *FCAT* and of eliminating the *FCAT* achievement gap in reading.

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### **How the Research Was Conducted**

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The research utilized a practical, problem-solving approach to determine barriers that keep many Hispanic boys from demonstrating reading proficiency on the *FCAT*. The study team of reading coaches, the elementary reading/language arts team and district evaluator worked together to select the students; to select appropriate assessments; to identify or develop other survey instruments to collect data determined to be of value in studying the problem; and to work out procedures to collect and analyze the data. Many instruments utilized in the prior study were revised.

The study was conducted in the Spring of 2006 and utilized multiple methods and both qualitative and quantitative data to answer the questions posed by the study team. Initially, a case study approach was used to obtain detailed information about the reading skills, vocabulary, development and many other characteristics of each of the Hispanic boys so that we could understand their stories. In conducting the case studies, however, we used the same instruments and procedures so that we would be able to identify common patterns in the data in order to generalize about the Hispanic boys who are low versus high achievers and to determine how the curriculum and instructional practices might be improved to better meet their needs.

#### **THE BOYS SELECTED TO PARTICIPATE**

Rather than looking at limited amount of data for large numbers of students, this action research was designed to study in great depth a limited number of Hispanic boys to better understand their low level of achievement in reading. As members of the study team discussed how to select the boys in a way that would be purposeful in providing the most information-rich cases possible, they arrived at the conclusion that including boys at both the low and the high ends of the *FCAT* scale would be helpful. We would have data on the level 1 and 2 readers but would also have, for purposes of comparison, data on model readers who scored at the high-end of the range, that is, at levels 4 and 5.

A pool of Hispanic boys in grade 4 was identified in the planning stage based on criteria established by the study team. By-school lists were generated of Hispanic boys in grade 4 who scored at levels 1, 2, 4, and 5 on the 2005 *FCAT Reading*, which was used as a preliminary screen while awaiting the dissemination of 2006 *FCAT Reading* scores. In addition to all girls and the boys who scored at level 3 on *FCAT Reading*, the following categories of students were excluded: students in Exceptional Student Education programs with the exception of those in speech and gifted

programs; and Limited English proficient students who were non-English monolingual (LY-A) or non-English predominant (LY-B). The intent was to focus, as did Buly and Valencia, on students who were not being served by special programs but who failed to demonstrate proficiency in reading on the state reading assessment. We were also interested in identifying a comparison group from the same racial/ethnic group who were highly proficient readers.

To select the preliminary sample, the schools were ordered by percent free and reduced price lunches. Alternating between a non-proficient reader and a highly proficient reader, the preliminary sample was selected. Thus, we selected low and high performing students from schools of similar socioeconomic status. Within a particular school, one student was randomly selected from the list of students eligible based on the criteria cited above. When the 2006 *FCAT Reading* scores were available, students who no longer fit the category of non-proficient readers or highly proficient readers were excluded; however, a few students who scored a level 3 but with borderline score were kept in the sample. The final sample of non-proficient readers included 26 Hispanic boys who were rated *FCAT* level 1 or 2 (non-proficient) readers in 2006 and 1 other student who was a very low level 3 student. The proficient readers included 17 Hispanic boys who were *FCAT* level 4-5 readers and 6 others who were high level 3 readers but with above-average *FCAT NRT* scores.

### **REVIEW OF RECORDS**

The student data base was utilized to obtain information about the school history of the boys in the study: whether they participated in the district's pre-kindergarten and kindergarten programs; the number of schools attended; the number of years they attended summer school; how often they had been retained; their attendance records; their history of disciplinary incidents; whether their meals were subsidized; whether they were served as English language learners; and their native language and home language.

### **READING ASSESSMENTS AND PROCEDURES**

Evaluating each boy's profile of strengths and weaknesses as a reader was the central component of the proposed research. As they considered what instruments to use to gather data, the study team was mindful of the demanding schedule of reading coaches and teachers, particularly with respect to assessment at the end of the school year. For this reason, to evaluate the reading skills of the sample of Hispanic boys, they opted to use, whenever possible, tests already in use in the elementary schools. Each of these is described in the paragraphs that follow.

***Florida Comprehensive Assessment Test (FCAT).*** The *Florida Comprehensive Assessment Test*, or *FCAT* as the comprehensive state achievement test administered in the spring to Florida students in grades 3 to 10 is widely known, includes both criterion-referenced and norm-referenced tests. The major subject areas tested are reading (grades 3-10), mathematics (grades 3-10), science (grades 5, 8, and 11), and writing (grades 4, 8, and 10). Relevant for our purposes were the *FCAT Reading Sunshine State Standards* (referred to as *FCAT Reading SSS*, *FCAT Reading*, or simply *FCAT*), the criterion-referenced test used to assess student achievement of the *Sunshine State Standards*, and the *FCAT Reading Norm-Referenced Test (FCAT Reading NRT or FCAT NRT)*, used to measure achievement in relation to students across the country.

The criterion-referenced *FCAT Reading SSS* yields a level score of 1 (low) to 5 (high) based on a vertically scaled developmental score (approximately 1-3000). The levels of the *FCAT* are described in state documents:

<b>Level 5</b>	This student has success with the most challenging content of the <i>Sunshine State Standards</i> . A student scoring in Level 5 answers most of the test questions correctly, including the most challenging questions.
<b>Level 4</b>	This student has success with the challenging content of the <i>Sunshine State Standards</i> . A student scoring in Level 4 answers most of the test questions correctly, but may have only some success with questions that reflect the most challenging content.
<b>Level 3</b>	This student has partial success with the challenging content of the <i>Sunshine State Standards</i> , but performance is inconsistent. A student scoring in Level 3 answers many of the test questions correctly but is generally less successful with questions that are the most challenging.
<b>Level 2</b>	This student has limited success with the challenging content of the <i>Sunshine State Standards</i> .
<b>Level 1</b>	This student has little success with the challenging content of the <i>Sunshine State Standards</i> .

The table below lists the achievement levels for *FCAT SSS Reading* along with the scale score ranges associated with each achievement level, by grade level. The table lists the achievement levels and developmental scale score ranges that are used to determine the student's success on the *FCAT*. Students who score at level 3 or higher are considered to have met the reading proficiency standard.

**Table 11. *FCAT* Achievement Levels for 2006 *FCAT* Score (Developmental Scale Score)**

<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Grade</b>
86-1045	1046-1197	1198-1488	1489-1865	1866-2514	<b>3</b>
295-1314	1315-1455	1456-1689	1690-1964	1965-2638	<b>4</b>
474-1341	1342-1509	1510-1761	1762-2058	2059-2713	<b>5</b>
539-1449	1450-1621	1622-1859	1860-2125	2126-2758	<b>6</b>
671-1541	1542-1714	1715-1944	1945-2180	2181-2767	<b>7</b>
886-1695	1696-1881	1882-2072	2073-2281	2282-2790	<b>8</b>
772-1771	1772-1971	1972-2145	2146-2297	2298-2943	<b>9</b>
884-1851	1852-2067	2068-2218	2219-2310	2311-3008	<b>10</b>

The *FCAT Reading NRT*, a version of the *Stanford Achievement Test - 10<sup>th</sup> Edition*, yields norm-referenced scores (e.g., national percentiles and stanines). The tenth edition of this group achievement test was developed to incorporate changes in curriculum, update norms, and provide for continuous assessment of subject matter aligned with national standards and curriculum. The Reading Comprehension Test includes literary, informational and functional reading material, which were described in a document developed by the Florida Department of Education and Harcourt Assessment, Incorporated (2005):

***C Literary*** - material typically read for enjoyment or literary merit, including folk tales, historical fiction, contemporary fiction, humor, and poetry. Approximately one-third of the reading selections fall into the literary category

***C Informational*** - material typically found in textbooks and other sources of information, including content from the natural, physical, and social sciences. Approximately one-third of the reading selections fall into the informational category.

***C Functional*** - material typically encountered in everyday life, such as directions, forms, labels, and advertisements. Approximately one-third of the reading selections fall into the functional category

p. 3

The types of questions that students answer about the various types of passages are classified in the supporting documents by the following standards:

- C **Initial Understanding** - comprehend explicitly stated details or relationships in a variety of reading selections.*
  - C **Interpretation** - form an interpretation of a variety of reading selections based on implicit information in the selections and discern ideas that go beyond the text..*
  - C **Critical Analysis** - synthesize and evaluate explicit and implicit information in a variety of reading selections*
  - C **Strategies** - recognize and describe strategies used by the author or apply appropriate reader strategies in given situations.*
- p. 4

In the course of the action research, the *FCAT* scores were used in several ways. The *FCAT Reading SSS* scores from 2005 were used initially to identify the pool of students eligible to participate (as described above) and when the 2006 *FCAT* scores became available, they were used to confirm eligibility. At the analysis stage, both the *FCAT Reading SSS* and the *FCAT Reading NRT* scores were among data used by the study team to determine the reading comprehension level of students.

**FCAT Reading Practice Test, Grade 4, Form D.** A key component of this action research was the administration of the *FCAT Reading Practice Test*, recently developed in the Hillsborough County Public Schools under the direction of the Supervisor of Data Analysis in the Department of Assessment and Accountability (Watts, 2004). Based on the *FCAT* item specifications, test items at grades 3 to 10 were developed with the involvement of reading supervisors, reading coaches and teachers. After the items were field tested in the district, they were reviewed based on the data collected and field tested again to verify item difficulty and to establish preliminary score levels. Then students from 10 randomly selected elementary schools and 5 randomly selected middle schools were administered the appropriate level test.

When *FCAT* scores became available and the distributions of p-values were analyzed, the *FCAT Reading Practice Tests* were judged to be similar to the *FCAT* in terms of their overall difficulty level, although the district's elementary practice tests were *much shorter in length, [and] did not have items that were as easy or as difficult as the FCAT* (p.3). Predictive validity for the practice tests was examined using two statistical approaches: correlations between students' scores on the *FCAT Reading Practice Test* and their scores on the *FCAT* and a discriminant analysis to determine how well the practice tests classified students into *FCAT* levels. At grade 4, the grade level of most students in our study, the correlation of the *FCAT Reading Practice Tests* to the *FCAT* ranged from .589 to .689. The correlational data were subsequently used to revise score interpretation for each practice test. The discriminant analysis indicated that at grade 4, the *FCAT Practice Test* accurately predicted their *FCAT* reading level in 65.7% to 68.6% of cases.

As the questions generated to guide the action research clearly indicate, the study team was interested in looking behind the overall scores attained by our sample of Hispanic boys to examine their profile of strengths and needs in reading, and in particular, their *modus operandi* for taking tests. For this reason, special procedures were developed for the administration of the *FCAT Reading Practice Test*, a key component of the action research. One of the reading coaches on the study team took the lead in developing and trying out procedures that would provide detailed information about how the boys go about taking a test like the *FCAT* and the strengths and weaknesses they exhibit as they work through the test. Directions and observation forms were developed for use by reading coaches at the participating schools so that they would administer the *FCAT Practice Test* in accord with procedures worked out by members of the study team.

Form D of the district's *FCAT Reading Practice Test* included two passages, an expository passage of 490 words and a narrative passage of 668 words. The practice test was administered to each student to complete silently as he would do on the state test. As the student worked on his own, the reading coach who administered the test made notes on the *Observation Guide Part I*. For example, the coach noted what the student did prior to reading, whether he flipped through the test booklet or looked at any of the questions in advance. Observations were made while the student read the test passage: whether or not he read the entire selection at once; whether he pointed at or underlined words or made any notes in the margin; whether he subvocalized. The coach made notes on the student's modus operandi in selecting answers to the questions: whether he appeared to read all answer options; whether he looked back in the passage and for which questions; and whether he was able to go back to relevant text with ease or did so with difficulty, for example.

Subsequently, the student was asked to read aloud the test questions and answer options, and then to explain why he chose the answer he did and why he eliminated alternative answers. Coaches recorded student responses as close to verbatim as possible. Following the recommendation of Calkins, the student was not only asked about why he selected the answers he did but also about why he had rejected other answer options. A coding system was provided to the coach, based on observations in our prior study of African-American boys. At the end of the session, or soon thereafter, the reading coach reviewed the record of responses and used a checklist to report effective and ineffective strategies that the child was observed to use when selecting his answers.

In addition, the reading coach made a *running record* as the student read aloud the 170-word sample from the expository passage and the 221-word sample from the narrative passage. That is, the coach recorded on a copy of the test exactly how the samples of text were read, thereby providing the study team with information about the errors made by the student on text at the student's grade level. The student's percent accuracy in reading words was recorded on a grid developed for that purpose. Based on the number of errors, the reading coach indicated whether the student was able to read each passage at an independent reading level (95%-100% accuracy), at the instructional reading level (90% to 94% accuracy) or at the frustration level (less than 90% accuracy). The reading coach also noted whether the student repeated words or phrases as he read and whether the student tended to self-correct his miscues.

The district has focused increasingly on the implementation of reading fluency as a result of participation in Reading First but also based on the work of Timothy Rasinski (2003) who has provided staff development in the district on several occasions. Rasinski, in discussing research by Pinnell et al. (1995) reported that:

*Rubric scores enabled researchers to differentiate fourth graders' oral reading, even after they had practiced the text twice. Moreover, they found a correlation between rubric ratings and students' performance on a silent reading test. Students who scored highest on the rubric (levels 3 and 4) also scored highest on a silent reading comprehension test, and those with the lowest rubric scores (levels 1 and 2) received, on average, the lowest scores on the comprehension test. (p. 173)*

Based on some of Rasinski's suggested procedures (pp. 169-173), directions and a form were prepared for reading coaches to record information about the reading fluency of the boys when they were tested in the spring of 2006. The reading coaches calculated the student's words correct per minute on each passage and rated each student on an adapted version of the *NAEP Oral Reading Fluency Scale* included in Rasinski's book (p. 174).

## Exhibit 1. Adapted NAEP Reading Fluency Scale

### Adapted Version of NAEP's\* Oral Reading Fluency Scale

- Level 1:** Reads primarily in a word-by-word fashion. Occasional two-word and three-word phrases may occur, but these are infrequent. Author's meaningful syntax is generally not preserved. Passage is read without expression or intonation. Reading seems labored and difficult.
- Level 2:** Reads primarily in two-word phrases with occasional three- or four-word phrases. Some word-by-word reading may be present. Word groupings may be awkward and unrelated to the larger context of the sentence or passage. Passage is read with little or inappropriate expression or intonation.
- Level 3:** Reads primarily in three- or four-word phrases. Some smaller phrases may be present. Most of the phrasing is appropriate and preserves the author's syntax. Some of the text is read with appropriate expression and intonation.
- Level 4:** Reads primarily in longer, meaningful phrases. Although some regressions, repetitions, and deviations from the text may be present, these do not appear to detract from the overall structure or meaning of the passage. The reading preserves the author's syntax. Most of the text is read with appropriate expression and intonation. A sense of ease is present in the reader's oral presentation.

\*National Assessment of Educational Progress

The reader can see that the NAEP scale provides a comprehensive rubric to rate reading fluency, including prosodic elements. According to Rasinski, students rated at levels 1 and 2 have not achieved a minimal level of fluency for the grade level at which the passage is written.

To summarize, when the *FCAT Practice Test* was completed, the information obtained was not limited to a score. Available to the study team was a comprehensive data set that included running records of his errors on samples from two passages of an *FCAT Practice Test*; the coach's appraisal as to whether he used self-monitoring strategies; his explanations of his choices of answers to test items; a completed checklist of effective and ineffective comprehension strategies observed; and a rating of his reading fluency as well as his words correct per minute when reading aloud the samples of text from the passages on the *FCAT Practice Test*.

### ASSESSMENT OF VOCABULARY DEVELOPMENT

The issue of vocabulary development surfaced early in the study team planning sessions as a likely contributing factor to low levels of reading achievement for at least some of the Hispanic boys in the study. Several instruments already in use in the district were identified for use in the study. The *Diagnostic Assessments of Reading* include one subtest that provides information about vocabulary development. Additionally, the reading coaches had already been trained in the use of the *Peabody Picture Vocabulary Test-III*.

**Diagnostic Assessments of Reading (DAR).** The *Diagnostic Assessments of Reading (DAR)*, published by the Riverside Publishing Company, made available to districts by the Florida Department of Education, is part of a larger program entitled the *Diagnostic Assessments of Reading with Trial Teaching Strategies (DARTTS)* that was developed to help teachers understand students' strengths and weaknesses in reading in order to develop a sound program of instruction. This test was built on the theory that three basic components underlie reading comprehension: *language, cognition, and reading skills* (Crehan, 1995). Developed for use with students reading from first grade level through high school level, the *DAR* is comprised of six tests: Word Recognition, Word Analysis, Oral

Reading, Silent Reading Comprehension, Spelling, and Word Meaning. The test administrator determines the reader's highest mastery level (70% to 80% correct depending on the format of the particular test). It is important to note that the item and descriptive statistics were based on results of a validation study done in 1990-1991 with teacher-identified underachieving students. ***The DAR Word Meaning Test*** was the particular test utilized in the study of Hispanic boys. On this test, the student is asked to define words that the test administrator reads aloud from lists of increasing difficulty. This subtest is intended to be used, in the absence of a cognitive or intellectual abilities measure, as an estimate of cognitive or language abilities, *not based on reading achievement* (Riverside, 1992, p. 4). The test is relatively demanding in that the student does not choose one of a number of possible answers but must generate his own explanation of the word's meaning.

***Peabody Picture Vocabulary Test-III (PPVT-III)***. The *Peabody Picture Vocabulary Test-III (PPVT-III)*, an individual orally administered listening vocabulary test designed to be used with standard English speaking children (Bessai, 2001), yields normative scores. The test is designed to be used with children from age 2.5 to adults age 90. This test is known to be easy to administer and to provide useful screening-level information about receptive vocabulary.

Reading coaches had received staff development in administering the *PPVT-III* as part of their job responsibilities and many of the students were administered the test as part of the requirements of Reading First. This instrument was administered to students in our study in the spring of 2006, as reading coaches were knowledgeable about the procedures and the assessment was used routinely in the district. In a few cases, the district staff assisted in administering this test.

#### **SURVEY INFORMATION AND OBSERVATION CHECKLIST**

The study team collected a variety of information through survey techniques. Teacher perceptions of the strengths and weaknesses they had observed in their students were of interest. The Hispanic boys responded to a questionnaire about their perceptions of and attitudes toward the *FCAT*, responded to questions about their reading habits, interests and their perceptions of themselves as readers. The reading coaches also made additional observations about the boys over the period of time they worked on their case study.

***Child Reading Characteristics: Teacher Questionnaire***. Teachers of students in the study were asked to complete a semantic differential scale for each student; items were related to habits of mind (e.g., effort, persistence), cognitive and language development, motivation to read, and specific components of reading (e.g., word analysis skills, fluency, reading vocabulary and comprehension). Additionally, teachers were asked to comment on their student's strengths and weaknesses in reading.

***Student Interview Regarding FCAT Reading Sunshine State Standards***. Students in the study were questioned by the reading coach about their perceptions of and feelings about the *FCAT*.

***Child Self Rating***. Elements of several forms made available by Fountas and Pinnell (2001), a Reading Interview (Appendix 46 in their book) and Self-Assessment: Reading (Appendix 52) were combined with additional items in the *Child Self Rating* form used in the study. These forms were already recommended for use in the classroom by our coaches. The form included 15 questions such as *What do you know how to do well as a reader?* and *What would you like to learn how to do better as a reader?* We were particularly interested in how often the boys read outside of school and what their reading interests are. Reading Coaches were asked to use their judgment as to whether the student should be interviewed or would be able to respond in writing to the questions.

***Child Activities and Checklist.*** One additional form was utilized as a warm-up activity for the reading coaches to get to know the youngster and develop rapport before beginning the assessments and to obtain some information of interest to the study team. Reading coaches were asked to rate the children's basic appearance; verbal fluency; ability to categorize and verbally solve a novel problem; as well as to note the children's affect and communication style. Appearance was restricted to stature for age, use of helping devices (glasses, hearing aides, etc.), and any apparent health issues. Verbal fluency was assessed in a surface manner by asking children to name as many animals as possible within one minute. Categorizing was assessed by asking children to identify a hammer, pliers, wrench and saw as tools, for example. To assess a child's problem-solving ability or ability to cope with a novel task, each was asked to explain how to get an elephant into a favorite restaurant. Responses were coded as *one elaborate response, multiple reasonable responses, minimal response, or no response/ don't know*. This was done to provide clues about their thinking, verbal ability, and creativity. Coaches were asked to rate their students on a four-point scale (with 4 representing the positive pole) on a number of affective dimensions, for example from "nervous" to "confident." Finally, coaches were asked to rate each child's most frequent communication style on a simple scale from *silent* to *paragraph-long answers*. Conversation with the children was also rated as *one-sided* or *give and take*, if applicable.

The information obtained by survey methods was intended to flesh out the data obtained by administering a variety of assessments to better understand the interests, attitudes, strengths and developmental needs of the Hispanic boys.

#### **DATA ANALYSIS AND REPORTING**

In the summer of 2006, the program evaluator and two reading coaches on the study team met to begin the process of compiling and analyzing the large amount of data collected for each of the Hispanic boys in the study. Much of the work of the study team was labor intensive, qualitative analysis. The overall approach was to first review scores for accuracy and then to develop for each of the boys an individual profile of strengths and needs based on the following components of the reading process: comprehension; fluency (reading accuracy, reading rate, overall fluency, incorporating prosodic elements); and vocabulary development. The team agreed upon standard procedures to record the data for the Hispanic boys on the individual profile sheet, procedures similar to those used in the prior study of African-American boys.

**Reading Comprehension.** On the Reading Profile form, the tests were listed by category down the left side of the page. Columns were used to indicate whether the child's level of reading achievement was below average, average, or above average. (Alternately their achievement score may be perceived as representing weakness, adequacy or strength). In making a judgment about each boy's ability to comprehend what he reads, the study team considered his scores on five different reading assessments: two years of *FCAT Reading NRT* scores (2003 and 2004); *FCAT Reading SSS* scores for the same two years; and the district *FCAT Reading Practice Test*. The assessments used in the study were developed in different ways to serve different purposes and varied with respect to readability levels. A test such as the *FCAT NRT* generally includes passages that range from a grade level below to a grade level above the grade at which the test is administered. No information was available to the study team about the readability of the *FCAT Reading SSS*; however, the consensus was that some passages may be above grade level. In contrast, the readability of the district's *FCAT Practice Test* passages were at grade level. Examining multiple sources of data is common practice in schools, and the study team worked together to make decisions about recording the information in a uniform way.

The extensive data recorded about effective and ineffective strategies used by the Hispanic boys in answering the questions on the district's *FCAT Reading Practice Test* were compiled and analyzed by the project evaluator. Illustrative examples for the report were selected from among the students' explanations of their answers, which had been recorded by the coaches.

The *FCAT NRT* data were recorded as a normal curve equivalent score in the appropriate column to indicate below-average (stanines 1-3), average (stanines 4-6) or above-average achievement (stanines 7-9). The more recent score was circled. Because the *FCAT Reading SSS* is a criterion-referenced test, a student's performance is linked to the standard rather than to the performance of other children. Technically speaking, the use of the terms *below average*, *average*, and *above average* is not appropriate; in practice, however, the correlation between the two tests is high. Based on the data collected during the evaluation of the K-2 Reading Coaches Initiative, almost all students who score in stanines 1 to 3 on the *FCAT Reading NRT* score at level 1 on the *FCAT Reading SSS*. Students who are low-average on the *FCAT NRT* (stanine 4) most often are rated at level 1 or 2 on the *FCAT*. At the other end of the distribution, most students who score in stanines 7-9 on the *FCAT Reading NRT* obtain a level 4 rating on the *FCAT Reading SSS*. Approximately a fourth of the grade 4 students in the district obtained level 4 scores in 2005 while a small percentage reached level 5. The fact that most students who receive level 1 or 2 ratings on the *FCAT* are viewed as not having met the grade level standard and are considered for retention in third grade was also pertinent. For these reasons, the study team viewed *FCAT* scores at level 1 or 2 as evidence of below-average achievement in reading. The boys targeted had been selected because of their level 1 or 2 *FCAT Reading* scores. The level 4-5 *FCAT Reading* scores of the Hispanic boys considered model readers were recorded as representing above-average achievement in reading. Again, the more recent *FCAT Reading* score was circled. The district *FCAT Reading Practice Test* contained only grade-level passages and the study team, to be cautious, simply recorded these scores (percent correct) as either below expectation (or below-average in achievement) or at expectation (or average).

Based on each child's overall performance on the five assessments, a decision was made as to whether the student's reading comprehension was below average, representing a need; average representing adequacy; or above average, representing a strength.

At a later date, the program evaluator in the Department of Assessment and Accountability reviewed and verified the mean or median scores as well as the range of scores within each group on each reading comprehension test. In addition, all of the data collected regarding how students went about answering questions on the *FCAT Reading Practice Test* were analyzed, utilizing both the observations recorded by the reading coaches as well as the record of explanations offered by the boys. Note that approximately 1,000 examples were available with the students' explanation of their answer choice. The analysis of this material was qualitative in nature and time consuming. Illustrative examples were selected for use both in the report and for staff development. A narrative report was prepared.

**Reading Fluency.** Reading fluency on the passages of the *FCAT Reading Practice* was assessed based on word reading accuracy, reading rate, and rating on an adapted version of the *NAEP Reading Fluency Scale*. Calculations of percent accuracy and words correct per minute were reviewed for accuracy by study team members. Tables were prepared contrasting the performance on the three measures of Hispanic boys who were not proficient readers based on *FCAT* and Hispanic boys who were highly proficient readers. In addition to calculating word reading accuracy rates, detailed information was compiled by student and then by group about the types of errors made and the frequency with which they occurred.

**Vocabulary Development.** Scores on two assessments of vocabulary development were also recorded on each boy's summary profile sheet by the study team. *DAR Word Meaning* scores were entered as grade level scores. *PPVT-III* scores were recorded as normal curve equivalent scores in columns representing below-average, average, or above-average stanine scores.

**Survey and Observation Data.** Survey data and additional observation data obtained from the Hispanic boys, their teacher, and the reading coaches, were compiled in the Department of Assessment and Accountability and summary tables and narrative descriptions of the findings prepared.

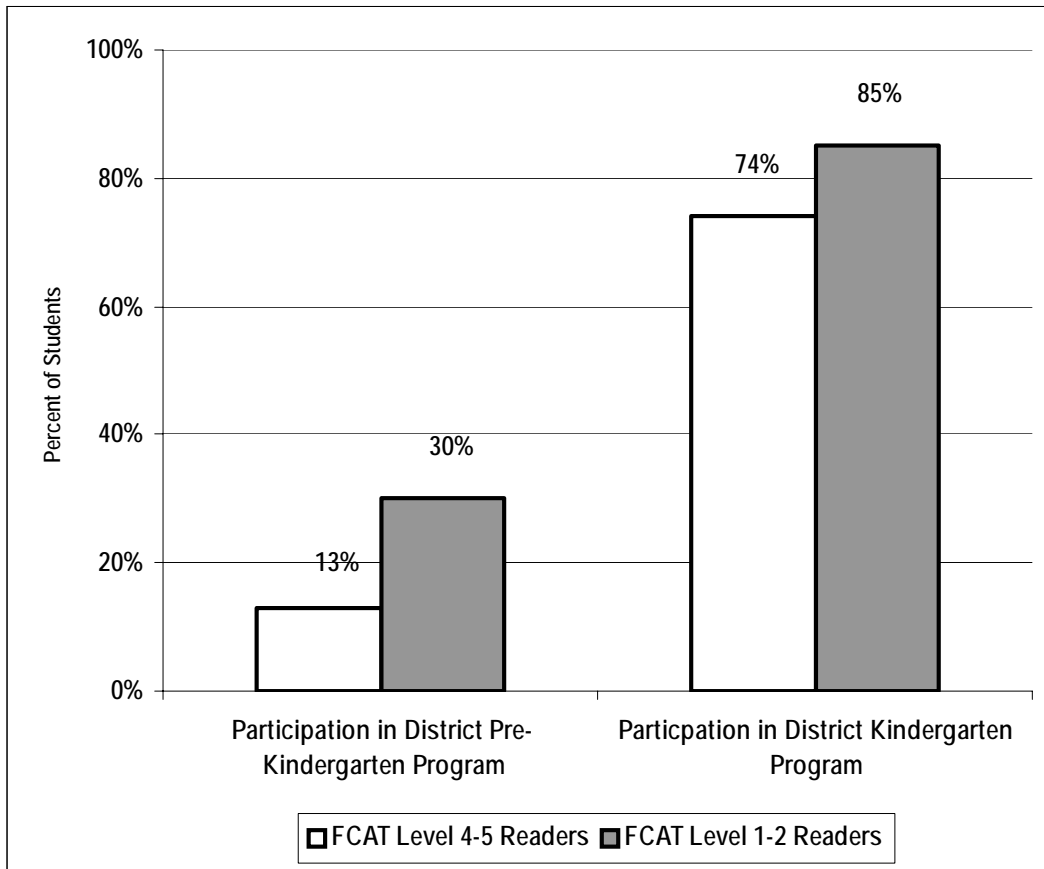
**Report Format.** The data collected in the course of the study have been summarized in narrative and tabular form and illustrated with numerous examples for use in staff development. Key findings and recommendations have been highlighted throughout the report. Findings have been shared informally with study team members and others prior to completion of the final report.

## School History

Provided below for each group of Hispanic boys, those that performed at level 4 or 5 on the *FCAT SSS Reading* in grades 3 and 4 and those that achieved at level 1 or 2, are the following types of descriptive data: participation in the district's pre-kindergarten and kindergarten programs; number of schools attended from kindergarten through fourth grade; attendance rate for the same time period; participation in summer school; retentions; whether their lunches were subsidized; and participation in programs for English language learners (ELL), native language, and home language. These data are summarized in the tables that follow.

### Participation in the District's Pre-Kindergarten and Kindergarten Program

Thirteen percent of the *FCAT* level 4-5 readers and 30% of the *FCAT* level 1-2 readers participated in a district pre-kindergarten program. Most boys in both groups, 74% of the *FCAT* level 4-5 readers and 85% of the *FCAT* level 1-2 readers, were enrolled in kindergarten in the district.

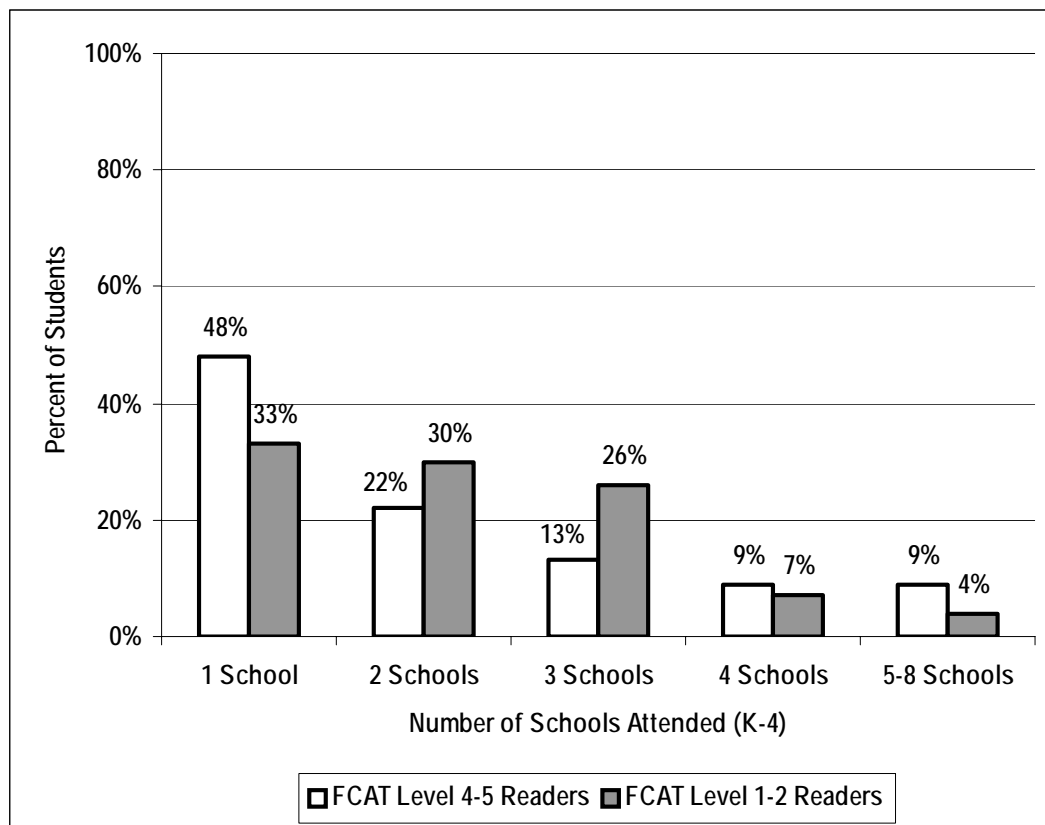


**Figure 1.** Participation in District Pre-Kindergarten and Kindergarten Programs

**Finding:** A minority of *FCAT* level 4-5 readers and *FCAT* level 1-2 readers attended a pre-kindergarten program in the district (13% and 30%, respectively); most boys in both groups attended a kindergarten program in the district (74% and 85%, respectively). Differences in participation rates are not perceived to be the cause of the difference in their achievement on the *FCAT Reading SSS*.

## Number of Schools Attended in Grade K-4

Mobility rates were roughly comparable for proficient and non-proficient readers: the mean numbers of schools attended from kindergarten to fourth grade were 2.3 and 2.2, respectively. The mode for each group was 1 and the median was 2 for each group. Most of the proficient readers and the non-proficient readers attended one or two schools during this time period. Paradoxically, the two students who transferred the most, each attending 8 schools between kindergarten and fourth grade, were two of the proficient readers.

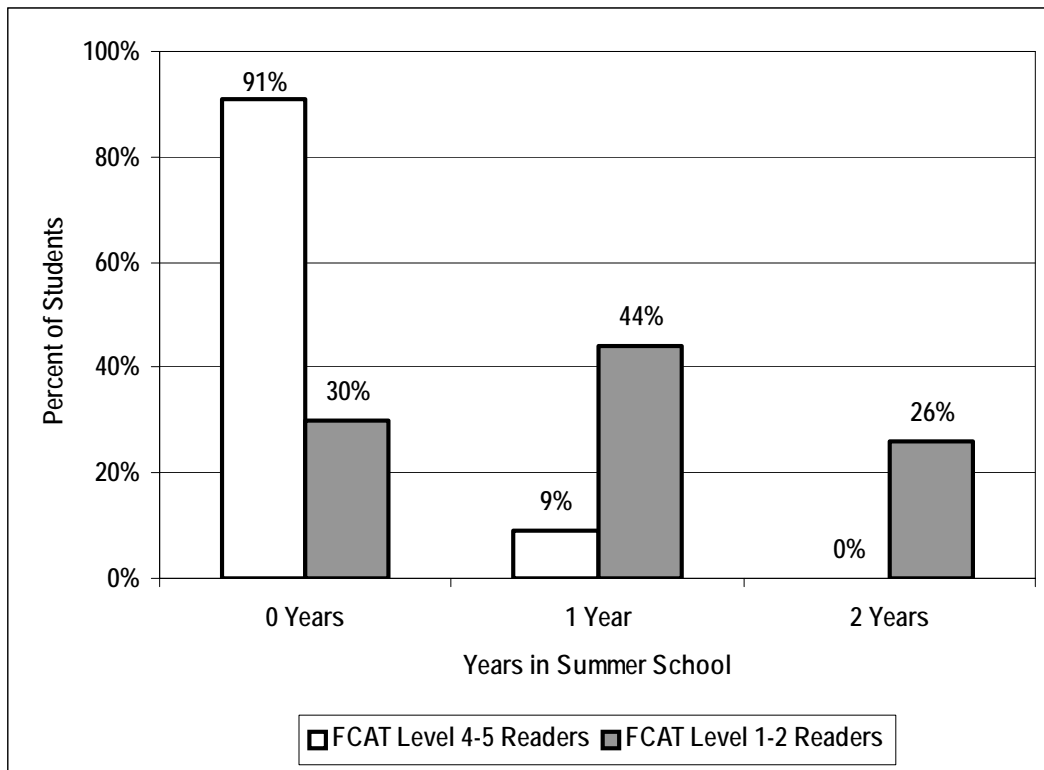


**Figure 2. Student Mobility**

**Finding:** A majority of Hispanic boys in both groups attended 1 or 2 schools from kindergarten through grades 4. High mobility was not a contributing factor in the below-average *FCAT* reading levels of most of the Hispanic boys in this study but may have been a contributing factor for a small percentage of them.

## Summer School Enrollment

Few *FCAT* level 4-5 readers (9%) attended summer school in grades K-4, one student in third grade and one student in fourth grade. In contrast most *FCAT* level 1-2 readers (70%) had attended summer school one or more times in grades K-4. Twelve non-proficient readers attended summer school once (44%), 5 students in second grade and 7 students in third grade. Seven students (26%) attended summer school twice in grades K-4. While the proficient readers averaged 0.1 years of summer school the non-proficient readers averaged 1.0 year of summer school.

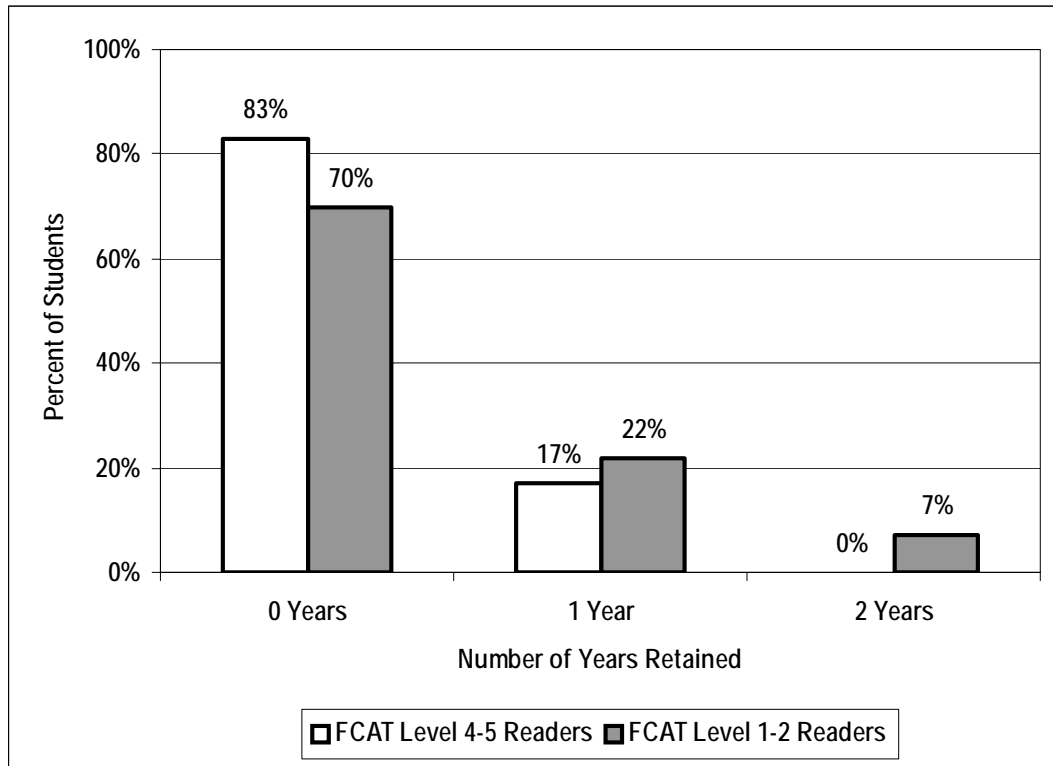


**Figure 3.** Enrollment in Summer School

**Finding:** Enrollment in summer school one or more times from kindergarten to fourth grade was much more common among non-proficient readers (70%) than among proficient readers (9%). However, participation in summer school was an effect of the low level of reading achievement rather than its cause.

## Retentions

Four of 23 proficient readers (17%) had been retained between kindergarten and fourth grade, all of them in either kindergarten or first grade. Eight students among the non-proficient readers (30%) had been retained: one student each in kindergarten, first grade, second grade, and third grade; one student in both first and third grades and another student in both second grade and third grade. The mean number of retentions for the proficient readers was 0.2 in comparison to 0.4 for non-proficient readers.

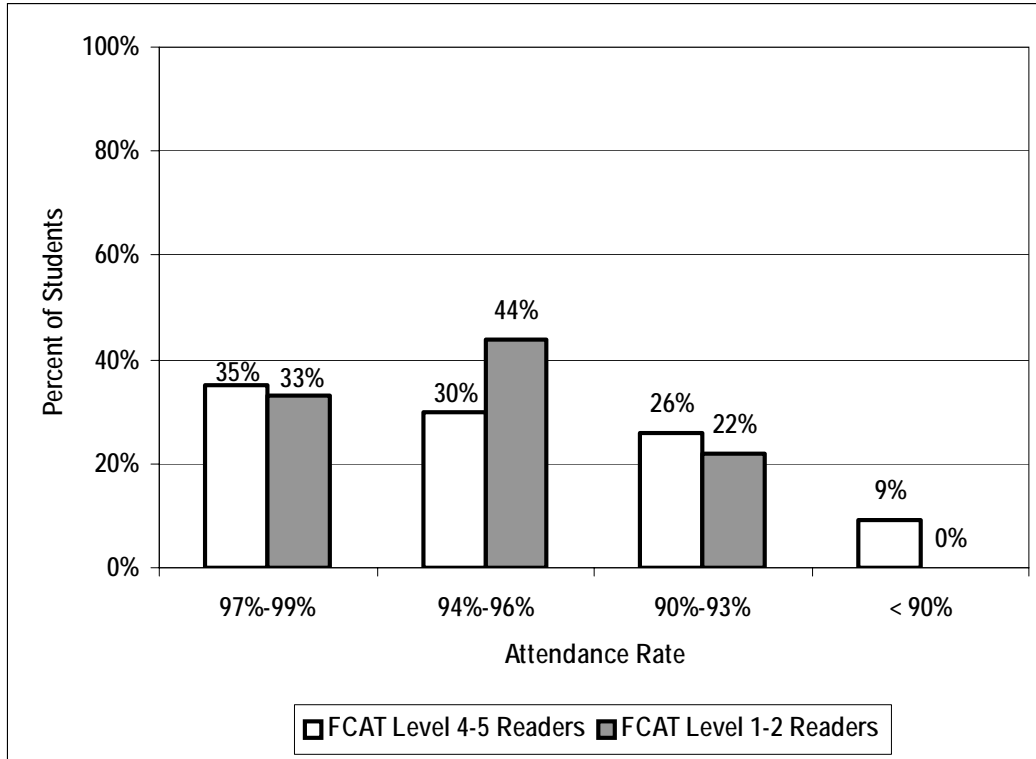


**Figure 4.** Number of Years Retained (K-4)

**Finding:** Most proficient readers (83%) and most non-proficient readers (70%) had not been retained between kindergarten and fourth grade. However, 17% of the proficient readers were retained once, while 30% of the non-proficient readers were retained either once (22%) or twice (7%).

## Attendance

While *FCAT* level 4-5 readers had an average attendance rate of 94% with a range of 83% to 99% between kindergarten and fourth grade, the *FCAT* level 1-2 readers' attendance rate in the same grades was 96% with a range from 91% to 99%. The *FCAT* level 4-5 readers displayed more variability in their attendance patterns than did the *FCAT* level 1-2 readers, as is evident in the bar graph below.

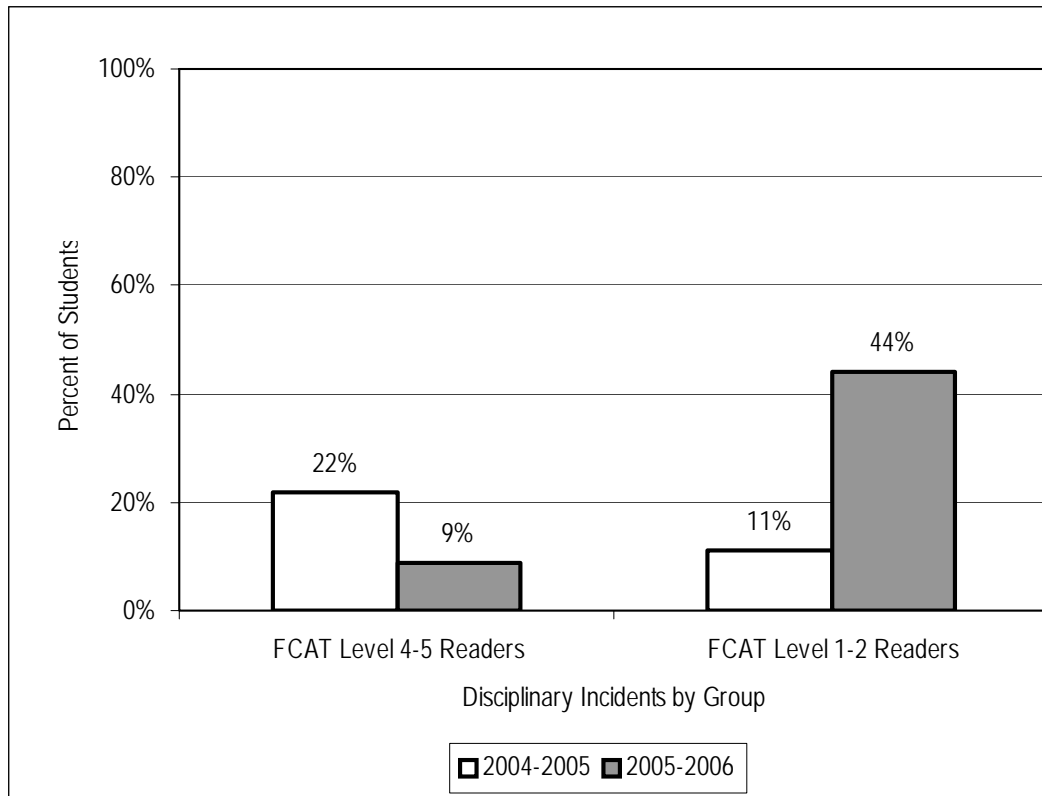


**Figure 5.** Attendance from Kindergarten through Grade 4

**Finding:** The non-proficient readers had a slightly better attendance rate (mean of 96%) than the proficient readers (94%). The attendance rate was not an explanatory factor in the divergent levels of reading achievement of the two groups.

## Disciplinary Incidents

The figure below displays data obtained from disciplinary records in the student data base for the year of the study and the prior year, 2005-2006 and 2004-2005. While the percentage of proficient readers with a disciplinary record declined from 2004-2005 (22%) to 2005-2006 (9%), the percentage of non-proficient readers with a disciplinary record quadrupled during the same time span (from 11% to 44%). Although a marked increase in the percentage of students with a disciplinary record was evident among the non-proficient readers, typically only one incident was recorded, most often "Inappropriate Behavior" or an offense while riding their school bus (i.e., Inappropriate, Disrespectful, or Disruptive Behavior).



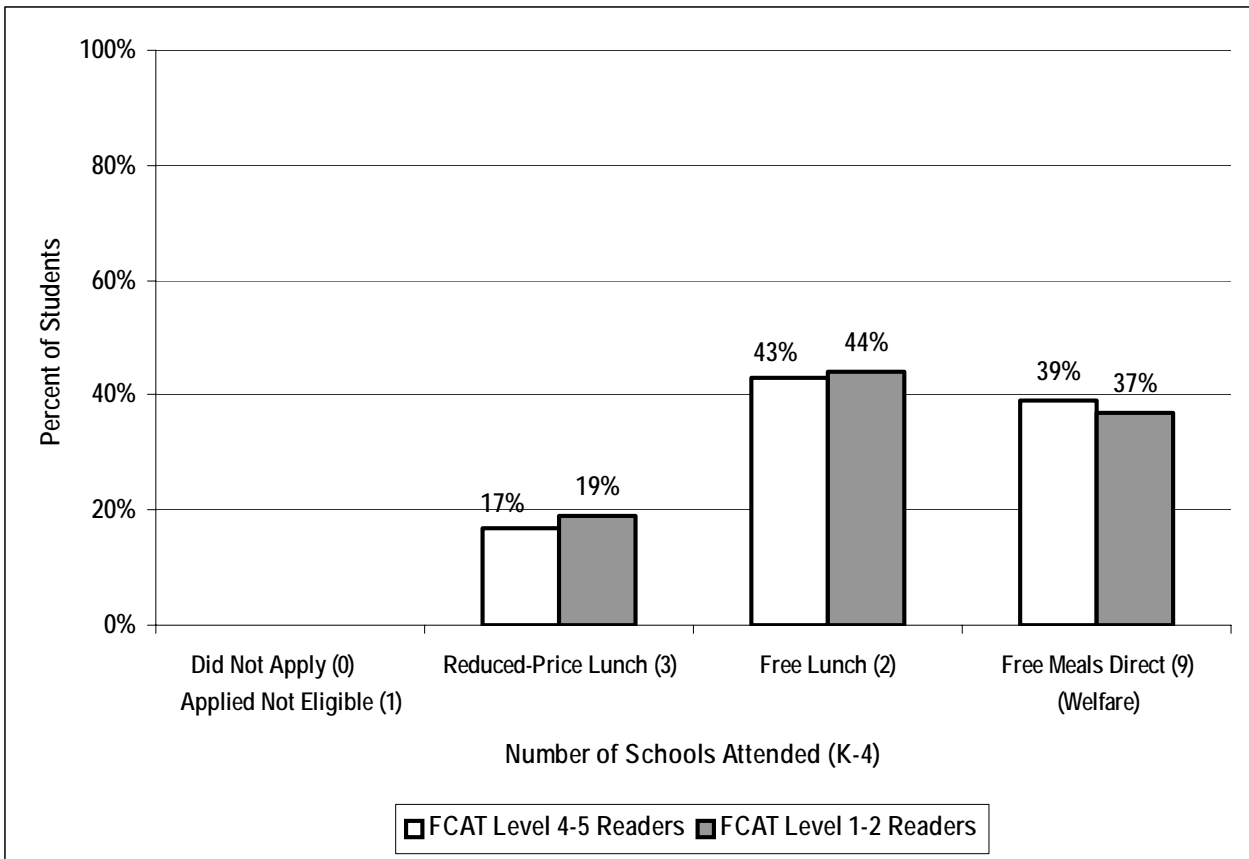
**Figure 6. Disciplinary Incidents by Group for Two Years**

**Finding:** The majority of students in both groups had no record of a disciplinary incident in the student data base. A marked increase in the percentage of non-proficient readers with a disciplinary record was observed from 2004-05 (11%) to 2005-06 (44%), although typically the number of incidents per student was small.

## Subsidized School Lunches

Information is available in the student data base about whether students pay full price for their lunches, pay a reduced price or receive a free lunch. The data base also captures whether the need is certified directly as result of the family receiving welfare services. All students in the study, the boys who scored at level 1 or 2 and the boys who scored at level 4 or 5 on *FCAT Reading*, received subsidized meals in these mostly high poverty schools. Because of the known correlation between socioeconomic status and academic achievement, one would expect to see more of the high achievers paying for their lunch. Keep in mind, however, that the study was conducted primarily in schools with high percentages of students receiving a free or reduced-price lunch.

Not only did all the Hispanic boys in the study receive a free or reduced-price lunch, but the percentages coded as receiving a reduced-price lunch, a free lunch, or free meals direct were very similar, as is evident in the table below.

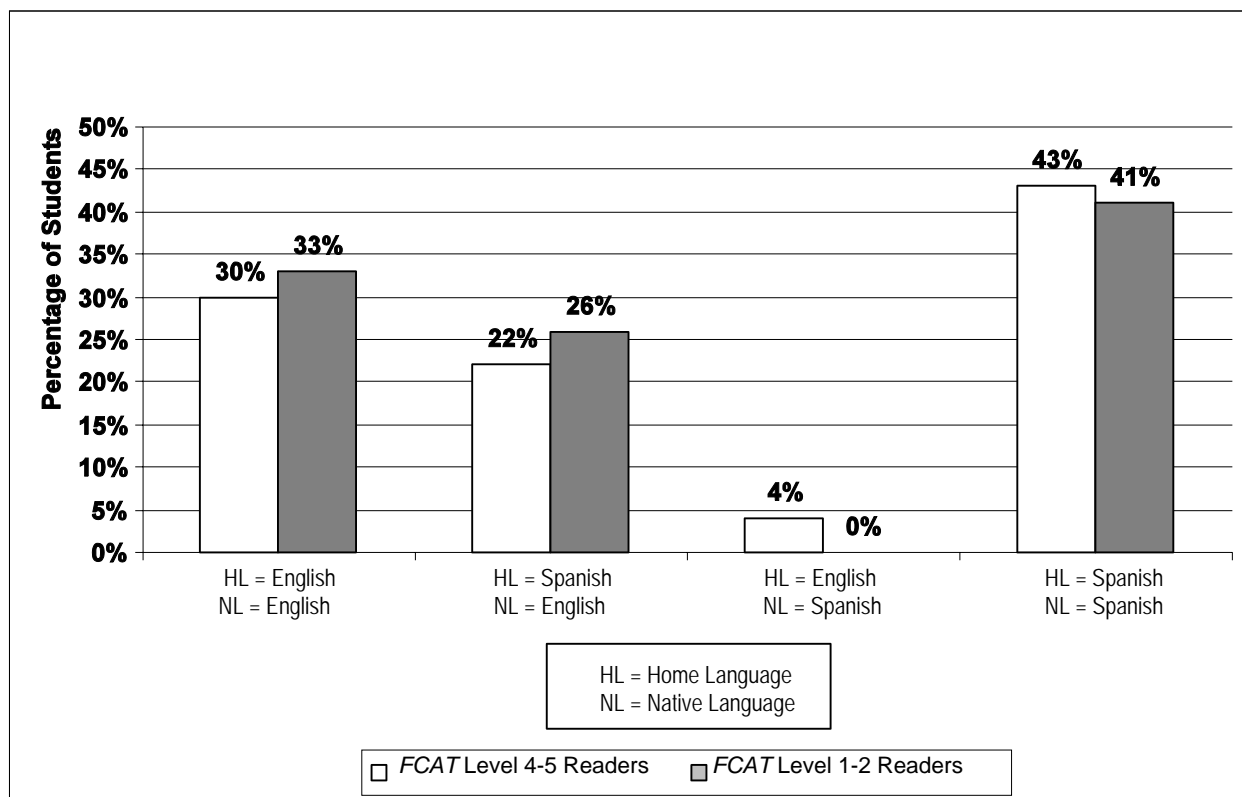


**Figure 7. Lunch Status**

**Finding:** The Hispanic boys in the study who were *FCAT* level 1-2 readers did not differ from the *FCAT* level 4-5 readers in their socio-economic status with meal status used as a proxy variable. All Hispanic boys in the study received a free or reduced-price lunch. Differences in socio-economic status were not an explanatory factor in regard to the differences in reading achievement of the two groups.

## Home Language and Native Language Reported

A pertinent factor in a discussion of the reading attainment of Hispanic boys is the language spoken in the student's home and his native language, which are frequently the same but sometimes different. The various combinations of these two elements are displayed in the graph below; as is evident, the two groups are similar with respect to home language and native language. Most prevalent in both groups were Hispanic students whose home language and native language were both Spanish (43% vs. 41%), followed by Hispanic students whose home language and native language were both English (30% vs. 33%). Third in order were students whose home language was Spanish but who grew up speaking English (22% vs. 26%).



**Figure 8. Home Language and Native Language by Group**

### **Finding - Home Language and Native Language:**

The various combinations of home language (Spanish or English) and native language of the student (Spanish or English) occurred in similar proportions among Hispanic boys who were highly proficient readers and Hispanic boys who were non-proficient readers on the *FCAT*.

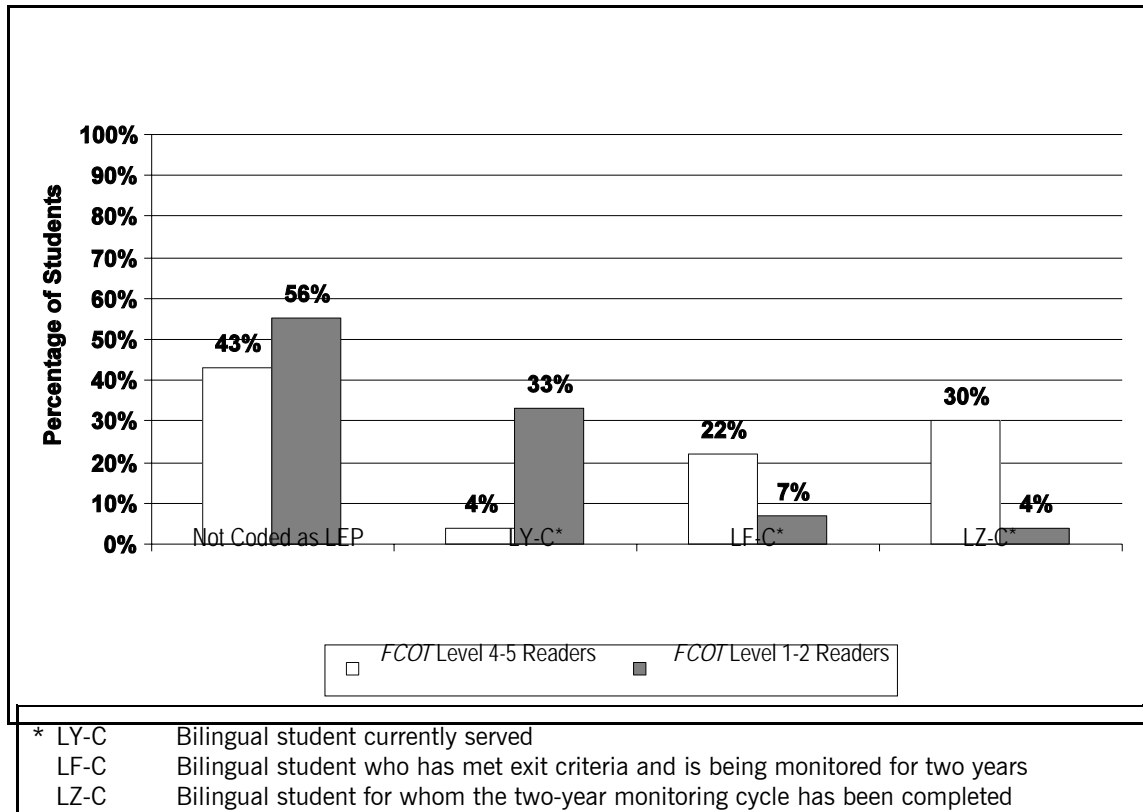
### **Recommendation**

On the Student Enrollment Form, review for clarity information requested about home language and native language.

## Participation in Programs for English Language Learners

Whether or not a Hispanic student has participated in programs for English Language Learners (ELL) is also pertinent in examining their reading achievement. For the purpose of this study, all students served as LY-A (non-English monolingual) or LY-B (non-English predominant) were excluded from this study; obviously students still learning English will have difficulty with a reading comprehension test in that language. Hispanic boys who were served as bilingual students (LY-C), who had met the exit criteria but were being monitored for two years (LF), or who were former English language learners for whom the two-year monitoring period had been completed (LZ) were included in the study, as were Hispanic boys who never met the criteria for being served in such a program.

Note that a slightly higher percentage of non-proficient readers (56%) than of proficient readers (43%) had not been served in programs for ELL students. Among the students who had been served, non-proficient readers were typically still enrolled with an LY-C designation while proficient readers were more likely to be coded as LF or LZ. LY-C students continue to be served for a variety of reasons: ELL Committee placement, norm-referenced achievement test scores, *Idea Proficiency Test (IPT)* scores.



**Figure 9. Participation in Programs for English Language Learners by Group**

**Findings: Participation in Programs for English Language Learners:**

Among the Hispanic boys who were *FCAT* level 4-5 readers, 43% had not participated in programs for ELL students; 56% of the *FCAT* level 1-2 readers had never been enrolled in such programs. Of the students enrolled in programs for English Language Learners, Hispanic students who were proficient readers on *FCAT* were most likely to be coded LY-F (being monitored) or LY-Z (past the two-year monitoring period); in contrast, non-proficient readers were most often coded LY-C (bilingual students still enrolled in a program for ELL students). Keep in mind LY-A and LY-B students were excluded from this study; students in the early stages of learning English are challenged by a reading comprehension test that is not written in the language they speak.

## Reading Comprehension Scores on Five Assessments

The study of the reading achievement of Hispanic boys in grade 4 was designed to contrast the reading behaviors of students who scored at levels 1 and 2 versus those who scored at levels 4 and 5 on *FCAT Reading*. The 2005 *FACT Reading* levels were utilized to identify the sample. When available, the 2006 *FCAT Reading* scores were used to confirm that the students identified were either non-proficient readers (levels 1-2) or proficient readers (levels 4-5). The *FCAT Reading* levels were also used in evaluating students' reading comprehension along with the *FCAT Reading NRT* scores.

In addition to the state tests, the Hispanic boys in the study were administered the district's *FCAT Reading Practice Test* (Grade 4, Form D). In this section of the report, the focus is on their overall comprehension; later in the report, more detailed information about various components of the reading process, including the strategies the boys use, will be provided.

### FCAT Reading Scores for Two Years

The following table provides a distribution of the *FCAT Reading* levels and mean developmental scale scores for both the proficient and non-proficient readers in 2005 (grade 3) and 2006 (grade 4). All 23 of the Hispanic boys in the study who were proficient readers obtained *FCAT SSS Reading* levels of 4 or 5 in 2005; 17 of the proficient readers also attained a level 4 or 5 while 6 obtained high level 3 scores in 2006 but also scored above average on the *FCAT NRT*.

Twenty six of the 27 Hispanic boys in the study who were non-proficient readers (level 1 or level 2) in 2005 remained so in 2006. One student who became a borderline low level 3 reader in 2006 was retained in the study; technically, this student is a proficient reader.

The proficient readers increased their mean developmental scale score from 1700 in grade 3 to 1826 in grade 4. The non-proficient readers increased their mean developmental scale score from 1030 in grade 3 to 1303 in grade 4.

**Table 12. *FCAT Reading* SSS Levels: Proficient vs. Non-Proficient Readers**

Group	N	GRADE 3 <i>FCAT READING</i> LEVELS (DEVELOPMENTAL SCALE SCORE)					Mean	Range
		Level 1	Level 2	Level 3	Level 4	Level 5		
		86-1045	1046-1197	1198-1488	1489-1865	1866-2514		
Proficient Readers	23				21	2	1700	1506-1950
Non-Proficient Readers	27	9	18				1030	86-1179

Group	N	GRADE 4 <i>FCAT READING</i> LEVELS (DEVELOPMENTAL SCALE SCORE)					Mean	Range
		Level 1	Level 2	Level 3	Level 4	Level 5		
		86-1045	1046-1197	1198-1488	1489-1865	1866-2514		
Proficient Readers	23			6	13	4	1826	1584-2304
Non-Proficient Readers	27	13	13	1			1303	1109-1484

## FCAT Reading Norm-Referenced Test Scores for Two Years

Table 13 displays two years of *FCAT Reading NRT* scores for the Hispanic boys who were proficient readers versus non-proficient readers. The proficient readers obtained a mean NCE score of 69.1 (NP of 82) in grade 3, then increased their mean NCE score to 81.3 in 2006 (NP of 93) on the *FCAT Reading NRT*. In 2005, the scores of the proficient readers ranged from stanine 5 (average) to stanine 9; by 2006, the range was more restricted, from stanine 6 (high average) to stanine 9.

The non-proficient readers on *FCAT Reading* obtained a mean NCE score of 36.7 (NP of 26) in 2005 (grade 3) but increased their mean NCE score to 45.8 (NP of 42) in 2006 on the *FCAT Reading NRT*. Their stanine scores ranged from 2 to 5 in 2005 but ranged from 3 to 6 the following year. What is most remarkable is that 93% of the non-proficient readers in the study (based on *FCAT*) scored in the average ranges (stanines 4-6) on the nationally-normed *FCAT Reading NRT*!

**Table 13. *FCAT Reading NRT Stanine Scores (2005, 2006): Proficient vs. Non-Proficient Readers***

Group	N	GRADE 3 <i>FCAT NRT</i> STANINE SCORES										Mean NCE	Corresponding NP
		STANINE											
		1	2	3	4	5	6	7	8	9			
Proficient Readers	23					3	7	4	7	2		69.1	82
Non-Proficient Readers	27		1	9	13	4						36.7	26

Group	N	GRADE 4 <i>FCAT NRT</i> STANINE SCORES										Mean NCE	Corresponding NP
		STANINE											
		1	2	3	4	5	6	7	8	9			
Proficient Readers	23						3	2	14	4		81.3	93
Non-Proficient Readers	27			2	10	9	6					45.8	42

## The District's FCAT Reading Practice Test

The percentages of questions that students in each group answered correctly on the *FCAT Reading Practice Test* administered at the end of the year in 2006 are displayed in the table below. On the *FCAT Reading Practice Test*, as on the *FCAT*, several plausible answer options are generally included; students must read the text closely to identify the expected answer. Twenty comprehension questions were based on two passages, one narrative and one expository. These data are presented in the table that follows, which included a distribution of percentage of comprehension questions answered correctly by the Hispanic boys who are proficient readers (*FCAT* level 4-5 readers) versus Hispanic boys who are non-proficient readers (*FCAT* level 1-2 readers).

Of the Hispanic boys who demonstrated reading proficiency on the *FCAT* (grade 4) 87% answered 70% or more of the 20 questions on the district's *FCAT Reading Practice Test* (Grade 4, Form D). In contrast, of the Hispanic boys designated non-proficient in reading on the *FCAT*, 92% answered less than 70% of the reading comprehension questions on the district's *FCAT Reading Practice Test*. Note that a few of the proficient readers did not perform well on this test, and a few of the non-proficient readers performed more like the proficient readers.

**Table 14. The FCAT Reading Practice Test Comprehension Score**

Group	N	FCAT READING PRACTICE TEST COMPREHENSION SCORE										Mean
		PERCENT CORRECT										
		0%-9%	10%-19%	20%-29%	30%-39%	40%-49%	50%-59%	60%-69%	70%-79%	80%-89%	90%-100%	
Proficient Readers	23						4%	9%	26%	39%	22%	79%
Non-Proficient Readers	27				11%	33%	37%	11%	4%	4%		49%

**Findings: Reading Comprehension Scores on Five Assessments**

- C Almost all of the Hispanic boys in the study who scored at level 4 or 5 on the *FCAT Reading* (87%) scored in the above-average range (stanines 7-9) on the *FCAT Norm-Referenced Test*.
- C Of particular interest, almost all of the Hispanic boys who scored at level 1 or 2 on *FCAT Reading* (93%) performed in the average range (stanines 4-6) on the nationally-normed *FCAT Reading NRT*. In other words, although they performed in the average range on a nationally-normed reading achievement test, these students were unable to demonstrate reading proficiency on the *FCAT*.
- C On a new form of the district's *FCAT Reading Practice Test* (Grade 4, Form C), 87% of the proficient readers (*FCAT Reading* levels 4-5) correctly answered 70% or more of 20 comprehension questions while 92% of the non-proficient readers (*FCAT Reading* levels 1-2) answered less than 70% of the comprehension questions correctly.

## **Analysis of Student Performance on the *FCAT Reading Practice Test***

The *FCAT Reading Practice Test*, developed under the direction of the Supervisor of Data Analysis, was a key component of the action research, used to better understand the profiles of strengths and needs of the Hispanic boys in the various components of reading.

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### **Reading Fluency**

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A fluent reader reads words with a high degree of accuracy, with speed that reflects automaticity in word recognition, and with appropriate phrasing and intonation (prosody) to capture and convey meaning. The administration procedures of the *FCAT Reading Practice Test* that were developed by members of the study team for use by the reading coaches enabled the team to collect data on each of the aforementioned aspects of skilled reading. Each boy was asked to complete the test independently as he would do when administered the *FCAT*. Subsequently each student was asked to read aloud to the reading coach at his school (or other test administrator) two samples of text from the *FCAT Reading Practice Test* (Grade 4, Form D), one narrative passage of 221 words and one expository passage of 170 words.

The test administrator recorded in a running record exactly how the student read the text and determined the student's level of word reading accuracy. In addition, an adapted version of the *NAEP Oral Reading Fluency Scales* was used to provide additional detail about each student's reading fluency.

#### **Word Reading Accuracy**

With what degree of accuracy do Hispanic boys in the model reader group (*FCAT* level 4 and 5 readers) read grade-level text? How accurately do non-proficient readers (*FCAT* level 1 and 2) read grade-level text? The tables that follow display word reading accuracy rates on the *FCAT Reading Practice Test* for both the proficient readers and non-proficient readers. Reading accuracy scores were calculated for a sample of text (221 words) from the narrative passage, for a sample of text (170 words) from the expository passage, and for both passages on the *FCAT Reading Practice Test* (average percent correct).

In a few cases, a student was administered only one passage; for these students, the accuracy rate on the passage read was used for their overall rate. Percentages are based on the number of valid responses.

The Hispanic boys who were proficient readers based on *FCAT Reading* were highly accurate in reading aloud the samples of text on the narrative and expository passages on the *FCAT Reading Practice Test* at grade 4. On the narrative passage, their average accuracy rate was 98.6% with a range from 96% to 100% accuracy. On the expository passage, their average accuracy rate was 98.6% with a range of 94% to 100%. Their overall reading accuracy rate was 98.6% with a range from 94% to 100%.

The accuracy rate of one skilled reader was reduced from 99% to 95% because he skipped a partial line of print; part way through the line he got back on track. One other student omitted a line but he noticed the problem and corrected his reading immediately.

**Table 15 . Reading Accuracy Rates: Proficient Readers on FCAT (N=23)**

Type Text	<90%	90%	91%	92%	93%	94%	95%	96%	97%	98%	99%	100%*	Mean Rate	Range
Narrative Text								1	2	6	6	8	98.6%	96%-100%
Expository Text						1	2	1		5	9	5	98.6%	94%-100%
Narrative & Expository							1	1	2	7	5	7	98.6%	94%-100%

\* Percentage  $\geq$  99.5%

Observe in Table 16 that most of the Hispanic boys who were non-proficient readers on *FCAT* read the *FCAT Reading Practice Test* with accuracy, many of them with the same high levels of accuracy observed in proficient readers. The mean accuracy rate for the Hispanic boys rated non-proficient on *FCAT* was 96.3% on the narrative passage and 95.7% on the expository passage, with an average percent accuracy of 96.1%.

One non-proficient reader read the narrative text with less than 90% accuracy. The student who read the narrative text at 88% accuracy also read the expository passage at a borderline level of accuracy (91%); however, on both passages this student omitted a line of text. One other student who read the expository passage with less than 90% accuracy (89%) read the narrative passage at 91% accuracy. Three other boys who were judged non-proficient readers on *FCAT* also omitted a line of words on one of the passages they read. None of the non-proficient readers went back to correct the omitted lines of text. Whether or not they noticed their reading did not make sense is unclear; they simply read on, based on their reading coaches' running records.

**Table 16 . Reading Accuracy Rates: Non-Proficient Readers on FCAT (N=27)**

Type Text	<90%	90%	91%	92%	93%	94%	95%	96%	97%	98%	99%	100%**	Mean Rate	Range
Narrative Text	1*		1		3		4	1	3	7	2	3	96.3%	88%-100%
Expository Text	1		2	1			5	2	6	1	6	1	95.7%	90%-100%
Narrative & Expository		2	1			2	2	6	3	9	2		96.1%	90%-99%

\* Percentage 88%  
\*\* Percentage  $\geq$  99.5%

Based on their overall rate of reading on the two types of text, 89% of the Hispanic boys who were non-proficient readers on *FCAT Reading* in grade 4 were able to read the *FCAT Reading Practice Test* with accuracy rates of 94% or higher, a sufficient rate of accuracy to support comprehension.

**Findings - Word Reading Accuracy:**

**All of the Hispanic boys who were judged to be proficient readers on the *FCAT* in grade 4 read with an overall accuracy rate of 95% or higher on the passages of the district's *FCAT Reading Practice Test*.**

**Of the Hispanic boys who were judged non-proficient readers on the *FCAT* in grade 4, 89% were able to read with 94% accuracy or higher, a degree of accuracy sufficient to support comprehension. For almost all of the grade 4 Hispanic boys designated non-proficient readers, difficulty in accurately reading words is not the cause of their low level of achievement in reading.**

**Recommendation**

**Continue effective instructional practices in developing students' word reading accuracy.**

## **Miscue Analysis for the FCAT Reading Practice Test**

The miscue analysis included the following error categories: common sight words of one or more syllables; single syllable words that occur with less frequency; multi-syllable words that are not common sight words and are typically of importance in understanding the content of the passage; and structural elements, such as the inflectional endings “s,” “ed,” “ing”; omitted words; and inserted words. Two other categories, self-corrections and repetitions, were recorded but not included in the error count because they are behaviors exhibited by good readers. When a skilled reader notices that what he has read doesn’t make sense, he often rereads, and spontaneously corrects his mistakes.

Table 17 displays the mean number of times the proficient readers and non-proficient readers exhibited these types of miscues while reading aloud the narrative passage (221 word sample) and the expository passage (170 word sample). On the narrative passage, the typical proficient reader missed 1 sight word, 1 word ending, and omitted a word. In contrast, the typical non-proficient reader missed 3 sight words, 1 multi-syllable word, 1 word ending, and omitted 2 words. On the expository passage, the typical proficient reader missed 1 multi-syllable word and omitted 1 word. In contrast, the non-proficient reader erred on 2 sight words, 2 multi-syllable words, and 1 word ending, and omitted 2 words.

**Table 17. Mean Number of Miscues by Category**

Error Categories	FCAT Level 4-5 Readers		FCAT Level 1-2 Readers	
	Narrative Mean Range	Expository Mean Range	Narrative Mean Range	Expository Mean Range
Sight Words	1.25 (0-4)	0.26 (0-2)	3.08 (0-11)	1.92 (0-9)
Single Syllable Words (less familiar)	--	--	0.44 (0-1)	0.17 (0-1)
Multi-Syllable Words	0.09 (0-1)	0.96 (0-3)	0.80 (0-5)	2.12 (0-6)
Structural Elements	0.61 (0-3)	0.26 (0-2)	0.60 (0-4)	0.62 (0-3)
Omissions	0.83 (0-3)	0.87 (0-8)	2.16 (0-17)	2.38 (0-14)
Insertions	0.26 (0-2)	0.04 (0-1)	0.28 (0-1)	0.12 (0-1)
<b>Total Errors</b>	<b>3.00 (0-8)</b>	<b>2.43 (0-11)</b>	<b>7.32 (1-25)</b>	<b>7.33 (1-18)</b>

Non-Error Categories				
Self Corrections	1.26 (0-4)	0.91 (0-5)	1.60 (0-5)	1.17 (0-4)
(% Errors Corrected)	30%	27%	18%	14%
Repetitions	1.52 (0-7)	0.65 (0-4)	2.00 (0-13)	1.75 (0-7)

In the running record, miscues are written directly above the word missed; when a child spontaneously corrects that miscue, the symbol “sc” is written next to the miscue. When a student omits a word, a line is written above the word; when a child adds words that are not in the text, they are also recorded. Various types of errors are illustrated below with examples from the running records made for each student.

Miscues in high frequency words or basic sight vocabulary are illustrated by  $\frac{a}{the}$   $\frac{the}{her}$ ,  $\frac{she}{they}$ ,  $\frac{broken}{better}$ ,  $\frac{eat}{get}$ ,  $\frac{choose}{chose}$ ,  $\frac{everyone's}{very}$ ,  $\frac{with}{will}$ ,  $\frac{then}{when}$ , and  $\frac{going}{coming}$ . Keep in mind that even skilled readers often make minor errors with high-frequency words such as “the”; frequently such minor errors have little impact on meaning. Several illustrative examples of sight word substitutions by the non-proficient readers follow.

**Exhibit 2. Sight Word Substitutions by Non-Proficient Readers**

a.	Only 36% of boys and 14% of girls $\frac{eat}{get}$ the right amount of calcium.
b.	She missed a step $\frac{going}{coming}$  sc down.
c.	She was $\frac{a}{the}$ Elevator Queen.
d.	$\frac{Each}{Every}$ day she chose a typical person to accompany her.
e.	She didn't care if her foot $\frac{even}{ever}$ got better
f.	She now $\frac{had}{held}$ the Golden key. . .
g.	Emma-Jean, you never $\frac{chose}{choose}$ me. . .
h.	Will soft drinks give you $\frac{stronger}{strong}$ bones?
i.	That's the same as everyone drinking 576 cans a year, $\frac{that's}{or}$ almost two cans a day.
j.	Emma Jean loved $\frac{the}{her}$ power.

A few single-syllable words that occur less frequently proved to be difficult for some of the non-proficient readers but not for the proficient readers. For example, *whined* was read as *winned*, *whenned*, *winded*, *wheeled*, and *whispered*.

More problematic were errors in multi-syllable words, often significant content-bearing words that were important for comprehension of the passages. In Exhibit 3, multiple examples of student mistakes in word reading accuracy in the same phrases or sentences are listed. Notice in reading the examples whether the student's substitution preserves meaning and how frequently they generate a non-word.

### Exhibit 3. Miscues in Multi-Syllable Words

a.	“Does this sound like your <u>life cycle</u> ? lifestyle
b.	“If you’re a 12-year-old boy, you’re in the group of the biggest soft drink <u>consumer</u> in the <u>nutrient</u> .” consumers nation
c.	“If you’re a 12-year-old boy, you’re in the group of the biggest soft drink <u>consum•ers</u> in the nation.” consumers
d.	“If you’re a 12-year-old boy, you’re in the group of the biggest soft drink <u>customers</u> in the nation.” consumers
e.	“Twelve-year-old boys may <u>drink</u> high in soft drink <u>consuputation</u> , . . .” rank consumption
f.	“Twelve-year-old boys may <u>drink</u> high in soft drink <u>consupation</u> , . . .” rank consumption
g.	“Twelve-year-old boys may <u>drink</u> high in soft drink <u>consumation</u> , . . .” rank consumption
h.	“Twelve-year-old boys may <u>drink</u> high in soft drink <u>communi-consupitation</u> . . .” rank consumption
i.	“Only 11% of boys and 16% of girls eat the <u>remainder</u> amount of fruit.” recommended
j.	“Only 11% of boys and 16% of girls eat the <u>requirement</u> <u>almost</u> of fruit.” recommended amount
k.	“Only 11% of boys and 16% of girls eat the <u>regular</u> <u>almost sc</u> of fruit.” recommended amount
l.	“Only 11% of boys and 16% of girls eat the <u>remaining</u> amount of fruit.” recommended
m.	“Only 36% of boys and 14% of girls get the right amount of <u>clowman(?)</u> ” calcium
n.	“Only 36% of boys and 14% of girls get the right amount of <u>calcum</u> .” calcium
o.	“Only 36% of boys and 14% of girls get the right amount of <u>cal-seam</u> .” calcium
p.	“ . . .the companies are allowed to <u>advestigate</u> . . . [an extended running record] advertise

Students who err in reading multi-syllable words almost always begin the word correctly and many read the ending correctly; the middle of the word missed appears to be the greatest source of difficulty, seemingly a blur of letters. Frequently, their approximation of the word makes no sense. Occasionally a word is substituted that indicates the student is attending to meaning; for example, in Example d, where the student replaces *consumers* with *customers*.

As students move up in the elementary grades, the ability to “chunk” longer content words becomes much more critical to their success in reading increasingly difficult text. Teachers may be more skilled in teaching students how to pronounce single syllable words than less familiar multi-syllable words. Students’ lack of familiarity with more complex vocabulary in their spoken language is most likely a contributing factor in their inability to read accurately. (In a later section on the report, information will be provided about students’ vocabulary development.)

Another category of errors involved a lack of precision with respect to structural elements, such as inflectional endings (e.g., *s*, *ed*, *ing*). These syntactic cues modulate the meaning of what is read, for example, by signaling that one or more persons or objects is involved or that an event is happening now or has already happened. Missing these cues, the student can still hang on to the basic meaning but will be wrong in his interpretation of details about the message conveyed. Other examples of structural elements that signal meaning include the possessive (e.g., *’s*), comparative and superlative endings (*er*, *est*), and common prefixes and suffixes. Contractions are often grouped with structural elements. Exhibit 4 lists examples of non-proficient readers’ errors in structural elements.



Both proficient and non-proficient readers omitted or inserted words on occasion. The examples in Exhibit 5 indicate that most of the time leaving out or adding small words has little impact on comprehension; leaving out an important content word, however, does impede comprehension. Note that some students rarely omit or insert words while other students are prone to this type of error. The “sc” indicates the student self corrected himself.

**Exhibit 5. Sample Omissions and Insertions in Oral Reading**

a.	You're going to $\frac{!}{\text{get}}$ <sup>sc</sup> hurt.
b.	Emma Jean was $\frac{!}{\text{in}}$ too much of a hurry. . .
c.	She went up $\frac{!}{\text{the}}$ stairs. . .
d.	. . . she chose a special person $\frac{!}{\text{to}}$ accompany her.
e.	. . . imagined they were $\frac{!}{\text{in}}$ a coal mine. . .
f.	She didn't care if her foot $\frac{!}{\text{ever}}$ got better.
g.	Emma $\frac{!}{\text{Jean}}$ was in $\frac{\text{so}}{\text{too}}$ much of a hurry. . .
h.	If you're $\frac{!}{\text{a}}$ 12-year-old boy. . .
i.	. . . race up and down $\frac{!}{\text{the}}$ stairs. . .
j.	. . . include $\frac{!}{\text{a}}$ soft $\frac{\text{drinks}}{\text{drink}}$ as part of their lunch.
k.	. . . parts of $\frac{!}{\text{the}}$ food pyramid.
l.	. . . her $\frac{\text{and}}{\vee}$ sometimes they made. . .
m.	14 billion $\frac{!}{\text{gallons}}$
n.	Some kids claim $\frac{\text{that}}{\vee}$ they
o.	And she did turn $\frac{!}{\text{on}}$ the light. . .
p.	. . . group of $\frac{!}{\text{the}}$ biggest soft drink consumers
q.	. . . 576 cans a year, $\frac{!}{\text{or}}$ almost two cans a day.
r.	$\frac{!}{\text{And}}$ she did turn on the light. . .
s.	. . . she $\frac{!}{\text{now}}$ held the golden key to the elevator. . .
t.	She was in $\frac{\text{so}}{\text{such}}$ $\frac{\text{much}}{\vee}$ a hurry.
u.	. . . pretended $\frac{\text{that}}{\vee}$ the elevator was. . .
v.	. . . Emma- $\frac{\text{Jane}}{\text{Jean}}$ was allowed to take one $\frac{\text{other}}{\vee}$ friend.
w.	. . . at $\frac{!}{\vee}$ school. . .

As mentioned previously, self-corrections and repetitions are not considered errors because they are strategies employed by proficient readers when the meaning of what they've read is not clear. Keep in mind that although the proficient readers and non-proficient readers corrected similar numbers of mistakes (see Table 17), the non-proficient readers made more errors and the percentage of mistakes corrected differed by group.

On the narrative passage, the proficient readers corrected 30% of their miscues while the non-proficient readers corrected 18% of theirs. On the expository passage, the proficient readers corrected 27% of their miscues while the non-proficient readers corrected 14% of their miscues. Earlier in the report non-proficient readers were reported as less likely to go back when they omitted a line of text when reading orally, seeming not to notice that their words made little sense. Fortunately, the omission of a whole line was a relatively rare occurrence.

### Three Running Records as Examples

Examples of running records of how three boys read the *FCAT Reading Practice Test* are provided to illustrate the range of the number and types of miscues made by the Hispanic boys who were unable to demonstrate grade-level proficiency in reading on the grade 4 *FCAT*. The first example is a running record of a student whose difficulty in word reading accuracy makes comprehension of the text difficult. The students' miscues are written above the words missed. Just read through this example as the student read it and you will clearly see how comprehension begins to be compromised by a lack of accuracy.

#### Exhibit 6. A Running Record Illustrating Low-Level Word Reading Accuracy

### Skip the Soft Drinks

#### Cutting Down on Coke and Pepsi adds up to better health



Do you know that Americans buy over 1 billion gallons of soft drinks every year? That's the same as everyone <sup>drinks</sup> drinking 576 cans a year, or almost two cans a day. Does this sound like <sup>a lipstick</sup> your lifestyle? Some kids <sup>claim</sup> that they need <sup>as</sup> a Coke to start off the day. Many students include a soft drink as part of their lunch at school. And it's very common to grab a can out of <sup>a</sup> the <sup>fridge</sup> fridgerator to drink with your dinner. See how quickly <sup>you</sup> it can add up?

If you're a 12-year-old boy, you're in the group of <sup>the</sup> the biggest soft drink consumers in the nation! Twelve-year-old boys rank high <sup>in</sup> soft <sup>drinks</sup> drink

<sup>con</sup> consumption, but they rank low when it comes to other parts of <sup>the</sup> the food pyramid. Only <sup>11</sup> of boys and <sup>16</sup> of girls eat the <sup>recoment</sup> recommended amount of fruit each day.

Only <sup>36</sup> of boys and <sup>14</sup> of girls get the right amount of <sup>calcium</sup> calcium. Will soft drinks give you strong bones? No way!



This student omits many short sight words, is inattentive to word endings, and struggles with some multisyllable words. Notice the third sentence where the student substituted “a lipstick” for “your lifestyle”; nothing read thus far suggested this word. This type of error clearly interferes with comprehension. Of the Hispanic students in the study who were non-proficient readers, 11% read with 90%-91% accuracy, a level at which reading tends to become frustrating.


Exhibit 7 displays a typical running record for the non-proficient reader group. This student has made a few errors in reading the words and inserted one word. Notice how the student has worked out the word *consumption* reading each of the syllables but was not as successful with *calcium*. This student read the words with sufficient accuracy to support comprehension. Approximately 40% of the Hispanic boys who failed to demonstrate reading proficiency on the *FCAT* read the *FCAT Reading Practice Test* with 94%-96% accuracy.

**Exhibit 7. A Running Record Illustrating a Typical Level of Word Reading Accuracy**

**Skip the Soft Drinks**  
**Cutting Down on Coke and Pepsi adds up to better health**

Do you know that Americans buy over 14 billion gallons of soft drinks every year? That's the same as everyone drinking 576 cans a year, or almost two cans a day. Does this sound like your lifestyle? Some kids claim <sup>that</sup> they need a Coke to start off the day. Many students include a soft drink as part of their lunch at school. And it's very common to grab a can out of the fridge to drink with your dinner. See how quickly it can add up?

If you're a 12-year-old boy, you're in the group of the biggest soft drink consumers in the nation! Twelve-year-old boys may rank high in soft drink



conCumpCtion  
consumption, but they rank low when it comes to other parts of the food pyramid. Only 11% of boys and 16% of girls eat the recommended amount of fruit each day. Only 36% of boys and 14% of girls get the right amount of calCeCsum. <sup>Which</sup> soft <sup>drink</sup> <sub>drinks</sub> give you strong bones? No way!




Next follows an example of a running record representing the high end of the range of Hispanic boys who are non-proficient readers (*FCAT* Level 1-2).

**Exhibit 8. A Running Record Illustrating High-Level Word Reading Accuracy of Non-Proficient Reader on FCAT**


**Skip the Soft Drinks**  
**Cutting Down on Coke and Pepsi adds up to better health**

Do you know that Americans buy over 14 billion gallons of soft drinks every year? That's the same as everyone drinking 576 cans a year, or almost two cans a



day. Does this sound like your lifestyle? Some kids claim that they need a Coke to start off the day. Many students include a soft drink as part of their lunch at school. And it's very common to grab a can out of the fridge to drink with your dinner. See how quickly it can add up?

If you're a 12-year-old boy, you're in the group of the biggest soft drink consumers in the nation! Twelve-year-old boys may rank high in soft drink



con-sum  
consumption but they rank low when it comes to other parts of the food pyramid. Only 11% of boys and 16% of girls eat the recommended amount of fruit every  
each day. Only 36% of boys and 14% of girls get the right amount of calcium. Will soft drinks give you strong bones? No way!

This student missed the multi-syllable word *consumption* and substituted *every* for *each*, the latter an error that preserved meaning. Keep in mind that almost half the Hispanic boys in the sample who failed to demonstrate proficiency on *FCAT* read the *FCAT Reading Practice Test* with a high degree of accuracy (97%-99%). Overall, nine-tenths of the Hispanic boys in the study who were non-proficient readers on *FCAT* read the district practice test with sufficient accuracy to support comprehension.

### Findings - Miscue Analysis:

- < On the narrative passage (221 words) of the *FCAT Reading Practice Test*, the proficient readers missed an average of 1 sight word and 1 word ending, and omitted a word, for a total of 3 errors. The non-proficient readers missed an average of 3 sight words, 1 multi-syllable word, 1 word ending, and omitted 2 words, for a total of 7 errors.
- < On the expository passage (170 words) of the *FCAT Reading Practice Test*, the proficient readers missed an average of 1 multi-syllable word and 1 omitted word, an average of 2 errors. The non-proficient readers missed an average of 2 sight words, 2 multi-syllable words, 1 word ending, and omitted 2 words, for an average of 7 errors.
- < Substitutions of one sight word for another generally did not interfere with comprehension (e.g., *Emma-Jean loved <sup>the</sup> ~~her~~ power*).
- < When students miss multi-syllable words, they almost always begin the word correctly and frequently read the end of the word right; the middle of the word is problematic, seemingly a blur of letters. Students often generate non-words (*consuputation*, *consupation* and *consupitation* for *consumption*). As is evident from the example, errors in multi-syllable content words are likely to affect comprehension.
- < On the average, non-proficient readers made 2 errors in syntax/structural elements per passage; proficient readers average one error in this category in the narrative passage. This type of error is more likely to lead to misunderstanding of small details of the passage.
- < Insertions are rare in both groups. Non-proficient readers omit twice as many words as proficient readers, but this error type was infrequent in both groups. A few non-proficient readers, however, omitted many more words than was typical.
- < Proficient readers were more likely to correct their errors (30% correction rate on the narrative passage and 27% on the expository passage) than non-proficient readers (18% correction rate on the narrative passage and 14% on the expository passage).

[Noting the error patterns is important, but the reader should keep in mind that most of the non-proficient readers read with sufficient accuracy to sustain comprehension.]

### Recommendations

- C Increase instructional focus on strategies to improve accuracy in reading multi-syllable words and to unlock their meaning. The Reading/Language Arts Team and reading coaches should agree on a few simple rules to teach children about breaking words into syllables. Focusing on meaningful parts of the words, that is, root words, prefixes and suffixes is particularly effective because they are used in a generative way in our language. Teachers should take advantage of opportunities to teach many related words at one time. When teaching *aqua*, one can easily call attention to words with the same Latin root: *aqueduct*, *aquamarine*, *aquarium*, *Aquarius*, *aquatic*, *aquifer*. Combining a root word with various prefixes and suffixes helps students understand the building blocks of words; for example, the root *port* (carry) changes meaning depending on the affix(es) *report* (carry back), *portable* (able to be carried), *porter* (one who carries), *misreport* (carry back incorrectly), *reporter* (one who carries back).
- C Locate useful materials to teach understanding of morphemes, or units of meaning. The study team is in agreement that Houghton Mifflin and Scholastic materials treat this content superficially. Recommended materials include Pat Cunningham's *Making Big Words* and EPS workbooks. This kind of word play can be both enlightening and fun for students if structured in an effective way.

## Reading Rate

Thus far in the data presented concerning the reading fluency of the Hispanic boys in our study, the focus has been on the word reading accuracy of proficient versus non-proficient readers. The principal finding was that approximately 90% of the non-proficient readers on *FCAT* were able to read the words of grade level text with sufficient accuracy to support comprehension. We now turn attention to reading rate, another important component of reading fluently.

Building on the work of Hasbrouck and Tindal (1992) and Howe and Shinn (2001), Rasinski (2003) provides normative data on student fluency based on words correct per minute (WCPM); this information is presented below.

### **Exhibit 9. Reading Fluency Norms**

<b>STUDENT FLUENCY NORMS BASED ON WORDS CORRECT PER MINUTE (WCPM)</b>			
<u>Grade</u>	<u>Fall</u>	<u>Winter</u>	<u>Spring</u>
1	--	--	60
2	53	78	94
3	79	93	114
4	99	112	118
5	105	118	128
6	115	132	145
7	147	158	167
8	156	167	171

Adapted from:  
Hasbrouck, J.E. & Tindal, G. (1992). Curriculum-based oral reading fluency forms for students in Grades 2 through 5. *Teaching Exceptional Children*, (Spring), 41-44.  
Howe, K.B. & Shinn, M.M. (2001). *Standard reading assessment passages (RAPS) for use in general outcome measurements: A manual describing development and technical features*. Eden Prairie, MN: Edformations.

Rasinski proposed one-minute probes with narrative text. The circumstances of testing were different in this study. Students' reading rate was recorded for both the narrative and expository passages, and a mean rate was calculated for the two passages. In a few instances, reading rate information was missing; where only one passage was administered, the rate for that passage was used as the overall rate for that student. The table below displays the *FCAT Reading Practice Test* reading rates obtained for Hispanic boys who are proficient readers and non-proficient readers based on *FCAT* in grade 4.

**Table 18. Reading Rates (Words Correct Per minute) of Proficient Vs. Non-Proficient Readers**

	N	< 50	50-59	60-69	70-79	80-89	90-99	100-109	110-119	120-129	130-139	140-149	150-159	160-169	170-179	180-189	190-199	≥200	WCPM* Mean
<b>Proficient Readers</b>																			
Narrative	22							3		1	5	5	2	1			2	2	<b>149</b>
Expository	22					2		3	3	3	4	2		1	1		2	1	<b>135</b>
<b>Average Rate</b>	<b>22</b>						<b>1</b>	<b>3</b>		<b>4</b>	<b>5</b>	<b>4</b>		<b>1</b>		<b>1</b>	<b>2</b>	<b>1</b>	<b>142</b>
<b>Non-Proficient Readers</b>																			
Narrative	25		1	1	6	5	1	1	2	3	2	2			1				<b>101</b>
Expository	23		1	1	4	5	3	2	4	1	1	1							<b>95</b>
<b>Average Rate</b>	<b>22</b>		<b>1</b>	<b>2</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>						<b>98</b>
<b>* Words correct per minute</b>																			

Based on the norms cited by Rasinski, by the end of fourth grade students are expected to read 118 words correct per minute. Examination of *FCAT Reading Practice Test* data reveals that Hispanic boys who are proficient readers based on *FCAT* read at an average rate of 142 words correct per minute. Eighty-two percent of the proficient readers read 120 words correct per minute or more. In contrast, Hispanic boys who were non-proficient readers on *FCAT* read an average of 98 words correct per minute, well below the norm for grade 4. More than three-fourths of the non-proficient readers (77%) read at less than 120 words correct per minute. Note that both groups did read the expository passage at a slower rate than the narrative passage, not an unexpected finding.

One factor that may affect reading rate of Hispanic students who are English language learners is whether or not they are translating and thinking in Spanish. One note provided by a reading coach suggests that this issue is pertinent for some of the Hispanic boys in this study:

*This student stated that sometimes he gets confused when he is verbalizing. Sometimes his words come out in English and sometimes they come out in Spanish.*

*There were a few times during this study when [he] encountered a word in English, and he did not know the word. The words he had problems with were similar enough to the same words in Spanish, which he knew. He used this knowledge to transfer information from Spanish to English. At other times he was able to make word analogies in English to determine words. He verbalized his process out loud. Each time he encountered an unfamiliar word, he made connections to known words and/or was able to segment a familiar part (stem) in order to make connections. [The student] has been taught strategies to activate when he is reading, and he uses the strategies.*

**Findings: Reading Rate**

**A clear and marked difference in the two groups was evident in reading rate: proficient readers read an average of 44 words correct per minute more than the non-proficient readers. Their slow rate of reading puts the non-proficient readers at a clear disadvantage in completing classroom assignments and, in particular, lengthy tests such as the *FCAT*. Based on their oral reading rates, ten minutes into the test, the non-proficient readers would be 440 words behind the proficient readers. The difference would likely be greater with a silent reading rate.**

### **NAEP Oral Reading Fluency Scale Ratings**

The *NAEP Oral Reading Fluency Scale* incorporates multiple elements of reading fluency, including phrasing, preservation of syntax, expression and intonation. *NAEP* fluency ratings assigned by reading coaches at the same time they determined each student's reading rate (i.e., WCPM) are displayed in the table that follows. The *Fluency Scale* adapted by Rasinski is a four-point scale. In a few cases, reading coaches noted that students demonstrated at different times in their reading elements of two adjacent levels of the scale, and they are so listed in the table.

Generally speaking, levels 3 and 4 represent fluent reading. Most of the Hispanic boys in both groups, proficient readers and non-proficient readers on the *FCAT*, were rated as fluent readers on the *FCAT Reading Practice Test* by the reading coaches. However, the typical proficient reader received the highest rating of Level 4 while the typical non-proficient reader was rated Level 3.

**Table 19. Ratings on NAEP Oral Reading Fluency Scale by Group**

<b>Adapted Version (Rasinski) of NAEP's* Oral Reading Fluency Scale</b>	<b>Proficient Readers</b>		<b>Non-Proficient Readers</b>	
	<b>Narrative (N=22)</b>	<b>Expository (N=21)</b>	<b>Narrative (N=24)</b>	<b>Expository (N=24)</b>
<b>Level 1:</b> Reads primarily in a word-by-word fashion. Occasional two-word and three-word phrases may occur, but these are infrequent. Author's meaningful syntax is generally not preserved. Passage is read without expression or intonation. Reading seems labored and difficult.				4% (1)
<b>ELEMENTS OF LEVEL 1 AND OF LEVEL 2</b>				
<b>Level 2:</b> Reads primarily in two-word phrases with occasional three- or four-word phrases. Some word-by-word reading may be present. Word groupings may be awkward and unrelated to the larger context of the sentence or passage. Passage is read with little or inappropriate expression or intonation.	5% (1)	10% (2)	29% (7)	25% (6)
<b>Elements of Level 2 and of Level 3</b>		5% (1)	4% (1)	
<b>Level 3:</b> Reads primarily in three- or four-word phrases. Some smaller phrases may be present. Most of the phrasing is appropriate and preserves the author's syntax. Some of the text is read with appropriate expression and intonation.	41% (9)	24% (5)	50% (12)	58% (14)
<b>Level 4:</b> Reads primarily in longer, meaningful phrases. Although some regressions, repetitions, and deviations from the text may be present, these do not appear to detract from the overall structure or meaning of the passage. The reading preserves the author's syntax. Most of the text is read with appropriate expression and intonation. A sense of ease is present in the reader's oral presentation.	54% (12)	62% (13)	17% (4)	12% (3)

\*National Assessment of Educational Progress

**Finding: NAEP Oral Reading Fluency Scale Rating:**

Both groups of Hispanic boys were typically rated as fluent readers by reading coaches using the *NAEP Oral Reading Fluency Scale*; *FCAT*-proficient readers most often received the highest rating of "4" while the *FCAT*-non-proficient readers most often received a rating of "3." A majority of Hispanic boys who are non-proficient readers based on *FCAT* would benefit from instructional activities designed to improve their rate of reading and overall fluency.

**Recommendations**

- C Design exercises for literacy centers and for small group instruction to improve reading rate and overall fluency.
- C When focusing on improving fluency, use materials that the student can read relatively easily.
- C Repeated reading is key. From an early age, children should be encouraged to reread (e.g., to classmates, to parents, siblings, grandparents, the dog, a doll). Reading along with a tape is helpful. Taping oneself and listening to how one sounds is valuable feedback.
- C Identify and encourage use of materials to develop a reading rate and other aspects of fluent reading. Suggested materials include *Phonics and Poetry Lessons* (Fountas and Pinnell), the *Fluency First Kit/CD* that is currently available in Reading First schools, *Readers' Theatre* (Benchmark Education Company), and activities suggested by Timothy Rasinski, who has been a conference presenter on many occasions in this district.
- C At a minimum, focus on students who, based on their oral reading, obviously need to become more fluent. However, many students can benefit from and enjoy these activities.

## Reading Comprehension on the FCAT Reading Practice Test

Much useful information about the Hispanic boys' reading comprehension was obtained during and after the administration of the *FCAT Reading Practice Test*.

### **Observations Recorded During the FCAT Reading Practice Test**

As each student worked through the *FCAT Reading Practice Test* silently, a reading coach observed and recorded behaviors on a checklist designed for that purpose. In the following table, the test administrators' appraisal of the students' appearance as they worked is reported.

**Table 20. Reading Coaches' Appraisal of Students Taking the Test**

	NARRATIVE PASSAGE				EXPOSITORY PASSAGE							
Proficient Readers	distracted...	—	—	30%	70%	..focused	haphazard approach...	—	—	26%	74%	..focused
	agitated/frustrated...	—	—	4%	96%	..calm	agitated/frustrated...	—	—	4%	96%	..calm
	unsure of self...	—	—	22%	78%	..confident	unsure of self...	—	—	17%	83%	..confident
	haphazard approach...	—	4%	39%	57%	..methodical	haphazard approach...	—	4%	43%	52%	..methodical
	tired...	—	9%	56%	35%	..energetic	tired...	—	9%	61%	26%	..energetic
	rushing...	13%	9%	43%	35%	..taking his time	rushing...	4%	13%	52%	30%	..taking his time
Non-Proficient Readers	distracted...	4%	8%	38%	50%	..focused	haphazard approach...	—	20%	28%	52%	..focused
	agitated/frustrated...	—	4%	38%	58%	..calm	agitated/frustrated...	—	8%	8%	84%	..calm
	unsure of self...	4%	12%	46%	38%	..confident	unsure of self...	4%	12%	40%	44%	..confident
	haphazard approach...	8%	23%	42%	27%	..methodical	haphazard approach...	—	36%	32%	32%	..methodical
	tired...	4%	31%	46%	15%	..energetic	tired...	20%	12%	56%	12%	..energetic
	rushing...	8%	8%	54%	31%	..taking his time	rushing...	8%	12%	44%	32%	..taking his time

The typical proficient reader was described as focused, calm, confident, methodical, somewhat energetic, and taking his time while taking both the narrative and expository parts of the *FCAT Reading Practice Test*. The typical non-proficient reader was described as focused, calm, somewhat confident or confident, methodical or somewhat methodical, somewhat energetic, and taking his time while taking both portions of the test. Both groups were observed to respond positively but they differed in degree, according to reading coaches who observed them working silently on the test.

The reading coaches also used a checklist to observe the Hispanic boys' method in tackling the test; these data are compiled in the next table. Note that in some instances, coaches may not have been able to discern whether the student read every single word or the exact sequence of actions. These represent the coaches' perceptions of what occurred; occasionally they omitted an item when they were not sure.

A few coaches noted that prior to reading several non-proficient readers flipped through the test booklet for both the narrative and expository passages. Some coaches were able to determine that their student did read the title. One of the non-proficient readers was observed to glance through the test illustrations on both the narrative passage and the expository passage. One non-proficient reader counted the number of questions on the expository passage.

While reading silently, almost all Hispanic boys, both proficient and non-proficient readers on *FCAT*, were perceived to have read the entire passage of narrative text and of expository text. A few students in each group subvocalized as they read, tracked the words with either their pencil or hand, generally holding their pencil or finger/hand above or next to the words. For each type of passage, one student in each group wrote in the test booklet while working silently. Several coaches made observations about the position in which their student read. One proficient reader was observed to read the expository passage twice before answering questions!

When answering the questions on the *FCAT Practice Test*, Hispanic boys in both groups typically read the question and all answer options; a few students read only some of the answers before making a choice, based on the reading coaches' records. Most students in both groups (62%-83%) looked back in the passages on one or more occasions when selecting answers. Proficient readers looked back to locate information or clues about more items than did non-proficient readers on both the narrative passage (mean of 2.4 vs. 1.6 times) and on the expository passage (mean of 2.6 vs. 1.7 times).

Fifteen to 35% of the boys did not go back to the passage at all. Scores of the proficient readers who did not look back on the narrative portion of the test were 45%, 64%, 73%, 82% correct; on the expository portion of their test, their scores were 67%, 78%, 89%, 89%. Scores of the non-proficient readers who did not look back on the narrative portion of the test were 18%, 18%, 36%, 36%, 45%, 45%, 45%, 55% and 64%; scores of non-proficient readers who did not look back at all in the expository portion of the test were 44%, 56%, 67% and 78%. Overall, among the students who never looked back at a passage on the practice test, *FCAT* proficient readers performed much better than *FCAT* non-proficient readers.

Of interest, the proficient and non-proficient readers most often went to the text to answer the same questions. For the narrative passage, students in both groups most often went back to answer question 12, which asked how a word is used in the context of the story, and question 20, which requires information provided in an informational inset. For the expository passage, students in both groups most often went back to the text when answering question 6, which also involved reading a table in an inset. Students appear to be making similar judgments about when they should go back to check the exact wording or details.

A minority of students in both groups marked answers and then went back to the text; this practice was slightly more prevalent among proficient readers.

An important difference between proficient and non-proficient readers was the relative ease with which the skilled readers went back and forth between the questions and the relevant text. This must to some extent relate to the advantage they have in terms of reading fluency. They may also have a better sense of where particular information is in the passage.

A number of reading coaches made additional notes. Several students reviewed their work. For example, several proficient readers were observed to reread some or all questions and answers when they completed the test and, on occasion, to change an answer. One student went so far as to check every answer against the passage after completing the test. A couple of non-proficient readers reviewed their answer choices on the expository passage.

**Table 21. Observations of Hispanic Boys' Test-Taking Strategies**

	Narrative Passage		Expository Passage	
	Proficient Readers	Non-Proficient Readers	Proficient Readers	Non-Proficient Readers
<b>A. BEFORE READING the passage, the student. . .</b>				
🌀 flips through the test booklet		8%		8%
🌀 reads some questions				
🌀 reads all questions				
🌀 reads the titles	30%	50%	39%	35%
🌀 Other _____	26%	8%	17%	15%
<b>B. WHILE READING the passage, the student. . .</b>				
🌀 The student does not read the passage, instead begins to answer questions.				
🌀 reads some of the passage.		4%		
🌀 reads all the passage	96%	92%	100%	92%
🌀 subvocalizes/moves lips	4%	15%		4%
🌀 points to words with <u>finger/pencil</u>	9%	15%	13%	8%
🌀 holds <u>hand/pencil below/above</u> line of text to track	13%	15%	13%	15%
🌀 writes on the test	4%	4%	4%	4%
🌀 Other _____	17%	12%	13%	15%
<b>C. WHEN ANSWERING QUESTIONS, the student. . .</b>				
🌀 reads the question and all answers	83%	77%	74%	85%
🌀 reads the question and some answers	13%	19%	4%	15%
🌀 reads only the answers				
🌀 does not look back at the passage	17%	35%	17%	15%
🌀 looks back at the passage on item(s) and then selects answer	83%	62%	74%	77%
🌀 first marks an answer, then goes back to confirm	23%	4%	26%	12%
🌀 goes back and forth between the questions and passage with <u>ease</u>	60%	12%	57%	23%
🌀 goes back and forth between the questions and passage with <u>difficulty</u>		4%		
🌀 appears to word match without reading	4%	8%		8%
🌀 Other	35%	12%	35%	23%

### **Findings: Observations During Testing**

- <Positive behaviors, such as being focused, calm and methodical, were observed in both proficient and non-proficient readers as they worked silently on the *FCAT Reading Practice Test*, though to a greater degree in proficient readers.
- <Students in both groups were observed to typically read each passage and then the questions and answers in turn. Proficient and non-proficient readers alike typically went back to the passages to look for information and clues to answer some questions.
- <Of interest, proficient and non-proficient readers alike most frequently reread in response to the same type questions, that is, questions that asked how a term was used in the passage and when the question called for specific details found in a graph or caption accompanying a photo.
- <On both types of passages, proficient readers went back to the text more often than did non-proficient readers and did so with relative ease.
- <Non-proficient readers who did not return to the passages almost always did very poorly on the test, which was not true of proficient readers.

### **Recommendations**

- ⊙ Help non-proficient readers realize that their classmates who do better in reading go back to reread more often than they do when answering questions. Consider asking skilled readers to explain how they judge if they need to check their answers.
- ⊙ Continue to encourage students to go back to the passage to find answers to questions about very specific information (e.g., how a word was used in the passage, data likely to be found in a table or graphic, a small detail). Many students know to do this; others need to learn this effective strategy as a first step.
- ⊙ Encourage students to think more as they read and model the process for them. Students need to develop a better schema about how a passage they read is organized so that they are able to quickly locate information needed. Students should be able to say that certain information is located near the beginning, towards the middle, or towards the end of the passage. Students should learn to quickly look ahead and preview what they are to read, glancing at the title, any headings, and graphics.
- ⊙ Sequence of events matters in many types of text, both fiction and non fiction. Help students learn to recognize other ways text is structured, for example, comparison/contrast, cause and effect. During classroom instruction, students might be asked to read a limited amount of text, a paragraph or page, and answer a question or briefly summarize what they have read thus far. Encourage students to use simple graphic organizers to keep track of what they read. The goal is for non-proficient readers to be more like proficient readers, who often are able to go right to the relevant part of a passage to justify their answer choice without spending excessive time searching. Modeling and practice are essential.
- ⊙ Recommended materials include Stephanie Harvey's work on summarization; *Guided Readers and Writers*; *Thinking While You're Reading*; and *Exploring Non-Fiction* by Teacher Created Materials.

### **Observations Based on Discussion of Answers**

To supplement the information obtained through observation of the student as he worked silently, each reading Coach followed up by interviewing the Hispanic student after he completed the *FCAT Reading Practice Test*. The students were asked to read the questions and answer options aloud and then explain their choices. The boys were also asked why they had rejected alternative choices as well. The reading coaches recorded the explanations on the test booklet and noted effective and ineffective use of strategies.

In the discussion of his answer to a test question on the practice test, the typical Hispanic boy rated at level 4 or 5 on *FCAT Reading* understood the question and held it in mind while evaluating the answer options; eliminated answers that clearly were wrong, justified his choice either by citing relevant text or by pointing out or reading to the coach the words in the passage that supported his answer; quickly located relevant text when he went back to the passage; and made use of all the types of information provided, including pictures and captions, graphs, etc. These effective comprehension strategies were observed in both the narrative and expository passages. Additionally, in the judgment of the reading coach, the typical proficient reader understood the vocabulary of the passages and questions.

In contrast, the typical Hispanic boy who was rated at level 1 or 2 on *FCAT Reading*, that is, non-proficient, demonstrated a mixture of effective and ineffective behaviors on the practice test. He did not consistently understand and hold in mind the question or eliminate answers that were obviously wrong; justified his answers by citing relevant information he remembered from the passage, although frequently his rationale was incomplete or illogical; on occasion pointed to or read aloud relevant words in the expository passage; often cited his own knowledge and experience in justifying answers; did not always use all the information provided, such as pictures, captions, and graphs; and struggled with the meaning of some words, often interpreting a word literally or concretely.

### **Students' Explanations of the Meanings of Vocabulary in the Expository Passage**

Typically vocabulary in expository passages is less familiar to students than vocabulary in narrative passages. For this reason, students were questioned about the meaning of a few key words from the expository passage *Skip the Soft Drinks!*

Note that students rarely provide definitions like those found in a dictionary. Instead they explain the term in their own words, describe various characteristics, provide examples or use it in a sentence. They sometimes mention the context in which they have heard or seen the word or emotional overtones. On occasion, students allude to multiple meanings of a word. Provided below are sample explanations of vocabulary provided by both proficient and non-proficient readers.

**'Advertisement'**. Most students in both groups had some understanding of 'advertisement' as illustrated below. However, a few non-proficient readers did not have a clear understanding of the word. Sometimes the non-proficient readers focused on a meaning gleaned from the passage as a whole rather than on the specific word.

**Table 22. Explanation of 'Advertisement'**

<b>ACCEPTABLE RESPONSES</b>	
▪ Anything used to pursue people to buy, go somewhere or do something	proficient reader
▪ Like an ad in a newspaper or on T.V. which is like a logo to persuade people to buy a product.	proficient reader
▪ On T.V., a commercial that is trying to sell something, like if they have a vacuum they are trying to sell, they use a commercial.	non-proficient reader
▪ Somebody on T.V. telling you to buy a drink, food, or toy.	non-proficient reader
<b>QUESTIONABLE RESPONSES</b>	
▪ It's bad. [P: Why?] It sounds like a bad word.	non-proficient reader
▪ It says in the story it turns your teeth yellow.	non-proficient reader
▪ I think it means to be healthy.	non-proficient reader
▪ Keeping your health.	non-proficient reader
▪ When you're eating something healthy.	non-proficient reader

**'Consumer'**. Almost all proficient readers were able to respond with an acceptable definition of 'consumer'. Non-proficient readers, however, had much more difficulty with this word, with more than half stating that they "didn't know" or "never head of it", and others providing questionable explanations. Once again, some students responded with a generalized message from the passage rather than by discussing the specific vocabulary word.

**Table 23. Explanation of 'Consumer'**

<b>ACCEPTABLE RESPONSES</b>	
▪ Someone that digests something or buys something a lot.	proficient reader
▪ Buyer of something.	proficient reader
▪ People consume soft drinks. You keep on buying and keep on using it.	non-proficient reader
▪ Like a customer.	non-proficient reader
<b>QUESTIONABLE RESPONSES</b>	
▪ . . .when you think, like you're a hard thinker.	non-proficient reader
▪ People who make them buy.	non-proficient reader
▪ Don't drink a lot of sweets like soft drinks.	non-proficient reader
▪ I think it's a plant that makes some food.	non-proficient reader

**'Nutrition'**. Most students, both proficient and non-proficient readers, understood that nutrition was related to health, eating healthy foods, or foods with vitamins. One proficient reader was more precise than other students and referenced studying the human body in science class.

**Table 24. Explanation of 'Nutrition'**

<b>ACCEPTABLE RESPONSES</b>	
▪ Something that is provided to produce energy in your body. I got this right out of my science book. We're studying the human body.	proficient reader
▪ What keeps you healthy, your healthiness; eating healthy foods.	proficient reader
▪ Like protein and nutrients in something like orange juice and milk.	non-proficient reader
▪ Something that is good for you and helps you grow.	non-proficient reader
<b>QUESTIONABLE RESPONSES</b>	
▪ There's a machine that puts the cokes in a box and then puts it on a truck. [This non-proficient reader may be thinking of 'automation'.]	non-proficient reader
▪ To help you with your vocabulary.	non-proficient reader
▪ Something new.	non-proficient reader

**‘Disease’.** The responses of most students, both proficient and non-proficient readers, reflected some level of understanding of ‘disease’. They used a synonym, gave an example, or referred to the possible outcomes of a disease.

**Table 25. Explanation of ‘Disease’**

<b>ACCEPTABLE RESPONSES</b>	
▪ <i>When you get sickness, it’s stuck to your body. They call it different things like cancer.</i>	proficient reader
▪ <i>Sickness like diabetes. A disease is not like a cold that goes away; it stays with you.</i>	proficient reader
▪ <i>Something that makes you really, really sick and is fatal.</i>	non-proficient reader
▪ <i>Something you get from something you do, like smoking gives you cancer. Cancer is a disease.</i>	non-proficient reader
▪ <i>A bad bacteria in your body.</i>	non-proficient reader

**‘Recommend’.** Most students responded in a way that indicated understanding of the word ‘recommend.’ Note that many students defined recommendation in a different way than most adults would - no doubt based on students’ experiences with a parent or teacher ‘recommending’ they take some action. Whether you follow a recommendation is generally a matter of choice; however, many children perceive it as a direction or even an order with an ‘or else’ implied.

**Table 26. Explanation of ‘Recommendation’**

<b>ACCEPTABLE RESPONSES</b>	
▪ <i>Doctor recommended medicine, something someone thought was good; they want you to try it too.</i>	proficient reader
▪ <i>Someone tells you to do this but that’s only their opinion.</i>	proficient reader
▪ <i>Your doctor tells you to get a prescription.</i>	non-proficient reader
▪ <i>Means making you do something; they want you to do the certain thing.</i>	non-proficient reader
▪ <i>I recommend you hand me the remote control; to demand somebody. . .</i>	non-proficient reader
▪ <i>Want. I recommend you clean up the mess on the floor.</i>	non-proficient reader

**Illustrations of the Explanations Offered During Discussion**

As a reading coach discussed with each Hispanic boy the answers he had marked on the *FCAT Reading Practice Test*, s(he) recorded the youngster’s explanation of his choice. This information proved to be particularly valuable in providing insight about each boy’s thinking in selecting his answers to questions like those found on the *FCAT*. As the reader will see, often several plausible answers are among the options, and the reader may need to reread the text to find the **best** answer.

More than 1,000 examples of the Hispanic boys’ explanations of their answers were analyzed and cross referenced with the notes made by the test administrator. These are available for purposes of dissemination, for staff development and for use with children as deemed appropriate. For the purposes of this report, examples of responses to each question by the boys assigned to each reader group are presented. For each question, the relevant text is provided for the reader, but keep in mind that these few sentences are embedded in a long passage, so the task is not as easy as it appears. Typically, one or two examples of explanations of skilled readers are exhibited, followed by examples of incorrect responses by non-proficient readers. The expected answer is identified with an asterisk (\*), the answer chosen is identified in a bold square, and the boy’s explanation is recorded on the right. Comments are provided below the example. In some examples, errors made in reading aloud the test questions and answers have been recorded.

As you read the examples, think about whether the student understood the question; consider the nature of the evidence cited in his rationale, that is, whether the answer is based on the passage or on his own experience; and read his explanation of how he eliminated various answer options because valuable information about his thinking processes surfaces.

**Exhibit 10. Illustrations of the Explanations Offered During Discussion: Question 1**

<b>Relevant Text: There’s a high concentration of sugar in soft drinks, and when that sugar sits on your teeth for any length of time, it can cause tooth decay.</b>			
<b>Question 1:</b> Tooth decay is caused by			
<b>EXAMPLE 1</b>	<b>A*</b>	sugar sitting on your teeth	<i>Because in the story it says that there is a big concentration of sugar in soft drinks and when sugar sits on your teeth for any length of time it causes tooth decay.</i>
	<b>B</b>	not seeing the dentist.	
	<b>C</b>	drinking too many soft drinks.	
	<b>D</b>	not drinking enough milk.	
<b>EXAMPLE 2</b>	<b>A*</b>	sugar sitting on your teeth.	<i>Because my mom told me that drinking soda puts sugar on your teeth and that decays them.</i>
	<b>B</b>	not seeing the dentist.	
	<b>C</b>	drinking too many soft drinks.	
	<b>D</b>	not drinking enough milk.	
Comment: The student relies on his mom rather than the text to answer.			
<b>EXAMPLE 3</b>	<b>A*</b>	sugar sitting on your teeth.	<i>The last passage - when you drink too many soft drinks it gives you diabetes and makes your teeth ugly. [P: Why didn't you choose any of the other answers?] Not sure.</i>
	<b>B</b>	not seeing the dentist.	
	<b>C</b>	drinking too many soft drinks	
	<b>D</b>	not drinking enough milk.	
<b>Proficient Readers</b>		<b>87% correct</b>	
<b>Non-Proficient Readers</b>		<b>58% correct</b>	

**Exhibit 11. Illustrations of the Explanations Offered During Discussion: Question 2**

<p><b>Relevant Text:</b> Many schools allow soft drink companies to buy the rights to all their vending machines. This means that pop machines will either serve all Pepsi products or all Coke products, plus the companies are allowed to advertise on signs around your school and on Channel One, a special TV show shown to kids first thing in the morning. Outside of school, you're hit even harder. You probably can't sit through one commercial break without seeing advertisements from at least one soft drink company.</p>			
<p><b>Question 2:</b> Why do soft drink companies want to advertise at your school?</p>			
<p><b>EXAMPLE 1</b></p>	A	They want to give money to your school.	<i>Soft drink companies don't give dollars to schools or people or anybody.</i>
	<b>B*</b>	They want you to buy their soft drink.	<i>They don't care if you drink them or not - they just want you to buy them.</i>
	C	They want kids to see their signs.	<i>They don't just want them to see signs but . . . buy the product and drink it.</i>
	D	They want you to drink soft drinks.	<i>They seriously want your money - they don't care if you drink them.</i>
<p><b>EXAMPLE 2</b></p>	A	They want to give money to your school.	<i>If they wanted to give money to the school, the principal could pay the teachers.</i>
	<b>B*</b>	They want you to buy their soft drink.	<i>It doesn't make sense - they didn't want you to get healthy.</i>
	<b>C</b>	They want kids to see their signs.	<i>Went to the reading. . . then found where it said about the TV show.</i>
	D	They want you to drink soft drinks.	<i>If you drink the soft drinks, you get no more healthy.</i>
<p><b>Comment:</b> Option C is a true statement but only a means to an end, that is, encouraging you to buy soft drinks.</p>			
<p><b>EXAMPLE 3</b></p>	<b>A</b>	They want to give money to your school.	<i>Because the school needs money too for things like desks and computers.</i>
	<b>B*</b>	They want you to buy their soft drink.	<i>They just encourage you to buy it.</i>
	C	They want kids to see their signs.	<i>Kids just don't see the signs - they buy it.</i>
	D	They want you to drink soft drinks.	<i>They want you to drink soft drinks. It's just once in awhile.</i>
<p><b>Comment:</b> The student sees advantages of the dollars not mentioned in the text. Soft drink companies do not provide their dollars for altruistic reasons.</p>			
<p><b>EXAMPLE 4</b></p>	A	They want to give money to your school.	
	<b>B*</b>	They want you to buy their soft drink.	
	<b>C</b>	They want kids to see their signs.	<i>I looked back in the story. [Student located 'Companies are allowed to advertise' around your school and on Channel One.]</i>
	D	They want you to drink soft drinks.	
<p><b>Proficient Readers</b></p>		<p><b>74% correct</b></p>	
<p><b>Non-Proficient Readers</b></p>		<p><b>35% correct</b></p>	

**Exhibit 12. Illustrations of the Explanations Offered During Discussion: Question 3**

<p><b>Relevant Text:</b> Many schools allow soft drink companies to buy the rights to all their vending machines. This means that pop machines will either serve all Pepsi products or all Coke products, plus the companies are allowed to advertise on signs around your school and on Channel One, a special TV show shown to kids first thing in the morning. Outside of school, you're hit even harder. You probably can't sit through one commercial break without seeing advertisements from at least one soft drink company.</p> <p>The advertising has obviously worked. . .</p>		
<p><b>Question 3:</b> As used in the article, which two words have the SAME meaning?</p>		
<p><b>EXAMPLE 1</b></p>	A	weaken, disease ...are very, very different
	B	sugar, low-calorie ...different because a lot of sugar is not low-calorie
	<b>C*</b>	commercial, advertising ...are the same thing because if you watch a commercial, they're advertising
	D	pounds, calories ...they're different
<p><b>Example 2</b></p>	A	weaken, disease <i>I thought they mean the same because someone in my family always says 'weaken.'</i>
	B	sugar, low-calorie <i>Don't mean the same [P:] Dad eats cereal, he eats sugar and it says high calories.</i>
	<b>C*</b>	commercial, advertising <i>A commercial - or TV, like a movie. [P: What does advertising mean?] I don't know.</i>
	D	pounds, calories <i>...Pounds are like someone weighs 50 pounds. Calories [cavities?] get in your teeth.</i>
<p><b>Comment:</b> The student refers to how the word 'weaken' is used in his family; his answer is not grounded in the passage read. Vocabulary is an issue for this student.</p>		
<p><b>EXAMPLE 3</b></p>	A	weaken, disease
	B	sugar, low-calorie
	<b>C*</b>	commercial, advertising
	D	pounds, calories <i>Because if you eat a lot of calories, it would make you gain pounds. . .</i>
<p><b>Comment:</b> So true! The student is able to connect the two words in a causal relationship. Although the student can link the words in a context, the individual words do not have the same meaning.</p>		
<p><b>EXAMPLE 4</b></p>	A	weaken, disease [Student located text that caffeine found in soft drinks, coffee and chocolate causes nervousness, irritability sleeplessness, etc] and stated <i>I am allergic to chocolate.</i>
	B	sugar, low-calorie
	<b>C*</b>	commercial, advertising
	D	pounds, calories
<p><b>Comment:</b> Again, the student is choosing an answer based on a personal reason rather than referencing the material read.</p>		
<p><b>EXAMPLE 5</b></p>	A	weaken, disease
	<b>B</b>	sugar, low-calorie <i>Sometimes I drink Pepsi and I see on the back 'sugar' and 'calories'.</i>
	<b>C*</b>	commercial, advertising
	D	pounds, calories
<p><b>Comment:</b> The student has seen the two words together on the back of a Pepsi can; that does not indicate the words have the same meaning. Once again, the student relies on outside information.</p>		
<p><b>EXAMPLE 6</b></p>	A	weaken, disease <i>'Weaken' means no energy and 'disease' is some type of sickness.</i>
	B	sugar, low-calorie <i>Sugar has a lot of calories.</i>
	<b>C*</b>	commercial, advertising <i>A 'commercial' is like on TV and 'advertising' is try to sell it.</i>
	D	pounds, calories <i>If you get too many calories that makes pounds.</i>
<p><b>Comment:</b> Linking words together in a causal context does not mean the words have the same meaning.</p>		

Exhibit 12. (cont.)

<p><b>Relevant Text:</b> Many schools allow soft drink companies to buy the rights to all their vending machines. This means that pop machines will either serve all Pepsi products or all Coke products, plus the companies are allowed to advertise on signs around your school and on Channel One, a special TV show shown to kids first thing in the morning. Outside of school, you're hit even harder. You probably can't sit through one commercial break without seeing advertisements from at least one soft drink company.</p> <p>The advertising has obviously worked. . .</p>			
<p><b>Question 3:</b> As used in the article, which two words have the SAME meaning?</p>			
<p><b>EXAMPLE 7</b></p>	<b>A</b>	weaken, disease	
	<b>B</b>	sugar, low-calorie	
	<b>C*</b>	commercial, advertising	
	<b>D</b>	pounds, calories	<i>Because of TV - they say let's lose weight and burn off all those calories.</i>
<p><b>Comment:</b> Again, the student is choosing an answer based on a personal reason rather than referencing the material read.</p>			
<p><b>EXAMPLE 8</b></p>	<b>A</b>	weaken, disease	<i>When you have a disease, you are tired and weakened.</i>
	<b>B</b>	sugar, low-calorie	<i>I don't understand 'low-calories.'</i>
	<b>C*</b>	commercial, advertising	<i>I didn't get 'commercial.'</i>
	<b>D</b>	pounds, calories	<i>'Pounds' - I think it was supposed to be with 'fat' and 'calories' is something else.</i>
<p><b>Comment:</b> 'Weaken' and 'disease' are linked in a causal context based on personal experience. The explanation is not related to the passage. The student is also uncertain about the meaning of 'commercial.'</p>			
<p><b>Proficient Readers</b></p>		<p><b>74% correct</b></p>	
<p><b>Non-Proficient Readers</b></p>		<p><b>8% correct</b></p>	

**Exhibit 13. Illustrations of the Explanations Offered During Discussion: Question 4**

<p><b>Relevant Text:</b> . . .we might experience more health problems as a result of the amount of soft drinks we drink. Drinking soft drinks and not milk may increase the chance for osteoporosis, a disease which weakens your bones. The added calories, coupled with less exercise, can also put on the pounds, putting you at risk for diseases like diabetes. Your teeth are also in danger. Not even two trips to the dentist a year can save you from the potential damage from too many soft drinks. There's a high concentration of sugar in soft drinks, and when that sugar sits on your teeth for any length of time, it can cause tooth decay.</p> <p>You've all heard of the drug caffeine, mostly found in soft drinks, coffee, and chocolate. Caffeine may cause nervousness, irritability, sleeplessness, and rapid heartbeat. It can make you become restless and fidgety, develop headaches, and have difficulty going to sleep.</p> <p><b>It's time to take a serious look at how many soft drinks you're consuming.</b></p>		
<p><b>Question 4:</b> What is the MOST important lesson to learn from "Skip the Soft Drinks!"?</p>		
<p><b>EXAMPLE 1</b></p>	<p><b>A*</b> Avoid soft drinks for better health.</p>	<p><i>In the story, the author was mostly talking about why to avoid soft drinks to help your health.</i></p>
	<p><b>B</b> Brush your teeth regularly.</p>	<p><i>. . .did talk about that but it said the <u>MOST</u> important thing.</i></p>
	<p><b>C</b> Soft drinks have too much sugar.</p>	<p><i>Everyone knows that - Same as B.</i></p>
	<p><b>D</b> Soft drink companies are pushy.</p>	<p><i>She didn't even talk about that so I knew it wasn't right.</i></p>
<p><b>Example 2</b></p>	<p><b>A*</b> Avoid soft drinks for better health.</p>	<p><i>As the title says "Skip the Soft Drinks." You have to avoid soft drinks for better health.</i></p>
	<p><b>B</b> Brush your teeth regularly.</p>	
	<p><b>C</b> Soft drinks have too much sugar.</p>	
	<p><b>D</b> Soft drink companies are pushy.</p>	
<p><b>Comment:</b> The proficient reader references the title as signaling an important idea.</p>		
<p><b>EXAMPLE 3</b></p>	<p><b>A*</b> Avoid soft drinks for better health.</p>	<p><i>It just says avoid it and the title says <u>skip</u> the soft drinks.</i></p>
	<p><b>B</b> Brush your teeth regularly.</p>	<p><i>It has nothing to do with the story.</i></p>
	<p><b>C</b> Soft drinks have too much sugar.</p>	<p><i>Because on the first page it said soft drinks have a lot of sugar.</i></p>
	<p><b>D</b> Soft drink companies are pushy.</p>	<p><i>It's true - not about the story.</i></p>
<p><b>Comment:</b> The non-proficient reader also alludes to the title but does not attach the same level of importance to it.</p>		
<p><b>EXAMPLE 4</b></p>	<p><b>A*</b> Avoid soft drinks for better health.</p>	
	<p><b>B</b> Brush your teeth regularly.</p>	
	<p><b>C</b> Soft drinks have too much sugar.</p>	<p><i>It showed in the box where there were lots of sugar.</i></p>
	<p><b>D</b> Soft drink companies are pushy.</p>	
<p><b>Comment:</b> This is a true statement but not a 'lesson.'</p>		
<p><b>EXAMPLE 5</b></p>	<p><b>A*</b> Avoid soft drinks for better health.</p>	<p><i>Because (I know it can be true) if you avoid soft drinks, you won't have the tooth problem.</i></p>
	<p><b>B</b> Brush your teeth regularly.</p>	<p><i>. . .some people hurry, but if you brush teeth regularly, you won't have the tooth problem.</i></p>
	<p><b>C</b> Soft drinks have too much sugar.</p>	<p><i>Yes that's true but not too much (more than 10).</i></p>
	<p><b>D</b> Soft drink companies are pushy.</p>	<p><i>I wouldn't say they are pushy - just bossy. I visited a coke company before.</i></p>
<p><b>Comment:</b> This reader cites a mixture of outside information and information he read.</p>		
<p><b>Proficient Readers</b></p>		<p><b>96% correct</b></p>
<p><b>Non-Proficient Readers</b></p>		<p><b>62% correct</b></p>

**Exhibit 14. Illustrations of the Explanations Offered During Discussion: Question 5**

<b>Relevant Text:</b> If you're a 12-year-old boy, you're in the group of the biggest soft drink consumers in the nation.			
<b>Question 5.</b> Who drinks the most soft drinks in the nation?			
<b>EXAMPLE 1</b>	<b>A</b>	dentists	<i>Dentists don't eat too much soft drinks because they need their teeth to be good.</i>
	<b>B</b>	school students	<i>Only some schools allow soft drinks.</i>
	<b>C*</b>	12-year-old boys	<i>It said in the text.</i>
	<b>D</b>	all Americans	<i>Nobody knows if all of us drink soft drinks.</i>
<b>Comment:</b> This proficient reader notes that 12-year-old boys were mentioned in the text, but uses interesting logic to eliminate the other options.			
<b>Example 2</b>	<b>A</b>	dentists	<i>They're just about whitening your teeth. They don't drink or eat junk food.</i>
	<b>B</b>	school students	<i>Could be but in the passage they said 12-year-old boys.</i>
	<b>C*</b>	12-year-old boys	<i>In the passage, it said 12-year-old boys.</i>
	<b>D</b>	all Americans	<i>In the passage most dentists are Americans so not all Americans drink soft drinks.</i>
<b>Comment:</b> This proficient reader cites information from the text to justify his answer. His logical approach in eliminating other answers is interesting.			
<b>EXAMPLE 3</b>	<b>A</b>	dentists	
	<b>B</b>	school students	
	<b>C*</b>	12-year-old boys	
	<b>D</b>	all Americans	<i>In the beginning of the story it said they drink a whole lot of soft drinks in a year. [The student went back to page 1 and read "14 billion soft drinks in a year."]</i>
<b>Comment:</b> This non-proficient reader does go back to the text but settles on the first piece of evidence he sees.			
<b>EXAMPLE 4</b>	<b>A</b>	dentists	<i>Dentists drink Coke but not more than Americans.</i>
	<b>B</b>	school students	<i>They are school students who are Americans too.</i>
	<b>C*</b>	12-year-old boys	<i>Adults drink more soft drinks than students.</i>
	<b>D</b>	all Americans	<i>I went back in the story. Do you know Americans buy over 14 billion gallons?</i>
<b>Comment:</b> This non-proficient reader missed the explicit statement about 12-year-old boys.			
<b>EXAMPLE 5</b>	<b>A</b>	dentists	<i>Didn't pick because they know not to drink soft drinks.</i>
	<b>B</b>	school students	<i>Not this because in school you are not allowed.</i>
	<b>C*</b>	12-year-old boys	<i>See, it says in article [reads passage]</i>
	<b>D</b>	all Americans	<i>I looked in passage and already knew it was C. I saw it didn't say this because babies are Americans too and they don't drink soft drinks.</i>
<b>Comment:</b> Note that this non-proficient reader was as skeptical as the proficient reader about <u>all</u> Americans drinking soft drinks and uses his own logic to eliminate this option, that is, babies don't drink soft drinks. He rejected B based on personal experience about his school.			
<b>Proficient Readers</b>		<b>96% correct</b>	
<b>Non-Proficient Readers</b>		<b>69% correct</b>	

**Exhibit 15. Illustrations of the Explanations Offered During Discussion: Question 6**

<b>Relevant Text:</b>	SUGAR: The average 12-ounce can of soda pop contains about 40 grams of refined sugars. That's 10 teaspoons of pure calories. Would you ever eat 10 teaspoons of sugar at once?		
<b>Question 6.</b> How many teaspoons of sugar are in a 12-ounce serving of soft drink?			
<b>EXAMPLE 1</b>	<b>A*</b>	10	<i>In the article beside the 3<sup>rd</sup> paragraph it says that an average 12 oz. can of soda pop contains about 40 grams or approximately 10 teaspoons of sugar.</i>
	<b>B</b>	12	
	<b>C</b>	40	
	<b>D</b>	100	
<b>Comment:</b> This proficient reader is precise in locating the information in the text and reporting that 40 grams corresponds to 10 teaspoons of sugar.			
<b>EXAMPLE 2</b>	<b>A*</b>	10	[Student went back to passage and skimmed in search of the number 10 and found the answer in less than 30 seconds, according to the reading coach.]
	<b>B</b>	12	
	<b>C</b>	40	
	<b>D</b>	100	
<b>EXAMPLE 3</b>	<b>A*</b>	10	<i>Normal</i> <i>Same as 10 [answer A]</i> <i>Because 40 is all your body can take.</i> <i>Bouncing off the walls.</i>
	<b>B</b>	12	
	<b>C</b>	40	
	<b>D</b>	100	
<b>Comment:</b> Some proficient readers struggled with this question and may not have read the inset. This student has developed his own scale!			
<b>EXAMPLE 4</b>	<b>A*</b>	10	I used the Natural [Nutritional] information and the answers do not have '150.'
	<b>B</b>	12	
	<b>C</b>	40	
	<b>D</b>	100	
<b>Comment:</b> This non-proficient reader looked at the wrong inset and saw that Coke has 150 calories; as he stated, he did not find 150 among the answers. The student looked at the numbers only rather than what was being counted. A number of students looked at the wrong informational inset.			
<b>EXAMPLE 5</b>	<b>A*</b>	10	The article said 40.
	<b>B</b>	12	
	<b>C</b>	40	
	<b>D</b>	100	
<b>Comment:</b> This student also found a number but did not pay attention to the noun of interest, that is, the number of teaspoons, not grams.			
<b>EXAMPLE 6</b>	<b>A*</b>	10	This was actually out of [not in] the story. I know that some of the soft drinks have 12 ounces of sugar in it.
	<b>B</b>	12	
	<b>C</b>	40	
	<b>D</b>	100	
<b>Comment:</b> This non-proficient reader did not base his answer on the information in the passage.			
<b>EXAMPLE 7</b>	<b>A*</b>	10	On page 1 there's a caption that says the average can of soda contains 40 grams of refined sugar.
	<b>B</b>	12	
	<b>C</b>	40	
	<b>D</b>	100	
<b>Comment:</b> Yes. How many teaspoons? This was a common error.			
<b>EXAMPLE 8</b>	<b>A*</b>	10	My dad tells me a 12 ounce soft drink is 10. . . . is too much for 12 teaspoons of sugar. That's impossible. That's uncertain
	<b>B</b>	12	
	<b>C</b>	40	
	<b>D</b>	100	
<b>Comment:</b> This non-proficient reader referenced his dad as an information source and gave his opinion of the various options.			
<b>Proficient Readers</b>		<b>52% correct</b>	
<b>Non-Proficient Readers</b>		<b>38% correct</b>	

**Exhibit 16. Illustrations of the Explanations Offered During Discussion: Question 7**

<b>Relevant Text:</b> If you do have a soft drink, make sure to brush your teeth afterward.			
<b>Question 7:</b> According to the article, what should you do after you drink a soft drink?			
<b>EXAMPLE 1</b>	<b>A</b>	exercise	
	<b>B</b>	eat healthy food	
	<b>C</b>	sleep	
	<b>D*</b>	brush your teeth	<i>I remembered reading in the passage. [The question was answered without a need to go back.]</i>
<b>Comment:</b> Most students in both groups answered this question correctly; the answer involved remembering, locating a literal statement, or using common sense.			
<b>EXAMPLE 2</b>	<b>A</b>	exercise	<i>After you drink a soft drink you probably need to exercise it off.</i>
	<b>B</b>	eat healthy food	<i>You do need healthy food but it won't exercise it off.</i>
	<b>C</b>	sleep	<i>When you sleep it will still stay there.</i>
	<b>D*</b>	brush your teeth	<i>You do have to brush your teeth to get it off your teeth, but if it's already in your system, you have to exercise it off.</i>
<b>Comment:</b> This non-proficient reader offers a logical justification for his answer but the expected answer is explicitly stated. The student's response is focused on gaining weight rather than tooth decay. Soft drinks do lead to both problems.			
<b>EXAMPLE 3</b>	<b>A</b>	exercise	<i>I went back to the article and it said to [exercise].</i>
	<b>B</b>	eat healthy food	<i>You're not supposed to drink a soft drink before you eat healthy food.</i>
	<b>C</b>	sleep	<i>If it's got caffeine like Sprite, it will make you lose sleep. . .</i>
	<b>D*</b>	brush your teeth	<i>If you drink it first, then brush your teeth, you still have the calories. . .</i>
<b>Comment:</b> This student, like the one above, is concerned about some of the other adverse consequences of drinking soft drinks. Above and beyond the problem of tooth decay is the issue of weight. This student obviously understands what he's read, but on a standardized test, finding an explicit statement will trump an answer arrived at by inference. Note also that the student brings in outside information in his comments about Sprite.			
<b>Proficient Readers</b>		<b>96% correct</b>	
<b>Non-Proficient Readers</b>		<b>81% correct</b>	

**Exhibit 17. Illustrations of the Explanations Offered During Discussion: Question 8**

<b>Relevant Text:</b> [Passage as a whole]			
<b>Question 8:</b> Why did the author write this passage?			
<b>EXAMPLE 1</b>	<b>A</b>	to explain why schools sell soft drinks	<i>It doesn't explain why schools sell soft drinks.</i>
	<b>B</b>	to encourage people to get dental care	<i>It encourages but doesn't explain a lot.</i>
	<b>C*</b>	to educate people about the problems with soft drinks.	<i>The entire story explains the problems with soft drinks.</i>
	<b>D</b>	to describe the effects of advertising	<i>It says stuff, but not a lot.</i>
<b>Example 2</b>	<b>A</b>	to explain why schools sell soft drinks	
	<b>B</b>	to encourage people about dental care	<i>If you don't go to the dentist often to do checkups, you can get lots of cavities or lose all your teeth.</i>
	<b>C*</b>	to educate people about the problems with soft drinks	<i>Next thing you know, you have to get all that stuff up there.</i>
	<b>D</b>	to describe the effects of advertising	
<b>Comment:</b> This non-proficient reader makes a true statement, but has missed the main message.			
<b>EXAMPLE 3</b>	<b>A</b>	to explain why schools sell soft drinks	<i>Schools don't sell soft drinks because it has sugar and gets kids hyper and acting cross.</i>
	<b>B</b>	to encourage people to get dental care	<i>They are trying to do this but. . .what is said in C more.</i>
	<b>C*</b>	to educate people about the problems with soft drinks	<i>They need to tell them how bad it is for you and they should stop buying it or maybe not drink so much of it.</i>
	<b>D</b>	to describe the effects of advertising	<i>He did show this - can get people to buy this, but he's telling more about soft drinks being bad for you.</i>
<b>Comment:</b> Most non-proficient readers answered correctly as this one did. He does pull in outside information,			
<b>EXAMPLE 4</b>	<b>A</b>	to explain why schools sell soft drinks	<i>Because schools really do sell soft drinks. [P: How do you know?] Because I buy the soft drinks.</i>
	<b>B</b>	to encourage people to get dental care	
	<b>C*</b>	to educate people about the problems with soft drinks	
	<b>D</b>	to describe the effects of advertising	
<b>Comment:</b> This non-proficient reader relies on personal experience. While what he says may be true, he's not focused on the author's purpose for writing.			
<b>EXAMPLE 5</b>	<b>A</b>	to explain why schools sell soft drinks	<i>At this school, kids can't drink soft drinks. . .but teachers can.</i>
	<b>B</b>	to encourage people to get dental care	<i>People might ignore an important part. It didn't say.</i>
	<b>C*</b>	to educate people about the problems with soft drinks	<i>If people read it, they didn't follow directions.</i>
	<b>D</b>	to describe the effects of advertising	<i>Someone who read it could know about soft drinks.</i>
<b>Comment:</b> This student has lost track of the question, the author's purpose. He talks about his own school.			
<b>Proficient Readers</b>		<b>100% correct</b>	
<b>Non-Proficient Readers</b>		<b>73% correct</b>	

**Exhibit 18. Illustrations of the Explanations Offered During Discussion: Question 9**

Relevant Text:		Nutritional Information			
		Coke	Pepsi	Orange Juice	
		Calories per 8 oz	100	150	110
		Fat	0	0	0
		Protein	0	0	2
		Vitamin C-percent of total daily value	0%	0%	100%

**Question 9:** Which statement is TRUE about the nutritional information on soft drinks and orange juice?

EXAMPLE 1	A	Soft drinks, in general, have more calories than orange juice.	<i>Soft drinks are not healthy, no vitamins and stuff like that. Plus I know this because right beside the 5<sup>th</sup> paragraph it says so on page 2. [Shows reading coach and reads it.]</i>
	<b>B*</b>	Soft drinks do not provide any vitamin C but orange juice has vitamin C.	
	C	Soft drinks and orange juice are fatty.	
	D	Soft drinks and orange juice are a good source of protein.	
<b>Comment:</b> This proficient reader is precise in describing where he found the relevant information.			
EXAMPLE 2	A	Soft drinks, in general, have more calories than orange juice.	<i>Because it says on Nutritional Information on page 2, it says. . .The others were not good choices because they were not even there when I looked deeper in the little graph.</i>
	<b>B*</b>	Soft drinks do not provide any vitamin C but orange juice has vitamin C.	
	C	Soft drinks and orange juice are fatty.	
	D	Soft drinks and orange juice are a good source of protein.	
<b>Comment:</b> This student was among the many non-proficient readers who answered correctly.			
EXAMPLE 3	A	Soft drinks, in general, have more calories than orange juice.	<i>Soda and soft drink do not have Vitamin D. But I <u>saw</u> on the back of a orange juice carton that it said it has Vitamin D.</i>
	<b>B*</b>	Soft drinks do not provide any vitamin C but orange juice has vitamin C.	
	C	Soft drinks and orange juice are fatty.	
	D	Soft drinks and orange juice are a good source of protein.	
<b>Comment:</b> This non-proficient reader chose the correct answer but based on this revision of the answer and personal experience.			
EXAMPLE 4	A	Soft drinks, in general, have more calories than orange juice.	<i>I see it on my orange juice and not on my soft drinks.</i>
	<b>B*</b>	Soft drinks do not provide any vitamin C but orange juice has vitamin C.	
	C	Soft drinks and orange juice are fatty.	
	D	Soft drinks and orange juice are a good source of protein.	
<b>Comment:</b> Another answer based on personal experience.			
EXAMPLE 5	<b>A</b>	Soft drinks, in general, have more calories than orange juice.	<i>Orange juice doesn't have a lot of calories like soft drinks do. [P: Does that make the statement true?] Yes, because orange juice contains Vitamin C.</i>
	<b>B*</b>	Soft drinks do not provide any vitamin C but orange juice has vitamin C.	
	C	Soft drinks and orange juice are fatty.	
	D	Soft drinks and orange juice are a good source of protein.	
<b>Comment:</b> The student's answer is not true; orange juice and soft drinks have similar numbers of calories. The argument is illogical in terms of his response to the coach's probe.			

**Exhibit 18.** (cont.)

<u>Relevant Text:</u>	Nutritional Information		
	Coke	Pepsi	Orange Juice
Calories per 8 oz	100	150	110
Fat	0	0	0
Protein	0	0	2
Vitamin C-percent of total daily value	0%	0%	100%

**Question 9:** Which statement is TRUE about the nutritional information on soft drinks and orange juice? (cont.)

**Comment:** Another answer based on personal experience.

<b>EXAMPLE 6</b>	<b>A</b>	Soft drinks, in general, have more calories than orange juice.	
	<b>B*</b>	Soft drinks do not provide any vitamin C but orange juice has vitamin C.	
	<b>C</b>	Soft drinks and orange juice are fatty.	
	<b>D</b>	Soft drinks and orange juice are a good source of protein.	<i>Orange juice has the same protein as soft drinks.</i>

**Comment:** Soft drinks can't be a good source of protein if they contain none.

<b>Proficient Readers</b>	<b>83% correct</b>
<b>Non-Proficient Readers</b>	<b>65% correct</b>

**Exhibit 19. Illustrations of the Explanations Offered During Discussion: Question 10**

<p><b>Relevant Text:</b> Emma-Jean could no longer race up and down the stairs, but she now held the golden key to the elevator at school, which was reserved for those in special need.</p>			
<p><b>Question 10:</b> [Read this sentence from the story.] Which word(s) mean the SAME as <b>reserved</b>?</p>			
<p><b>EXAMPLE 1</b></p>	<b>A</b>	held onto	<p><i>I read the question. I had to think about the answer. [The student tried out each answer by inserting it before the phrase '_____'. . .for a person with special needs.] 'D' was the only one that made sense to me.</i></p>
	<b>B</b>	for future use	
	<b>C</b>	not allowed	
	<b>D*</b>	saved	
<p><b>Comment:</b> This proficient reader used a systematic process to consider each answer option.</p>			
<p><b>EXAMPLE 2</b></p>	<b>A</b>	held onto	<p><i>Remembered 'reserved' from another story and looked in the dictionary.</i></p>
	<b>B</b>	for future use	
	<b>C</b>	not allowed	
	<b>D*</b>	saved	
<p><b>Comment:</b> This non-proficient reader alluded to another story and looking up the word 'reserved' in a dictionary. He didn't reference the passage but did select the correct answer.</p>			
<p><b>EXAMPLE 3</b></p>	<b>A</b>	held onto	<p><i>I know this because sometimes my mom reserves a room at a hotel when we go on vacation so they have to hold it or save it for us. I don't think holds for future use. If reserved, then can't be used. Can be this last but more 'A.'</i></p>
	<b>B</b>	for future use	
	<b>C</b>	not allowed	
	<b>D*</b>	saved	
<p><b>Comment:</b> This non-proficient reader identified the two most likely options but then selected the wrong one, citing another context, a hotel room being held.</p>			
<p><b>EXAMPLE 4</b></p>	<b>A</b>	held onto	<p><i>Because my mom worked at the mall. I asked to sit in a chair, she said it was 'reserved.' It was a hard decision because 'saved' was on there. [P:] 'Held onto' tells more than 'saved.'</i></p>
	<b>B</b>	for future use	
	<b>C</b>	not allowed	
	<b>D*</b>	saved	
<p><b>Comment:</b> This non-proficient reader was influenced by an experience at the mall with his mother and made no reference to the story he read.</p>			
<p><b>EXAMPLE 5</b></p>	<b>A</b>	held onto	<p><i>Because hotels use it. [P: Hotels use it for what?] You can reserve a hotel room before you get there.</i></p>
	<b>B</b>	for future use	
	<b>C</b>	not allowed	
	<b>D*</b>	saved	
<p><b>Comment:</b> The reading coach indicated this non-proficient reader did flip back very briefly to the passage, but in the end he used outside information to justify his answer.</p>			
<p><b>EXAMPLE 6</b></p>	<b>A</b>	held onto	<p><i>'Not Allowed' because I would usually see 'reserved' for certain people.</i></p>
	<b>B</b>	for future use	
	<b>C</b>	not allowed	
	<b>D*</b>	saved	
<p><b>Comment:</b> This non-proficient reader is influenced by his experience that 'reserved' means for others but he's not allowed. He's answering from his own perspective as opposed to that of the character in the story.</p>			
<p><b>Proficient Readers</b></p>		<p><b>87% correct</b></p>	
<p><b>Non-Proficient Readers</b></p>		<p><b>32% correct</b></p>	

**Exhibit 20. Illustrations of the Explanations Offered During Discussion: Question 11**

<b>Relevant Text:</b> Sometimes they made the trip in the dark and imagined they were in a coal mine. Sometimes they pretended the elevator was a bat cave.			
<b>Question 11:</b> As used in the story, which two words have almost the SAME meaning?			
<b>EXAMPLE 1</b>	<b>A</b>	prince, queen	<i>'A' and 'D' they were close. [P:] 'A' is the same but a boy and girl.</i>
	<b>B</b>	rolled, pushed	<i>I eliminated 'B'</i>
	<b>C</b>	replied, asked	<i>and 'C' because they were opposites.</i>
	<b>D*</b>	pretended, imagined	<i>They are doing something that was not real [in the story].</i>
<b>Comment:</b> This proficient reader quickly eliminated two answers because the word pairs are opposites. He relies on the context of the story to make his final choice.			
<b>Example 2</b>	<b>A</b>	prince, queen	<i>They're like opposites (boy, girl) even though they mean royalty.</i>
	<b>B</b>	rolled, pushed	<i>This is easy to eliminate: 'roll' means spin; 'pushed' uses force.</i>
	<b>C</b>	replied, asked	<i>'Replied' tells; 'asked' is a question - easy to eliminate.</i>
	<b>D*</b>	pretended, imagined	<i>Because when you pretend it's like something made up and 'imagined' is . . .you imagine something fake and the definition of each means can't happen in real life.</i>
<b>Comment:</b> This proficient reader also spots and discards the pairs that are opposites. He is articulate in his discussion of the options.			
<b>EXAMPLE 3</b>	<b>A</b>	prince, queen	
	<b>B</b>	rolled, pushed	
	<b>C</b>	replied, asked	
	<b>D*</b>	pretended, imagined	<i>Both are making up things: 'pretending' to be someone else, making up in your mind is imagining.</i>
<b>Comment:</b> Another proficient reader explains his choice.			
<b>EXAMPLE 4</b>	<b>A</b>	prince, queen	
	<b>B</b>	rolled, pushed	<i>It's almost the same. If you 'rolled' something it would be moving and 'pushed' would be the same thing.</i>
	<b>C</b>	replied, asked	
	<b>D*</b>	pretended, imagined	
<b>Comment:</b> This non-proficient reader calls attention to a property that the two actions share; however, the words represent different actions.			
<b>EXAMPLE 5</b>	<b>A</b>	prince, queen	
	<b>B</b>	rolled, pushed	
	<b>C</b>	replied, asked	<i>'Replied' is like you say something; 'asked' is the same thing.</i>
	<b>D*</b>	pretended, imagined	
<b>Comment:</b> This non-proficient reader used the same line of reasoning: 'ask' and 'reply' both involve speech, however, they have opposite meanings in terms of their functions in conversation. Any two words can be linked this way (e.g., they are both parts of the universe).			
<b>EXAMPLE 6</b>	<b>A</b>	prince, queen	
	<b>B</b>	rolled, pushed	
	<b>C</b>	replied, asked	<i>I picked it because I saw it more in the story.</i>
	<b>D*</b>	pretended, imagined	
<b>Comment:</b> This non-proficient reader did focus on the passage, however, he paid no attention to the meaning.			
<b>EXAMPLE 7</b>	<b>A</b>	prince, queen	<i>These are the same because they are both like bosses.</i>
	<b>B</b>	rolled, pushed	<i>Well, this is not.</i>
	<b>C</b>	replied, asked	<i>This has nothing to do with boss.</i>
	<b>D*</b>	pretended, imagined	<i>This does not have anything to do with boss either.</i>
<b>Comment:</b> The question has nothing to do with boss either. This non-proficient reader loses track of the question after considering option 'A.' From then on he perseverates on the idea of boss. This is also the same error pattern seen in several examples above, that is, if the words share any feature, they have the same meaning.			

Exhibit 20. (cont.)

<b>Relevant Text: Sometimes they made the trip in the dark and imagined they were in a coal mine. Sometimes they pretended the elevator was a bat cave.</b>			
<b>Question 11:</b> As used in the story, which two words have almost the SAME meaning?			
<b>EXAMPLE 8</b>	<b>A</b>	prince, queen	
	<b>B</b>	rolled, pushed	
	<b>C</b>	replied, asked	<i>'Replied' means to ask for and 'asked' means to talk to.</i>
	<b>D*</b>	pretended, imagined	
<b>Comment:</b> Ditto			
<b>EXAMPLE 9</b>	<b>A</b>	prince, queen	
	<b>B</b>	rolled, pushed	<i>When you 'roll' on the ground, and when you 'push' it's like you push a door open.</i>
	<b>C</b>	replied, asked	<i>They almost mean the same thing: 'replied' means he asked the question and 'asked' means she asked the question.</i>
	<b>D*</b>	pretended, imagined	<i>Whatever that is ['pretend'], it doesn't mean the same as 'imagined.'</i>
<b>Comment:</b> This non-proficient reader suggests that 'asked' and 'replied' both refer to questions, but girls use one term and boys the other!			
<b>EXAMPLE 10</b>	<b>A</b>	prince, queen	
	<b>B</b>	rolled, pushed	<i>'Rolloed' and 'pushed' are the same because when people are in wheel chairs they can have someone roll it or push it.</i>
	<b>C</b>	replied, asked	
	<b>D*</b>	pretended, imagined	
<b>Comment:</b> 'Roll' and 'push' are two ways to operate a wheelchair, two <u>different</u> ways. This is the same pattern of reasoning as in examples above: If two things share a common characteristic, they are the same.			
<b>Proficient Readers</b>		<b>91% correct</b>	
<b>Non-Proficient Readers</b>		<b>44% correct</b>	

**Exhibit 21. Illustrations of the Explanations Offered During Discussion: Question 12**

<p><b>Relevant Text:</b> Emma-Jean could no longer race up and down the stairs, but she now held the golden key to the elevator at school, which was reserved for those in special need. And she did turn on the light – sometimes.</p> <p>Emma-Jean was allowed to take one friend each time she rode in her coach. Every day she chose a special person to accompany her. . . .</p>		
<p><b>Question 12:</b> As used in the story, the word <b>coach</b> means. . . ?</p>		
<p><b>EXAMPLE 1</b></p>	<p><b>A</b> a sports trainer</p>	<p>[The student pointed to the sentence in the story that included the word ‘coach’.]</p> <p><i>Also the others don’t make sense.</i> [The student substituted each of the other answers to show the reading coach it didn’t make sense.] [Probe: Did you ever hear the word ‘coach’ used like that in another story?] <i>No, but I read so much, I might have.</i></p>
	<p><b>B*</b> an elevator</p>	
	<p><b>C</b> an automobile</p>	
	<p><b>D</b> a special teacher</p>	
<p><b>Comment:</b> This proficient reader demonstrated several effective strategies: he went back to the text, he substituted each option for ‘coach’ to see which made sense.</p>		
<p><b>EXAMPLE 2</b></p>	<p><b>A</b> a sports trainer</p>	<p><i>I eliminated that one; the entire story had nothing to do with sports.</i></p> <p><i>In the story they use ‘elevator’ a lot; I thought they switched it to not use ‘elevator’ a lot.</i></p> <p><i>The story said nothing about a automobile.</i></p> <p><i>There wasn’t a special teacher in the story.</i></p>
	<p><b>B*</b> an elevator</p>	
	<p><b>C</b> an automobile</p>	
	<p><b>D</b> a special teacher</p>	
<p><b>Comment:</b> This proficient reader was sensitive to the author’s craft as a writer. <i>Wow!</i></p>		
<p><b>EXAMPLE 3</b></p>	<p><b>A</b> a sports trainer</p>	<p><i>The ‘coach’ teaches you sports like tennis, like at PE he taught us to play football, tennis, dodge ball.</i></p>
	<p><b>B*</b> an elevator</p>	
	<p><b>C</b> an automobile</p>	
	<p><b>D</b> a special teacher</p>	
<p><b>Comment:</b> This was a common explanation offered by both proficient and non-proficient readers based on their common understanding of the word ‘coach’.</p>		
<p><b>EXAMPLE 4</b></p>	<p><b>A</b> a sports trainer</p>	<p><i>Coach Otto is a sports trainer and we always call him ‘Coach.’</i></p> <p><i>Something that goes up and down.</i></p> <p><i>Goes fast.</i></p> <p><i>Teaches math and stuff, not like exercise.</i></p>
	<p><b>B*</b> an elevator</p>	
	<p><b>C</b> an automobile</p>	
	<p><b>D</b> a special teacher</p>	
<p><b>Comment:</b> When asked how the word ‘coach’ related to the story, this non-proficient reader said ‘She’s like being a coach to Vincent.’ Again and again, students relied on their experience of how the word ‘coach’ is commonly used.</p>		
<p><b>EXAMPLE 5</b></p>	<p><b>A</b> a sports trainer</p>	<p><i>Because we have a special teacher at our school; he is a coach.</i></p>
	<p><b>B*</b> an elevator</p>	
	<p><b>C</b> an automobile</p>	
	<p><b>D</b> a special teacher</p>	
<p><b>Comment:</b> Ditto</p>		
<p><b>EXAMPLE 6</b></p>	<p><b>A</b> a sports trainer</p>	<p><i>That’s what a coach is.</i> [P: Can you find it in the story?]</p> <p>[The student found and reread the relevant text] [P: What would be a better answer?] <i>An elevator.</i></p>
	<p><b>B*</b> an elevator</p>	
	<p><b>C</b> an automobile</p>	
	<p><b>D</b> a special teacher</p>	
<p><b>Comment:</b> Unfortunately, few students based their answer on the written word.</p>		

Exhibit 21. (cont.)

<p><b>Relevant Text:</b> Emma-Jean could no longer race up and down the stairs, but she now held the golden key to the elevator at school, which was reserved for those in special need. And she did turn on the light – sometimes.</p> <p>Emma-Jean was allowed to take one friend each time she rode in her coach. Every day she chose a special person to accompany her. . . .</p>		
<p><b>Question 12:</b> As used in the story, the word <b>coach</b> means. . . ?</p>		
<p><b>EXAMPLE 7</b></p>	<p><b>A</b></p>	<p>a sports trainer <i>Because a coach. . .they train you and like sports.</i></p>
	<p><b>B*</b></p>	<p>an elevator <i>'cause an elevator is no coach. It has buttons and goes up and down.</i></p>
	<p><b>C</b></p>	<p>an automobile <i>Because a automobile is some kind of car and a coach - he's some kind of a person.</i></p>
	<p><b>D</b></p>	<p>a special teacher <i>Because. . .I don't' know.</i></p>
<p><b>Comment:</b> Few picked up on the meaning of 'coach' used metaphorically.</p>		
<p><b>EXAMPLE 8</b></p>	<p><b>A</b></p>	<p><i>A 'coach' means sometimes they call them something that is pulled by horses. [P: Did they use the word 'elevator' as a coach in the story?] Yes. [P: Did that make sense to you?] Yes, in the old days, they used to call the thing they took people around in a coach.</i></p>
	<p><b>B*</b></p>	
	<p><b>C</b></p>	
	<p><b>D</b></p>	
<p><b>Comment:</b> This non-proficient reader is one of the few who cite an alternative meaning for the word 'coach.'</p>		
<p><b>Proficient Readers</b></p>		<p><b>30% correct</b></p>
<p><b>Non-Proficient Readers</b></p>		<p><b>24% correct</b></p>

**Exhibit 22. Illustrations of the Explanations Offered During Discussion: Question 13**

<p><b>Relevant Text:</b> Emma-Jean could no longer race up and down the stairs, but she now held the golden key to the elevator at school, which was reserved for those in special need. And she did turn on the light – sometimes.</p> <p>Emma-Jean was allowed to take one friend each time she rode in her coach. Every day she chose a special person to accompany her. . . .</p> <p>Sometimes Emma-Jean made enemies.</p> <p>“Emma-Jean, you never choose me,” Kevin whined.</p> <p>Emma-Jean loved her power. She was the Elevator Queen. She didn’t care if her foot ever got better.</p>			
<p><b>Question 13:</b> Why did Emma-Jean want to keep the elevator key all to herself?</p>			
EXAMPLE 1	A*	She loved the power it gave her.	<i>I went back and underlined. [Read it to coach.]</i>
	B	She was given the key by her teacher.	<i>She didn't care who gave it to her - just liked the power.</i>
	C	She couldn't go up and down the stairs with her crutches.	<i>That sentence, or that meaning, wasn't in the passage.</i>
	D	She wanted to ride the elevator all by herself.	<i>It didn't talk about it in the story. She like everyone asking her to go with her.</i>
<p><b>Comment:</b> Proficient readers frequently check their answers against the text.</p>			
EXAMPLE 2	A*	She loved the power it gave her.	<i>I remembered reading this in the passage.</i>
	B	She was given the key by her teacher.	
	C	She couldn't go up and down the stairs with her crutches.	
	D	She wanted to ride the elevator all by herself.	
<p><b>Comment:</b> Proficient readers process information as they read and may not need to go back.</p>			
EXAMPLE 3	A*	She loved the power it gave her.	
	B	She was given the key by her teacher.	
	C	She couldn't go up and down the stairs with her crutches.	
	D	She wanted to ride the elevator all by herself.	<i>Because she was selfish. [P: How do you know?] She doesn't want anyone else on the elevator.</i>
<p><b>Comment:</b> Some evidence supports this answer. When Vincent [the boy in the wheelchair] entered the school, Emma-Jean did not want to share. The point of the passage is that Emma-Jean grows in her understanding.</p>			
EXAMPLE 4	A*	She loved the power <sup>to give</sup> it gave her	<i>Because you know if you have PE or gym it uses up your energy if you go up and down the stairs.</i>
	B	She was given the key by her teacher.	
	C	She couldn't go up and down the stairs with her crutches.	
	D	She wanted to ride the elevator all by herself.	
<p><b>Comment:</b> This non-proficient reader chose the right answer for the wrong reason. He used his own experience and understood power in another way (i.e., energy).</p>			
EXAMPLE 5	A*	She loved the power it gave her.	
	B	She was given the key by her teacher.	
	C	She couldn't go up and down the stairs with her crutches.	<i>In the story, it told you she had a key to use the elevator and had a broken leg.</i>
	D	She wanted to ride the elevator all by herself.	
<p><b>Comment:</b> This non-proficient reader used common sense reasoning; of course, you like the elevator when your leg is broken. However, the preferred answer is based on the story.</p>			
<p><b>Proficient Readers</b></p>		<p><b>87% correct</b></p>	
<p><b>Non-Proficient Readers</b></p>		<p><b>36% correct</b></p>	

Exhibit 22. (cont.)

<p><b>Relevant Text:</b> Emma-Jean could no longer race up and down the stairs, but she now held the golden key to the elevator at school, which was reserved for those in special need. And she did turn on the light – sometimes. Emma-Jean was allowed to take one friend each time she rode in her coach. Every day she chose a special person to accompany her. . . . Sometimes Emma-Jean made enemies. “Emma-Jean, you never choose me,” Kevin whined. Emma-Jean loved her power. She was the Elevator Queen. She didn’t care if her foot ever got better.</p>			
<p><b>Question 13:</b> Why did Emma-Jean want to keep the elevator key all to herself?</p>			
<b>EXAMPLE 6</b>	<b>A*</b>	She loved the power it gave her.	<i>If a key gave you power it would be a lucky key.</i>
	<b>B</b>	She was given the key by her teacher.	<i>If the teacher gave her the key, the teacher would have to tell the principal.</i>
	<b>C</b>	She couldn’t go up and down the stairs with her crutches.	<i>My friend had crutches too and needed help like this girl.</i>
	<b>D</b>	She wanted to ride the elevator all by herself.	<i>If she wanted to ride it herself, no one would have known.</i>
<p><b>Comment:</b> This non-proficient reader seems to “free associate” when considering each answer and decides on ‘C’ because he has a friend who had crutches and needed help too. The thinking is not a logical response to the question.</p>			
<b>EXAMPLE 7</b>	<b>A*</b>	She loved the power it gave her.	
	<b>B</b>	She was given the key by her teacher.	
	<b>C</b>	She couldn’t go up and down the stairs with her crutches.	
	<b>D</b>	She wanted to ride the elevator all by herself.	<i>The passage said somewhere that she wanted to ride it by herself. [Can you find it?] No.</i>
<p><b>Comment:</b> This student was weak in word accuracy and rate.</p>			
<b>Proficient Readers</b>		<b>87% correct</b>	
<b>Non-Proficient Readers</b>		<b>36% correct</b>	

**Exhibit 23. Illustrations of the Explanations Offered During Discussion: Question 14**

<p><b>Relevant Text:</b> As the week wore on, Emma-Jean started thinking about Vincent. She thought about never riding a bike. She thought about never walking or jumping up and down on her bed. She felt very sorry she had been so mean to him.  <b>“I’ll have a surprise for you tomorrow,” Emma-Jean said to Vincent.</b></p>		
<p><b>Question 14:</b> When does Emma-Jean <b>FIRST</b> show Vincent that she has changed her feelings about him?</p>		
<p><b>EXAMPLE 1</b></p>	<p><b>A*</b></p>	<p>She told him she would have a surprise for him tomorrow.</p> <p><i>The first thing that showed the change in feelings.</i></p>
	<p><b>B</b></p>	<p>She felt sorry that she had been so mean to him.</p> <p><i>He doesn't know she felt sorry.</i></p>
	<p><b>C</b></p>	<p>She gave him the elevator key in a purple velvet bag.</p>
	<p><b>D</b></p>	<p>She started thinking about never running or riding a bike.</p> <p><i>Thinking doesn't show anything.</i></p>
<p><b>Comment:</b> This proficient reader paid close attention to the question, focusing on what action <u>showed</u> Vincent she had changed her feelings about him. Some non-proficient readers also paid attention to the difference between thinking and taking action.</p>		
<p><b>Example 2</b></p>	<p><b>A*</b></p>	<p>She told him she would have a surprise for him tomorrow.</p> <p><i>I also thought about when she gave him the key but I know it was FIRST thing so I know it was when she told him about the surprise, not when she actually gave it to him.</i></p>
	<p><b>B</b></p>	<p>She felt sorry that she had been so mean to him.</p>
	<p><b>C</b></p>	<p>She gave him the elevator key in a purple velvet bag.</p>
	<p><b>D</b></p>	<p>She started thinking about never running or riding a bike.</p>
<p><b>Comment:</b> This proficient reader considered the two actions evident to Vincent and chose the first in sequence.</p>		
<p><b>EXAMPLE 3</b></p>	<p><b>A*</b></p>	<p>She told him she would have a surprise for him tomorrow.</p>
	<p><b>B</b></p>	<p>She felt sorry that she had been so mean to him.</p> <p><i>Because it said that in the passage. [P: Can you show me?] It says right here.</i></p>
	<p><b>C</b></p>	<p>She gave him the elevator key in a purple violet velvet bag.</p>
	<p><b>D</b></p>	<p>She started thinking about never running or riding a bike.</p>
<p><b>Comment:</b> ‘B’ was a frequent choice of non-proficient readers; they didn’t grasp the importance of ‘show Vincent.’</p>		
<p><b>EXAMPLE 4</b></p>	<p><b>A*</b></p>	<p>She told him she would have a surprise for him tomorrow.</p>
	<p><b>B</b></p>	<p>She felt sorry that she had been so mean to him.</p>
	<p><b>C</b></p>	<p>She gave him the elevator key in a purple velvet bag.</p> <p><i>Because in the story, she takes out the crown key and purple violet bag and gives it to him.</i></p>
	<p><b>D</b></p>	<p>She started thinking about never running or riding a bike.</p>
<p><b>Comment:</b> She does give him the crown and key in a purple velvet bag but this was not the first act to show Vincent her change in feelings.</p>		

Exhibit 23. (cont.)

<p><b>Relevant Text:</b> As the week wore on, Emma-Jean started thinking about Vincent. She thought about never riding a bike. She thought about never walking or jumping up and down on her bed. She felt very sorry she had been so mean to him.          “I’ll have a surprise for you tomorrow,” Emma-Jean said to Vincent.</p>		
<p><b>Question 14:</b> (cont.) When does Emma-Jean <b>FIRST</b> show Vincent that she has changed her feelings about him?</p>		
<p><b>EXAMPLE 5</b></p>	<p><b>A*</b></p>	<p>She told him she would have a surprise for him tomorrow. <i>If she had a surprise it would be the key or crown.</i></p>
	<p><b>B</b></p>	<p>She felt sorry that she had been so mean to him. <i>If she was mean, she wouldn’t give the key to him.</i></p>
	<p><b>C</b></p>	<p>She gave him the elevator key in a purple velvet bag. <i>If she gave it to him, the teacher would be mad at him.</i></p>
	<p><b>D</b></p>	<p>She started thinking about never running or riding a bike. <i>It says she thought about never running or riding a bike [He pointed to the words in the passage.]</i></p>
<p><b>Comment:</b> This reader selected a thought as opposed to an action. Also note that she doesn’t seem to evaluate the other answers but instead gives a personal reaction to them; she offers her opinion that the teacher would be mad if Emma-Jean gave Vincent the key.</p>		
<p><b>EXAMPLE 6</b></p>	<p><b>A*</b></p>	<p>She told him she would have a surprise for him tomorrow.</p>
	<p><b>B</b></p>	<p>She felt sorry that she had been so mean to him. <i>First she was really mean, then towards the end of the story she had given him the key because she started feeling sorry for him.</i></p>
	<p><b>C</b></p>	<p>She gave him the elevator key in a purple velvet bag.</p>
	<p><b>D</b></p>	<p>She started thinking about never running or riding a bike.</p>
<p><b>Comment:</b> ‘B’ was an appealing distractor to many.</p>		
<p><b>Proficient Readers</b></p>		<p><b>61% correct</b></p>
<p><b>Non-Proficient Readers</b></p>		<p><b>32% correct</b></p>

**Exhibit 24. Illustrations of the Explanations Offered During Discussion: Question 15**

<b>Relevant Text:</b> Emma-Jean was in too much of a hurry to listen. She went up the stairs in the dark. She missed a step coming down.			
<b>Question 15:</b> Emma-Jean's broken foot was caused when			
<b>EXAMPLE 1</b>	<b>A</b>	she turned on the light.	<i>You can't break your foot if you're just flicking on the light. It doesn't have anything to do with your foot.</i>
	<b>B*</b>	she came down the stairs and missed a step.	<i>In the story I read that when the light was off she tripped.</i>
	<b>C</b>	she listened to her mother.	<i>The only way you broke your foot by your mother is if she said 'Break your foot with your baseball bat.' My mom wouldn't make me do that.</i>
	<b>D</b>	she went up the stairs in the dark.	<i>I think she was coming down the stairs.</i>
<b>Comment:</b> This proficient reader discarded all options but the correct answer; he tries to amuse with his explanations.			
<b>Example 2</b>	<b>A</b>	she turned on the light.	<i>She was so fast she never turned on the light.</i>
	<b>B*</b>	she came down the stairs and missed a step.	<i>I looked back and underlined. [Read]</i>
	<b>C</b>	she listened to her mother.	<i>Her mom kept on telling her but she never listened.</i>
	<b>D</b>	she went up the stairs in the dark.	<i>That was true but before she missed a step.</i>
<b>Comment:</b> Underlining a literal statement or clues is a strategy used by some proficient readers.			
<b>EXAMPLE 3</b>	<b>A</b>	she turned on the light.	
	<b>B*</b>	she came down the stairs and missed a step.	<i>[The student stopped reading at 'B.' P: What made you so confident that 'B' was correct?] I remembered reading it in the story.</i>
	<b>C</b>	she listened to her mother.	
	<b>D</b>	she went up the stairs in the dark.	
<b>Comment:</b> Proficient readers do process information as they read and tend to remember details.			
<b>EXAMPLE 4</b>	<b>A</b>	she turned on the light.	<i>She was in a hurry and didn't turn on the lights.</i>
	<b>B*</b>	she came down the stairs and missed a step.	<i>She was going up the stairs instead of down.</i>
	<b>C</b>	she listened to her mother.	<i>She didn't listen to her mother.</i>
	<b>D</b>	she went up the stairs in the dark.	<i>She was in a hurry and she missed a step and fell down.</i>
<b>Comment:</b> Most non-proficient readers answered correctly, but this one missed a literal question.			
<b>EXAMPLE 5</b>	<b>A</b>	she turned on the light.	
	<b>B*</b>	she came down the stairs and missed a step.	<i>For this I went back into the passage and it said this.</i>
	<b>C</b>	she listened to her mother.	<i>If she had done this, she wouldn't have broken it.</i>
	<b>D</b>	she went up the stairs in the dark.	<i>Not this, because in the passage it said she was coming down.</i>
<b>Comment:</b> This non-proficient reader reread and found the answer.			
<b>Proficient Readers</b>		<b>87% correct</b>	
<b>Non-Proficient Readers</b>		<b>76% correct</b>	

**Exhibit 25. Illustrations of the Explanations Offered During Discussion: Question 16**

<b>Relevant Text:</b>		
<b>Question 16:</b> If the story "Emma-Jean, Elevator Queen" were given a new title, which would be best?		
<b>EXAMPLE 1</b>	<b>A*</b>	"Emma-Jean Learns a Lesson" <i>Emma-Jean was selfish about the elevator key, but when Vincent came she learned about what it was like in a wheelchair. . .He couldn't run, ride a bike. She learned a lesson about caring and sharing, especially when people are in most need.</i>
	<b>B</b>	"Mean, Mean Emma-Jean"
	<b>C</b>	"Vince the Prince"
	<b>D</b>	"Never Hurry, Never Worry"
<b>Comment:</b> This proficient reader was articulate in his justification of his choice.		
<b>EXAMPLE 2</b>	<b>A*</b>	"Emma-Jean Learns a Lesson" <i>I was going to pick 'D' but that didn't have anything to do with Vince. So I think she learned a lesson - not be selfish.</i>
	<b>B</b>	"Mean, Mean Emma-Jean"
	<b>C</b>	"Vince the Prince"
	<b>D</b>	"Never Hurry, Never Worry"
<b>Comment:</b> This proficient reader selected the expected answer over a plausible alternative.		
<b>EXAMPLE 3</b>	<b>A*</b>	"Emma-Jean Learns a Lesson" <i>She learned a lesson that she doesn't need to be in a hurry and take your time about things.</i>
	<b>B</b>	"Mean, Mean Emma-Jean"
	<b>C</b>	"Vince the Prince"
	<b>D</b>	"Never Hurry, Never Worry"
<b>Comment:</b> Non-proficient readers who chose the expected answer were more likely to describe lessons about not hurrying or not listening to your mother.		
<b>EXAMPLE 4</b>	<b>A*</b>	"Emma-Jean Learns a Lesson"
	<b>B</b>	"Mean, Mean Emma-Jean"
	<b>C</b>	"Vince the Prince"
	<b>D</b>	"Never Hurry, Never Worry" <i>Because she was going fast up and down and when she was going down she broke her leg.</i>
<b>Comment:</b> The most important lesson of the story had to do with how to treat others; this non-proficient reader focused on another lesson, as did many others.		
<b>EXAMPLE 5</b>	<b>A*</b>	"Emma-Jean Learns a Lesson"
	<b>B</b>	"Mean, Mean Emma-Jean"
	<b>C</b>	"Vince the Prince" <i>Because in the story she gave him a crown and key and called him 'Vince the Prince.'</i>
	<b>D</b>	"Never Hurry, Never Worry"
<b>Comment:</b> The protagonist in the story is Emma-Jean, not Vincent.		
<b>EXAMPLE 6</b>	<b>A*</b>	"Emma-Jean Learns a Lesson"
	<b>B</b>	"Mean, Mean Emma-Jean"
	<b>C</b>	"Vince the Prince"
	<b>D</b>	"Never Hurry, Never Worry" <i>If you go down the stairs fast, you might break something.</i>
<b>Comment:</b> This is a lesson but not the principal focus of the passage.		
<b>EXAMPLE 7</b>	<b>A*</b>	"Emma-Jean Learns a Lesson" <i>She did learn a lesson. That lesson was you have to watch where you're going and listen to Momma. If you don't listen, you're in big trouble.</i>
	<b>B</b>	"Mean, Mean Emma-Jean"
	<b>C</b>	"Vince the Prince"
	<b>D</b>	"Never Hurry, Never Worry"
<b>Comment:</b> Again, even when non-proficient readers selected the expected answer, they tend to speak about a lesson that was not the major focus of the story but the circumstance that placed Emma-Jean in the story setting.		
<b>Proficient Readers</b>		<b>74% correct</b>
<b>Non-Proficient Readers</b>		<b>56% correct</b>

**Exhibit 26. Illustrations of the Explanations Offered During Discussion: Question 17**

<b>Relevant Text:</b> Emma-Jean turned out the light for the ride upstairs. Vincent made spooky noises, and Emma-Jean laughed.		
<b>Question 17:</b> Which word describes <b>BOTH</b> Emma-Jean and Vincent?		
<b>EXAMPLE 1</b>	<b>A</b>	active <i>They don't really run around a lot. Vincent is in a wheelchair and she's on crutches. You can't do a lot of running around like that.</i>
	<b>B</b>	selfish <i>Only Emma-Jean was selfish on a few parts.</i>
	<b>C</b>	tricky <i>They weren't really tricky.</i>
	<b>D*</b>	playful <i>Because when they went in the elevator, they turned off the light and Vincent made spooky noises and they laughed.</i>
<b>Comment:</b> Most proficient readers cited the evidence in the passage.		
<b>EXAMPLE 2</b>	<b>A</b>	active [This highly proficient reader didn't answer this question. During the session, he said he was confused after rereading and studying the choices.] <i>I know it's not B or C but it can't be playful because they can't walk and it can't be 'active' for the same reason. Is it OK if I give up?</i>
	<b>B</b>	selfish
	<b>C</b>	tricky
	<b>D*</b>	playful
<b>Comment:</b> What does 'playful' mean to this student? Even skilled readers need to expand their vocabulary.		
<b>EXAMPLE 3</b>	<b>A</b>	active
	<b>B</b>	selfish
	<b>C</b>	tricky <i>She can be tricky sometimes like when she was in the elevator with Vincent [turned to P and said] Oh, I have a surprise for you tomorrow.</i>
	<b>D*</b>	playful
<b>Comment:</b> This non-proficient reader lost track of the question; he didn't mention Vincent.		
<b>EXAMPLE 4</b>	<b>A</b>	activities active <i>Activities - it's something both can do.</i>
	<b>B</b>	selfish
	<b>C</b>	ticket tricky
	<b>D*</b>	playful
<b>Comment:</b> This non-proficient reader is one of the few handicapped by his inability to read words accurately.		
<b>EXAMPLE 5</b>	<b>A</b>	active <i>They both aren't active.</i>
	<b>B</b>	selfish <i>They are not selfish.</i>
	<b>C</b>	tricky <i>She wouldn't even pick Vincent to be the one to push her in her wheelchair.</i>
	<b>D*</b>	playful <i>It could be 'playful' but it never said 'playful'! [P: Did it ever say 'tricky?'] No, but I think they are tricky.</i>
<b>Comment:</b> This non-proficient reader is struggling to follow the logic of the reading coach's probe, "Did it say 'tricky'?" He's also confused about who's in the wheelchair or which pronoun is used for each gender. [S]he wouldn't even pick Vincent to push her in her wheelchair.		
<b>EXAMPLE 6</b>	<b>A</b>	active <i>It means they are not nice to each other.</i>
	<b>B</b>	selfish <i>It means they are greedy and don't want to share.</i>
	<b>C</b>	tricky <i>Emma told her she was going to give her a surprise; he thought it was the key but it was something else.</i>
	<b>D*</b>	playful <i>They would be playing all the time.</i>
<b>Comment:</b> A number of problems are evident. This non-proficient reader has lost track of the question but is just commenting on each answer. He does not know the meaning of 'active.' In selecting C, he discusses only Emma not BOTH as being tricky.		
<b>EXAMPLE 7</b>	<b>A</b>	active <i>They were both all the time talking and walking.</i>
	<b>B</b>	selfish <i>Vincent wasn't selfish and it said to discuss both.</i>
	<b>C</b>	tricky <i>None of them were tricky.</i>
	<b>D*</b>	playful <i>Emma-Jean wasn't so playful.</i>
<b>Comment:</b> This non-proficient reader did not select the expected answer but did justify his choice based on his understanding of the word 'active,' that is, you can be active even when handicapped.		
<b>Proficient Readers</b>		<b>87% correct</b>
<b>Non-Proficient Readers</b>		<b>48% correct</b>

**Exhibit 27. Illustrations of the Explanations Offered During Discussion: Question 18**

<p><b>Relevant Text:</b> On the ride down, she asked him how long he had to use the wheelchair. "Always," Vincent said.          "Always? Haven't you ever walked?" Emma-Jean asked.          "No, I was born this way," Vincent explained. "How long have you had crutches and a cast?"          "Two weeks. I'm getting it off next week," Emma-Jean answered.          As the week wore on, Emma-Jean started thinking about Vincent. She thought about never running or riding a bike. She thought about never walking or jumping up and down on her bed. She felt sorry she had been mean to him.</p>			
<p><b>Question 18:</b> What caused Emma-Jean's change in feelings toward Vincent?</p>			
<p><b>EXAMPLE 1</b></p>	<b>A</b>	She felt sorry she had been mean to him.	
	<b>B*</b>	She thought about how it would be in a wheelchair.	<i>I went back to the story to check if that was right and it was.</i>
	<b>C</b>	She would have her cast off in two weeks.	
	<b>D</b>	She thought Vincent was funny when he made spooky noises.	
<p><b>Comment:</b> This proficient reader reread to verify his answer.</p>			
<p><b>EXAMPLE 2</b></p>	<b>A</b>	She felt sorry she had been mean to him.	<i>She was sorry but she thought about how it would be in a wheelchair before she felt sorry.</i>
	<b>B*</b>	She thought about how it would be in a wheelchair.	<i>She felt sorry about him being in a wheelchair because he couldn't walk, run, swing, anything like that.</i>
	<b>C</b>	She would have her cast off in two weeks.	<i>Nothing to do with story plus it was only a week.</i>
	<b>D</b>	She thought Vincent was funny when he made spooky noises.	<i>She did think he was funny but that didn't change her feelings.</i>
<p><b>Comment:</b> This proficient reader discerned that thinking about Vincent's limitations ('B') preceded her feeling sorry (effect described in 'A').</p>			
<p><b>EXAMPLE 3</b></p>	<b>A</b>	She felt sorry she had been mean to him.	<i>Because at first she was kinda mean to him; at the end she felt sorry for being mean to Vincent.</i>
	<b>B*</b>	She thought about how it would be in a wheelchair.	
	<b>C</b>	She would have her cast off in two weeks.	
	<b>D</b>	She thought Vincent was funny when he made spooky noises.	
<p><b>Comment:</b> Many non-proficient readers and proficient readers as well selected 'A' but 'A' describes the change in feelings (the effect) <u>not</u> the cause.</p>			
<p><b>EXAMPLE 4</b></p>	<b>A</b>	She felt sorry she had been mean to him.	<i>When she had the key and started to see Vincent, she was always hugging.</i>
	<b>B*</b>	She thought about how it would be in a wheelchair.	<i>She <u>was</u> in a wheelchair in the elevator with Vincent.</i>
	<b>C</b>	She would have her cast off in two weeks.	<i>Even though she was going to have her cast off, she had special feelings for him and wanted to do something for him.</i>
	<b>D</b>	She thought Vincent was funny when he made spooky noises.	<i>Even though he did make spooky noises, that wasn't her feelings about how Vincent was.</i>
<p><b>Comment:</b> This non-proficient reader also chose A but supplies the hugging based on her experience not the text. He also thinks Emma-Jean was in a wheelchair not on crutches.</p>			
<p><b>EXAMPLE 5</b></p>	<b>A</b>	She felt sorry she had been mean to him.	
	<b>B*</b>	She thought about how it would be in a wheelchair.	
	<b>C</b>	She would have her cast off in two weeks.	
	<b>D</b>	She thought Vincent was funny when he made spooky noises.	<i>cause Vince was very funny when he made spooky noises [student read text at top of page 6].</i>
<p><b>Comment:</b> This non-proficient reader did reread and found evidence 'D' was a true statement, but because the statement is true doesn't make it the best answer to the question.</p>			

Exhibit 27. (cont.)

<p><b>Relevant Text:</b> On the ride down, she asked him how long he had to use the wheelchair. “Always,” Vincent said.          “Always? Haven’t you ever walked?” Emma-Jean asked.          “No, I was born this way,” Vincent explained. “How long have you had crutches and a cast?”          “Two weeks. I’m getting it off next week,” Emma-Jean answered.          As the week wore on, Emma-Jean started thinking about Vincent. She thought about never running or riding a bike. She thought about never walking or jumping up and down on her bed. She felt sorry she had been mean to him.</p>			
<p><b>Question 18:</b> What caused Emma-Jean’s change in feelings toward Vincent?</p>			
<b>EXAMPLE 6</b>	<b>A</b>	She felt sorry she had been mean to him.	<i>Because she was being so mean and Vince told her he had been that way since he was born.</i>
	<b>B*</b>	She thought about how it would be in a wheelchair.	
	<b>C</b>	She would have her cast off in two weeks.	
	<b>D</b>	She thought Vincent was funny when he made spooky noises.	
<p><b>Comment:</b> Answer ‘A,’ which focuses on Emma-Jean’s feelings resonates with students but her change in feelings is the effect caused by ‘B,’ her thinking about his predicament.</p>			
<b>Proficient Readers</b>		<b>61% correct</b>	
<b>Non-Proficient Readers</b>		<b>32% correct</b>	

**Exhibit 28. Illustrations of the Explanations Offered During Discussion: Question 19**

<p><b>Relevant Text:</b> “Emma-Jean,” the doctor said, “you’ve broken your foot. . . None of the kids had been with a boy in a wheelchair before. . . On the ride down, she asked him how long he had to use the wheelchair. “Always,” Vincent said.</p>			
<p><b>Question 19:</b> How are Emma-Jean and Vincent ALIKE?</p>			
<p><b>EXAMPLE 1</b></p>	A	They are both mean and selfish.	
	B	Emma wants to hold the key but Vincent does not care.	
	<b>C*</b>	They both have problems walking.	<i>Emma has a cast and Vincent never walked and has a wheelchair.</i>
	D	Emma likes the dark but Vincent is afraid.	
<p><b>Comment:</b> This proficient reader and most students in both groups had no trouble answering this question.</p>			
<p><b>Example 2</b></p>	A	They are both mean and selfish.	<i>I crossed out ‘A’ because they are not both mean and selfish.</i>
	B	Emma wants to hold the key but Vincent does not care.	<i>I crossed out ‘B’</i>
	<b>C*</b>	They both have problems walking.	
	D	Emma likes the dark but Vincent is afraid.	<i>and ‘D’ because these choices did not tell how they are ALIKE.</i>
<p><b>Comment:</b> This proficient reader describes his process of elimination.</p>			
<p><b>EXAMPLE 3</b></p>	<b>A</b>	They are both mean and selfish.	<i>They both played tricks with one another.</i>
	B	Emma wants to hold the key but Vincent does not care.	
	<b>C*</b>	They both have problems walking.	<i>[P: Why didn’t you pick ‘C’?] I was flipping through both of them; I wasn’t sure what to pick.</i>
	D	Emma likes the dark but Vincent is afraid.	
<p><b>Comment:</b> A non-proficient reader was one of the few to miss this.</p>			
<p><b>EXAMPLE 4</b></p>	A	They are both mean and selfish.	
	<b>B</b>	Emma wants to hold the key but Vincent does not care.	
	<b>C*</b>	They both have problems walking.	
	D	Emma likes the dark but Vincent is afraid.	
<p><b>Comment:</b> This non-proficient reader chose a statement about their differences not similarities.</p>			
<p><b>Proficient Readers</b></p>		<p><b>100% correct</b></p>	
<p><b>Non-Proficient Readers</b></p>		<p><b>92% correct</b></p>	

**Exhibit 29. Illustrations of the Explanations Offered During Discussion: Question 20**

<p><b>Relevant Text:</b> After the Olympics, athletes with physical and other disabilities compete in the para-Olympics. Cheri Blauwet from Iowa has been in a wheelchair since she was 15 months old. An excellent student and piano player, Cheri won a silver and 3 bronze medals at the 2000 Paralympic Games in Sydney, Australia as a wheelchair racer. She is now a medical student and hopes to promote the rights of the disabled.</p>			
<p><b>Question 20:</b> What is the name of the Olympics that Vincent could compete in as a wheelchair racer?</p>			
<p><b>EXAMPLE 1</b></p>	A	Wheelchair Olympics	<p>[Turns to p. 6] Because right here it said in the text 'After the Olympics most athletes with physical and other disabilities compete in the Paralympics.'</p>
	B	Disabled Olympics	
	<b>C*</b>	Paralympics	
	D	There isn't a different Olympics for wheelchair racers.	
<p><b>Comment:</b> Most proficient readers read the text that accompanied the picture of a disabled competitor in a wheelchair.</p>			
<p><b>EXAMPLE 2</b></p>	A	Wheelchair Olympics	<p>I took it from the caption under the picture.</p>
	B	Disabled Olympics	
	<b>C*</b>	Paralympics	
	D	There isn't a different Olympics for wheelchair racers.	
<p><b>Comment:</b> Many proficient readers used this terminology in explaining their answer.</p>			
<p><b>EXAMPLE 3</b></p>	A	Wheelchair Olympics	<p>I'm having a 50-50 with 'A' and 'B'; they are both disabled. Disabled is the same thing as being in a wheelchair. You could have no legs and be in a wheelchair.</p>
	B	Disabled Olympics	
	<b>C*</b>	Paralympics	
	D	There isn't a different Olympics for wheelchair racers.	
<p><b>Comment:</b> Most non-proficient readers did not find the inset describing the Paralympics.</p>			
<p><b>EXAMPLE 4</b></p>	<b>A</b>	Wheelchair Olympics	<p>Because everybody would be in a wheelchair because they can't be active that much or walk so they have wheelchair races. Because disabled Olympics talk about disabled people who are not in wheelchairs. Is too long [a word] for Olympics.</p>
	B	Disabled Olympics	
	<b>C*</b>	Paralympics	
	D	There isn't a different Olympics for wheelchair racers.	
<p><b>Comment:</b> This non-proficient reader did not locate the relevant information. 'A' makes sense to him. He seems not to understand the word 'disabled' and he finds the word Paralympics 'too long' to be suitable.</p>			
<p><b>EXAMPLE 5</b></p>	A	Wheelchair Olympics	<p>It says the word 'wheelchair' and he's in a wheelchair. Doesn't mean you're in a wheelchair. {P: What does it mean?} I don't know - there's only one wheelchair Olympics. That's like for parallel people. [P: What are parallel people?] They can't move some parts of their body. It says wheelchair and not __?. I've seen it on TV.</p>
	B	Disabled Olympics	
	<b>C*</b>	Paralympics	
	D	There isn't a different Olympics for wheelchair racers.	
<p><b>Comment:</b> This non-proficient reader has some issues with vocabulary but is 'winging it' as best he can.</p>			
<p><b>Proficient Readers</b></p>		<p><b>70% correct</b></p>	
<p><b>Non-Proficient Readers</b></p>		<p><b>40% correct</b></p>	

**Findings: Reading Coaches' Observations Based on Discussion of Answers**

○The typical Hispanic boy in grade 4 rated a proficient reader on *FCAT* (levels 4-5) understood and held in mind questions; eliminated obviously wrong answers; justified answers by citing relevant text or by pointing out to the coach or reading aloud words in the passage that supported his answer; quickly located relevant text; made use of all the information provided, including pictures, captions, and graphs; and understood meanings of key words in the passages.

○The typical Hispanic boy in grade 4 who was rated a non-proficient reader on the *FCAT* (levels 1-2) understood and held in mind some questions; did not consistently eliminate obviously wrong answers; justified his answers by citing relevant information he remembered from the passage, although frequently his rationale was incomplete or illogical; often cited his own knowledge and experience in justifying answers; did not always attend to all the information provided in the passage (e.g., captions of pictures, tables); and at times struggled with the meanings of key words (e.g. 'consumer') or interpreted them literally or concretely.

○Highlighted below is an observation not called to attention in our prior study of African-American boys in grade 4. Some non-proficient readers are unable to distinguish between two similar question stems utilized in the *FCAT*: (1) Which two words have the SAME meaning? and (2) How are *x* and *y* ALIKE? They understand the first question stem as having the same meaning as the second stem as illustrated below:

Which two words have the SAME meaning (as used in the passage)?

calories, pounds

•*Because if you eat a lot of calories, it would make you gain pounds.*

•*If you get too many calories, that makes pounds.*

•*Because of T.V. - they say let's lose weight and burn off all those calories.*

weaken, disease

•*When you have a disease, you are tired and weakened.*

rolled, pushed

•*It's almost the same. If you 'rolled' something, it would be moving, and 'pushed' would be the same thing.*

•*'Rolled' and 'pushed' are the same because when people are in wheelchairs, they can have someone roll it or push it.*

prince, queen

•*These are the same because they are both like bosses.*

replied, asked

•*'Replied' is like you say something; 'asked' is the same thing.*

•*They almost mean the same thing: 'replied' means he asked the question and 'asked' means she asked the question.*

The words do not have the SAME meaning but have in common an attribute, function or context, something that is ALIKE.

This common error pattern across different test questions makes salient the need to help children better understand various question stems.

○When asked to explain what caused a certain outcome, students sometimes selected a restatement or elaboration of the effect (a true statement) rather than a causal statement as illustrated below:

Question: *What caused Emma Jean's change in feelings toward Vincent?*

Response: *She felt sorry she had been mean to him. [This was the change in feelings!]*

Preferred Response: *She thought about how it would be in a wheel chair.*

**Recommendations: Reading Coaches' Observations Based on Discussion of Answers**

- C During classroom instruction and during short periods of test preparation continue to help students be detectives when answering questions; continue to use the “test prep” approach developed in conjunction with the district’s study of African-American boys in grade 4 as all of the same issues are evident in our study of Hispanic boys at the same level.
- C Of great importance, help non-proficient readers understand that their answers should be grounded in the material they have read, not outside experiences; rereading is important when in doubt.
- C Help students understand the specialized vocabulary used in tests and common question stems. Model for students by thinking aloud about what the question is asking for and how to eliminate some answers. For example, in response to the question cited above (*Which two words have the SAME meaning?*), proficient readers that we observed immediately tossed out word pairs that were opposite in meaning; in contrast, non-proficient readers went through each pair trying to think of a way they were alike. Use of examples and non-examples is helpful.
- C Continue to search for effective ways to help students realize that if an illustration and caption, an inset, or other graphic material is included in a passage, the answer to one or more questions is likely to be found therein.
- C Emphasize to teachers the importance of probing deeper when a student first answers a question. Students’ explanations are a window into their thinking and offer opportunities to move them to higher levels of understanding and, over time, more robust justifications for their answers.
- C Finding time in the day to fit in all that is required is a challenge; reading coaches should be ready to help with schedules and with alternative settings and ways to meet students’ instructional needs with respect to understanding what they read and responding to questions.
- C Recommended materials include the *Comprehension Tool Kit* and guided practice with the *FCAT Reading Practice Tests*, particularly in finding evidence to justify their answers.

## Vocabulary/Language Development

Throughout the discussion of students' performance on the *FCAT Reading Practice Test*, observations about limitations in vocabulary were noted. Two additional assessments provided information about the vocabulary development of the Hispanic boys in this study: (1) the *Peabody Picture Vocabulary Test, Third Edition - Form B (PPVT-III B)*, a measure of receptive vocabulary (student selects a picture), and (2) the *Diagnostic Assessment of Reading Word Meaning Test (DAR Word Meaning)*, an orally administered test of word meanings (student provides definitions).

### PPVT-III B Results

Most reading coaches involved in this study were already trained in and accustomed to administering the *Peabody Picture Vocabulary Test, Third Edition*. At some schools, members of the study team administered this test.

Table 27 displays the scores of each reader group identified by the study team, for the *FCAT* Level 1-2 readers and for the model reader group who scored mostly at level 4-5 on the *FCAT*. All the model readers scored in the average or above average range on this measure of receptive vocabulary, with approximately half of the boys scoring in the above-average range and approximately half in the average range. Only one student among the boys who did not demonstrate proficiency on the *FCAT* scored in the above-average range on the *PPVT-III B*, although 63% of them demonstrated achievement in the average range. A third of the low-achievers on *FCAT Reading* demonstrated below-average vocabulary on the *PPVT-III B*. Eighty-three percent of the skilled readers scored in the 6<sup>th</sup> stanine or above while 85% of the less skilled readers scored in the 5<sup>th</sup> stanine or below, indicating little overlap between the groups in their level of vocabulary development.

The relationship between vocabulary and reading achievement is reciprocal: on the one hand, a good vocabulary helps a student comprehend what he reads; on the other hand, the more the student reads, the more words he adds to his vocabulary. Most of the boys who were low achievers on the *FCAT* would appear to benefit from increased attention to vocabulary development. Interestingly, some of the skilled readers may benefit from increased attention in this area. This finding is confirmed by the results of the *DAR Word Meaning* test as will be seen in the data that are described next.

**Table 27. Number of Students in PPVT-III B Score Ranges by Group**

		Below Average			Average			Above Average			Mean Standard Score	Corresponding	
Stanine		1	2	3	4	5	6	7	8	9		NP	Stanine
NP		1-3	4-9	10-21	23-37	39-58	61-75	77-87	88-95	96-99			
Standard Score		4-72	73-80	81-88	88-95	96-103	104-110	111-117	118-125	126-160			
<i>FCAT</i> Model Readers	N=23				2	2	8	4	3	4	112	79	7
<i>FCAT</i> Level 1-2 Readers	N=27		2	7	7	7	3			1	94	34	4

## Diagnostic Assessments of Reading: Word Meaning Results

The *PPVT-III B* is a measure of receptive vocabulary; students point to one of four pictures that depicts the word pronounced by the test administrator. In contrast, on the *Word Meaning* portion of the *Diagnostic Assessments of Reading*, the examinee is asked to define words pronounced by the person administering the test. Arguably, this is a more difficult task.

The table below presents the *Word Meaning* scores of the Hispanic boys who were high achievers and low achievers on *FCAT Reading*. The test levels correspond to grade levels, ranging from first grade through grades 11-12. With no ceiling on the test, students have ample opportunity to demonstrate the breadth of their vocabulary to the extent they are able to express in their own words the meaning of the words pronounced.

In examining the table, one's immediate impression is that few children demonstrated particularly high levels of performance. Twenty of 23 skilled readers (87%) who were administered the *DAR Word Meaning* scored at grade level 4 or 5. The median score for the skilled readers was level 5 with a range from level 4 to level 8. The mode, the score most often obtained, was a grade 5 for skilled readers, a year above grade placement. Eighteen of 23 of these skilled readers scored in stanines 8-9 on the *FCAT* norm-referenced test; one would expect that at least some of these boys would achieve at higher levels on the *DAR Word Meaning*.

Fifty percent of the *FCAT* level 1-2 readers who took this test also scored at grade level 4 or 5 on the *DAR Word Meaning*, 35% of them scored at grade 3, and 15% at grade 2. The median score for the less-skilled readers was level 3.5, with a range from level 2 to level 5. The most frequently observed score among the non-proficient readers was grade 3, a year below grade placement.

These results provide support for the conclusion that most of the Hispanic boys in the study who were non-proficient readers on *FCAT* may profit from instruction to develop their vocabulary; some of the proficient readers are likely to benefit as well.

**Table 28. Level of Achievement on the *DAR Word Meaning***

Group	N	Highest Grade Level at which Student Demonstrated Mastery										Median	Mode	Range
		1	2	3	4	5	6	7	8	9/10	11/12			
Model Readers	23				9	11	2		1			5	5	4-8
<i>FCAT</i> Level 1-2 Readers	26		4	9	7	6						3.5	3	2-5

### Findings: Vocabulary/Language Development

- < Two tests used to assess vocabulary development were administered to the Hispanic boys in the study: the *PPPV-IIIB*, a measure of receptive vocabulary, and the *DAR Word Meaning*, which asks students to explain the meaning of words pronounced by the examiner.
- < On the *PPVT-IIIB*, the Hispanic boys in the model reader group (*FCAT* Levels 4-5) performed in the average (52%) or above-average stanines (48%). The non-proficient readers (*FCAT* levels 1-2) performed in the average (63%) or below-average stanine ranges (33%), although one non-proficient reader had an above-average vocabulary (stanine 9). The mean standard score was a 112 (NP of 79) for the skilled readers and 94 (NP of 34) for the less skilled readers, a marked difference. Eighty-three percent of the proficient readers scored in the 6<sup>th</sup> stanine or higher while 85% of the non-proficient readers scored in the 5<sup>th</sup> stanine or lower.
- < On the *DAR Word Meaning*, the median and modal grade equivalent scores were both grade 5 for the model readers at the end of grade 4. The median (3.5) and modal (3.0) grade-equivalent scores for the non-proficient *FCAT* readers were both below their grade placement at the end of grade 4.
- < Based on the two tests in combination, most of the Hispanic boys who have not yet demonstrated proficiency on *FCAT* would benefit from instruction to strengthen their vocabulary as would some of the proficient readers.

### Recommendations

In addition to the recommendations provided (p.54) regarding teaching students to improve accuracy and understanding of multi-syllable words, consider the following:

- C Do not neglect “read alouds” and “interactive read alouds.” Selections that incorporate vocabulary above the students’ reading levels provide one of the best opportunities to enhance students’ understanding of words, particularly in the primary grades but also in the intermediate grades. Identify in advance a few words to emphasize and develop but also be responsive to students’ queries.
- C Word work is beneficial in instruction in all content areas; coaches should help teachers figure out how to incorporate these activities in their schedules. Writing instruction is one very logical place for building vocabulary. Keep charts on display of examples of word categories (e.g., ways to move: *walked, raced, hurried, paced, strolled, meandered, ambled, sauntered, stumbled*). Continue to encourage students to use their thesaurus to choose words that aptly convey the meaning they intend.
- C Promote district-wide use of *Making Meaning* (K-2 Developmental Study Center) and the *Primary Comprehension Test Kit* (firsthand-Heinemann) when it becomes available. Identify other valuable resources to develop students’ lexicon.
- C Encourage students to read widely in various genre from an early age, an important element in the development of vocabulary. Let children share words they discover that they particularly like, either because of the sound or the meaning.
- C When opportunities arise and through planned activities, help students move beyond their initial and often literal understanding of words to understanding their figurative use (similes and metaphors) and help students understand common idioms that often are a barrier to students whose native language or home language is other than English. Help students move from concrete to more abstract thinking.
- C Consider reinstatement of screening entering kindergarten students for speech/language problems, as is done for hearing and vision. This would be useful as well for young students new to the district who are achieving below level.

## Teacher Ratings of Students

Teachers of the boys in the study were asked to rate their students on a six-point scale on items related to habits of mind and behavior, cognitive and language development, motivation to read, reading and language arts, and mathematics.

Below are tables that summarize teacher ratings of students who scored at level 1 or 2 on *FCAT Reading*, teacher ratings of students who scored at level 4 or 5 on *FCAT Reading*, and comparative data. Of interest are the distribution of ratings, the median rating (the middle score when scores are arranged from high to low), and the mode (most frequently occurring score) for each group of students.

### Students Who Scored at Level 4 or 5 on *FCAT Reading*

Evident in the table that follows is a relatively restricted range of ratings by teachers of students who performed at level 4 or 5 on *FCAT Reading*. All median and modal scores were either a 5 or a 6, at the high end of the six-point rating scale. A few individuals were rated lower in terms of habits of mind or behavior or in motivation to read. Rarely were any of these high-performing students rated low in the components of reading.

**Table 29. Teacher Ratings of *FCAT Reading* Level 4-5 Students on a Semantic Differential Scale (N=25)**

Negative Indicators	Number of Students Rated						Positive Indicators	Median	Mode	Range
	①	②	③	④	⑤	⑥				
Weak effort in class in general	3	1	1	8	10		Strong effort in class in general	5	6	2-6
Gives up easily	1	2	1	6	13		Remains persistent	6	6	2-6
Becomes frustrated easily	1	3	4	6	9		Tolerates frustration well	5	6	2-6
Needs substantial teacher support	1	1	3	1	5	12	Works independently	6	6	1-6
Learns slowly	1	1	1	7	13		Learns quickly	6	6	2-6
Misbehaves frequently	1	3	2	9	8		Behaves well consistently	5	5	2-6
Weak background knowledge	1	1	2	14	5		Strong background knowledge	5	5	2-6
Weak vocabulary		1	4	13	5		Strong vocabulary	5	5	3-6
Non-fluent speech in conversation				3	9	11	Fluent speech in conversation	5	6	4-6
Weak cognitive skills				4	6	12	Strong cognitive skills	6	6	4-6
Weak problem-solving skills	1	1	1	7	13		Strong problem-solving skills	6	6	2-6
Low interest in reading	1	1	3	5	13		Strong phonemic awareness	6	6	2-6
Weak motivation to read silently	1	1	2	8	11		Strong motivation to read silently	5	6	2-6
Weak motivation to read aloud	1	2	7	10	3		Strong motivation to read aloud	5	5	2-6
Weak family support of reading	1	1	1	6	4	8	Strong family support of reading	5	6	1-6
Weak reading enjoyment			1	4	6	12	Strong reading enjoyment	6	6	3-6
Weak phonemic awareness				4	9	10	Strong phonemic awareness	5	6	4-6
Frequent errors in reading				1	14	8	Infrequent errors in reading	5	5	4-6
Weak reading vocabulary			1	3	12	7	Strong reading vocabulary	5	5	3-6
Weak reading comprehension				3	10	10	Strong reading comprehension	5	5,6	4-6
Weak word analysis skills				5	8	10	Strong word analysis skills (word attack)	5	6	4-6
Weak phonics skills				5	7	13	Strong phonics skills	6	6	4-6
Weak reading fluency skills				2	9	12	Strong reading fluency skills	6	6	4-6
Weak spelling skills	1		1	4	7	10	Strong spelling skills	5	6	1-6
Weak word segmenting skills				4	10	9	Strong word segmenting skills	5	5	4-6
Weak number sense	1	1	1	4	16		Strong number sense	6	6	2-6

## Students Who Scored at Level 1 or 2 on FCAT Reading

What stands out when one examines teachers' ratings of students who scored at level 1 or 2 on *FCAT Reading* is the wide range of ratings for every item. While some students were rated low (on a scale of 1-6) on each item, other students were rated high. In general, few students were typically rated at the extremes of the rating scale (scale score points 1 or 6); most ratings were within the 2-5 range. The median rating was 3 for 23 of 26 items, a very consistent pattern. Modal scores varied more but typically were in the 2-4 point range.

Exceptions to these generalizations are interesting. Median and modal scores were higher for three items. The most frequently observed rating for behavior for *FCAT* level 1-2 readers was a 6, the highest possible favorable rating. Similarly, the fluency of the speech in conversation was most frequently rated a 6. A 4 was the rating most often assigned for their motivation to read orally.

The median rating for each of these three indicators was also above a 3: fluency of speech in conversation was the highest median of ratings teachers gave the *FCAT* level 1-2 readers (5), followed by behavior (4) and motivation to read aloud (4).

**Table 30. Teacher Ratings of *FCAT Reading* Level 1-2 Students on a Semantic Differential Scale (N=25)**

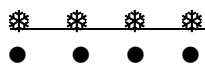
Negative Indicators	Number of Students Rated						Positive Indicators	Median	Mode	Range
	①	②	③	④	⑤	⑥				
Weak effort in class in general	1	7	5	7	3	2	Strong effort in class in general	3	2,4	1-6
Gives up easily	2	5	6	4	6	2	Remains persistent	3	3,5	1-6
Becomes frustrated easily	2	3	8	6	4	1	Tolerates frustration well	3	3	1-6
Needs substantial teacher support	3	7	7	2	2	3	Works independently	3	2,3	1-6
Learns slowly	3	7	4	5	4	2	Learns quickly	3	2	1-6
Misbehaves frequently	2	4	1	6	3	9	Behaves well consistently	4	6	1-6
Weak background knowledge		10	6	5	3		Strong background knowledge	3	2	2-5
Weak vocabulary	1	9	7	3	5		Strong vocabulary	3	2	1-5
Non-fluent speech in conversation	1		5	5	6	7	Fluent speech in conversation	5	6	1-6
Weak cognitive skills	1	5	9	6	3		Strong cognitive skills	3	3	1-5
Weak problem-solving skills	4	7	5	5	2	1	Strong problem-solving skills	3	2	1-6
Low interest in reading	4	6	5	6	3	1	High interest in reading	3	2,4	1-6
Weak motivation to read silently	2	7	5	6	3	1	Strong motivation to read silently	3	2	1-6
Weak motivation to read aloud	2	7	5	8	7	1	Strong motivation to read aloud	4	4	1-6
Weak family support of reading	3	6	6	3	1	4	Strong family support of reading	3	2,3	1-6
Weak reading enjoyment	1	11	5	5	2	1	Strong reading enjoyment	3	2	1-6
Weak phonemic awareness	2	9	4	4	4	1	Strong phonemic awareness	3	2	1-6
Frequent errors in reading	2	7	4	6	6		Infrequent errors in reading	3	2	1-5
Weak reading vocabulary	2	6	6	6	3	1	Strong reading vocabulary	3	2,3,4	1-6
Weak reading comprehension	2	7	7	6	2	1	Strong reading comprehension	3	2,3	1-6
Weak word analysis skills	2	9	6	5	3		Strong word analysis skills (word attack)	3	2	1-5
Weak phonics skills	1	8	6	5	4		Strong phonics skills	3	2	1-5
Weak reading fluency skills	3	7	5	5	5		Strong reading fluency skills	3	2	1-5
Weak spelling skills	3	7	8	4	2	1	Strong spelling skills	3	3	1-6
Weak word segmenting skills	2	6	8	5	3		Strong word segmenting skills	3	3	1-5
Weak number sense	1	5	7	5	4	2	Strong number sense	3	3	1-6

## Comparative Data

The table below enables the reader to examine teacher ratings of low achievers versus high achievers on *FCAT Reading*. Low achievers on *FCAT Reading* typically attained a median rating of 3 and high achievers a median rating of 5 or 6. According to their teachers, the two groups of students are most like each other in terms of the behavior and the fluency of their speech as they converse.

**Table 31. Summary of Student Rating Scale Data Provided by Teachers**

		Rating (Median)					
		1	2	3	4	5	6
<b>Habits of Mind and Behavior</b>	Weak effort in class in general			❄		●	Strong effort in class in general
	Gives up easily			❄		●	Remains persistent
	Becomes frustrated easily			❄		●	Tolerates frustration well
	Needs substantial teacher support			❄		●	Works independently
	Misbehaves frequently			❄	❄	●	Behaves well consistently
<b>Cognitive and Language Development</b>	Learns slowly			❄		●	Learns quickly
	Weak background knowledge			❄		●	Strong background knowledge
	Weak vocabulary			❄		●	Strong vocabulary
	Non-fluent speech in conversation			❄	❄	●	Fluent speech in conversation
	Weak cognitive skills			❄		●	Strong cognitive skills
	Weak problem-solving skills			❄		●	Strong problem-solving skills
<b>Motivation to Read</b>	Low interest in reading			❄		●	High interest in reading
	Weak motivation to read silently			❄		●	Strong motivation to read silently
	Weak motivation to read aloud			❄	❄	●	Strong motivation to read aloud
	Weak family support of reading			❄	❄	●	Strong family support of reading
	Weak reading enjoyment			❄		●	Strong reading enjoyment
<b>Reading Language Arts</b>	Weak phonemic awareness			❄		●	Strong phonetic awareness
	Frequent errors in reading			❄		●	Infrequent errors in reading
	Weak reading vocabulary			❄		●	Strong reading vocabulary
	Weak reading comprehension			❄		●	Strong reading comprehension
	Weak word analysis skills			❄		●	Strong word analysis skills (word attack)
	Weak phonics skills			❄		●	Strong phonics skills
	Weak reading fluency skills			❄		●	Strong reading fluency skills
	Weak spelling skills			❄		●	Strong spelling skills
Weak word segmenting skills			❄		●	Strong word segmenting skills	
<b>Mathematics</b>	Weak number sense			❄		●	Strong number sense



❄ ❄ ❄ ❄      Level 1-2 Readers' Median Rating  
 ● ● ● ●      Level 4-5 Readers' Median Rating

## Teachers' Reporting of Students' Greatest Strengths as Readers

The table that follows summarizes information teachers provided about the greatest strength as a reader of each of the low-performers versus high-performers on *FCAT Reading*.

Teachers were most likely to cite students' comprehension of what they read (52%) as the greatest strength of highly proficient readers. This percentage would be even higher (82%) if we were to include those students who were described as proficient in all components of the reading process. Next in terms of frequency as the greatest strength of skilled readers was their interest in or enjoyment of reading (35%). The greatest strengths identified for non-proficient readers on *FCAT* were accuracy in reading words (32%), students' interest in or enjoyment of reading (28%), and their ability to self select an appropriate level book (28%).

**Table 32. Teacher Perceptions of Students' Greatest Strengths as Readers**

What is this student's greatest strength as a reader?	<i>FCAT</i> Level 4-5 Readers N=23	<i>FCAT</i> Level 1-2 Readers N = 25
Phonemic awareness	9% ( 2)	
Word reading accuracy	22% ( 5)	32% (8)
Fluency	22% ( 5)	4% (1)
Knowledge of word meanings	17% ( 4)	12% (3)
Comprehension	52% (12)	16% (4)
Knowledge of structure of English (inflectional endings, plurals, possessives, etc.)	4% ( 1)	4% (1)
Skilled in all components of reading	30% ( 7)	
Interest in/Enjoyment of reading	35% ( 8)	28% (7)
Ability to self select appropriate level text	22% ( 5)	28% (7)
Other		8% (2) [Relation to text, inference, Enjoys independent leisure reading.]

## Teachers' Reporting of Students' General Needs as Readers

The next table summarizes information reported by teachers as to each student's greatest need as a reader. The reports of greatest need of the highly-proficient readers were varied. The highest need (22%) concerned their level of interest in or enjoyment of reading.

Of importance, teachers stated that the greatest need of non-proficient readers (60%) on *FCAT* concerns their reading comprehension. This percentage would be even higher (76%) if students identified as weak in all components of reading were included. The next most frequently reported weakness was reading fluency (28%).

**Table 33. Teacher Perceptions of Students' Greatest Needs as Readers**

What is this student's greatest need as a reader?	<i>FCAT</i> Level 4-5 Readers N=23	<i>FCAT</i> Level 1-2 Readers N = 25
Phonemic awareness	4% (1)	12% ( 3)
Word reading accuracy	4% (1)	12% ( 3)
Fluency		28% ( 7)
Knowledge of word meanings	13% (3)	16% ( 4)
Comprehension	4% (1)	60% (15)
Knowledge of structure of English (inflectional endings, plurals, possessives, etc.)	17% (4)	8% ( 2)
Weak in all components of reading.		16% ( 4)
Interest in/Enjoyment of reading	22% (5)	12% ( 3)
Ability to self select appropriate level text	4% (1)	8% ( 2)
Other	22% (5) [- Spelling - He is a very proficient reader and excels in all areas. - Reads too fast which lowers his comprehension - Confidence - Strategies to aid in long-term retention of information read (metacognition)]	
Not Rated	(4)	(1)

## Additional Descriptive Information Provided by Teachers

Cited below are examples of the additional comments by teacher about the non-proficient and highly-proficient readers. The teachers' comments remind us of the uniqueness of individual students and some of the factors that contribute to or inhibit their reading success.

PROFICIENT READERS	NON-PROFICIENT READERS
[This student] <i>has a strong bond with his older brother plus there is a strong family unit. I believe these two positive forces allow him to feel confident and excel.</i>	<i>ODD under medication.</i>
<i>Enjoys reading and can read higher level material. When text is chosen for him, he has little interest. Can comprehend well orally, but when he writes it down, has a harder time explaining. Would excel if he had the support at home. Would behave better if he had the support at home.</i>	[This student] <i>is a good reader but struggles with using the text to comprehend what he has read. He struggles with short and extended responses to text. [This student] is a quiet child that needs coaxing to participate in reading discussions.</i>
<i>These results are (if/when) [This student] is on his meds.</i>	[This student] <i>is below level in reading. Although he is below, he still volunteers to read aloud and enjoys reading silently.</i>
[This student] <i>is a fluent, well-versed reader. He reads with emotion while reading out loud. He can recall major events of a passage and summarize what was read. If he doesn't understand something read he won't hesitate to ask. When he stumbles on a word he doesn't know he uses phonemic/chunking strategies.</i>	[This student] <i>has a hard time processing some English words due to his ESOL status. He does eventually understand but it really limits his ability to comprehend and really enjoy reading.</i>
[This student] <i>is a wonderful student. He is enthusiastic and a role model for others. He comes in every day ready to learn and is consistently successful.</i>	[This student] <i>is a good reader. His fluency isn't perfect but he will usually correct himself as soon as he realizes the word he said doesn't make sense. He enjoys reading and tries his best.</i>
[This student] <i>is a great reader. He unfortunately does not like to read a lot. When he finds a book he likes he will read it non-stop, however, finding one he likes is difficult. His comprehension is always good.</i>	[This student] <i>has true potential to be an accomplished student. He comes from a single-parent home with 5 children. He does not always come to school with practice or background needed for reading and writing activities.</i>
[This student] <i>is an avid reader. He has completed many chapter books this year.</i>	<i>Blind in right eye.</i>
[This student] <i>is very easily distracted. He is forgetful and disorganized. He attends OGP science class but not math. He needs excessive support by Mom and teacher to make sure he takes books, homework, etc. home, actually does the work (at home or in steps) and returns it to school. I sent a behavioral checklist (that I filled out) to Mom to see if he had perhaps an attention deficit problem, but so far Mom has not followed through. However, [this student] loves to read. He reads well. He retains facts. He has a good vocabulary and uses it in writing. His spelling, however, is horrific; fine motor skills are also poor; . . . his handwriting appears very immature.</i>	[This student] <i>likes to read. Has very little interest in school. Interest, work effort has improved in the last 9 weeks.</i>
<i>Mom does not speak English.</i>	[This student's] <i>performance is greatly affected by his taking his medication. He is currently having difficulty because he had been staying with his father and not receiving medicine regularly.</i>
<i>He is a gifted student. His grades are O's and he only reads because he is instructed to.</i>	[This student] <i>is a smart boy but requires a lot of teacher motivation. He can do the work but seems to not care. His parents are hard workers and believe in a strong education. I'm hoping 3<sup>rd</sup> 9 weeks report card will help him finish work well for the 4<sup>th</sup> 9 weeks.</i>
[This student] <i>is a great reader that not only reads well but understands (comprehends) what he is reading very consistently. He strives to excel in his reading and is a higher-level thinker. He enjoys challenges and welcomes critical thinking questions after and during reading.</i>	[This student] <i>has trouble using phonics. He is able to pronounce the words correctly in regular speech, but has difficulty using the letters to identify the word while reading. This also contributes to his weakness in spelling.</i>
[This student] <i>is a bright young man. However, his motivation to succeed in class is lacking. [He] relies on his natural ability. He would be a much more successful student if he applied himself more.</i>	[This student] <i>seems to have little interest/low motivation to read, despite continuous encouragement from teacher.</i>
<i>I feel that reading is an escape for him being that he has been in foster care for four years.</i>	<i>With small group guided reading, [this student's] reading ability improved tremendously to the point he was put in a higher reading group.</i>
<i>This student seems to be obsessed with one topic and will only choose books in that area, even though the books are much lower than his level. He accepts constructive criticism well.</i>	[This student] <i>is very active and loves to get a laugh out of the other students. Sometimes this will get him in trouble. Once [this student] is in trouble he will shut down and do nothing.</i>
	[This student] <i>lacks interest and motivation to read. His family speaks Spanish at home but seem to be supportive of school. His behavior is influenced by his big brother in a negative way. Reading isn't 'cool' so he doesn't do it.</i>
	[This student] <i>reads often independently, he likes to read aloud but you must call on him. He will not usually volunteer. Often he has trouble with comprehension if he reads the text once only. If I have him reread, then he does better. He is a student that tries hard and puts in a lot of effort.</i>

### Findings: Teacher Ratings

- < Teachers' median ratings of Hispanic boys who scored at level 4 or 5 on *FCAT Reading* were a 5 or 6, at the high end of the scale, in all areas: habits of mind and behavior, cognitive and language development, motivation to read, and components of reading. Teachers' median ratings of Hispanic boys who scored at level 1 or 2 on *FCAT Reading* were typically a 3 on the 6-point scale. The students who were non-proficient on *FCAT*, according to their teachers were most like the highly proficient readers in three areas: their good behavior, the fluency of their speech in conversation, and their motivation to read aloud.
- < The ability to comprehend written material was regarded as the greatest strength of the proficient readers. Their needs were varied; most often mentioned was their [low] level of interest in reading.
- < While reported to be the greatest strength of skilled readers, comprehension was perceived to be the greatest area of need for the non-proficient readers. Mentioned most often as a strength of the non-proficient readers was their word reading accuracy.
- < These generalizations are informative and useful for planning, but keep in mind that each reader has a particular profile of strengths and weaknesses that is relevant in determining how to help that student become more skilled in reading.

## Student Interview Regarding FCAT Reading Sunshine State Standards (SSS)

The sample of Hispanic students in grade 4, both proficient readers (*FCAT Reading*, levels 4-5) and non-proficient readers (*FCAT Reading*, levels 1-2), were questioned about their perceptions of the *FCAT Reading* test. A “P” indicates the reading coach probed for additional information.

### Summary Responses and Illustrative Comments

1. You recently took the <i>FCAT</i> . What was your attitude or feeling as you were handed the test?	
PROFICIENT READERS (N = 23)	NON-PROFICIENT READERS (N = 27)
<p><b>Reported positive thoughts, feelings (5)</b></p> <p><i>C That it was cool - I would be happy if I passed - I was ready - practice was worth it - I was ready.</i></p> <p><i>C I felt good, confident.</i></p> <p><i>C Excited, get it over with</i></p> <p><i>C I was going to do good. I knew I was going to do good because I passed last year, so I would do good this year.</i></p> <p><i>C I felt like it was going to be easy.</i></p>	<p><b>Reported positive thoughts, feelings (1)</b></p> <p><i>C I think I know what I needed to know - so, I think I passed it.</i></p>
<p><b>Reported mixed thoughts/feelings (10)</b></p> <p><i>C I was thinking is my learning enough, do I have the guts to pass? Can I do this? I got nervous, then I opened it up and it was easy. I got confident and just did the test. People might think that it is hard and scary but once they get to learn and understand it, it's easy.</i></p> <p><i>C [Smiles] I was just sitting there thinking, 'Oh my gosh, I can't believe it's true. I hope all my learning pays off.' I was nervous - my pencil was shaking.</i></p> <p><i>C I was a bit nervous. But when it ended, I was calm</i></p> <p><i>C I was confident that I would pass but just a little nervous.</i></p> <p><i>C Nervous, but it went away. The answers were getting simpler.</i></p> <p><i>C When I couldn't understand a few words [in the reading section], I got mad and put my head down on my arm. I ended up skipping them and going on. The math section was better.</i></p> <p><i>C Nervous and pretty confident I would pass [P: Why?]. Because I've been practicing since beginning of school and I think all that practice wore off on me.</i></p> <p><i>C Nervous, very scared. But then I started to think positive things - that I could do it. We've been practicing and should be able to do it.</i></p> <p><i>C I needed to take the test, and I shouldn't be nervous. I had to have faith that I would pass and not stress out. Not to get 'tempted' by the number of questions.</i></p>	<p><b>Reported mixed thoughts/feelings (3)</b></p> <p><i>C Scared a little bit. [P] It was my first time taking that type of test. [P] I relaxed once I got started.</i></p> <p><i>C Feeling happy. [P: Why were you feeling happy?] Because I was finally getting it over with.</i></p>

1. You recently took the FCAT. What was your attitude or feeling as you were handed the test? (cont.)	
PROFICIENT READERS (N = 23)	NON-PROFICIENT READERS (N = 27)
<p><b>Reported negative thoughts/feelings (8)</b></p> <p><i>C Nervous, because I was scared I might fail. The test was hard.</i>  <i>C I was a little nervous.</i>  <i>C Scared. 'cause I didn't know if I was going to pass or fail.</i>  <i>C Scared because I was worried if I'd pass or not.</i>  <i>C I was scared because like I might not know one they asked me.</i></p>	<p><b>Reported negative thoughts/feelings (23)</b></p> <p><i>C I was a little nervous.</i>  <i>C Nervous. [P: Why?] Thought I might fail or get a 70.</i>  <i>C I was scared. I didn't know if I was going to pass or not.</i>  <i>C Nervous and scared - I thought I might puke.</i>  <i>C I thought I wasn't going to pass.</i>  <i>C I was scared that it was hard.</i>  <i>C I felt nervous because last year I got sick after I took the FCOT. Because I'm in a higher grade this year and maybe I won't pass the test.</i>  <i>C Nervous because I shake in my hands. [P: What were you thinking?] If I'm going to pass the test. [P: Did you sleep well?] Yes. [P: Other signs of nervousness?] When I used the restroom.</i>  <i>C Nervous, because I failed 3<sup>rd</sup> grade FCOT but passed other tests and hope it wouldn't happen again.</i>  <i>C Nervous, because I thought I was going to fail it. It scares me, I felt nervous inside my belly.</i>  <i>C I was nervous because it was a long test. It was harder than other tests that we take in the classroom</i>  <i>C Nothing. [P: Were you nervous?] No. [P: Did you feel prepared?] No. [P: Why?] Because I don't know much.</i>  <i>C I felt kind of nervous because I think I might not make it to 5<sup>th</sup> grade and I felt mad because I only had 45 minutes.</i>  <i>C Mad. Because it was a whole bunch of work to do.</i>  <i>C Scared if I was going to pass or fail.</i></p>

2. What kind of reading do you expect on the test? Interesting? Boring?	
PROFICIENT READERS (N = 23)	NON-PROFICIENT READERS (N = 27)
<p><b>Expected interesting reading (12)</b></p> <p><i>C I expected it to be interesting because you got your head into it.</i>  <i>C I expected it to be interesting.</i>  <i>C Interesting because of the adventures and difficult problems</i>  <i>C Well, on FCOT I usually like the stories. After I finish the test, I read the story just for fun.</i>  <i>C It was interesting. [P: What was interesting?] They gave a lot of detail in it.</i>  <i>C Interesting. [P: Why?] They want you to learn stuff while you are taking test.</i>  <i>C Interesting. [P] Because they write about other people, show they do stuff.</i></p>	<p><b>Expected interesting reading (14)</b></p> <p><i>C I expected it to be good, interesting, that I wouldn't mess up on hard words.</i>  <i>C Like shorter reading. Interesting.</i>  <i>C Odventurous, mystery.</i>  <i>C Easy, interesting.</i>  <i>C Interesting because maybe there's things I won't know.</i>  <i>C Exciting reading.</i>  <i>C Hard reading. Reading about the animals was interesting. [P: Boring?] No.</i>  <i>C Some parts could give you hints - like how to treat an animal if you don't know how to treat it.</i></p>

2. What kind of reading do you expect on the test? Interesting? Boring? (cont.)	
PROFICIENT READERS (N = 23)	NON-PROFICIENT READERS (N = 27)
<b>Reported mixed expectations/experience (9)</b> <i>C In between; some give me information and some are interesting.</i> <i>C I think some could be adventurous, exciting. But I think one or two of them might be boring.</i> <i>C Some are boring and some are exciting.</i> <i>C I was expecting reading that was not boring but it might be kind of difficult. I would have to use my brains for critical thinking. I know that I had to really focus, reread, underline and pay a lot of attention. I wasn't looking forward to failing. I wanted to pass.</i> <i>C Sometimes interesting. Sometimes kind of boring.</i> <i>C I didn't really know what to expect, because even though we had practiced, my teachers said the stories and topics would be different.</i>	<b>Reported mixed expectations/experience (10)</b> <i>C Pretty interesting - sometimes boring.</i> <i>C Both</i> <i>C Of first I think it's boring and long. When I read it and like it, it's not boring. It's fun.</i> <i>C Adventure. True story. Some are interesting and some don't explain much.</i> <i>C Um - kind of interesting, kind of boring.</i> <i>C Expected [it] to be boring, but was kind of exciting or interesting.</i>
<b>Expected boring reading (2)</b> <i>C Kind of boring. It was boring - the stories were all bluhh!!</i> <i>C Boring. There were no good books.</i>	<b>Expected boring reading (3)</b> <i>C Boring, every FCOT is.</i> <i>C Boring [P: Why boring?] Because it doesn't have any good stories in it.</i>

3. What have your teachers taught you about taking the test? (Elicit specific strategies.)			Which strategies did you use?		
Strategy	PR* (N=23)	NPR** (N=27)	PR* (N=23)	NPR** (N=27)	Why?
Study any practice tests					
Be prepared (sleep, breakfast)	1		1		
Try your best/Work hard	5	5	3	5	<i>C Try your best. . . If you didn't. . . maybe you got a lot wrong [NPR]</i> <i>C Working hard, it helped me pass. [PR]</i> <i>C Work hard on it so I could pass. [NPR]</i> <i>C When I do my best I think about what I learned through the whole year. [PR]</i>
Be calm/Relax/Don't worry/Don't be scared	6	9	5	4	<i>C Don't worry. . . every time I was stuck on a word or problem, I told that to myself and then I'd get it. [PR]</i> <i>C I was a little nervous but remembered to relax. If you're not relaxed, you don't do as good. [PR]</i> <i>C Relax, because if I was so nervous, my teacher told me to relax and I'd be fine. [NPR]</i>
If nervous, take a deep breath.	1	1		1	
Never give up/You can do it/Think positive/Be confident	3	5	3	4	
Work quietly/don't talk	1	5	1	3	
Focus/Concentrate	5	2	5	2	
Try not to be distracted	1		1		
Read slowly to understand/Take your time/Don't hurry through it	2	7	2	4	<i>C Take my time and not miss words/questions. [PR]</i> <i>C Reading slowly. [PR]</i> <i>C Don't hurry through because it went a lot smoother. I didn't go fast, like slow. [NPR]</i> <i>C Take my time, because if I take my time I can learn more stuff. [NPR]</i>
Don't go too fast or too slow.		1		1	
Sound out unknown words.	4	1	2		
If I don't know word, spell it out/chunk words.		2		2	<i>C Chunking unknown words. [NPR]</i>
If there's part you don't understand, read the front of it and the back of it to make sense.	1		1		
If you get stuck on a word, say the first letter and go on.		1		1	
Think about/Remember what you read/details/Read carefully.		8	3	7	<i>C Paying attention to the facts. You could remember it right away when you get to the questions. [PR]</i>
Ask questions as you read.		1		1	
Read aloud (in class).	1				

\* PR = Proficient Reader

\*\* NPR = Non-Proficient Reader

(cont.) 3. What have your teachers taught you about taking the test? (Elicit specific strategies)			(cont.) Which strategies did you use?		
Strategy	PR* (N=23)	NPR** (N=27)	PR* (N=23)	NPR** (N=27)	Why?
Read in your head; you can read faster.	1		1		<i>CReading in head. . . You read so much faster so got through the list quicker 'cause it's timed. [PR]</i>
Always read directions/instructions.	1	2	1	2	
Use what you know.	1		1		<i>CUse what you know because if I made stuff up, it wouldn't help me because it's not true. [PR]</i>
Read the questions first/Preview questions.	2	1	1	1	<i>CIf I reading [the question] first, I find when I read the story, I'll know what I'm looking for. Then when I read the story and I see the answer, it will stay in my head. [NPR]</i>
Read every question carefully/the whole question.	1	5	1	2	
Read questions twice/Look at the question again if you don't understand.	3	3	3	3	<i>CI didn't understand one question and I read it over again and understood it. . . I got to see what the passage was about when I didn't understand it. [PR]</i> <i>CRead it [question] three times. [PR]</i>
Break down the question if you don't understand.	1		1		<i>CBreaking it [the question] down into little pieces. [PR]</i>
Move on to the next question, you might get help there.	1		1		<i>CWhen I know an answer I looked on through the other questions. [PR]</i>
Read all answer choices carefully.	2	2	1	1	
Mark off answers that don't make sense or weren't in the story.	2	1	2	1	<i>CSo I'll get the right one. So I don't guess. [NPR]</i>
Go back into the story/reread (to remember, to find details, to check answers).	13	15	13	15	[See the table that follows.]
Explain answer	1		1		
Compare and contrast	1				
Cause and effect	1				
Look at pictures/Read captions/Read everything		6		5	
Sentences that talk about the same thing		1		1	
Don't stay stuck on one question.	1		1		
If you're stuck on a question, skip it and come back later.	6	4	3	2	<i>CGoing to the next question because I didn't know it and I skipped it and went on - then went back to it later. I didn't waste time. [NPR]</i> <i>CSkip it and go back 'cause I wouldn't get stuck and keep trying to figure it out. [PR]</i> <i>CWhere I skipped it and went back. . . it gave me a lot of time to answer and check other questions. [PR]</i>
Scan for words that make sense with question.		1		1	<i>CScanning because it helps me find the question.</i>
When you're finished, check your answers to see if anything's missing.	3		2	1	<i>CChecking over my paper. . . I realized I didn't do all the questions.</i>
While you're reading, put numbers and what the paragraph's about.		1			<i>CTo put what the paragraph was about if the question was 'What was the mystery about?', I could go back to look at what I wrote about the paragraph and get the answer. [NPR]</i>
Underline in the passage and put question number by it.	1		1		
Underline important information/words.	1	4	1	1	
Watch for important information.		1		1	
Don't guess.	1	1	1		
Answer questions specifically.	1		1		
Guess if you really don't know an answer. It's better than leaving it blank.	2	1	2		
Only bubble the circle		1		1	

\* PR = Proficient Reader

\*\* NPR = Non-Proficient Reader

(cont.) 3. What have your teachers taught you about taking the test? (Elicit specific strategies)			(cont.) Which strategies did you use?		
Strategy	PR* (N=23)	NPR** (N=27)	PR* (N=23)	NPR** (N=27)	Why?
Erase completely		2		2	
Don't copy/look at other people's work/cheat.	1	5	1	4	
Edit, add detail, make sure writing is clear [FCAT Writing]	3	1	2	1	
Show your work [FCAT Math].		1		1	
When the dot means time[?]		1		1	
No strategies, my mom taught me.		1			
Stay in your seat.		2		1	
Don't ask for help.		1		1	
Warm up - get your blood going.		1		1	
Went to the bathroom, put water in your eyes.		1		1	
Ask the teacher on practice test.		1		1	
* PR = Proficient Reader			** NPR = Non-Proficient Reader		

In response to an open-ended question about test-taking strategies they were taught, both proficient readers (57%) and non-proficient readers (56%) most often reported that their teachers taught them to look back into the passage, to reread in order to refresh their memory, to verify details, to check their answers. Because this has been an emphasis in both classroom instruction and test preparation, students' comments are cited in detail below. Among the comments are some that indicate that students have employed this strategy of verification to correct errors; they have realized the value of this strategy.

Students' Comments About the #1 Strategy That Helped Them Most	
PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
<i>C Rereading over it. Because sometimes the brain can't handle every detail and remembering stories so it's good to go back and review every detail.</i>	<i>C Going back to the passage because I was able to remember more when I read it again.</i>
<i>C Read the questions and go back into the story. It helped because when you read a question, then you go back and think about it, then you find it.</i>	<i>C Looking back in the story because I didn't remember the answer, I was able to look back for the answer.</i>
<i>C Rereading, because I saw some mistakes I made and then I fixed them.</i>	<i>C Look back, because it was an open book test.</i>
<i>C Go back into text because if I didn't do that I wouldn't know the answer to one of the questions.</i>	<i>C About going back into the story to get your answer – that's what helped me the best.</i>
<i>C Checking my answers. 'cause like yesterday when I checked my answers, the one I wanted was wrong when I reread it.</i>	<i>C Going back to find the answers, because if you don't know it you can find it.</i>
<i>C Going back into passage because when I finished the test, I went back and found a mistake.</i>	<i>C Because in the passage they gave you the answers. . . Look at the question and if you see it then you know you have it right.</i>
<i>C Look it over again. Sometimes I was in such a hurry the answer was absolutely wrong. I ask, 'How could I have answered this this way?'</i>	<i>C Go back into text because if you don't understand the question you go back and read the paragraph to find the answer. . .</i>
<i>C Go back and look because it assured me that I was correct.</i>	<i>C Re-read the passage because on most of the stories I didn't get it so I had to go back.</i>
<i>C Checking it over. Some of the questions I figured out I got wrong.</i>	

Students were also asked explicitly if they use the strategy of going back to the passage to reread.

4. [If not mentioned in 3] Do you go back to the passage to make sure your answer is correct?	
PROFICIENT READERS (N = 23)	NON-PROFICIENT READERS (N = 27)
<p><b>'Yes' (17)</b></p> <p><i>C Yes - so you can get the right answer and make a '5' or a '6'.</i></p>	<p><b>'Yes' (23)</b></p> <p><i>C Yes, almost every time to make sure my answers were right.</i></p> <p><i>C Yes. [P: how often?] Mostly every time.</i></p> <p><i>C Sometimes I might miss something so I went back to reread to see if I missed it.</i></p> <p><i>C Yes. [P: How do you do that?] By seeing the passage and see if the answer to the question is clear.</i></p> <p><i>C [Eliminate] the answers that I don't think am correct. I look for two answers, then look back for the right one.</i></p>
<p><b>Qualified 'Yes' (6)</b></p> <p><i>C Sometimes, just to double check.</i></p> <p><i>C Yes, if I didn't understand.</i></p> <p><i>C When it's a hard question, but if it's a question I know from mind, I don't.</i></p> <p><i>C ... only when I'm not positive.</i></p> <p><i>C Yes, sometimes; most times I don't; if I have a question I go back into the passage.</i></p> <p><i>C Yes. [P:] Of the time. [P:] Not that much.</i></p>	<p><b>Qualified 'Yes' (4)</b></p> <p><i>C ... the ones that are hard, yes.</i></p> <p><i>C Sometimes. [P: Why just sometimes?] Because sometimes I know what the answer is.</i></p> <p><i>C ... when I don't know the answer I go back.</i></p> <p><i>C Sometimes. [P: Why sometimes?] When reading, ... passage stick in my head and if I don't remember I go back.</i></p>

5. Do you write anything on the test? If so, what?	
PROFICIENT READERS (N = 23)	NON-PROFICIENT READERS (N = 27)
<p><b>Yes/Sometimes (12)</b></p> <p><i>C Sometimes like in math. . .</i></p> <p><i>C Just math problems.</i></p> <p><i>C ... I sometimes underline some of the words in the story/text.</i></p> <p><i>C Underlined words, circled sentences that might help me.</i></p> <p><i>C Underline, question #</i></p> <p><i>C Put a mark near a question and go back to it later.</i></p> <p><i>C Yes, if I thought a word was important in a question, I wrote it on the side. Then when I saw it in the passage I circled it.</i></p> <p><i>C Sometimes I write notes of where to find the answer.</i></p> <p><i>C Sometimes I underline words. . .</i></p> <p><i>C ... I underlined words/letters. [P:] It gave me clues to be sure of what the question was asking.</i></p>	<p><b>Yes/Sometimes (19)</b></p> <p><i>C Underline words.</i></p> <p><i>C Underline the important words on the test.</i></p> <p><i>C Yes, underlined specific details.</i></p> <p><i>C Yes, when it asked you to explain your answers.</i></p> <p><i>C I write some words on the side, so we get tickets for the carnival. I write the important words.</i></p> <p><i>C We had a separate answer sheet for math. We had to explain some answers for reading.</i></p> <p><i>C Adding or subtract. [P: If a reading passage. . .?] I underline the sentence that would be a good one for one of the answers.</i></p> <p><i>C Underlined parts.</i></p> <p><i>C Only on the math.</i></p> <p><i>C Yes, on the math and I underline when I read something important.</i></p> <p><i>C Yes, numbers and a summary of a paragraph.</i></p> <p><i>C Yes, work out the problem. [P: What about the reading section?] I wrote important information.</i></p> <p><i>C Yes, pictures to help me remember what I am scanning. Underline important words - those in the questions.</i></p> <p><i>C Not that much - math problems and times tables. [P: Did you ever underline anything?] This time I did.</i></p> <p><i>C Yes, on the math. . .</i></p> <p><i>C Math - subtracting and multiplication; underline answer when I read.</i></p> <p><i>C Yes, on the math. . .</i></p>
<p><b>No (11)</b></p> <p><i>C No, sometimes my teachers tell me not to write anything on the pages.</i></p>	<p><b>No (8)</b></p> <p><i>C No. [Why not?] I just got used to thinking in my own mind.</i></p>

6. What is the purpose of the FCAT?		
Purpose	Proficient Readers (N=23)	Non-Proficient Readers (N=27)
<i>To determine whether you are prepared for the next grade.</i>	11 (48%)	18 (67%)
<i>To test your knowledge/determine what you have learned/to see if you have improved</i>	11 (48%)	11 (41%)
<i>To rate how the school/teachers are doing</i>	3	
<i>To see how you compare to other students</i>	2	
<i>To see if you have made a year's progress since last test.</i>	1	
<i>To determine whether you need help.</i>	1	
<i>To determine whether you have met the standards</i>	1	
<i>To help you learn different subjects and strategies</i>	1	
<i>To give you a grade</i>	1	
<i>To see how good a reader you are</i>	1	2
<i>To see if you're ready for high school</i>		1
<i>To help your education so that you can earn a job with money</i>		1
<i>So you can get a college diploma</i>		1

7. What have your parents said to you about the FCAT?		
Purpose	Proficient Readers (N=23)	Non-Proficient Readers (N=27)
<i>Gave me topics and 45 minutes to write</i>	1	
<i>Get a good night's rest.</i>	2	
<i>Eat a good breakfast.</i>	2	
<i>Relax/Don't be nervous/scared/worried.</i>	7	6
<i>Try/Do your best (It's important).</i>	7	11
<i>Have confidence/Believe in yourself/you're going to pass.</i>	4	1
<i>Concentrate/Focus</i>	1	3
<i>If you listen, have good grades, you'll pass.</i>		1
<i>Good luck/I hope you pass/My mom wakes up early so she could wish me good luck.</i>		4
<i>It's not that hard/that big a test/no sweat.</i>	2	2
<i>The test is difficult in grade 6 but easy in grade 4.</i>		1
<i>Take your time/Don't rush.</i>	1	
<i>Don't fool around/mess up.</i>		1
<i>If you're stuck on a question, don't stay there long; just guess.</i>	1	1
<i>Pay attention to your math.</i>		1
<i>Go back into the test; read carefully.</i>		1
<i>Reported parent questions their son after the test about how he did.</i>	2	4
<i>Promised a reward (e.g., Game Boy for a 4, 5; \$10).</i>	2	1
<i>If I don't pass, I'm going to get a 'wooping'.</i>		1
<i>Nothing/Never talked about it.</i>	3	
<i>My parents tell me not to get frustrated if I don't know a question. Even if I don't pass I will hold my head up tall. In life you always have a second chance.</i>	1	

### Findings: Student Interviews About FCAT

- <Hispanic boys at grade 4 who are proficient readers most often reported mixed feelings about the *FCAT*, initial nervousness but also confidence that they would be successful. In contrast, most of the non-proficient readers reported negative feelings (anxiety, fear, anger) and various physical symptoms (shaking hands, upset stomachs.) Whether proficient or non-proficient readers, the boys expected interesting reading; this finding is consistent with our prior study of African-American boys. In response to an open-ended question about strategies their teachers had taught them to use during testing, the boys listed multiple strategies. The strategy most frequently named by both proficient and non-proficient readers was to go back into the text to reread to find pertinent information or to verify their answer choice. The boys reported not only learning this strategy but applying it on the *FCAT*. Some boys indicated that this strategy enabled them to correct errors they had made. Another item on the test asked specifically whether they used this same strategy, and almost all boys in both groups responded that they did. [This finding should be of interest to teachers and reading coaches who have invested time and energy in helping students understand that their answer should be grounded in the passage rather than based on other sources of information.]
- <The Hispanic boys who were *FCAT* level 4-5 readers were divided as to whether they wrote on their test booklets; most of the Hispanic boys who were *FCAT* level 1-2 readers indicated they do write in their test booklet. Most often mentioned with respect to reading was understanding or jotting down words or important information in either the questions or the passage.
- <Proficient readers cited a variety of purposes for the *FCAT* but most often mentioned determining what they know or have learned and whether they are prepared for the next grade level. The non-proficient readers were more likely to associate the *FCAT* with a promotion decision but also saw the test as measuring what they had learned.

### Recommendations

- ☉Celebrate with teachers their effectiveness in increasing students' knowledge of the value of rereading to verify information or to ensure that their interpretation is supported in the material read. Provide students examples indicating that students were able to correct errors using this strategy. Strive to convince more students to apply this knowledge.
- ☉Continue to encourage teachers to teach reading comprehension strategies throughout the school year, not just in preparation for testing, and to increase students' repertoire of effective strategies.
- ☉Share with students the finding that students consider *FCAT* passages interesting; this has been corroborated in a number of studies.
- ☉At each school, make a concerted effort to reduce the stress inherent in the current testing environment. Help students gain a clear understanding of the purposes of the *FCAT*.

## Student Questionnaire Data

Students were administered a written questionnaire to obtain information about their reading habits, interests and perceptions of themselves as readers.

### Number of Books Read (2005-2006) and Reading Preferences

The proficient readers reported reading an average of 54 books last year, with a wide range of 5 to 150. The non-proficient readers reported reading an average of 46 books last year, with a similar wide range of answers, 3 to 146. More than half the proficient readers indicated they enjoy reading adventure books, mysteries and video game information. More than half of the non-proficient readers indicated that they enjoy reading adventure books, mysteries, video game information, jokes/humor, books about animals, comic books, and books about famous athletes/sports.

### Home Libraries

The boys in each group most often stated that they kept their books on a bookshelf. The median number of books reported owned by proficient readers was 28 books in comparison to 18 books for non-proficient readers. The median is reported because outliers, particularly in the proficient reader group, affected the mean scores. The range was very wide for students in both groups: 4 to 320 books for proficient readers and zero to 102 books for non-proficient readers.

### Enjoyment of Reading

When asked whether they like to read, most boys in both groups answered positively. Double the percentage of non-proficient readers (26%) in comparison to proficient readers (13%) gave ambivalent or negative answers to this question. More proficient readers (70%) than non-proficient readers (44%) reported reading on a daily basis outside of school.

### The Best Book Read (2005-2006) and Favorite Author

The following books were identified by more than one proficient reader as the best book read last year: Harry Potter books; books about Gregor the Overlander; Help! Someone Get me Out of the 4<sup>th</sup> Grade, and Once Upon a Marigold. Captain Underpants and The World According to Humphrey were mentioned by more than one non-proficient reader.

Among the favorite authors identified by more than one skilled reader were Suzanne Collins, J.K. Rowling, Dav Pilkey, and Lemony Snicket [Daniel Handler]. Two authors were identified as their favorite by more than one of the less skilled readers: Dr. Seuss (P.D. Eastman) and Mary Pope Osborne (Magic Tree House series). Note that while almost all proficient readers (91%) identified a favorite author, fewer than half the non-proficient readers (48%) did so.

## Who Helped the Boys Most in Learning to Read

Proficient readers most often identified their teacher(s) (35%) and/or mother (35%) as helping them most in learning to read, but also mentioned were sisters, a grandmother, parents, a cousin, a friend. In contrast, non-proficient readers most often mentioned their teacher (74%) followed by their mothers (30%); a sister, a grandmother, parents, and a nephew were each mentioned once by members of the non-proficient reader group. Among both groups of Hispanic boys, proficient readers as well as non-proficient readers, those who most helped these students learn to read were for the most part females in the school and home environment.

## Students' Perceptions of Themselves as Readers

Proficient readers most often described themselves as readers using words such as *excellent, great, talented, really good, above level* (57%) but some as *good, on-level, average, and okay* (39%). In contrast, only two non-proficient readers (7%) said *very good*; however, most non-proficient readers (81%) described themselves as *pretty good, in the middle, okay, good, not the best but pretty good*. Thus, the boys' perception of themselves as readers is not entirely dependent on their rating on the *FCAT*.

When asked what they do well as a reader, the proficient readers most often focused on their use of comprehension strategies (41%) while most non-proficient readers were divided between the use of comprehension strategies (41%) and accuracy in reading words (37%).

When asked what they needed to work on as a reader, the responses varied in both groups. Skilled readers most often mentioned reading at an appropriate pace (35%), more often than not stressing the need to slow down. Most frequently mentioned as a need by the less skilled readers was increasing accuracy in reading words (37%) followed by using reading comprehension strategies to improve their comprehension (27%). The majority of both proficient and non-proficient readers thought their teacher considered them a good reader.

## Family Members Who Liked to Read and Access to Neighborhood Library

Approximately half of the proficient readers indicated that each of the following family members like to read: mother, father, sisters, brothers, grandparents, and cousins. The percentages reported for each of these family members was similar for non-proficient readers. Of interest, similar percentages of male and female family members were said to enjoy reading even though, as reported above, the boys do not perceive the male family members to be involved in helping them learn to read. Sixty-five percent of the proficient readers and 52% of non-proficient readers stated that they have a library card for the library in their neighborhood.

**Table 34. Student Questionnaire Responses**

1. How many books did you read this year?												
GROUP	NUMBER OF BOOKS READ										Mean	Range
	1-10	11-20	21-40	41-60	61-70	71-80	81-90	91-100	>100	DK		
Proficient Readers (N=23)	2	3	5	5		1		2	4	1	54	5-150
Non-Proficient Readers (N=27)	5	2	6	8				2	3	1	46	3-146

**Table 34. (cont.)**

2. What do you like to read?		PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
Adventure books		20	15
Mysteries		15	16
Video Game Information		12	17
Jokes/Humor		11	19
Books about animals		10	16
Comic books		8	17
History		8	6
Science/Experiments		8	9
Books about famous athletes/sports		7	17
Magazines		6	9
Biography/Autobiography		4	4
Newspapers		3	6
Other:			
Science Fiction/Futuristic		1	1
Harry Potter/Dragons			1
Mythology		1	
Fiction			1
Learning about things I never knew (Egypt)		1	
Fictional animal characters (Bernstein Bears)			1
Scary books		1	
Unspecified		5	6

3. Where do you keep your books at home?		PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
On a shelf/bookshelf		15	13
In my closet		3	2
In my desk		2	
In my backpack/book bag		1	5
In a container by the computer		1	
On my dresser		1	2
In a little library I made		1	
Along the wall (living with great grandma)			1
In the "garage room" (like an office with computer, TV, couch)			1
On my bedroom counter			1
In a box			2

4. How many books do you own?												
GROUP	NUMBER OF BOOKS OWNED											
	0	1-10	11-20	21-40	41-60	61-80	81-100	>100	Other	Mean	Median	Range
Proficient Readers (N=23)		4	4	4	2	2	1	3	3	60	28	4-320
Non-Proficient Readers (N=27)	1	9	8	2	4		2	1 (102)		28	18	0-102

5. Do you like to read?	PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
I love reading	1	1
Yes	19	19
A little, kinda, sometimes	1	5
Not that much	1	1
No	1	1

6. How often do you choose to read outside of school?	PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
Daily	16	12
Weekly	4	8
Monthly	2	3
Almost Never	1	4

**Table 34. (cont.)**

7. What was the best book you read this year?	What made this book so good?
<b>PROFICIENT READERS (N = 23)</b>	
Harry Potter and the Goblet of Fire	<i>It was exciting and had a lot of detail. It made me feel like I was there.</i>
Harry Potter and the Goblet of Fire	<i>It was full of action.</i>
Harry Potter	<i>I don't know.</i>
<i>Harry Potter</i>	<i>It had action and it was also full of excitement</i>
<i>Gregor and the Curse of the Warm Bloods</i>	<i>There's a plague and they are trying to find a cure.</i>
<i>Gregor the Overlander</i>	<i>The war and adventure, suspense</i>
<i>Gregor the Overlander</i>	<i>There's a lot of adventures/characters/talking cockroaches/ golden giant bat</i>
<i>Help! Someone Get Me Out of the 4<sup>th</sup> Grade</i>	<i>Interesting, funny</i>
<i>Help! Someone Get Me Out of the 4<sup>th</sup> Grade</i>	<i>Because it's interesting and has my favorite author.</i>
<i>Once Upon a Marigold</i>	<i>Because everything. . .it was surprising. You never knew what would happen.</i>
<i>Once Upon a Marigold</i>	<i>No response</i>
<i>Charlie and the Chocolate Factory/The Giant Peach</i>	<i>That it had lots of good ideas. It wasn't boring like other stories. What I'm trying to say is that it kept me hooked.</i>
<i>The City of Ember</i>	<i>The characters and how they acted</i>
<i>Eragon and Eldest</i>	<i>It had adventures, mysteries, and a good vocabulary.</i>
<i>Escaping the Giant Wave</i>	<i>The adventure and problems</i>
<i>The Ghost of Lizard Light</i>	<i>It had a mystery about ghost that haunts Lizard Light.</i>
<i>Holes</i>	<i>It talked about how they felt and details.</i>
<i>How to Draw Cartoons</i>	<i>It show me how to draw.</i>
<i>No Dogs Allowed</i>	<i>The Dog</i>
<i>Made you Look (it's a Battle Book)</i>	<i>It was about a game show. They liked to travel. They went to California.</i>
<i>O Series of Unfortunate Events (Book 12)</i>	<i>The action in it.</i>
<i>Vampire Plagues</i>	<i>It was adventurous</i>
<i>The Young Man and the Sea</i>	<i>It talked about a boy who goes in the to catch a fish. I like to fish.</i>
<b>NON-PROFICIENT READERS (N = 27)</b>	
<i>Captain Underpants</i>	<i>It made me fell good Because gorge and Harold made me laugh</i>
<i>Captain Underpants</i>	<i>It's funny and action</i>
<i>The World According to Humphrey</i>	<i>Yes it was very funny.</i>
<i>The World According to Humphrey</i>	<i>Because I like books about animals that do crazy things - in it a rat is a student in class.</i>
<i>O snake one</i>	<i>I like all the different kinds of snakes.</i>
<i>Oil-Star Baseball Book</i>	<i>The players hit the ball far</i>
<i>Book about Yao Ming</i>	<i>History about the basketball player</i>
<i>Digimon</i>	<i>Because I used to watch that show and I didn't know it had a book to it.</i>
<i>Hellboy</i>	<i>How it was discrivue [descriptive?]</i>
<i>Highlight (the magazine)</i>	<i>It tells you about the president, hidden pictures and jokes.</i>
<i>Ida B. . .</i>	<i>She talk to tree. [P] Her mom had cancer and I wanted to know how her mom got rid of the cancer.</i>
<i>Japan</i>	<i>I learned some names in Japan.</i>
<i>Junie B. Jones - Graduation Girl</i>	<i>J.B. Jones poured grape juice on her graduation gown</i>
<i>Million dollar Kick</i>	<i>That the end when they won</i>
<i>Monster Manners</i>	<i>The little monster didn't know how to act mean like the other monsters. [. . .connection because my family teaches me to be respectful]</i>
<i>Owen Foote - Super Spy</i>	<i>It made it good because it was funny. Kids spy on people they caught Owen's grandma watching cartoons.</i>
<i>seaward born</i>	<i>it was intense</i>
<i>Shoopy</i>	<i>it funny</i>

**Table 34. (cont.)**

7. What was the best book you read this year? (cont.)	What made this book so good?(cont.)
<b>PROFICIENT READERS (N=23)</b>	
<i>Stone Fox</i>	<i>That it tell about a boy that has to take care of a farm while his father is sick.</i>
<i>The young man and the sea</i>	<i>It made the book so good because it was a chapter book and the young man had a few problems in the water.</i>
<i>The Best Running Backs in NFL</i>	<i>It told me about the best runner so I could pick one for my team.</i>
<i>The Silver Chair</i>	<i>Knowing new information.</i>
<i>The Magic Tree House</i>	<i>they have magic tree house can takes them to other adventure's</i>
<i>Trading Places with Tank Talbot</i>	<i>-There was alot of adventure. They always traded places, Tabb &amp; Justin, when one of them had to swim and couldn't they traded glasses and bathing suit.</i>
<i>Walk Like On Egyptian</i>	<i>Markers take her to wherever she draws.</i>
<i>War of the words</i>	<i>Oction</i>
<i>Westside School</i>	<i>It had good chapters because the book was funny.</i>

8. Who is your favorite author?	Why do you like this author?
<b>PROFICIENT READERS (N=23)</b>	
<i>Susan Collins [Suzanne Collins]</i>	<i>The stories are really adventurous. I'd like to visit New York one day.</i>
<i>Suzanne Collins</i>	<i>She writes a lot of mythical things and the world of mythology</i>
<i>Suzzane Collins [Suzanne Collins]</i>	<i>The adventure and suspense of her stories.</i>
<i>J.K. Rowling</i>	<i>She writes great books.</i>
<i>J.K. Rowling</i>	<i>Because she makes good books.</i>
<i>J.K. Rowling</i>	<i>He makes his books full of mysteries and suspense.</i>
<i>Dav Pilkey</i>	<i>He has interesting books.</i>
<i>Dav Pillky [Pilkey]</i>	<i>He makes me laugh.</i>
<i>Lemony Snicket</i>	<i>I really like the series - especially mystery.</i>
<i>Lemony Snicket</i>	<i>She writes good books.</i>
<i>Ondrew Clements</i>	<i>He writes in a way that makes you wonder what's going to happen next throughout the whole book.</i>
<i>Roald Dahl</i>	<i>Because he writes great books and also he lets his imagination run wild.</i>
<i>Dr. Seuss (P.D. Eastman)</i>	<i>He's funny.</i>
<i>Katherine Hannigan</i>	<i>She made a book I also like, Ida B.</i>
<i>Peg Kehret</i>	<i>Because she writes good adventure books.</i>
<i>Christopher Paolini</i>	<i>He wrote my favorite books and we have a lot in common.</i>
<i>Rodman Philebrick [Philbrick]</i>	<i>When he writes his books he writes them like they're really talking.</i>
<i>Sabastian Brooks [Sebatian Rooke]</i>	<i>He's the author of my favorite book.</i>
<i>R.L. Stein (Goosebumps)</i>	<i>Writes scary books.</i>
<i>Bill Wallace</i>	<i>He writes good books.</i>
<i>Henry Winkler</i>	<i>He is in my favorite book.</i>
<i>Don't have one/Don't remember</i>	<i>N = 2</i>
<i>Dr. Suice [P.D. Eastman]</i>	<i>I like his drowing and they are funny.</i>
<i>Dr. Seuss [P.D. Eastman]</i>	<i>He wrote good book. I loved the Cat in the Hat books because he writes silly stories.</i>
<i>Dr. Seuss [P.D. Eastman]</i>	<i>Because he makes rhyiming books and I like rhyiming books.</i>
<i>Mary Pope Osborne</i>	<i>She writes good stories about the Magic Tree House</i>
<i>Mary Pope Osborne</i>	<i>She writes books that I like.</i>
<i>Betty Be Birny [Betty G. Birney]</i>	<i>She writes funny stories</i>
<i>C.S. Lewis</i>	<i>Because he made seven books about Narnia</i>
<i>J.B. Jones [Barbara Park]</i>	<i>What J.B. Jones says</i>

**Table 34. (cont.)**

8. Who is your favorite author? (cont.)	Why do you like this author? (cont.)
<b>PROFICIENT READERS (N=23)</b>	
<i>Patricia Paloco [Polacco]</i>	<i>Because she writes good books. [P] They are sad like Chicken Sunday</i>
<i>Dav Pickly [Pilkey]</i>	<i>Cause he's jokes around</i>
<i>Shel Silverstein</i>	<i>He writes a lot of poems.</i>
<i>Lea Wait</i>	<i>She makes it intense [intense].</i>
<i>Henry Winkler</i>	<i>Because he wrote "Help! Someone Get Me Out of the 4<sup>th</sup> Grade"</i>
<i>Don't know his name</i>	<i>He wrote the Young Man and the Sea</i>
<i>Don't know/Don't have one</i>	<i>N = 13</i>

9. Who helped you most in learning to read?	
PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
<b>My Teacher(s) (8)</b> <i>C When I was living in NY and I was learning to talk and a speech teacher brought me a book and read half to me and I read half so I asked myself, wow this is really cool.</i> <i>C Kindergarten teacher</i> <i>C My teachers helped me the most to learn to read.</i> <i>C I think it was a teacher.</i>	<b>My Teacher(s) (20)</b> <i>C O teacher [P:] She taught me to re-read to help remember.</i> <i>C Teacher - she comes and reads with a group of kids, we read books together.</i> <i>C My teacher does - lots of different teachers.</i> <i>C O fourth grade teacher</i> <i>C Lots of different teachers</i> <i>C My third grade teacher</i> <i>C My first grade teacher</i> <i>C Mostly my teachers</i> <i>C My teacher taught me to chunk words and to skip them. It helped me a lot.</i>
<b>My Mom (8)</b> <i>C Mom - every night she read bedtime story and next day I had to read it to her.</i> <i>C My mom. She taught me to read and be the best reader. She helped me learn to sound out and test me on reading accuracy.</i> <i>C My mom really helped a lot when it came to learning how to read.</i>	<b>My Mom (8)</b> <i>C My mom tells me to read slow and think about what it's about.</i> <i>C My Mom. She told me reading takes me places and that's the only way you're going to get through life.</i> <i>C My mom. Whenever I'm stuck on a word she's there to help me.</i> <i>C Mom - she reads with me; listens to me, too.</i>
<b>My sister (2)</b> <i>C The person who helped me learn most about reading is my sister.</i>	<b>My sister (1)</b> <i>C My sister, she helped me to sound out the words and which big words I didn't know.</i>
<b>A family member (2)</b>	
<b>My grandmother (1)</b> <i>C Grandmother - used to be a teacher</i>	<b>My grandmother (1)</b>
<b>My parents (1)</b>	<b>My parents (1)</b> <i>C My mom and dad. When I don't know how to pronounce the word they help with it.</i>
<b>A cousin (1)</b>	<b>Nephew (1)</b>
<b>A friend (1)</b>	
<b>Myself (1)</b> <i>C It was just me - I helped myself.</i>	

**Table 34. (cont.)**

10. How good of a reader are you?	
PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
<p>Excellent/Great/Talented/Really good/Very good/ Above level/Above average (13)</p> <p><i>C I would say above average.</i> <i>C I love to read 3 inch thick books.</i> <i>C I am a very talented reader.</i> <i>C I'm a 6.5.</i> <i>C Very good. I read 5<sup>th</sup> grade books. (I usually don't get words wrong.)</i> <i>C Pretty good to be able to read almost anything.</i></p>	<p>Very good (2)</p> <p><i>C O very good reader</i></p>
<p>A good reader/On-level/Average/OK (9)</p> <p><i>C Most people say I'm good.</i> <i>C Good, but too speedy and miss some words.</i> <i>C I think I'm a good reader but not perfect.</i> <i>C OK - not too good but good.</i></p>	<p>A good reader/OK/Medium/In the middle (22)</p> <p><i>C Pretty good. If I can read hard books I'm a good reader.</i> <i>C Maybe in the middle.</i> <i>C Okay, don't read too fast, but not too slow either.</i> <i>C Okay, not that much good.</i> <i>C You mean how do I understand the words - sometimes I do and sometimes I don't.</i> <i>C I think I am a good reader.</i> <i>C I'm not like the best but I'm pretty good.</i> <i>C Not that bad, but not that good.</i> <i>C I wouldn't say I was super good but I'm OK.</i> <i>C Sometimes well/sometimes not (don't know hard words - longer words).</i></p>
	<p>Not that good (2)</p> <p><i>C Not to good.</i></p>
<p>Don't Know (1)</p>	<p>Don't Know (1)</p> <p><i>C I really don't know but I love reading.</i></p>

**Table 34. (cont.)**

11. What do you know how to do well as a reader?	
PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
<b>Use Comprehension Strategies (11)</b> <i>C I question myself, I picture it in my mind. I read the summary on the back.</i> <i>C I imagine the pictures in my head.</i> <i>C To understand every little detail.</i> <i>C Visualize, make a prediction, and ask myself questions.</i> <i>C I know how to re-read if I don't understand something.</i> <i>C Reread.</i> <i>C Look for words you don't know and try to guess the meaning. Guess!</i> <i>C Outo fixing my mistakes.</i> <i>C When I finish a chapter, I stop and write about it.</i> <i>C Writing helps me to be a good reader.</i>	<b>Use Comprehension Strategies (11)</b> <i>C You have to look back over it more than two times.</i> <i>C If don't understand parts – I read again, again until I understand.</i> <i>C I know how to tell the story in my own words.</i> <i>C Look back in story to find clues.</i> <i>C . . .re-read. . .</i> <i>C Pay attention to the book.</i> <i>C Pay attchin [attention].</i> <i>C Try to answer the question when there's a question mark.</i> <i>C Writting [Writing]</i> <i>C Write about different kinds of stuff.</i> <i>C Write well and you will get better.</i>
<b>Reads accurately/Sounds out words (5)</b> <i>C Just do your best and sound out the word if needed.</i> <i>C . . .sound out words, memorize words.</i> <i>C I split some words up.</i> <i>C I know how to say a lot of the hard words.</i> <i>C Sounds out words.</i>	<b>Reads accurately/Sound out words (10)</b> <i>C Sound out words - remember words - recognize words.</i> <i>C I pronounce the words.</i> <i>C . . .I sound out words I don't know. Osk for teacher's help.</i> <i>C . . .chunk it, ask</i> <i>C Sound out words.</i> <i>C Sound out words.</i> <i>C To break apart words</i> <i>C Chunk words</i> <i>C . . .skip words and read to the end of the sentence and then read it again.</i> <i>C If the word doesn't sound right, I read it over.</i>
<b>Read fast/with expression (4)</b> <i>C I can read fast and finish books in a day.</i> <i>C I read fast.</i> <i>C Read to groups/people.</i> <i>C Change the sound of voices.</i>	<b>Read fast (2)</b> <i>C I know how to read well by reading at a good paste [pace] not messing up.</i> <i>C I read fast.</i>
<b>Know word meanings (1)</b> <i>C I have a okay vocabulary.</i>	<b>Attend to punctuation (1)</b> <i>C I look through the book to see if there's and punctuation.</i> <b>Attend to words don't know (1)</b> <i>C To look in and find word I do not know.</i> <b>Read in content areas (1)</b> <i>C Math, science and social studies</i>
<b>Enjoy reading (1)</b> <i>C . . .and I adore reading.</i>	<b>Read a lot (3)</b>
<b>Read easily (1)</b> <i>C It's easy for me to read.</i>	
<b>. . .save my page if I don't have a book mark. (1)</b> <i>C Ogood reader.</i>	
<b>Non specific response (1)</b>	
<b>Don't know/Not sure (2)</b>	<b>Don't Know (1)</b>

**Table 34. (cont.)**

12. As a reader, what do you need to work on?	
PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
<b>Read at an appropriate pace (8)</b> <i>C Slow down to not miss words but fast so I can finish the book and start on another one.</i> <i>C Speeding up.</i> <i>C Sometimes I read too fast.</i> <i>C Reading slower when reading out loud.</i> <i>C I want to read a little faster.</i> <i>C Reading slower.</i> <i>C I think I need to work on slowing down. I read really fast so I need to slow down.</i> <i>C Reading more chapters during the reading time.</i>	<b>Read at an appropriate pace (3)</b> <i>C Fluency</i> <i>C Read slow. [P] When I read fast I don't understand what it means.</i> <i>C . . .to read faster. . .</i>
	<b>Observe punctuation (1)</b> <i>C I need to work on stopping at periods.</i>
<b>Increase reading vocabulary (4)</b> <i>C Knowing more words.</i> <i>C On the meaning on some of the words.</i> <i>C Big words.</i> <i>C I would like to learn more words.</i>	<b>Increase reading vocabulary (1)</b> <i>C . . .understanding the word.</i>
<b>Increase word reading accuracy (3)</b> <i>C Reading and sounding out bigger words.</i> <i>C I'd say work on reading strategies when I come to a word I don't know.</i> <i>C I need to work on reading some words.</i>	<b>Increase word reading accuracy (10)</b> <i>C I need to work on all of the hard words that I don't know.</i> <i>C Sound out words.</i> <i>C The words</i> <i>C The endings of words.</i> <i>C My words - don't put in or leave out words.</i> <i>C Knowing the words</i> <i>C I do not know how to read out, but I don't like to either.</i> <i>C Reading. [P: Specifically?] On saying the right words.</i> <i>C Improving reading out big words.</i> <i>C I need to work on how to read longer words.</i>
<b>Use reading comprehension strategies (3)</b> <i>C Inferring what the author is trying to say.</i> <i>C I need to work on understanding what the people in the book are saying.</i> <i>C I need to work on picturing the picture of the book.</i>	<b>Use reading comprehension strategies/ Improve comprehension (7)</b> <i>C How to understand what they're trying to say</i> <i>C Comprehension</i> <i>C The important [important] things in the book</i> <i>C I need to work on reading and studying how to reread more than 1. I don't reread and it helps to learn more.</i> <i>C Learn new things</i> <i>C Pay attention more of the book.</i> <i>C Understanding</i>
<b>Read in Spanish (1)</b>	
<b>Find good books (1)</b> <i>C . . .I want to find more good books.</i>	<b>Find books at appropriate level (1)</b> <i>C . . .when I'm reading - come to word hard to say. If I can't sound it out, I need to read another book.</i>
<b>Improve in reading/Read at a higher level (2)</b> <i>C . . .reading longer books.</i> <i>C Really reading and to become better and work on it.</i>	<b>Improve in reading/Read at a higher level (4)</b> <i>C Read more books.</i> <i>C How to read better - practice reading chapter books</i> <i>C . . .not to worry too much and catch up on my reading.</i> <i>C Reading hard books. . .and learn more.</i>
<b>Improve in other areas (2)</b> <i>C My writing</i> <i>C Draw.</i>	<b>Improve in other areas (4)</b> <i>C Writing [Writing]</i> <i>C Math and social studies [P] Definitions</i> <i>C My printing [printing]</i> <i>C Stay on task</i>
<b>Not sure (1)</b>	
<b>Nothing (1)</b>	<b>Nothing (1)</b>

Table 34. (cont.)

13. Does your teacher think you are a good reader?		
	PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
Yes	(17) <i>C Yes, because she sees me reading a lot.</i> <i>C Yes, I have problems to stop reading.</i> <i>C Yes - she tells me but I don't believe it.</i>	(15) <i>C Yes when she sits with me I read her books.</i> <i>C Yes, she says 'good job.'</i> <i>C Yes, because there are three reading groups...I'm in the medium - was in lower group but not anymore.</i>
Probably/I guess/ I think so/ Kind of/ Maybe	(3) <i>C Probably because I'm one of the top best readers.</i> <i>C I guess so.</i>	(5) <i>C O little</i> <i>C Kind of</i> <i>C I think so</i> <i>C Sometimes</i> <i>C Maybe</i>
Specific strength noted/ Need noted	(1) <i>C Learning new words.</i>	(2) <i>C More understanding.</i> <i>C She thinks I need a little bit more work.</i>
I don't know	(2)	(4) <i>C She never told me I'm a good reader.</i> <i>C I really don't know, she hasn't told me.</i>
No Response		(1)

14. Check the people in your family who like to read.		
	PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
Mother/Step-Mom	12	16
Father	11	13
Sister(s)/Step-Sister(s)	11	15
Brother(s)/Step-Brother(s)	11	13
Grandparent(s)	14	12
Cousin(s)	12	16
Aunt	4	4
Uncle		3
Nephew(s)		1
Friend of mother's		1
Just me		1

15. Do you have a library card for the library in your neighborhood?		
	PROFICIENT READERS (N=23)	NON-PROFICIENT READERS (N=27)
Yes	(15) <i>C I go sometimes</i> <i>C but don't use it; hard to get here.</i>	(14)
No	( 8) <i>C I beg my mom to buy me books.</i> <i>C But I want to get one.</i>	(13) <i>C But I use my aunt's</i>

### Findings: Student Questionnaire

A questionnaire was administered to the Hispanic boys to obtain information about their reading habits, interests and perceptions of themselves as readers.

The range of the number of books read in 2005-2006 varied greatly in both groups from a very few to 150 or so, perhaps more important than the mean for the proficient readers (54) versus non-proficient readers (46). Adventure, mystery and video game information were of interest to students in both groups. Joke books, books about animals, comic books, and books about famous athletes and sports appear to be of somewhat greater interest to the non-proficient readers than to the proficient readers.

As was the case with books read, the range of books the boys owned was very wide: 4 to 320 books for proficient readers and zero to 102 books for non-proficient readers. Most boys in both groups reported that they enjoy reading, but more proficient readers (70%) than non-proficient readers (44%) reported daily reading outside school.

Favorite books of skilled readers included Harry Potter books, Gregor the Overlander books, Help! Get me out of the 4<sup>th</sup> Grade, and Once Upon a Marigold; favorite books of less skilled readers included Captain Underpants and The World According to Humphrey. Of interest, most skilled readers (91%) identified favorite authors (e.g., Suzanne Collins, J.K. Rowling, Dav Pilkey, and Lemony Snicket). In contrast, fewer than half the less-skilled readers (48%) were able to name a favorite author. Mentioned by more than one non-proficient reader were Dr. Seuss (P.D. Eastman) and Mary Pope Osborne (The Magic Tree series).

Skilled readers among the Hispanic boys most often credited their teacher(s) (35%) and mother (35%) in helping them learn to read. The less skilled readers most often indicated a teacher was most helpful in their learning to read. Also mentioned were grandmothers and sisters. The data suggest that females are largely responsible for teaching young Hispanic boys to read. [A note of caution: the sample was small.]

Proficient readers most often described themselves (57%) as *excellent, great, talented, really good, above-level* readers. Non-proficient readers most often (81%) used terms such as *pretty good, good, in the middle, okay, and not the best but pretty good*, a positive finding. When asked what they need to work on as a reader, skilled readers most often mentioned reading at an appropriate rate (35%), more often than not referring to slowing down. Less skilled readers mentioned improving word reading accuracy (37%) and use of comprehension strategies (26%).

When asked which family members like to read, the boys in each group responded similarly, with about half identifying their mothers, fathers, sisters, brother, grandparents, and cousins as enjoying reading.

### Recommendations

- C Investigate programs that focus on providing students in need with at least some books of interest to them that they may keep. Consider what agencies would be interested in participating (e.g., Foundation, PTA, publishers, public libraries, community groups). One such initiative, Imagination Library, a multi-agency collaborative effort will provide newborns in specific zip codes in Hillsborough County with books on a regular basis. These infants are identified through pediatricians in the area. Are similar efforts underway for elementary school students?
- C The Language Arts Team and reading coaches should consider the implication of the finding that non-proficient readers are unable to identify an author whose books they enjoy.
- C The data suggest, although the sample is small, that females (teachers, mothers, grandmothers, sisters) are largely responsible for the early literacy development of Hispanic boys. At least one school with a large Hispanic population is giving books to dads who participate in the "Donuts for Dads" program where fathers read to their children. If such incentives are successful, spreading the word might lead to similar efforts at other schools.
- C Most of the non-proficient readers reported that they enjoy reading. Consider how to maintain their levels of interest. What are the possibilities, for example, of reading clubs for boys?

## Child Activities and Checklist

The person administering the assessments to the boys completed a checklist based on some general observations along with observations made during “warm-up” activities. Coaches commented on students’ physical stature, use of helping devices (e.g., glasses, hearing aid) and noted other pertinent health or developmental issues. To measure verbal fluency, students were asked to name as many animals as they could within a minute. They were also asked to categorize a series of four items. Students were asked to supply a solution to a novel problem (i.e., how to get an elephant into a favorite restaurant). Additionally, coaches recorded ratings of the youngster’s affect and indicated communication style.

### Observations of Students’ Appearance and Other Health Related Issues

Both proficient readers and non-proficient readers were typically described as of average stature (70% each) with a smaller percentage of the boys in each group as small or large for their age.

Four proficient readers wore glasses as did one non-proficient reader. Additionally, one proficient reader was said to be an ADHD (Attention Deficit/Hyperactive Disorder) child. Among the non-proficient readers, one student was described as an ADD (Attention Deficit Disorder) child, another as blind in one eye, another as asthmatic, and still another as suffering from headaches.

### Generating Names of Animals Orally with One-Minute Time Limit

As a measure of verbal fluency, students were asked to name as many animals as they could within a minute. Proficient readers named an average of 17 animals with a range of 11-24, non-proficient readers named an average of 16 with a range of 10-22.

### Supplying an Appropriate Word for a Series of Related Items

Students were presented with 10 series of 4 items and were asked to name a category to represent each set. Proficient readers obtained a mean of 10 correct (9.5) with a range of 8-10; the mode was 10. The mean for non-proficient readers was 9 with a range of 7-10; the modal score was 9. Several items generated responses that differentiated one group from the other. [Note that answers were counted as correct if true even if the words were not the most precise term.]

Responses differed not only in terms of correctness but also quality, that is, the precision of the vocabulary supplied by the boys. Some students erred by providing another word for one of the set of words. For example, given the words *lemonade*, *soda*, *water*, and *hot chocolate*, a student suggested *soft drinks* as the category. For the words *helicopter*, *biplane*, *jet* and *space craft*, a number of students opted for *planes* or *airplanes*. In these examples, the focus was too narrow.

In contrast, some students offered a word that is that is overly broad in scope. One example is the word *universe* to represent *Mercury*, *Venus*, *Earth* and *Mars*, where *planets* would be preferable. After all, each of the items listed on the test could be described as part of the universe. Another student described *oak*, *pine*, *maple* and *palm* as *plants* rather than *trees*, which is correct in terms of the broad distinction between plants versus animals; however, the simple word *trees* is more descriptive and precise. In terms of specificity, some students described *turtle*, *lizard*, *crocodile* and *snake* as *animals*, while other students supplied the more precise word *reptiles*.

Some students identified *J.K. Rowling, R.L. Stine, Terry Spinelli* and *Betsy Byars* as *authors*, but others supplied the words *people, persons, and names*.

While some students undershot or overshot the mark, some of their peers either did not know or did not have ready access to appropriate superordinate or categorical words in their lexicon. Instead they used phrases describing a common characteristic or function. Instead of the word *tools*, several students said *for working* or *construction supplies* to represent *hammer, pliers, wrench, and saw*. Instead of the words *vehicles* or *transportation*, some students said *things you drive*. When some students categorized *trumpet, trombone, tuba* and *French horn* as instruments or *brass instruments*, other students said they were *music stuff* or *things you could play for a band*. Another student described the words *helicopter, biplane, jet* and *space craft* as *stuff that goes in the air*. Examination of the table reveals that imprecise words and phrases were more prevalent in the responses of the non-proficient readers.

Note that vocabulary development had surfaced as an issue in our earlier study of African-American boys in grade 4. The Elementary Language Arts Team and reading coaches have been proactive in examining current research and best practices in this area, developing inservice training on this topic, identifying and developing instructional materials, and working with teachers to improve vocabulary instruction. Continuing to support classroom application of the knowledge gained through inservice training is important in ensuring that focused efforts to develop vocabulary are an integral part of instruction across the district.

Students' answers for the final set, comprised of well-known authors of children's books, were particularly interesting. This was a new item in our study of Hispanic boys that had not been included in our prior study of African American boys, one that clearly differentiated proficient and non-proficient readers. Most proficient readers identified *J.K. Rowling, R.L. Sting, Jerry Spinelli, and Betsy Byars* as authors while only 41% of the non-proficient readers did so. Some of the categorical words supplied by non-proficient readers were movie stars, actors, musicians, baseball players, CDs, scientists, and singers.

This difference between the two groups of Hispanic boys' knowledge of authors is corroborated by the finding that non-proficient readers were much less likely to come up with the name of a favorite author when asked to do so [see the student questionnaire section]. This lack of knowledge of authors may relate to the issue of reading interests; a student may be more inclined to pay attention to the author if he loves the book and wants to find another one by the same author. The reading interests of boys was also an issue that surfaced in our study of African-American boys. The language arts team and reading coaches also have been mindful of boys' interests when involved in purchasing new books and materials.

**Table 35. Categorization by Proficient and Non-Proficient Readers**

<b>Exemplars</b>	<b>Categories Named</b>	<b>Proficient Readers (N=23)</b>	<b>Non-Proficient Readers (N=27)</b>
football soccer baseball hockey	sports	100% (23)	96% (26)
	balls		4% (1)
hammer pliers wrench saw	tools	91% (21)	85% (23)
	construction supplies	4% (1)	
	woodwork	4% (1)	
	for working/work		7% (2)
	construction supplies		4% (1)
	equipment		4% (1)
car van truck motorcycles	vehicles	57% (13)	70% (19)
	transportation	30% (7)	4% (1)
	automobiles/cars	13% (3)	7% (2)
	mobiles/motor mobiles		7% (2)
	electronics		4% (1)
	machines		4% (1)
	things you drive		4% (1)
Mercury Venus Earth Mars	planets	91% (21)	96% (26)
	solar system	9% (2)	
	universe		4% (1)
helicopter biplane jet space craft	air craft/air ships/air travel/air vehicles/air force	35% (8)	19% (5)
	airplanes/planes	26% (6)	26% (7)
	air transportation/air transport/transportation	22% (5)	4% (1)
	flying objects/flying vehicles/flying things/flights/fly	9% (2)	26% (7)
	machinery/mechanical things/flying machines	4% (1)	7% (2)
	space ships		4% (1)
	stuff that goes in the air		4% (1)
	no response	4% (1)	11% (3)
oak pine maple palm	trees	81% (21)	81% (22)
	wood	4% (1)	
	plants	4% (1)	7% (2)
	fruit		4% (1)
	nature		4% (1)
	no response		4% (1)
lemonade soda water hot chocolate	drinks	65% (15)	67% (18)
	beverages	22% (5)	7% (2)
	liquids	13% (3)	15% (4)
	food		4% (1)
	sodas/soft drinks		7% (2)
trumpet trombone tuba french horn	instruments	70% (16)	78% (21)
	musical instruments/music instruments	13% (3)	11% (3)
	brass instruments	9% (2)	
	woodwinds	4% (1)	
	music stuff	4% (1)	
	music		4% (1)
	things you could play for a band		4% (1)
	no response		4% (1)

Table 35. (cont.)

Exemplars	Categories Named	Proficient Readers (N=23)	Non-Proficient Readers (N=27)
turtle lizard crocodile snake	reptiles	39% (9)	56% (15)
	animals	39% (9)	33% (9)
	amphibians	9% (2)	4% (1)
	creatures	9% (2)	
	invertebrates	4% (1)	
	wild animals		4% (1)
	sea animals		4% (1)
	J.K. Rowling R.L. Stine Jerry Spinelli Betsy Byars	authors	87% (20)
	people/persons	9% (2)	11% (3)
	famous people	4% (1)	
	movie stars/actors/stars/superstars		15% (4)
	musicians/music		7% (2)
	names		7% (2)
	baseball players		4% (1)
	CDs		4% (1)
	different animals		4% (1)
	scientists		4% (1)
	singers		4% (1)

### Problem Solving with a Novel Task

Also presented to each student was a novel problem-solving task, designed to provide some relief in what could be a stressful testing situation but also to get acquainted with the student and to see how the student thinks and expresses himself. Their solutions are presented in the table below.

Considered by one or more of the boys were the following issues: where to get an elephant; the elephant's size as a barrier to entry; whether the elephant was disposed to enter a restaurant and how he might be enticed to do so; whether the restaurant personnel would be open to an elephant as a patron; whether the job could be outsourced; and what events might transpire once the elephant entered the restaurant. Some boys evidenced a concern for logistics while others responded with humor. Some students focused on a single aspect of the problem, while other attended to multiple issues. One student sought to understand more about the scope of the problem: *How big an elephant? A baby? A big one?*

The mean number of words in the solutions of the proficient readers was 38 words, with a range of 4 to 131 words. The mean number of words in the solutions provided by the non-proficient readers was 32 words, with a range from 5 to 89 words. Considerable variability existed within each group in terms of the number of words used to explain their answers as well as in the delineation of the issues involved and the elaboration evident in their responses. Some coaches in each group probed for more detail.

**Table 36. Solutions to a Novel Problem**

Proficient Readers (N=22)	Non-Proficient Readers (N=26)
<p>&lt; Take him from the wild then take him to that restaurant. Knock down the wall so he can charge in.</p> <p>&lt; By opening the roof and getting the elephant in. I would need a special tool to get the elephant in.</p> <p>&lt; I would lower it in with a truck full of fruits. Then I would go in and ask the waiter to bring a side dish for the elephant. Then I would start eating and uh. . .when he finished it I would order some more food. I would keep ordering until he was full. Then I would take him back to where he came from and I'd go home.</p> <p>&lt; I would make the door bigger, I guess. I would keep on pushing until he finally got in.</p> <p>&lt; I would push him inside the door [P] and he would eat all of the food.</p> <p>&lt; I would make a big space for it so I can go in. I would get in a plane to lift it in there.</p> <p>&lt; I take a shrinker out of my pocket, shrink him and put him in my pocket, go in the restaurant and unshrink him to be as tall as a dog.</p> <p>&lt; That's hard. I don't know, maybe a pass. Email it or mail it. . . It's just a funny idea because it's a joke. Get a rat to chase it in; they're afraid of mice.</p> <p>&lt; Well, I would put, change the walls to the side, instead of standard size, a bigger size. And I would made the ceiling higher. And a bigger door. Is that really a question? [That's fun.] I don't know why I would want to do that though.</p> <p>&lt; I would lure him in with his favorite food. Then I would tell him we have more. His favorite dish would be peanuts and water. He'll like the peanuts because I've seen it in cartoons and somewhere else.</p> <p>&lt; I throw peanuts on ground and into the restaurant.</p> <p>&lt; Taking the restaurant to the elephant or if there is a huge window in the roof I would make him drop through there. [P: How would you get him up on the roof?] 11,000 helicopters.</p> <p>&lt; Bring peanuts into the restaurant. [P: Is that all?] I will call elephant and I got peanuts. [P: Would that get him into the restaurant?] Not really - I would need a shrink ray; they're huge. I wouldn't want my favorite restaurant coming down on me.</p> <p>&lt; By forcing him. [P: How?] By pushing him into the restaurant. [P: Tell me more. . .Student paraphrased his statement.] another thing I might try is give out samples of his food. [P: What makes you say that?] Because people may want to taste things before they buy it. Then he [the elephant] may want to taste it; then he'll go into the restaurant.</p> <p>&lt; I would tell him then that it is a free country and my elephant is hungry. I have a license to have him and if you disagree, I would like to speak to the manager.</p>	<p>&lt; By trying to push it into the door. [P: Anything else?] It's too big to fit in.</p> <p>&lt; I would try to push him in and if he didn't go I would go inside and try to pull him in and if he wouldn't go I would make the door a little bigger.</p> <p>&lt; Push him down on his knees and get people to help me push him in there.</p> <p>&lt; By cooking him - or in pieces.</p> <p>&lt; Screw off the roof, get a helicopter to carry it and 'jrop' it into the restaurant.</p> <p>&lt; Make a hole in the wall.</p> <p>&lt; By breaking the door and making a big hole. Ond measure how long the hole needs to be so the elephant can get in there.</p> <p>&lt; To get the elephant into my favorite restaurant you could go through the back because they have two big doors by the __?. If the elephant is too high you could lay it on its back and push it in with a truck.</p> <p>&lt; My goodness. If they had double doors, I would tell them to just bring it in. If it was big, I don't know. I would tell them to cut a hole in the wall.</p> <p>&lt; Open the back doors, put him through there out of the kitchen.</p> <p>&lt; I would build a roof, then drop him in with a helicopter.</p> <p>&lt; Well, if someone took off the roof, you can take a helicopter and pick elephant up and put him in.</p> <p>&lt; I would break the largest window and try to put him in. [P:] Steak &amp; Shake.</p> <p>&lt; Take off the roof. Get a huge crane and lift the roof and put it in there.</p> <p>&lt; Make it lose some weight.</p> <p>&lt; Get a peanut and show it to him. Make him smell it. Get on his back. You could show him the peanut and he'll follow you. You could make a track of peanuts into the restaurant and he'll eat them.</p> <p>&lt; I would get a really strong helicopter - Get a chain, put it on the bottom of the helicopter and tie it on the elephant - Get another helicopter and get a chain on the bottom of it, and tie it on all four corners of the restaurant's roof. I tell the helicopter to pull it up and then tell the other helicopter to put elephant inside.</p> <p>&lt; Peanut gallery - because they like peanuts. I would get a really big chainsaw to cut the door open, as big as a monster truck so that he could fit in. Ond I would tell people 'Male elephant coming through.' I'd tell them to get out of the way so the elephant could eat some peanuts and I would take him home and give him some boiled peanuts.</p>

Table 36. (cont.)

Proficient Readers (N=22)	Non-Proficient Readers (N=22)
<p>&lt; Uh - elephant into favorite restaurant? What kind of elephant? Baby? Big? Make it go through the front door. [P] No, through the back door. [P] I don't think anyone would but you could kill it; you know how people do that so you can cook it.</p> <p>&lt; First there's the matter of getting the elephant in. I'd have to chain saw the roof and throw him in. Then I'd persuade them that the elephant would be helpful in washing the dishes. They have trunks to store water and can do the dishes, and the employees can just lay back.</p> <p>&lt; I would get the elephant into my favorite restaurant by distracting the 'butler' in the doorway. If that doesn't work, I would sneak the elephant through the back door. I would get the biggest table there is. Then get the biggest plate, biggest drink (a 4-liter of soda). I would put it all under the table so the elephant could nibble on it. The second biggest plate and drink is for me. The second biggest dessert is the elephant. Then I would get on the elephant's back, get all of the food and go back home and eat all of the food.</p> <p>&lt; I would go to the zoo and try to talk the zookeeper into letting me take him. I'd take him to buy some peanuts and then go to the restaurant. . .My uncle works for a construction company and he has a crane. I would ride the elephant to the construction site. My uncle would let me take the crane but he needs it back at 4:30. It would take while. I would take off the top of the restaurant with the crane. The elephant is a little scared but I lift him up and put him inside. He keep eating and eating - even the spoons and forks. When he's full, I say 'Let's go.' I pick him back up, return him to the zoo and take back the crane.</p> <p>&lt; Pay extra for it.</p> <p>&lt; Get the circus to move it there.</p> <p>&lt; I would hire a elephant trainer and let him train the elephant for a few weeks. I would take the trainer's advice, like if he said 'Do this or that.' Then if that doesn't work, I would put food in the restaurant so the elephant could come.</p>	<p>&lt; I would get the elephant and try to get him through the big door. If that doesn't work, I will put a hole in the ceiling and tell them I am a construction worker. I'll sneak him into the bathroom and put a sign up that says 'out of order.' Then I act like a plumber ___?___ that I have to fix the bathroom and I'll bring him food.</p> <p>&lt; I would get an elephant into my favorite restaurant by taking peanuts in a horse trailer. The elephant would get in by getting the peanuts. Check that the door is closed good; check the door is shut good and check the truck needs gasoline. Then I would drive him there. Check if there's other elephants. See if his favorite meal is there - peanut salad.</p> <p>&lt; Asking them to come in.</p> <p>&lt; I'll place peanuts in the restaurant. Make the restaurant doors wider and bigger so the elephant can go through the doors.</p> <p>&lt; I would track peanuts on the floor and when it goes into the restaurant I would close the door and lock it, and there would be a stack of peanuts on the counter.</p> <p>&lt; I will get a peanut, make smell all the way over to Pizza Hut and deflate the elephant. I will put the elephant into a box, then put a piece of bread and pizza in the box. Then we would drink soda. After that we will leave and drive back to the zoo.</p> <p>&lt; Well. . .get his favorite food and if he can't get through the doors, like he can't fit, put him in.</p> <p>&lt; Umm! Make the door - cut the door - make the door taller and wider and. . .make the cups, plates, spoons. . .make. . .bake lots of food, like two plates, two plates full of food. Make the chairs bigger and stronger.</p> <p>&lt; Cut the door big, very big and put the elephant inside. Take the elephant with food in your hand. I'll walk and then he'll follow me. Or take a machine that has a ball on it and crush the roof. Get a helicopter, put ropes on the elephant, fly into the restaurant and people will cut the ropes. Or get an elephant, put it somewhere that is clear, put it somewhere you can build something, and then build your favorite restaurant there. [P: Favorite restaurant?] Wendy's or Burger King, yeah, Burger King.</p>

## Rating Scale for Affective Indicators: Results by Group

Reading coaches also were asked to rate the Hispanic boys, both proficient- and non-proficient readers, in terms of their affect as they completed the warm-up tasks. Provided in the tables below are the ratings for each group. A one-point (low) to four-point (high) scale was used to record observations. Occasionally an item is omitted; percentages are based on valid responses.

**Table 37. Affect of Proficient Readers (N=22)**

Rating	1	2	3	4	Rating
Gloomy		9%	41%	50%	Cheerful
Nervous	5%	18%	36%	41%	Confident
Reserved	23%	18%	36%	23%	Outgoing
Uncooperative			5%	95%	Cooperative
Agitated		5%	18%	77%	Calm
Bored		5%	27%	68%	Engaged
Reluctant		18%	32%	50%	Enthusiastic

**Table 38. Affect of Non-Proficient Readers (N=20)**

Rating	1	2	3	4	Rating
Gloomy		15%	58%	27%	Cheerful
Nervous		19%	69%	12%	Confident
Reserved	12%	44%	36%	8%	Outgoing
Uncooperative			15%	85%	Cooperative
Agitated		4%	31%	65%	Calm
Bored		15%	35%	50%	Engaged
Reluctant		12%	81%	8%	Enthusiastic

Four points separated the negative and positive pole on the semantic differential scale used by reading coaches to rate students on affective indicators. When examining the table, one's first impression is that both proficient and non-proficient readers were rated positively overall but variations occurred in terms of degree. With respect to how cheerful they were, proficient readers were most often rated a 4 while non-proficient readers were most often rated a 3. Proficient readers were most often a 3 or 4 with respect to confidence while non-proficient readers were most often rated a 3. In terms of whether students were perceived as outgoing or reserved, the ratings varied considerably in both groups. This item, in fact, was not one as clearly falling on a continuum from negative to positive, so the results are not surprising. Almost all children in both groups received the highest rating for cooperation, a very positive finding in terms of intervening with non-proficient readers. Similarly, students in both reader groups were most often rated a 4 in terms of being calm and engaged as they worked. Proficient readers were more likely to receive the highest rating (4) for enthusiasm; most non-proficient readers also were rated positively (3) for enthusiasm.

Overall, proficient and non-proficient readers were rated positively by reading coaches; non-proficient readers were perceived to be most like proficient readers in being cooperative and calm as they worked with the reading coach at their school.

## Communication Style

A checklist was used to note how the student conversed with the reading coach during the activities. Most students in both groups used phrases and sentences or a combination thereof while working with the reading coach. Few students in either group gave single word responses or gave lengthy responses. To some extent, the type of response was an artifact of the testing situation. In both groups, reading coaches were much more likely to indicate the conversation was "give and take" rather than "one sided."

Table. 39 . Communication Style

Reported Communication Style	Group	
	Proficient Readers (N=23)	Non-Proficient Readers (N=27)
Single word answers		
Combination one-word answers and phrases	5% ( 1)	4% ( 1)
Short phrases	29% ( 6)	38% (10)
Combination phrases and sentences	19% ( 4)	19% ( 5)
Sentences	24% ( 5)	27% ( 7)
Combination of sentences and lengthier response	10% ( 2)	
Paragraph-long answers	5% ( 1)	8% ( 2)
One-sided conversation (e.g., I probed his answers; teacher to student most of the time)	14% ( 3)	12% ( 3)
"Give and take" communication	52% (11)	35% ( 9)
No response	( 2)	( 1)

**Findings: Child Activities and Checklist**

- < The reading coaches engaged the Hispanic boys in a series of tasks to get to know the students, their thinking and ways of expressing themselves. One activity that generated interesting data was asking students to identify the category represented by 10 series of 4 words. Most students in both groups were able to supply words or descriptive phrases for most or all word sets. Answers varied in terms of the precision of the words the boys supplied. Non-proficient readers were more likely to use vocabulary that was overly broad: *nature* or *plants* for "oak, pine, maple and palm" rather than *trees*, and *universe* rather than *planets* for "Mercury, Venus, Earth, and Mars." Non-proficient readers were more likely than proficient readers to use imprecise terminology: *stuff that goes in the air* for "helicopter, biplane, jet, and space craft"; *for working* to describe "hammer, pliers, wrench and saw"; *music stuff* for "trumpet, trombone, tuba, and French horn."
- < A set of words that yielded interesting responses was "J.K. Rowling, R.L. Stine, Jerry Spinelli, and Betsy Byars," easily identified as authors (of well-known children's books) by 87% of proficient readers but by 41% of non-proficient readers. Among the alternatives supplied by the non-proficient readers were *movie stars*, *musicians*, *baseball players*, *CDs*, and *scientists*.
- < In terms of affective indicators, reading coaches rated proficient and non-proficient readers positively. Coaches perceived the non-proficient readers most like the proficient readers in being cooperative and calm as they worked one-on-one with the coach. The positive attitude of the less proficient readers among the Hispanic boys is reminiscent of the findings from the prior study of African-American boys; this finding bodes well for efforts to help these boys achieve at a higher level in reading.

**Recommendations**

- Ⓒ Continue efforts underway to make vocabulary development an integral part of instruction each day during language arts but also in other content areas. A focus on learning new words in a meaningful context is important.
- Ⓒ Consider the fact that less-proficient readers are not familiar with very well-known authors, a finding supported by the inability of many of these boys to name an author they particularly like. Explore the following question: Are we doing all we can do to find authors and books of interest to boys?
- Ⓒ Share with teachers the fact that so many of these non-proficient readers are rated positively by reading coaches in terms of the attitudes they displayed and celebrate this finding. Again, redouble efforts to find books and authors that boys enjoy before they turn away, thinking reading is for others, not for them.

**Profiles of Non-Proficient Readers Among Hispanic Males in Grade 4**

When the data compiled in the case folders for fourth grade Hispanic boys who were non-proficient in reading were analyzed, a number of common profiles were evident. Table 40 identifies strengths (+), adequacies (**U**), and developmental needs (!) of each grouping of students, and identifies a student profile (fictitious names) to represent each cluster of students.

**Table 40. Profiles of Hispanic Boys**

Group	% (n)	Accuracy	Rate	Vocabulary	Comprehension	Example
1	15% (4)	+	+(1) or <b>U</b> (3)	<b>U</b>	<b>U</b> - (low average 4)	<i>Alberto</i>
2	19% (5)	+(4) or <b>U</b> (2)	+(3) or <b>U</b> (2)	+(1) or <b>U</b> (4)	!	<i>Ande</i>
3	7% (2)	+	+(1) or <b>U</b> (1)	!	!	<i>Emanuel</i>
4	11% (3)	+	!	<b>U</b>	<b>U</b> - (low average)	<i>Jacob</i>
5	15% (4)	+(1) or <b>U</b> (4)	!	<b>U</b>	!	<i>Jose</i>
6	26% (7)	+(3) or <b>U</b> (4)	!	!	!	<i>Pedro</i>
7	7% (2)	!	!	!	!	<i>Simon</i>

The first three groups exhibit a number of similarities: strengths or adequacies in word reading accuracy and rate of reading, but needs in the areas of reading comprehension. Students in group 3 need to develop their vocabularies as well as their reading comprehension. These three groups, about two-fifths of the sample, are represented by Alberto, Ande and Emanuel.

The fourth group of Hispanic boys are highly accurate at reading words and have a vocabulary typical of their grade level. However, their very slow rate of reading in all likelihood impedes their reading comprehension. The fifth group is quite similar, with word reading accuracy that is satisfactory or better and adequate vocabulary but with a developmental need in both reading rate and reading comprehension. Jacob and Jose illustrate students with these profiles.

Pedro represents the sixth cluster of students, whose principal reading strength is in their ability to read words accurately. Reading rate, vocabulary and reading comprehension are all areas of need. Simon captures the profile of students who are weak in all components of the reading process when reading text at their grade level.

Now follow seven profiles with fictitious names to illustrate the various configurations of strengths, adequacies and needs identified in the study.

## **Alberto**

Alberto received a level 2 rating in grade 3 and a high level 2 rating in grade 4 on *FCAT Reading*, a few points from proficiency. Both years he scored in the average range in reading on the *FCAT NRT*. When administered the district's *FCAT Reading Practice Test*, he was observed to read with a high degree of accuracy on both passages (99% and 99.5%) and to read at a reasonable rate (average of 109 words correct per minute) but with greater speed on the narrative passage than on the expository passage. His comprehension score on the practice test averaged 65% correct. He demonstrated many effective comprehension strategies, for example, he was consistent about rereading when answering questions involving a specific detail. He was observed to give illogical answers on occasion.

On the *Peabody Picture Vocabulary Test*, he scored in the average range but in the below-average range in comparison to his classmates on the *DAR Word Meaning Test*. His teacher confirmed that word reading accuracy is a real strength for Alberto and noted that he was highly fluent in conversation. He was rated in the low average range in background knowledge and comprehension and as below average in problem solving skills.

Alberto's family receives welfare assistance and his school lunch is subsidized. His home and native language is Spanish and he is receiving services as a bilingual student (LY-C). Alberto enrolled in one district school in kindergarten, then another school in grades 1-4. His attendance rate for grades K-4 was 97%. He participated in summer school at the end of grade 2 but has never been retained. No evidence of any disciplinary incident has been recorded in the student data base in the last two years. Somewhat small for his size, Alberto was described as cheerful, confident and cooperative by his reading coach.

Alberto reported that he likes to read, has about 20 books, which he keeps in his book bag or on the TV table. He indicated that he reads daily at home, most likes books about sports/famous athletes and joke books. *Owen Foote - Super Spy* was his favorite book among those he read in grade 4 because it was funny: *Kids spy on people - they caught Owen's grandma watching cartoons*. Alberto described himself as a "very good reader": *I know how to read well by reading at a good paste and not messing up*.

Alberto has many strengths to support improved performance in reading: he attends school faithfully and is well behaved; he reads words accurately and at a reasonable pace; and his receptive vocabulary is average. He needs to increase his expressive vocabulary and to continue to develop effective comprehension skills.

## Ande

Ande was rated a low level 2 reader on *FCAT Reading* in grade 3 but fell back to level 1 in grade 4. Both of those years he scored in the low-average range in reading comprehension on the *FCAT NRT*. When administered the *FCAT Reading Practice Test*, he read with a high degree of accuracy on the narrative passage (98%) and the expository passage (97%). Moreover, he read at a fast clip, averaging 158 words correct per minute; however, he was able to answer only 6 of 20 questions correctly after reading the test silently. He rarely went back to reread when answering questions. During discussion with the reading coach, he justified his answers by pointing to or reading from the passage, but most often he cited outside information in his explanation. He often understood the questions, but sometimes did not. When asked which two words have the SAME meaning, he opted for 'pounds' and 'calories', commenting that *Noodles have a lot of calories and if you eat a lot you'll be heavy - you gain weight from both*. He thought of a common characteristic of two words that have different meanings and cited an example, noodles, that was not found in the passage.

On the *Peabody Picture Vocabulary Test*, he scored in the low-average range. On the *DAR Word Meaning*, he also performed slightly below grade level. His teacher typically rated him below average or low average on rating scale items. He was only rated above average in his fluent speech in conversation. She did consider him average in phonics skills, reading/literacy, vocabulary and reading comprehension. His teacher volunteered the following information:

*[His] performance is greatly affected by his taking his medication. He is currently having difficulty because he has been staying with his father and not receiving medication regularly.*

The reading coach who worked with him described him as confident and cooperative.

Ande's home and native language is English. His meals at school are subsidized. This student was enrolled in a pre-K program in a district school and also attended that first summer. He participated in a kindergarten program at another district school in the fall but returned to his first school mid-year where he completed kindergarten, first grade, and a few weeks of second grade. He was enrolled at a third district school to complete second grade and attended summer school there as well. In third and fourth grade, he was enrolled in a fourth school in the district. His attendance rate was 96% over five years (K-4). A number of disciplinary events involving this student are on record, 7 in grade 3 and 6 in grade 4, all but 1 of which were described as "inappropriate behavior." In third grade, the teacher initially conferred with this student but he was also assigned to work detail (2), detention (3) and out-of-school suspension (1). Grade 4 disciplinary actions included a parent conference (1), referral to guidance, work details (2), out-of-school suspension, and detention.

When asked how he felt as he was handed the *FCAT* test booklet, this young man told the reading coach he was nervous because he thought he was going to fail it: *It scares me, I felt nervous inside my belly*. He found the test to be hard but interesting. Ande printed his answers on the student questionnaire in handwriting typical of a much younger student (i.e., very large print, letters awkwardly formed, reversals with a mixture of capital-and lower-case forms. He indicated he had more than 100 books of his own, which he kept in a box. Of the 6 books he reported reading this year, his favorite was *The Silver Chair*; he liked *Knowing NeW iNformation*. He considers himself a good reader and reported that both parents, grandparents, his aunt and cousins all like to read. *To stay on task* is what he needs to work on as a reader. He feels that he does well as a reader in *Math, SciNece, and Social Studies*.

Strengths evident in Ande's history include his satisfactory attendance, his fluent speech, and his ability to read accurately and rapidly, and his confidence. Behavioral problems were more prevalent than among most students in the study. In reading he needs to develop his vocabulary, reading comprehension and test-taking skills. Ande faces some challenges at home as well, according to the reading coach.

## **Emanuel**

Emanuel was rated a level 2 reader in grade 3 but fell to level 1 in grade 4 on *FCAT Reading*. In contrast, he improved his reading performance on the *FCAT NRT* from below average to low average during the same time period. When administered the *FCAT Reading Practice Test*, Emanuel read both passages with accuracy (99% on the expository passage and 96% on the narrative passage). In addition, he was able to read the passages at an average rate of 121 words correct per minute. He performed less well on the comprehension questions, answering 10 of 20 questions correctly. He interpreted words literally and sometimes did not understand word meanings; for example, “calories get in your teeth.” He was able to go back and find information in the text with relative ease but often relied on outside information, for example, quoting his dad.

On the *Peabody Picture Vocabulary Test*, he scored in the average range but was two years below grade level in explaining the meanings of words on the *DAR Word Meaning*. His greatest need is comprehension, both at the level of the word and of written text. His teachers typically rated him below average to low average across the items of the scale; exceptions were his behavior and fluency in conversation, both of which were rated average. He was described by the reading coach as very cooperative during testing and positive in terms of his affect.

Emanuel’s home and native language is Spanish and he is currently receiving services as a bilingual student (LY-C). His meals are subsidized. Emanuel has attended only one school in the district in grades K-4, although for part of first grade he was out of district. He attended summer school in third grade but has never been retained. His attendance rate was 95% over the five-year period, and he has no record of disciplinary incidents over the last two years.

Emanuel reported several reading interests: adventure, books about animals, magazines, and video game information. He indicated that he has 37 books at home, which he keeps in the top of his closet. He enjoys reading and indicated he does so daily. His favorite book read this year he identified as “Magic the house” because *they have a magic tree house can takes them to other adventure’s*. He perceives himself to be an “OK reader” and stated that what he does well is *pay attention to the Book* but what he needs to work on as a reader is *pay attention more of the Book*.

Emanuel attends school regularly, behaves well, has learned to read text accurately and at a good rate. His greatest needs in reading are to develop his vocabulary and reading comprehension. He particularly needs to understand that his answers to test questions must be grounded in the passage, not based on what he has learned elsewhere.

## Jacob

Jacob obtained a high level 2 rating on *FCAT* in both third and fourth grades, a few points from proficiency. His *FCAT NRT Reading* score increased from low average to average during the same period of time.

On the *FCAT Reading Practice Test* administered in the study, he was observed to be very accurate in reading words (averaged 97.5% on two passages) but his low rate of reading is a limitation (averaged 82 words correct per minute). While he answered 78% of the questions on the expository passage correctly, he only answered 45% correctly on the narrative passage. Jacob only looked back in one test passage on one occasion. In explaining his answer choices, Jacob sometimes justified his answers by citing the text but at other times he answered based on outside information. He was not strategic in eliminating answers that were clearly wrong and responded in illogical ways. For example, 'sugar' and 'calories' have the SAME meaning *because soft drinks have sugar and they aren't low calorie*. The reading coach noted that this student on a number of occasions interpreted words very literally.

On both the *Peabody Picture Vocabulary Test* and the *DAR Word Meaning* Jacob scored in the low-average range. His teacher rated his vocabulary and background knowledge as low average, confirming the test scores. His highest teacher rating (6 on a six-point scale) was in behavior.

This student's home language is Spanish but his native language is English. Born in this country, he has not participated in programs for English language learners. His school lunch is subsidized. Jacob enrolled in the pre-K program at one district school, in kindergarten at another school, but remained in a third school in grades 1-4. He attended summer school in grade 3 but has never been retained. His attendance rate of 98% (K-4) is excellent. Only one disciplinary incident, inappropriate behavior, has been recorded in the last two years.

Jacob reported that he enjoys reading daily, that he has two books of his own that he keeps on his shelf, and that he has a library card. He likes to read about video games. His favorite book that he read in grade 4 was *capitan under pants: It made me fell good Because gorge and harold made me laugh*. He considers himself a *very good reader* and stated that he doesn't need to work on his reading.

Jacob has attended school faithfully, is well behaved, and has learned to read words accurately. His greatest needs include improving his rate of reading, development of vocabulary and reading comprehension.

## **Jose**

Jose, who repeated grade 3, scored at level 1 on *FCAT Reading* both of those years but did obtain a low level 2 rating in grade 4. On the *FCAT NRT* in reading he performed in the below-average range both years in grade 3 but demonstrated average reading achievement the following year in grade 4. When administered the *FCAT Reading Practice Test* one-on-one, Jose was observed or read with adequate accuracy to sustain comprehension (94%); however, his reading rate was a significant barrier to higher levels of reading achievement; his average oral reading rate for the two samples of text was 66 words correct per minute, well below expectations for his grade level. Although he reads accurately, he does not do so with ease; in particular, he would benefit from strategies to help him read multi-syllable content words important in comprehending the text. Jose answered 9 of 20 practice questions correctly.

On both measures of vocabulary, he scored in the average range (stanine 6 on the *PPVT* and at fifth grade level on the *DAR Word Meaning Test*). His relative strength in vocabulary helps him attend to meaning even though he does not accurately read long words; for example he substituted “customers” for “consumer”. When answering questions he justified some answers by referring to the passage but he was just as likely to answer based on outside information. He does make use of graphs provided. The only area in which his teacher rated him above average on the rating scale was fluency of his speech in conversation. On most rating scale items, this student was rated below average or low average. His teacher did report that he makes a reasonable effort, remains persistent and tolerates frustration well, but that he learns slowly and needs teacher support. The reading coach that conducted his case study considered him to be very cheerful, cooperative and engaged.

Although his home and native language is reported as English, he is receiving services as a bilingual student (LY-C). This student’s family receives welfare assistance. Jose attended one district school in kindergarten and first grade, then transferred to another district school where he remained in grades 2 through 4. He repeated grade 3 and attended summer school both of those years. In both grade 3 and grade 4, he had a record of one incident of inappropriate behavior, for which he was suspended from school.

Although Jose was “scared” when handed the *FCAT* test booklet because it determined *if* [he] was *going to pass or fail*, he found the test passages interesting to read. He also reported enjoying many types of reading material: adventure, books about animals, biography, history, mysteries, newspapers, science and books that tell you how to do science experiments. He owns 100 books which he keeps on a book shelf. *Hellboy* was his favorite of many books he said he read this year (50); what he liked was *how it was discrivue*[described?]. He considers himself *not to good* as a reader. He believes that he can sound out words and that what he needs to work on is *how to read better*. He reported that many family members like to read.

His good attitude, relative strength in vocabulary, and his fluency in spoken language will help him develop as a reader, but his lack of automaticity, reading a word or two at a time, and his difficulty reading the important content words represent developmental needs for Jose in terms of improving in comprehension.

## **Pedro**

Pedro was rated a level 2 reader in grade 3 but received the lowest rating (level 1) in grade 4. In contrast, on the *FCAT NRT* he improved his reading performance from below average to average during the same time period. When administered the district's *FCAT Reading Practice Test*, he was observed to read with a high degree of accuracy (averaged 98% on two passages) but he read at a very slow rate, approximately 80 words correct per minute on both passages. He answered only 8 of 20 questions correctly (40%); only once did he go back to reread in answering the 20 questions. When justifying his answers during discussion with the reading coach, he frequently cited information extraneous to the text. His lack of fluency may make going back difficult. Pedro was rated positively in terms of his affect during testing (e.g., cooperative, engaged).

On the *Peabody Picture Vocabulary Test*, he scored in the below-average range and was a grade level behind his peers on the *DAR Word Meaning Test*. Generally, his teacher rated him as average or above on most items on the rating scale but perceived him to be easily frustrated, unable to work independently and weak in terms of his motivation despite what she considered very strong family support for reading. His teacher gave him the highest possible rating with respect to his fluency in conversation.

English is both his home language and native language. His school lunch is subsidized. He has attended the same district school from kindergarten through grade 4, has never attended summer school and has never been retained. His attendance rate over four years was 95%. No disciplinary incident involving this student in the last two years has been entered in the student data base.

Pedro said he likes to read and does so daily at home. Among his reading preferences were adventure, comic books, jokes/humor, mysteries and video game information. He says he has 5 books of his own, which he keeps in his book bag. He wrote that he read 3 books this year and that his favorite was *sea ward born* because *it was intenes* [intense, interesting?]. He described himself as a *pretty good* reader; he stated *I read fast* but thought he needed to work on *the words*. He reported that his father and brother like to read.

Pedro's regular attendance, his consistently good behavior, and his demonstrated ability to work out the correct pronunciation of words are among his strengths. Needs include the development of his reading rate, vocabulary and reading comprehension in the context of a high level of teacher support.

## **Simon**

Simon was rated a level 1 reader on *FCAT Reading* in both grades 3 and 4 but on the *FCAT NRT* he scored in the low average range in grade 3 and in the average range in grade 4. When administered the *FCAT Reading Practice Test*, his word reading accuracy bordered on the frustration level while reading both passages (90% accuracy) and his rate of reading, an average of 74 words correct per minute, was very slow. Simon tended to omit words, but generally not important content words. He answered 8 of 20 questions (40%) on the *Practice Test*. More often than not his comprehension strategies were ineffective. He sometimes uses outside information. For example, he has seen the words 'sugar' and 'calories' together on the back of a Pepsi and, therefore, they have the same meaning. He only went back to the passages once in answering 20 questions.

On the *Peabody Picture Vocabulary Test*, he scored in the below-average range. Simon's teacher rated him below average on most items on the rating scale. Highest rated were his behavior and his toleration of frustration, both rated in the high average range.

Simon's home and native language is Spanish and he is currently served in a bilingual program (LY-C). This student was enrolled in the same district school from kindergarten through the first few weeks of fourth grade, when he transferred to another district school. He participated in summer school in kindergarten, was retained in third grade and attended summer school again that year. His attendance has been erratic, averaging 91%. He has been involved in only one disciplinary incident in the last two years.

When asked how he felt when handed the *FCAT* booklet, Simon stated that he wasn't nervous but did not feel prepared *because I don't know much*. He reported that he likes to read, that he has 3 books of his own that he keeps *in my book setlf*. Many types of reading materials were of interest to him: books about animals, biography, comic books, history, mysteries, science, books about sports and athletes. *Million dollar kick* was his favorite book read this year; he liked *that the[y]* end when they won. He reported reading 30 books in grade 4. When asked on the questionnaire about how good a reader he is, he wrote *not a lot read I do*. When the reading coach probed, he said he was *pretty good*. He reported that what he knows how to do well as a reader is *to look in and find word the[that] I do kown [know?]*. What he needs to work on is definitions [recorded by the coach after probing].

Simon has a number of strengths: his good behavior and his toleration of frustration, but he is struggling in all aspects of reading and will need considerable support to make progress. He also faces challenges at home. Jotted down in the case folder for this student was the following note: *Father departed back to Mexico*.

**Findings: Profiles of Non-Proficient Readers:**

Seven profiles of students were identified among the Hispanic boys in the study who were non-proficient readers in *FCAT*. These students have different configurations of strengths, adequacies and developmental needs in their ability to read words accurately, their rate of reading, their knowledge of word meanings and their comprehension of what they read.

**Recommendations**

To increase reading achievement, teachers must be cognizant of the strengths, adequacies and developmental needs of their students. Continue to work with teachers on the power of diagnosis. Reading coaches should assist teachers as needed in improving their capacity to help students develop each of the components of the reading process. Guide teachers as to how to form ad hoc groups and also as to ways to work such targeted instruction into their daily schedules.

## **Findings and Recommendations**

In the spring of 2006, an evaluation team comprised of reading coaches and staff from the Departments of Elementary Education and Assessment and Accountability replicated with Hispanic boys an earlier study of African-American boys in grade 4. The question of interest: What is different about non-proficient readers (levels 1-2) versus proficient readers (primarily levels 4-5) on *FCAT*? Data from 50 case studies were combined to identify profiles of strengths, adequacies and developmental needs. Findings and recommendations from each section of the report are combined here for the convenience of the reader.

### **DESCRIPTIVE DATA FROM STUDENT DATA BASE**

#### **Pre-K and Kindergarten Participation**

A minority of *FCAT* level 4-5 readers and *FCAT* level 1-2 readers attended a pre-kindergarten program in the district (13% and 30%, respectively); most boys in both groups attended a kindergarten program in the district (74% and 85%, respectively). Differences in participation rates are not perceived to be the cause of the difference in their achievement on the *FCAT Reading SSS*.

#### **Mobility**

A majority of Hispanic boys in both groups attended 1 or 2 schools from kindergarten through grade 4. High mobility was not a contributing factor in the below-average *FCAT* reading levels of most of the Hispanic boys in this study but may have been a contributing factor for a small percentage of them.

#### **Summer School Enrollment**

Enrollment in summer school one or more times from kindergarten to fourth grade was much more common among non-proficient readers (70%) than among proficient readers (9%). However, participation in summer school was an effect of the low level of reading achievement rather than its cause.

#### **Retention**

Most proficient readers (83%) and most non-proficient readers (70%) had not been retained between kindergarten and fourth grade. However, 17% of the proficient readers were retained once, while 30% of the non-proficient readers were retained either once (22%) or twice (7%).

#### **Attendance**

The non-proficient readers had a slightly better attendance rate (mean of 96%) than the proficient readers (94%). The attendance rate was not an explanatory factor in the divergent levels of reading achievement of the two groups.

#### **Disciplinary Incidents**

The majority of students in both groups had no record of a disciplinary incident in the student data base. A marked increase in the percentage of non-proficient readers with a disciplinary record was observed from 2004-05 (11%) to 2005-06 (44%), although typically the number of incidents per student was small.

### **Subsidized Meals (SES)**

The Hispanic boys in the study who were *FCAT* level 1-2 readers did not differ from the *FCAT* level 4-5 readers in their socio-economic status with meal status used as a proxy variable. All Hispanic boys in the study received a free or reduced-price lunch. Difference in socio-economic status was not an explanatory factor in regard to the differences in reading achievement of the two groups.

### **Home Language and Native Language Reported**

The various combinations of home language (Spanish or English) and native language of the student (Spanish or English) occurred in similar proportions among Hispanic boys who were highly proficient readers and Hispanic boys who were non-proficient readers on the *FCAT*.

### **Participation in Programs for English Language Learners**

Among the Hispanic boys who were *FCAT* level 4-5 readers, 43% had not participated in programs for ELL students; 56% of the *FCAT* level 1-2 readers had never been enrolled in such programs. Of the students enrolled in programs for English Language Learners, Hispanic students who were proficient readers on *FCAT* were most likely to be coded LY-F (being monitored) or LY-Z (past the two-year monitoring period); in contrast, non-proficient readers were most often coded LY-C (bilingual students still enrolled in a program for ELL students). Keep in mind LY-A and LY-B students were excluded from this study; students in the early stages of learning English are challenged by a reading comprehension test that is not written in the language they speak.

## **READING ACHIEVEMENT**

### **Reading Comprehension Scores on Five Assessments**

- < Almost all of the Hispanic boys in the study who scored at level 4 or 5 on the *FCAT Reading* (87%) scored in the above-average range (stanines 7-9) on the *FCAT Norm-Referenced Test*.
- < Of particular interest, almost all of the Hispanic boys who scored at level 1 or 2 on *FCAT Reading* (93%) performed in the average range (stanines 4-6) on the nationally-normed *FCAT Reading NRT*. In other words, although they performed in the average range on a nationally-normed reading achievement test, these students were unable to demonstrate reading proficiency on the *FCAT*.
- < On a new form of the district's *FCAT Reading Practice Test* (Grade 4, Form C), 87% of the proficient readers (*FCAT Reading* levels 4-5) correctly answered 70% or more of 20 comprehension questions while 92% of the non-proficient readers (*FCAT Reading* levels 1-2) answered less than 70% of the comprehension questions correctly.

### **Word Reading Accuracy**

- < All of the Hispanic boys who were judged to be proficient readers on the *FCAT* in grade 4 read with an overall accuracy rate of 95% or higher on the passages of the district's *FCAT Reading Practice Test*.
- < Of the Hispanic boys who were judged non-proficient readers on the *FCAT* in grade 4, 89% were able to read with 94% accuracy or higher, a degree of accuracy sufficient to support comprehension. For almost all of the grade 4 Hispanic boys designated non-proficient readers, difficulty in accurately reading words is not the cause of their low level of achievement in reading.
- < On the narrative passage (221 words) of the *FCAT Reading Practice Test*, the proficient readers missed an average of 1 sight word and 1 word ending, and omitted a word, for a total of 3 errors. The non-proficient readers missed an average of 3 sight words, 1 multi-syllable word, 1 word ending, and omitted 2 words, for a total of 7 errors.

- < On the expository passage (170 words) of the *FCAT Reading Practice Test*, the proficient readers missed an average of 1 multi-syllable word and 1 omitted word, an average of 2 errors. The non-proficient readers missed an average of 2 sight words, 2 multi-syllable words, 1 word ending, and omitted 2 words, for an average of 7 errors.
- < Substitutions of one sight word for another generally did not interfere with comprehension (e.g., *Emma-Jean loved <sup>the</sup>her power*).
- < When students miss multi-syllable words, they almost always begin the word correctly and frequently read the end of the word right; the middle of the word is problematic, seemingly a blur of letters. Students often generate non-words (*consuputation, consupation* and *consupitation* for *consumption*). As is evident from the example, errors in multi-syllable content words are likely to affect comprehension.
- < On the average, non-proficient readers made 2 errors in syntax/structural elements per passage; proficient readers average one error in this category in the narrative passage. This type of error is more likely to lead to misunderstanding of small details of the passage.
- < Insertions are rare in both groups. Non-proficient readers omit twice as many words as proficient readers, but this error type was infrequent in both groups. A few non-proficient readers, however, omitted many more words than was typical.
- < Proficient readers were more likely to correct their errors (30% correction rate on the narrative passage and 27% on the expository passage) than non-proficient readers (18% correction rate on the narrative passage and 14% on the expository passage.)

**Recommendation 1:** Continue effective instructional practices in developing students' word reading accuracy.

**Recommendation 2:** Increase instructional focus on strategies to improve accuracy in reading multi-syllable words and to unlock their meaning. The Reading/Language Arts Team and reading coaches should agree on a few simple rules to teach children about breaking words into syllables.

Focusing on meaningful parts of the words, that is, root words, prefixes and suffixes is particularly effective because they are used in a generative way in our language. Teachers should take advantage of opportunities to teach many related words at one time. When teaching *aqua*, one can easily call attention to words with the same Latin root: *aqueduct, aquamarine, aquarium, Aquarius, aquatic, aquifer*. Combining a root word with various prefixes and suffixes helps students understand the building blocks of words; for example, the root *port* (carry) changes meaning depending on the affix(es) *report* (carry back), *portable* (able to be carried), *porter* (one who carries), *misreport* (carry back incorrectly), *reporter* (one who carries back).

**Recommendation 3:** Locate useful materials to teach understanding of morphemes, or units of meaning. The study team is in agreement that Houghton Mifflin and Scholastic materials treat this content superficially. Recommended materials include Pat Cunningham's *Making Big Words* and EPS workbooks. This kind of word play can be both enlightening and fun for students if structured in an effective way.

## **Reading Rate**

- < A clear and marked difference in the two groups was evident in reading rate: proficient readers read an average of 44 words correct per minute more than the non-proficient readers. Their slow rate of reading puts the non-proficient readers at a clear disadvantage in completing classroom assignments and, in particular, lengthy tests such as the *FCAT*. Based on their oral reading rates, ten minutes into the test, the non-proficient readers would be 440 words behind the proficient readers. The difference would likely be greater with a silent reading rate.
- < Both groups of Hispanic boys were typically rated as fluent readers by reading coaches using the *NAEP Oral Reading Fluency Scale*; *FCAT*-proficient readers most often received the highest rating of "4" while the *FCAT*-non-proficient readers most often received a rating of "3." A majority of Hispanic boys who are non-proficient readers based on *FCAT* would benefit from instructional activities designed to improve their rate of reading and overall fluency.

**Recommendation 4:** Design exercises for literacy centers and for small group instruction to improve reading rate and overall fluency.

**Recommendation 5:** When focusing on improving fluency, use materials that the student can read relatively easily.

**Recommendation 6:** Repeated reading is key. From an early age, children should be encouraged to reread (e.g., to classmates, to parents, siblings, grandparents, the dog, a doll). Reading along with a tape is helpful. Taping oneself and listening to how one sounds is valuable feedback.

**Recommendation 7:** Identify and encourage use of materials to develop reading rate and other aspects of fluent reading. Suggested materials include *Phonics and Poetry Lessons* (Fountas and Pinnell), the *Fluency First Kit/CD* that is currently available in Reading First schools, *Readers' Theatre* (Benchmark Education Company), and activities suggested by Timothy Rasinski, who has been a conference presenter on many occasions in this district.

**Recommendation 8:** At a minimum, focus on students who, based on their oral reading, obviously need to become more fluent. However, many students can benefit from and enjoy these activities.

## **TEST-TAKING STRATEGIES**

### **Observations During Testing**

- < Positive behaviors, such as being focused, calm and methodical, were observed in both proficient and non-proficient readers as they worked silently on the *FCAT Reading Practice Test*, though to a greater degree in proficient readers.
- < Students in both groups were observed to typically read each passage and then the questions and answers in turn. Proficient and non-proficient readers alike typically went back to the passages to look for information and clues to answer some questions.
- < Of interest, proficient and non-proficient readers alike most frequently reread in response to the same type questions, that is, questions that asked how a term was used in the passage and when the question called for specific details found in a graph or caption accompanying a photo.

- < On both types of passages, proficient readers went back to the text more often than did non-proficient readers and did so with relative ease.
- < Non-proficient readers who did not return to the passages almost always did very poorly on the test, which was not true of proficient readers.

**Recommendation 9:** Help non-proficient readers realize that their classmates who do better in reading go back to reread more often than they do when answering questions. Consider asking skilled readers to explain how they judge if they need to check their answers.

**Recommendation 10:** Continue to encourage students to go back to the passage to find answers to questions about very specific information (e.g., how a word was used in the passage, data likely to be found in a table or graphic, a small detail). Many students know to do this; others need to learn this effective strategy as a first step.

**Recommendation 11:** Encourage students to think more as they read and model the process for them. Students need to develop a better schema about how a passage they read is organized so that they are able to quickly locate information needed. Students should be able to say that certain information is located near the beginning, towards the middle, or towards the end of the passage. Students should learn to quickly look ahead and preview what they are to read, glancing at the title, any headings, and graphics.

**Recommendation 12:** Sequence of events matters in many types of text, both fiction and non-fiction. Help students learn to recognize other ways text is structured, for example, comparison/contrast, cause and effect. During classroom instruction, students might be asked to read a limited amount of text, a paragraph or page, and answer a question or briefly summarize what they have read thus far. Encourage students to use simple graphic organizers to keep track of what they read. The goal is for non-proficient readers to be more like proficient readers, who often are able to go right to the relevant part of a passage to justify their answer choice without spending excessive time searching. Modeling and practice are essential.

**Recommendation 13:** Recommended materials include Stephanie Harvey's work on summarization; *Guided Readers and Writers*; *Thinking While You're Reading*; and *Exploring Non-Fiction* by Teacher Created Materials

### **Reading Coaches' Observations Based on Discussion of Answers**

- < The typical Hispanic boy in grade 4 rated a proficient reader on *FCAT* (levels 4-5) understood and held in mind questions; eliminated obviously wrong answers; justified answers by citing relevant text or by pointing out to the coach or reading aloud words in the passage that supported his answer; quickly located relevant text; made use of all the information provided, including pictures, captions, and graphs; and understood meanings of key words in the passages.
- C The typical Hispanic boy in grade 4 who was rated a non-proficient reader on the *FCAT* (levels 1-2) understood and held in mind some questions; did not consistently eliminate obviously wrong answers; justified his answers by citing relevant information he remembered from the passage, although frequently his rationale was incomplete or illogical; often cited his own knowledge and experience in justifying answers; did not always attend to all the information provided in the passage (e.g., captions of pictures, tables); and at times struggled with the meanings of key words (e.g. 'consumer') or interpreted them literally or concretely.

- C Highlighted below is an observation not called to attention in our prior study of African-American boys in grade 4. Some non-proficient readers are unable to distinguish between two similar question stems utilized in the *FCAT*: (1) Which two words have the SAME meaning? and (2) How are *x* and *y* ALIKE? They understand the first question stem as having the same meaning as the second stem as illustrated below:

WHICH TWO WORDS HAVE THE SAME MEANING (AS USED IN THE PASSAGE)?

- |                  |  |
|------------------|--|
| calories, pounds | <ul style="list-style-type: none"> <li>• Because if you eat a lot of calories, it would make you gain pounds.</li> <li>• If you get too many calories, that makes pounds.</li> <li>• Because of T.V. - they say let's lose weight and burn off all those calories.</li> </ul>                  |
| weaken, disease  | <ul style="list-style-type: none"> <li>• When you have a disease, you are tired and weakened.</li> </ul>   |
| rolled, pushed   | <ul style="list-style-type: none"> <li>• It's almost the same. If you 'rolled' something, it would be moving, and 'pushed' would be the same thing.</li> <li>• 'Rolled' and 'pushed' are the same because when people are in wheelchairs, they can have someone roll it or push it.</li> </ul> |
| prince, queen    | <ul style="list-style-type: none"> <li>• These are the same because they are both like bosses.</li> </ul>  |
| replied, asked   | <ul style="list-style-type: none"> <li>• 'Replied' is like you say something; 'asked' is the same thing.</li> <li>• They almost mean the same thing: 'replied' means he asked the question and 'asked' means she asked the question.</li> </ul>  |

The words do not have the SAME meaning but have in common an attribute, function or context, something that is ALIKE.

This common error pattern across different test questions makes salient the need to help children better understand various question stems.

- C When asked to explain what caused a certain outcome, students sometimes selected a restatement or elaboration of the effect (a true statement) rather than a causal statement as illustrated below:

Question: *What caused Emma Jean's change in feelings toward Vincent?*  
Preferred Response: *She thought about how it would be in a wheel chair.*  
Student Response: *She felt sorry she had been mean to him. [the change in feelings!]*

**Recommendation 14:** During classroom instruction and during short periods of test preparation continue to help students be detectives when answering questions; continue to use the "test prep" approach developed in conjunction with the district's study of African-American boys in grade 4 as all of the same issues are evident in our study of Hispanic boys at the same level.

**Recommendation 15:** Of great importance, help non-proficient readers understand that their answers should be grounded in the material they have read, not outside experiences; rereading is important when in doubt.

**Recommendation 16:** Help students understand the specialized vocabulary used in tests and common question stems. Model for students by thinking aloud about what the question is asking for and how to eliminate some answers. For example, in response to the question cited above (*Which two words have the SAME meaning?*), proficient readers that we observed immediately tossed out word pairs that were opposite in meaning; in contrast, non-proficient readers went through each pair trying to think of a way they were alike. Use of examples and non-examples is helpful.

**Recommendation 17:** Continue to search for effective ways to help students realize that if an illustration and caption, an inset, or other graphic material is included in a passage, the answer to one or more questions is likely to be found therein.

**Recommendation 18:** Emphasize to teachers the importance of probing deeper when a student first answers a question. Students' explanations are a window into their thinking and offer opportunities to move them to higher levels of understanding and, over time, more robust justifications for their answers.

**Recommendation 19:** Finding time in the day to fit in all that is required is a challenge; reading coaches should be ready to help with schedules and with alternative settings and ways to meet students' instructional needs with respect to understanding what they read and responding to questions.

**Recommendation 20:** Recommended materials include the *Comprehension Tool Kit* and guided practice with the *FCAT Reading Practice Tests*, particularly in finding evidence to justify their answers.

### **VOCABULARY/LANGUAGE DEVELOPMENT**

Two tests used to assess vocabulary development were administered to the Hispanic boys in the study: the *PPVT-III B*, a measure of receptive vocabulary, and the *DAR Word Meaning*, which asks students to explain the meaning of words pronounced by the examiner.

- < On the *PPVT-III B*, the Hispanic boys in the model reader group (*FCAT* levels 4-5) performed in the average (52%) or above-average stanines (48%). The non-proficient readers (*FCAT* levels 1-2) performed in the average (63%) or below-average stanine ranges (33%), although one non-proficient reader had an above-average vocabulary (stanine 9). The mean standard score was a 112 (NP of 79) for the skilled readers and 94 (NP of 34) for the less skilled readers, a marked difference. Eighty-three percent of the proficient readers scored in the 6<sup>th</sup> stanine or higher while 85% of the non-proficient readers scored in the 5<sup>th</sup> stanine or lower.
- < On the *DAR Word Meaning*, the median and modal grade equivalent scores were both grade 5 for the model readers at the end of grade 4. The median (3.5) and modal (3.0) grade-equivalent scores for the non-proficient *FCAT* readers were both below their grade placement at the end of grade 4.
- < Based on the two tests in combination, most of the Hispanic boys who have not yet demonstrated proficiency on *FCAT* would benefit from instruction to strengthen their vocabulary as would some of the proficient readers.

In addition to the recommendations provided (p.142) regarding teaching students to improve accuracy and understanding of multi-syllable words, consider the following:

**Recommendation 21:** Do not neglect "read alouds" and "interactive read alouds." Selections that incorporate vocabulary above the students' reading levels provide one of the best opportunities to enhance students' understanding of words, particularly in the primary grades but also in the intermediate grades. Identify in advance a few words to emphasize and develop but also be responsive to students' queries.

**Recommendation 22:** Word work is beneficial in instruction in all content areas; coaches should help teachers figure out how to incorporate these activities in their schedules. Writing instruction is one very logical place for building vocabulary. Keep charts on display of examples of word categories (e.g., ways to move: *walked, raced, hurried, paced, strolled, meandered, ambled, sauntered, stumbled*). Continue to encourage students to use their thesaurus to choose words that aptly convey the meaning they intend.

**Recommendation 23:** Promote district-wide use of *Making Meaning* (K-2 Developmental Study Center) and the *Primary Comprehension Test Kit* (firsthand-Heinemann) when it becomes available. Identify other valuable resources to develop students' lexicon.

**Recommendation 24:** Encourage students to read widely in various genre from an early age, an important element in the development of vocabulary. Let children share words they discover that they particularly like, either because of the sound or the meaning.

**Recommendation 25:** When opportunities arise and through planned activities, help students move beyond their initial and often literal understanding of words to understanding their figurative use (similes and metaphors) and help students understand common idioms that often are a barrier to students whose native language or home language is other than English. Help students move from concrete to more abstract thinking.

**Recommendation 26:** Consider reinstatement of screening entering kindergarten students for speech/language problems, as is done for hearing and vision. This would be useful as well for young students new to the district who are achieving below level. If this is not feasible at all schools, initially implement at schools most in need.

## **SURVEY DATA**

### **Teacher Ratings**

- < Teachers' median ratings of Hispanic boys who scored at level 4 or 5 on *FCAT Reading* were a 5 or 6, at the high end of the scale, in all areas: habits of mind and behavior, cognitive and language development, motivation to read, and components of reading. Teachers' median ratings of Hispanic boys who scored at level 1 or 2 on *FCAT Reading* were typically a 3 on the 6-point scale. The students who were non-proficient on *FCAT*, according to their teachers were most like the highly proficient readers in three areas: their good behavior, the fluency of their speech in conversation, and their motivation to read aloud.
- < The ability to comprehend written material was regarded as the greatest strength of the proficient readers. Their needs were varied; most often mentioned was their [low] level of interest in reading.
- < While reported to be the greatest strength of skilled readers, comprehension was perceived to be the greatest area of need for the non-proficient readers. Mentioned most often as a strength of the non-proficient readers was their word reading accuracy.
- < These generalizations are informative and useful for planning, but keep in mind that each reader has a particular profile of strengths and weaknesses that is relevant in determining how to help that student become more skilled in reading.

### **Student Interviews About FCAT**

- < Hispanic boys at grade 4 who are proficient readers most often reported mixed feelings about the *FCAT*, initial nervousness but also confidence that they would be successful. In contrast, most of the non-proficient readers reported negative feelings (anxiety, fear, anger) and various physical symptoms (shaking hands, upset stomachs). Whether proficient or non-proficient readers, the boys expected interesting reading; this finding is consistent with our prior study of African-American boys. In response to an open-ended question about strategies their teachers had taught them to use during testing, the boys listed multiple strategies. The strategy most frequently named by both proficient and non-proficient readers was to go back

into the text to reread to find pertinent information or to verify their answer choice. The boys reported not only learning this strategy but applying it on the *FCAT*. Some boys indicated that this strategy enabled them to correct errors they had made. Another item on the test asked specifically whether they used this same strategy, and almost all boys in both groups responded that they did. [This finding should be of interest to teachers and reading coaches who have invested time and energy in helping students understand that their answer should be grounded in the passage rather than based on other sources of information.]

- < The Hispanic boys who were *FCAT* level 4-5 readers were divided as to whether they wrote on their test booklets; most of the Hispanic boys who were *FCAT* level 1-2 readers indicated they do write in their test booklet. Most often mentioned with respect to reading was understanding or jotting down words or important information in either the questions or the passage.
- < Proficient readers cited a variety of purposes for the *FCAT* but most often mentioned determining what they know or have learned and whether they are prepared for the next grade level. The non-proficient readers were more likely to associate the *FCAT* with a promotion decision but also saw the test as measuring what they had learned.

**Recommendation 27:** Celebrate with teachers their effectiveness in increasing students' knowledge of the value of rereading to verify information or to ensure that their interpretation is supported in the material read. Provide students examples indicating that students were able to correct errors using this strategy. Strive to convince more students to apply this knowledge.

**Recommendation 28:** Continue to encourage teachers to teach reading comprehension strategies throughout the school year, not just in preparation for testing, and to increase students' repertoire of effective strategies.

**Recommendation 29:** Share with students the finding that students consider *FCAT* passages interesting; this has been corroborated in a number of studies.

**Recommendation 30:** At each school, make a concerted effort to reduce the stress inherent in the current testing environment. Help students gain a clear understanding of the purposes of the *FCAT*.

### **Student Questionnaire**

- < A questionnaire was administered to the Hispanic boys to obtain information about their reading habits, interests and perceptions of themselves as readers.
- < The range of the number of books read in 2005-2006 varied greatly in both groups from a very few to 150 or so, perhaps more important than the mean for the proficient readers (54) versus non-proficient readers (46). Adventure, mystery and video game information were of interest to students in both groups. Joke books, books about animals, comic books, and books about famous athletes and sports appear to be of somewhat greater interest to the non-proficient readers than to the proficient readers.
- < As was the case with books read, the range of books the boys owned was very wide: 4 to 320 books for proficient readers and zero to 102 books for non-proficient readers. Most boys in both groups reported that they enjoy reading, but more proficient readers (70%) than non-proficient readers (44%) reported daily reading outside school.
- < Favorite books of skilled readers included Harry Potter books, Gregor the Overlander books, Help! Get me out of the 4<sup>th</sup> Grade, and Once Upon a Marigold; favorite books of less skilled readers included Captain Underpants and The World According to Humphrey. Of interest, most skilled readers (91%) identified favorite authors (e.g., Suzanne Collins, J.K. Rowling, Dav Pilkey, and Lemony Snicket). In contrast, fewer than half the less-skilled readers (48%) were able to name a favorite author. Mentioned by more than one non-proficient reader were Dr. Seuss (P.D. Eastman) and Mary Pope Osborne (The Magic Tree series).

- < Skilled readers among the Hispanic boys most often credited their teacher(s) (35%) and mother (35%) in helping them learn to read. The less skilled readers most often indicated a teacher was most helpful in their learning to read. Also mentioned were grandmothers and sisters. The data suggest that females are largely responsible for teaching young Hispanic boys to read. [A note of caution: the sample was small.]
- < Proficient readers most often described themselves (57%) as *excellent, great, talented, really good, above-level* readers. Non-proficient readers most often (81%) used terms such as *pretty good, good, in the middle, okay, and not the best but pretty good*, a positive finding. When asked what they need to work on as a reader, skilled readers most often mentioned reading at an appropriate rate (35%), more often than not referring to slowing down. Less skilled readers mentioned improving word reading accuracy (37%) and use of comprehension strategies (26%).
- < When asked which family members like to read, the boys in each group responded similarly, with about half identifying their mothers, fathers, sisters, brother, grandparents, and cousins as enjoying reading.

**Recommendation 31:** Investigate programs that focus on providing students in need with at least some books of interest to them that they may keep. Consider what agencies would be interested in participating (e.g., Foundation, PTA, publishers, public libraries, community groups). One such initiative, Imagination Library, a multi-agency collaborative effort, will provide newborns in specific zip codes in Hillsborough County with books on a regular basis. These infants are identified through pediatricians in the area. Are similar efforts underway for elementary school students?

**Recommendation 32:** The Language Arts Team and reading coaches should consider the implication of the finding that non-proficient readers are unable to identify an author whose books they enjoy.

**Recommendation 33:** The data suggest, although the sample is small, that females (teachers, mothers, grandmothers, sisters) are largely responsible for the early literacy development of Hispanic boys. At least one school with a large Hispanic population is giving books to dads who participate in the “Donuts for Dads” program where fathers read to their children. If such incentives are successful, spreading the word might lead to similar efforts at other schools.

**Recommendation 34:** Most of the non-proficient readers reported that they enjoy reading. Consider how to maintain their levels of interest. What are the possibilities, for example, of reading clubs for boys?

### **Child Activities and Checklist**

- < The reading coaches engaged the Hispanic boys in a series of tasks to get to know the students, their thinking and ways of expressing themselves. One activity that generated interesting data was asking students to identify the category represented by 10 series of 4 words. Most students in both groups were able to supply words or descriptive phrases of most or all word sets. Answers varied in terms of the precision of the words the boys supplied. Non-proficient readers were more likely to use vocabulary that was overly broad: *nature* or *plants* for “oak, pine, maple and palm” rather than *trees*, and *universe* rather than *planets* for “Mercury, Venus, Earth, and Mars”. Non-proficient readers were more likely than proficient readers to use imprecise terminology: *stuff that goes in the air* for “helicopter, biplane, jet, and space craft”; *for working* to describe “hammer, pliers, wrench and saw”; *music stuff* for “trumpet, trombone, tuba, and French horn.”

- < A set of words that yielded interesting responses was “J.K. Rowling, R.L. Stine, Jerry Spinelli, and Betsy Byars,” easily identified as authors (of well-known children’s books) by 87% of proficient readers but by 41% of non-proficient readers. Among the alternatives supplied by the non-proficient readers were *movie stars, musicians, baseball players, CDs, and scientists*.
- < In terms of affective indicators, reading coaches rated proficient and non-proficient readers positively. Coaches perceived the non-proficient readers most like the proficient readers in being cooperative and calm as they worked one-on-one with the coach. The positive attitude of the less proficient readers among the Hispanic boys is reminiscent of the findings from the prior study of African-American boys; this finding bodes well for efforts to help these boys achieve at a higher level in reading.

**Recommendation 35:** Continue efforts underway to make vocabulary development an integral part of instruction each day during language arts but also in other content areas. A focus on learning new words in a meaningful context is important.

**Recommendation 36:** Consider the fact that less-proficient readers are not familiar with very well-known authors, a finding supported by the inability of many of these boys to name an author they particularly like. Explore the following question: Are we doing all we can do to find authors and books of interest to boys?

**Recommendation 37:** Share with teachers the fact that so many of these non-proficient readers are rated positively by reading coaches in terms of the attitudes they displayed and celebrate this finding. Again, redouble efforts to find books and authors that boys enjoy before they turn away, thinking reading is for others, not for them.

### **PROFILES OF NON-PROFICIENT READERS**

Seven profiles of students were identified among the Hispanic boys in the study who were non-proficient readers in *FCAT*. These students have different configurations of strengths, adequacies and developmental needs in their ability to read words accurately, their rate of reading, their knowledge of word meanings and their comprehension of what they read.

**Recommendation 38:** To increase reading achievement, teachers must be cognizant of the strengths, adequacies and developmental needs of their students. Continue to work with teachers on the power of diagnosis.

**Recommendation 39:** Reading coaches should assist teachers as needed in improving their capacity to help students develop each of the components of the reading process. Guide teachers as to how to form ad hoc groups and also as to ways to work such targeted instruction into their daily schedules.

### **Final Recommendation**

At the district level (Language Arts Team) and school level (reading coaches and others), review the recommendations and focus on appropriate priorities.

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