The Latest and the Greatest!

Joseph Torgesen
Florida Center for Reading Research

Coaches Conference, Orlando, 2004
As a state we have set very high standards in reading, and we are making steady progress toward achieving those standards.
Something Great about our work in Florida…

<table>
<thead>
<tr>
<th>State</th>
<th>State standard</th>
<th>NAEP standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>60</td>
<td>63</td>
</tr>
<tr>
<td>Georgia</td>
<td>80</td>
<td>59</td>
</tr>
<tr>
<td>Texas</td>
<td>85</td>
<td>59</td>
</tr>
<tr>
<td>Mississippi</td>
<td>87</td>
<td>49</td>
</tr>
<tr>
<td>South Carolina</td>
<td>76</td>
<td>59</td>
</tr>
</tbody>
</table>
Something Great about our work in Florida...

Growth in percent of 4th Grade students meeting Basic standard on NAEP from 1992-2003

<table>
<thead>
<tr>
<th>State</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>+10</td>
</tr>
<tr>
<td>Texas</td>
<td>+2</td>
</tr>
<tr>
<td>Georgia</td>
<td>+2</td>
</tr>
<tr>
<td>Tennessee</td>
<td>+0</td>
</tr>
<tr>
<td>Alabama</td>
<td>+1</td>
</tr>
<tr>
<td>South Carolina</td>
<td>+6</td>
</tr>
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</table>
The ultimate goal of our work within *Just Read, Florida!* initiative is to:

Steadily increase the percentage with grade level reading skills at each grade level from K to 12.

Within the *Reading First* part of *Just Read, Florida!* we are focused on increasing, every year, the percentage of students with grade level skills in K-3.
So, how did we do last year on this goal?

The only test we can really compare outcomes on from 2003 to 2004 is the FCAT, and that only assesses work done with third grade children this past year.

### Change from 2003 to 2004 on FCAT

<table>
<thead>
<tr>
<th></th>
<th>All Schools</th>
<th>RF Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% at level</td>
<td>% at level</td>
</tr>
<tr>
<td></td>
<td>1 2 3&gt;</td>
<td>1 2 3&gt;</td>
</tr>
<tr>
<td>2003</td>
<td>23 15 62</td>
<td>31 18 51</td>
</tr>
<tr>
<td>2004</td>
<td>22 13 65</td>
<td>28 16 56</td>
</tr>
<tr>
<td>change</td>
<td>-1 -2 +3</td>
<td>-3 -2 +5</td>
</tr>
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</table>
In Florida, our effectiveness will ultimately be judged by the improvements our students make on the FCAT.

Which is an excellent, but very demanding test of reading comprehension.

Let’s take a brief detour to understand a little more about what is being measured by the FCAT.
The Florida Center for Reading Research recently conducted a study of the FCAT to answer several important questions:

Among the most important questions were these:

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

What kinds of skills and knowledge are particularly low in students who struggle on the FCAT?
The FCAT has some important characteristics

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

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

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

Proportion of questions requiring “higher order” thinking skills increases from 30% in grade three to 70% in grade 10
The FCAT has some important characteristics.

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

Passage length at different levels

3rd grade – 325 words
7th grade – 816 words
10th grade – 1008 words
How the study was conducted:

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

**Language** — Wisc Vocab and Similarities
  Listening comprehension with FCAT passage

**Reading** — Oral reading fluency, TOWRE, Gray Oral Reading Test

**NV Reasoning** — Wisc Matrix Reasoning, Block Design

**Working Memory** — Listening span, Reading Span
Percent of variance accounted for

- Fluency
- Verbal
- Non Verbal
- Memory

10th Grade

Fluency: 32%
Verbal: 52%
Non Verbal: 28%
Memory: 5%
What skills are particularly deficient in level 1 and level 2 readers in 3rd grade?

<table>
<thead>
<tr>
<th>Skill/ability</th>
<th>FCAT Performance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>WPM on FCAT</td>
<td>54</td>
</tr>
<tr>
<td>WPM on DIBELS</td>
<td>61</td>
</tr>
<tr>
<td>Fluency percentile</td>
<td>6th</td>
</tr>
<tr>
<td>Phonemic decoding</td>
<td>25th</td>
</tr>
<tr>
<td>Verbal knowledge/ reasoning</td>
<td>42nd</td>
</tr>
<tr>
<td>SAT9 percentile</td>
<td>31st</td>
</tr>
</tbody>
</table>
Paths to 6th percentile performance in reading fluency in 3rd grade

1. Don’t learn phonetic decoding strategies very well at all. That way, you will remain an inaccurate reader, and you won’t read independently because there are too many words you can’t decode on your own.

2. Wait until mid second grade or early third grade to learn to use phonemic decoding strategies – that way you will miss out on 1 or 2 years of productive reading practice.

3. Go ahead and learn phonemic decoding skills early and well, but don’t read very much. That way you won’t have the opportunity to learn to recognize 1000’s of words at a single glance.
Important Conclusions from the Study for RF schools

1. The most important reading and language factors that explain individual differences in performance on the FCAT in 3rd grade are reading fluency and vocabulary/verbal reasoning.

2. The most direct way to reduce the number of students reading at level 1 is to insure that all children become fluent and accurate readers by the end of third grade.

3. At the same time, we must work to support growth of vocabulary, conceptual knowledge, and reasoning because they are also important at third grade, and become increasingly important at later grades.
So, how did the students in our Reading First Schools do this year in Reading Fluency and Vocabulary?

Let’s look at some graphs
Grade: 3rd Grade  
Probe: Oral Reading Fluency  
Student: All Students  
Assessment: All Assessments  
School Year: 2003-2004  

WPM = 72  
35th percentile

WPM = 105  
35th percentile

# of Students  
Assessment 1: 33879  
Assessment 2: 34157  
Assessment 3: 34046  
Assessment 4: 34088

Select a District:

Show Grade Summary Report

Reading First Only
Ave. WPM = 105
35th percentile

29,475 students

23% high risk

Oral Reading Fluency – Assess4, Third Grade

Std. Dev = 36.87
Mean = 105.3
N = 29,745.00

29,475 students

Ave. WPM = 105
35th percentile

23% high risk

Oral Reading Fluency – Assess4, Third Grade
Assess 4 OLV Percentile

100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0

3000
2000
1000
0

Std. Dev = 26.72
Mean = 39.0
N = 29466.00

Peabody Picture Vocabulary, Third Grade

Ave percentile = 34th
29,466 students

31% high risk
Percentile scores on Peabody

Average Percentile

Average verbal score of level 1 students in FCAT study was 42\textsuperscript{nd} %
Performance on SAT 10 & GMRV

Percent of students below 20th and 40th Percentile

1st: SAT10 45, GMRV 40
2nd: SAT10 46, GMRV 44
3rd: SAT10 40, GMRV 40
Implications of these outcome data

1. We must find a way to insure that the number of students in the “high risk” category for oral reading fluency is drastically reduced over the next five years.

2. We must find a way to meet the challenge of the “vocabulary gap” for students in reading first schools. This may be a major limiting factor in performance on the FCAT in 3rd grade for students in Reading First schools, and it will have an even greater impact on FCAT performance in the later grades.
More outcome data:

1. Our ultimate goal is to improve, over time, in the percent of students reading at grade level at the end of each grade.

2. Since a large percentage of students in RF schools begin school (and each subsequent grade) already below grade level, our instruction must accelerate their growth if they are to catch up to grade level standards.

3. Most students in RF schools must make more than a year’s growth in each school year if they are to “close the gap” by third grade.

4. So, how did we do this past year in closing the gap at each grade level?
How did we do at increasing the percentage of students at grade level (the category called “initial” in the PMRN)
Assessment 1-- Kindergarten

School level data about 320 schools in the graph

Percent grade level = 30.6

Std. Dev = 10.02
Mean = 30.6
N = 320.00
Assessment 4 -- Kindergarten

Percent grade level = 56.7

Increased Students at grade level by 26.1%
Assessment 1 – First Grade

Percent at grade level = 61.8 %
Assessment 4 – First Grade

Percent at grade level = 41.6%

Decreased Students at grade level by 20.2%
44th percentile

31st percentile

Achieved benchmark late
Assessment 1 – Second Grade

Percent at grade level = 47.7 %
ASSESS4 PERCENT INITIAL for Grade 2

Percent at grade level = 37.1%

Decreased Students at grade level by 10.6%

Assessment 4 – Second Grade
Assessment 1 – Third Grade

Percent at grade level = 39.5 %
Assessment 4 – Third Grade

Percent at grade level = 42.3%

Increased Students at grade level by 2.8%
## Summary of Instructional Effects in Grades K-3

<table>
<thead>
<tr>
<th>Grade</th>
<th>% “Intensive”</th>
<th>% “on grade level”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>reduced 4.3</td>
<td>increased 26.1</td>
</tr>
<tr>
<td>1&lt;sup&gt;st&lt;/sup&gt; Grade</td>
<td>increased 6.0</td>
<td>decreased 20.2</td>
</tr>
<tr>
<td>2&lt;sup&gt;nd&lt;/sup&gt; Grade</td>
<td>increased 17.4</td>
<td>decreased 10.6</td>
</tr>
<tr>
<td>3&lt;sup&gt;rd&lt;/sup&gt; Grade</td>
<td>decreased 7.1</td>
<td>increased 2.8</td>
</tr>
</tbody>
</table>
Lessons learned: doing even better next year

1. At every grade (K-3), we need to strengthen the quality and increase the intensity of instruction in vocabulary.
Bringing Words to Life

Isabel Beck
M. McKeown
L. Kucan

Guilford Press
Big ideas from “Bringing Words to Life”

First-grade children from higher SES groups know about twice as many words as lower SES children.

Poor children, who enter school with vocabulary deficiencies have a particularly difficult time learning words from “context.”

Research has discovered much more powerful ways of teaching vocabulary than are typically used in classrooms – generalization to reading comprehension.

A “robust” approach to vocabulary instruction involves directly explaining the meanings of words along with thought-provoking, playful, interactive follow-up.
Four Critical Elements for More Robust Vocabulary Instruction

Select the right words to teach – Tier 2 words

Develop child-friendly definitions for these words

Engage children in interesting, challenging, playful activities in which they learn to access the meanings of words in multiple contexts

Find a way to devote more time during the day to vocabulary instruction
An anecdote from a friend..

“While teaching a learning support lesson to my 6th grade struggling readers, the word carpenter was used. I ask my students to tell me what a carpenter did. They said, "A person who lays carpet." This happened in more than one class.”

“These same students are being ask to learn primogeniture, degenerate, and omnipotent in their regular 6th grade Language Arts class. Wow! This is a tough situation. I work with my students to learn these required words so that they can pass their language arts class but what a waste of good learning time. When I returned today, not one of the students in my second period class remembered what a carpenter did. I got the correct answer in my third period class. Hurray! How long do you think they will remember their regular language arts words?”

Noreen Beattie, 6th grade learning support, Tallahassee, FL
Remember what reading becomes as children move through elementary and into middle and high school.

Reading Comprehension is:

“thinking guided by print”

Perfetti, 1985
Lessons learned: doing even better next year

1. At every grade (K-3), we need to strengthen the quality and increase the intensity of instruction in vocabulary.

2. Provide special support to teachers in 1\textsuperscript{st} and 2\textsuperscript{nd} grades to improve the growth of their students in two critical areas.
   
   In first grade, more powerful instruction and interventions for phonemic decoding skills and reading fluency.

   In second grade, more work to stimulate and support growth of reading fluency. There are still too many students in second grade who have not achieved basic benchmarks in phonemic decoding efficiency.
At the beginning of 2nd grade, most of our students had not achieved the 1st grade benchmark for phonemic decoding.

At the end of second grade, we still have more than 20% of our students who have not achieved the first grade benchmark in phonemic decoding.
Doing Better: A summary

1. Robust Vocabulary Instruction for all
2. Stronger support for 1\textsuperscript{st} and 2\textsuperscript{nd} grade
3. Stronger interventions for alphabetic reading skills (phonemic decoding) in 1\textsuperscript{st} grade
4. Stronger interventions for fluency in 2\textsuperscript{nd} and 3\textsuperscript{rd} grade
5. And remember, reading becomes “thinking guided by print”
Will it be easy?
How strongly to we feel about it?

It will involve:

- Continued professional development for teachers
- Continued school reorganizations
- Continuing with careful student assessments
- And a relentless focus on the needs of every child

But, its not the most difficult thing we could be faced with...
Thank You

www.fcrr.org

Science of reading section