

**An Analysis of School Level Performance Data for
Reading First Schools in the State Florida for student
outcomes in 2004-2006**

**Prepared by the Florida Department of Education –Just Read, Florida! Office with
assistance from the National Reading First Technical
Assistance Center**

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Executive Summary

This document describes changes in student reading performance in two cohorts of Reading First schools in Florida. Cohort 1 (318 schools) has outcome data from 2004, 2005, and 2006, and Cohort 2 (70 schools) has outcome data from 2005 and 2006. Cohort 1 began implementation of Reading First in the 2003-2004 school year, while Cohort 2 began implementing a year later. Thus, this document describes the extent to which student performance on important reading measures has changed in each successive year of implementation.

Important Findings:

1. For Cohort 1, which involves 318 schools, the most important finding is that the percentage of students meeting grade level standards on the Florida Comprehensive Assessment Test increased by 10% from the end of Year 1 to the end of Year 3. For the 70 schools in Cohort 2, the percentage of students at grade level on the FCAT increased by 7% from the end of their first year of implementation to the end of their second year. During the same period of time, the percent of students at Level 1 on the FCAT (high risk) decreased from 27 to 19% in Cohort 1, and from 29 to 22 percent in Cohort 2.
2. A relatively unexpected finding was that the percentage of students meeting grade level standards in oral vocabulary at the end of third grade in Cohort 1 increased from 43% at the end of Year 1 to 50% at the end of Year 3. Schools in Cohort 2 increased from 39% at grade level in Year 1 to 43% at grade level in Year 2. Equally important, the percentage of students at grade level in vocabulary was much higher at the end of third grade than the end of kindergarten. For example, in Cohort 1, only 38% of kindergartners could meet grade level standards in vocabulary at the end of year 3, while 50% of third graders could. This suggests that Reading First schools are helping to “close the gap” in vocabulary knowledge for the predominately poor students attending these schools.
3. Strong year-to-year improvements were also noted in both Cohorts of schools for measures of letter knowledge, phonemic awareness, and phonemic decoding taken at the end of kindergarten. At the same time, the percentage of students leaving kindergarten at “high risk” for subsequent reading failure decreased substantially on these measures.
4. Improvements in reading comprehension were not as strong in first grade as they were in second grade, which in turn, were not quite as strong as third grade. What may be happening is that higher quality instruction is having a “cumulative effect” on those students who continue in Reading First schools for more than one year.
5. End of year estimates for improvement in oral reading fluency were relatively unstable because of the use of different text passages to measure oral reading fluency in different years. However, when looking at a comparison for Cohort 1 schools of mid year testing that involved the same passages of text, it appears that percentage of students able to meet grade level standards in oral reading fluency have increased by 4.3% per year in grade 1, 4.5% in grade 2, and 4.2% in grade 3.

Introduction and Overview

This document reports student performance on end-of-year outcome assessments in Reading First schools in Florida for the years 2004, 2005, and 2006. The purpose is to document the extent to which student performance in reading and reading-related skills has improved from the end of the first year of implementation to the end of the second and third years.

Description of the school sample

There are currently 584 elementary schools participating in Florida's Reading First program. Of this group, 318 schools received their Reading First grants in the spring of 2003, and began their implementation in the fall of that year. This group of Cohort 1 schools finished their third year of implementation in the spring of 2006. Another group (Cohort 2) of 70 schools began implementation in the fall of 2004, and a third group (Cohort 3) of 196 schools began their Reading First implementation in the fall of 2005. This report will provide information about the performance of students in Cohort 1 schools for the end of their first, second, and third years of implementation, and for Cohort 2 schools at the end of their first and second years of implementation. The performance of schools in Cohort 3 will not be described, as only one year of outcome data is available for them.

For both Cohort 1 and 2, only schools that have provided data at every measurement point in the analysis are included. For Cohort 1, 327 schools were initially provided grants in the spring of 2003, but two schools withdrew after the first year, and several other charter schools closed or were consolidated. This left 318 schools for which data is provided in this report. The 70 schools in Cohort 2 represent all of the schools initially provided Reading First funding in the spring of 2004. In other words, this report contains information about all Cohort 1 and Cohort 2 schools that had participated as Reading First schools for three years (Cohort 1) or two years (Cohort 2) as of the spring of 2006.

The demographics for students in Cohorts 1 and 2 are as follows:

	% Free/reduced lunch	% Minority	%English Language Learner
Cohort 1	73	62	14
Cohort 2	79	83	31

Description of outcome measures and standards of proficiency

In Florida's Reading First Assessment plan, end-of-year outcomes in reading and reading-related skills are assessed by three different measures. In Kindergarten, subtests from the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) are used to assess outcomes in phonemic awareness, letter knowledge, and phonemic decoding. In addition, the Peabody Picture Vocabulary Test is administered to provide a standardized measure of general oral language vocabulary.

For grades 1-3, the primary outcome measure is performance on a group administered test of reading comprehension. At grades 1 and 2, the measure of reading comprehension is the Reading Comprehension subtest from the Stanford Achievement Test, 10th edition (SAT10), and at grade 3 it is the Florida Comprehensive Assessment Test (FCAT). At grades 1 to 3, we also report student outcomes for oral language vocabulary as assessed by the Peabody Picture Vocabulary Test. Finally, although the primary use of DIBELS measures in grades 1-3 is for screening and progress monitoring measures, in this report we will also report year to year changes in the percent of students achieving grade level targets in Oral Reading Fluency, as well as the percent of students classified as “high risk” on this measure. We have provided below a brief description of each of the measures used in these analyses.

Kindergarten

1. *Phoneme Segmentation Fluency (PSF)* – assesses the fluency with which students can identify the phonemes in words. It is a measure of phonemic awareness.
2. *Nonsense Word Fluency (NWF)* – assesses the fluency with which students can pronounce letter sounds and decode unfamiliar, simple nonwords such as *baf*, *ral*, *fim*. It is a measure of phonemic decoding ability.
3. *Letter Naming Fluency (LNF)*– assesses the fluency with which students can name letters. It is a measure of both accuracy and fluency in naming letters
4. *Peabody Picture Vocabulary Test* – it assess how accurately students can identify pictures that depict the meaning of words that are pronounced by the examiner

First Grade

1. *Peabody Picture Vocabulary Test* – same as kindergarten measure
2. *Reading Comprehension Subtest from the SAT10* – it requires students to read short passages and answer multiple choice questions about their meaning. It is administered in a group setting.
3. *Oral Reading Fluency (ORF)* – assesses the speed and accuracy with which students can read orally a passage written at their current grade level.

Second Grade

1. *Peabody Picture Vocabulary Test* – same as kindergarten measure
2. *Reading Comprehension Subtest from the SAT10* – same as grade 1
3. *Oral Reading Fluency (ORF)* – same as grade 1

Third Grade

1. *Peabody Picture Vocabulary Test* – same as kindergarten measure
2. *Comprehension test from the FCAT* - it requires students to read short passages and answer multiple choice questions about their meaning. It is administered in a group setting in a manner similar to the SAT10.
3. *Oral Reading Fluency (ORF)* – same as grade 1

Of the measures described above, the most comprehensive measures of reading skill are the reading comprehension assessments administered at the end of 1st, 2nd, and 3rd grades. The measures reported in kindergarten are important precursors to the development of reading skills that can be reliably assessed before most students are able to read text for comprehension. The Peabody Picture Vocabulary Test (PPVT) is included among these assessments because of the importance of vocabulary for the long-term growth of reading comprehension, and because oral language vocabulary is typically an area of particular challenge for poor and minority students like those who are in the majority at Reading First schools. The PPVT provides a measure of vocabulary breadth that is not confounded by differences in word reading skill, as is the case for measures of reading vocabulary. The Oral Reading Fluency measures are provided for the end of 1st, 2nd, and 3rd grade in order to provide information about the way in which student's skills in this important area of reading growth are changing from year to year in Reading First schools, although it is not considered to be a primary outcome measure within Florida's assessment system.

For the DIBELS measures in Kindergarten, and for Oral Reading Fluency in grades 1-3, students are considered to be performing "at grade level" if they meet or exceed the end-of-year performance targets identified by the developers of the DIBELS assessments. Students are identified as "high risk" if their performance falls within the high risk category as defined by the DIBELS developers. On the two measures (PPVT and SAT10) that provide percentile ranks based on a national norming sample, "grade level" performance is defined as performance at the 40th percentile or above, while students are classified as "high risk" if they perform below the 20th percentile. The FCAT groups students into five performance categories. Students who obtain scores of level 3 or higher are considered to be at grade level or above, while student performing at level 1 are considered to be at high risk.

Description of method of analysis

This report provides simple descriptive data only. Further, it focuses on changes in the percent of students meeting the grade level standard on each measure or the percent of students classified as "high risk" on each measure at the end of each grade level, since these variables are directly related to the goals of Reading First. It does not report statistical comparisons, since the purpose of the report is to simply describe the actual amount of improvement in critical outcome measures shown in Reading First schools in each successive year of implementation.

Description of questions to be addressed

This report will focus on two important questions that are central to the evaluation of the success of Florida's Reading First program:

1. To what extent has the percentage of students able to meet grade level standards on critical reading or reading-relate outcomes increased each year in which Reading First has been implemented?

2. To what extent has the percentage of students who are seriously behind (classified as “high risk”) on important reading, or reading related outcomes decreased each year in which Reading First has been implemented?

It should be noted that Baseline data from schools in the year prior to the implementation of Reading First was not available because of the time frame in which the grants were awarded and the inconsistency of outcome measures being administered in K-2 (if administered at all) before Reading First began. Thus, the changes noted in this report are for successive years of Reading First implementation (i.e. end of year 1, end of year 2, end of year 3, etc.). They essentially address the question of the extent to which the implementation of Reading First has become stronger in each successive year of implementation, as well as the cumulative effects of increasing years of “Reading First” instruction for those students who remain in Reading First schools in successive years. In Florida, approximately 50% of the students who began first grade in Cohort 1 schools in the fall of 2003 took the FCAT in 3rd grade in a Reading First school in the spring of 2006.

In our presentation of the data relevant to the two questions presented above, we will follow a standard format for each grade level. We will first present figures showing the data on changes in performance across years for Cohorts 1 and 2, and will then discuss findings briefly for each set of figures.

Figure 1: Cohort 1 Year-to-Year changes in percent of students meeting grade level standards on DIBELS measures at the end of kindergarten (n=318)

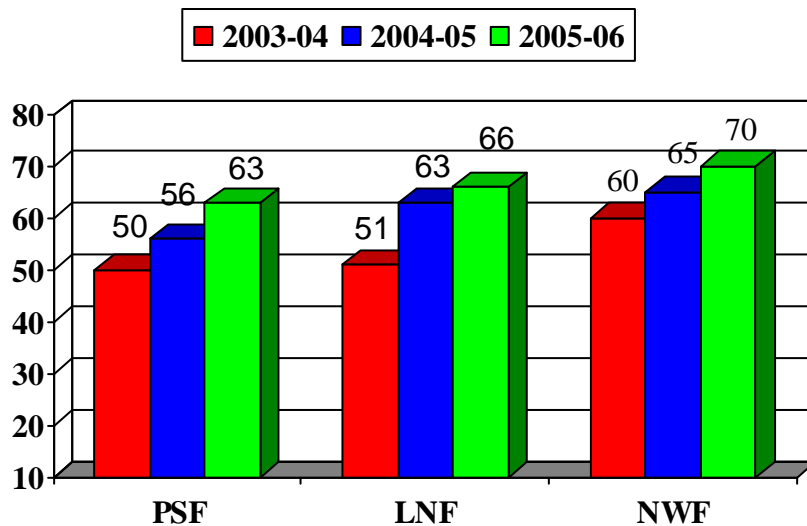
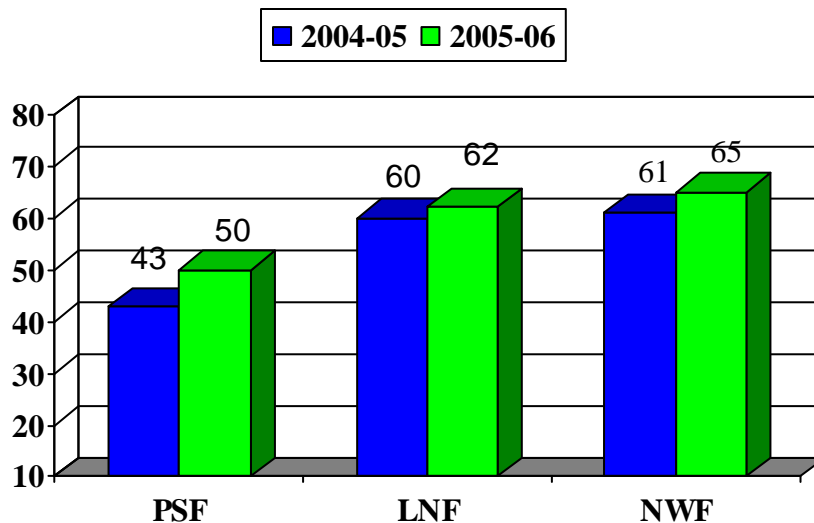


Figure 2: Cohort 2 Year-to-Year changes in percent of students meeting grade level standards on DIBELS measures at the end of kindergarten (n=70)



Findings:

- Cohort 1 schools have made substantial progress from the end of Year 1 to the end of Year 3 in strengthening instruction in phonemic awareness, letter knowledge, and phonemic decoding. Increases from year 1 to year 3 in percent of students at grade level are: PSF= 13%, LNF=15%, and NWF = 10%
- Cohort 2 schools made gains similar to Cohort 1 from Year 1 to Year 2, with the exception of Letter Name Knowledge (LNF), which was smaller in Cohort 2.

Figure 3: Cohort 1 Year-to-Year changes in percent of students classified as high risk on DIBELS measures at the end of kindergarten (n=318)

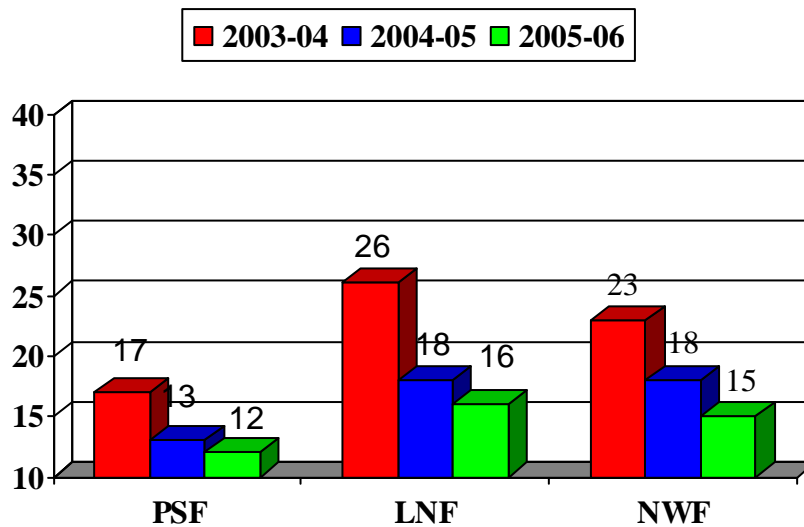
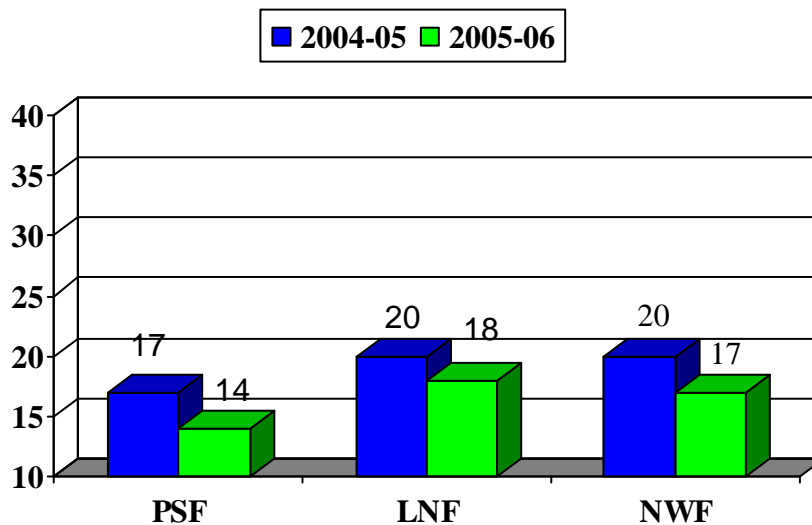


Figure 4: Cohort 2 Year-to-Year changes in percent of students classified as high risk on DIBELS measures at the end of kindergarten (n=70)



Findings:

- Substantially fewer children in Cohort 1 performed in the high risk range on DIBELS measures at the end of kindergarten in Year 3 than Year 1. Reductions in percent of students classified as high risk across measures were: PSF=5%, LNF = 10%, and NWF = 8 %.
- Although Cohort 2 schools were able to reduce the percent of students at high risk on each of the measures from Year 1 to Year 2, these reductions were not as large as those reported for Cohort 1.

Figure 5: Cohort 1 Year-to-Year Changes in Kindergarten student performance on a measure of Oral Vocabulary (n= 318)

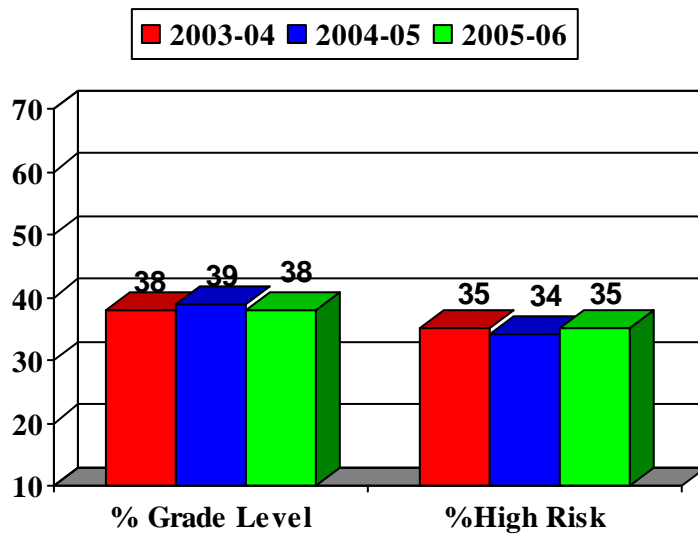
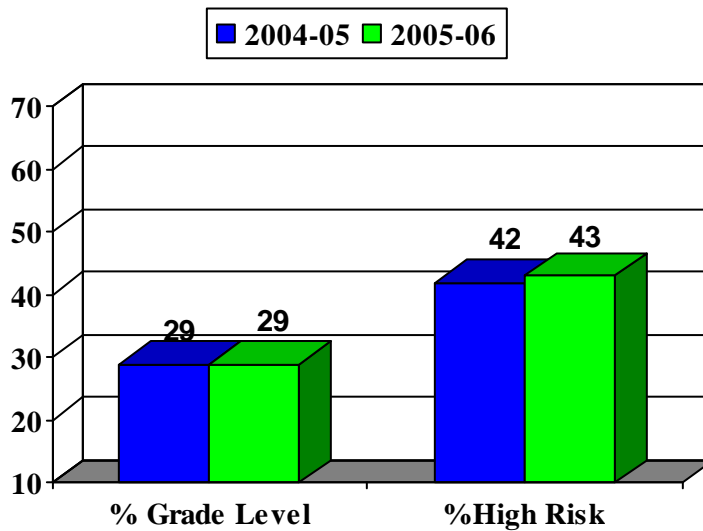


Figure 6: Cohort 2 Year-to-Year Changes in Kindergarten student performance on a measure of Oral Vocabulary (n= 70)



Findings

- Performance of students at the end of Kindergarten on the measure of oral vocabulary has been quite stable across three years of implementation in Cohort 1 schools, and the same pattern is emerging for Cohort 2 schools
- The higher percentage of English Language Learners in Cohort 2 than Cohort 1 schools is the likely reason for the substantially lower vocabulary performance in Cohort 2 schools.

Figure7: Cohort 1 changes in First Grade student performance on Measures of Reading Comprehension and Oral Vocabulary (n= 318)

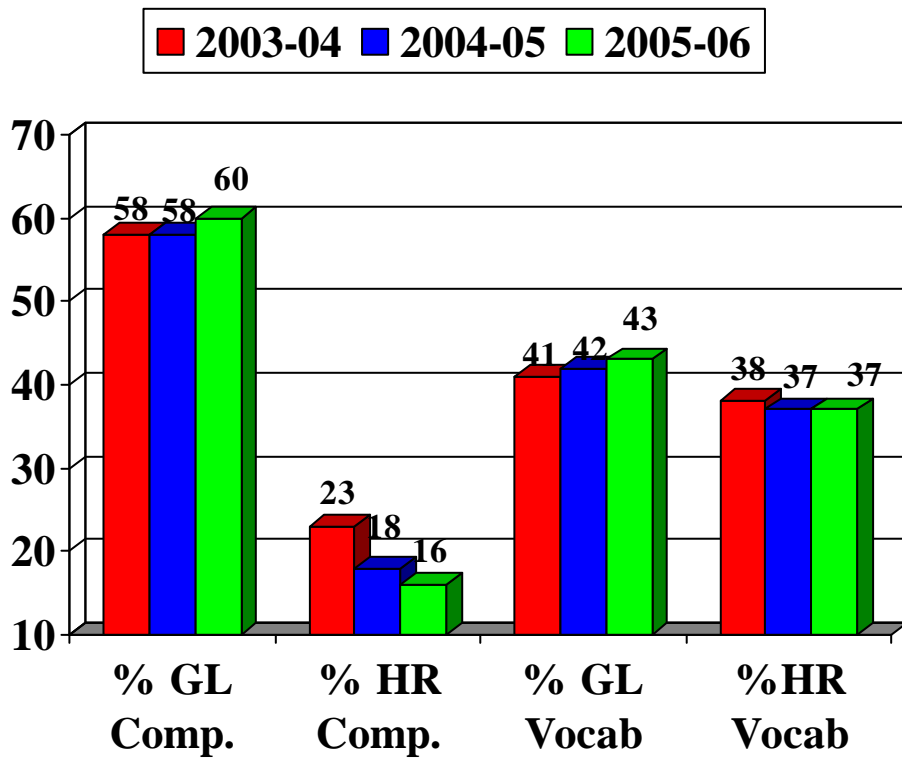
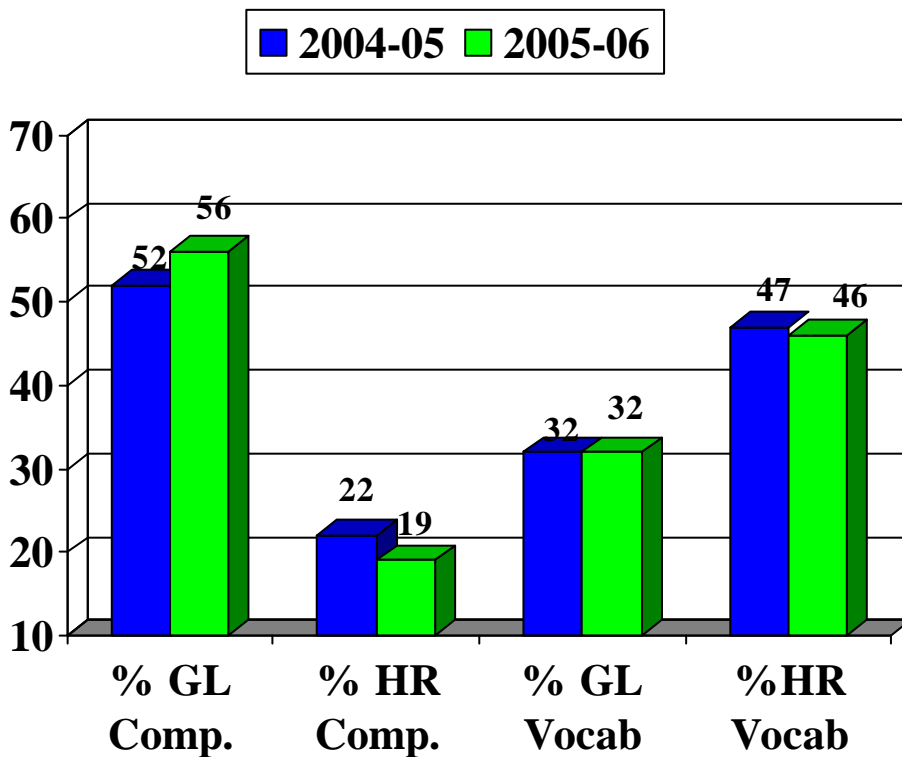


Figure 8: Cohort 2 changes in First Grade student performance on Measures of Reading Comprehension and Oral Vocabulary (n= 70)



Findings

- Cohort 1 schools have been more successful in reducing the percentage of students with serious reading comprehension difficulties at the end of first grade than they have at increasing the percentages of students at grade level. Schools in the second cohort had more success in improving the percent of students at grade level in reading comprehension from Year 1 to Year 2 than did Cohort 1 schools.
- Although we did not formally report student performance on Oral Reading Fluency measures in this document, changes in the percent of students meeting grade level performance targets, and reductions in the percent of student classified as high risk on the ORF measures closely parallel those for reading comprehension. For example, the percentage of students meeting the ORF end of year performance targets were 53, 53, and 55 for years 1,2, and 3, respectively. Corresponding percentages of students classified as high risk on the ORF measure in those three years were 21, 19, and 18.
- In contrast to the pattern in Kindergarten, Cohort 1 schools actually showed small Year-to-Year increases in the percent of students meeting grade level standards for Vocabulary. It is also important to note that a higher percent of students met the grade level standard in vocabulary at the end of year 3 in grade 1 (43%), than in kindergarten (35%). Although these are not longitudinal data, it does suggest that the vocabulary of students in Reading First schools is becoming stronger relative to normative standards the longer they attend school. This means that the “vocabulary gap” shown by students in Reading First schools closed slightly between the end of kindergarten and the end of first grade.

Figure 9: Cohort 1 Year-to-Year Changes in First Grade student performance on the test of Oral Reading Fluency (n= 318)

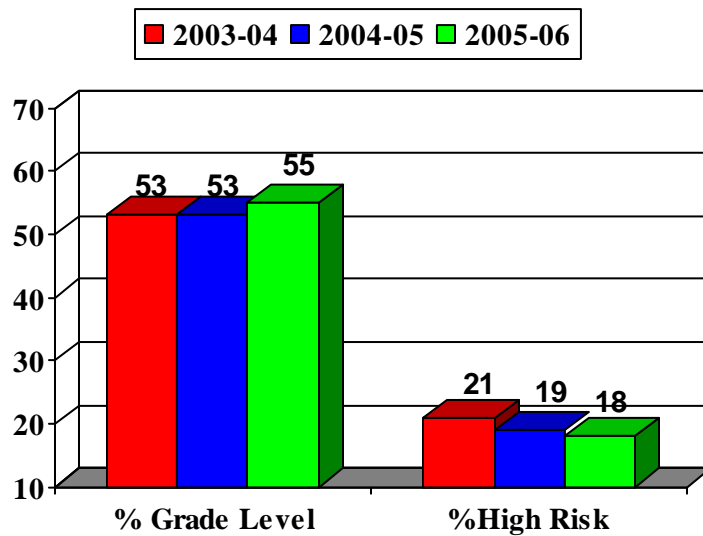
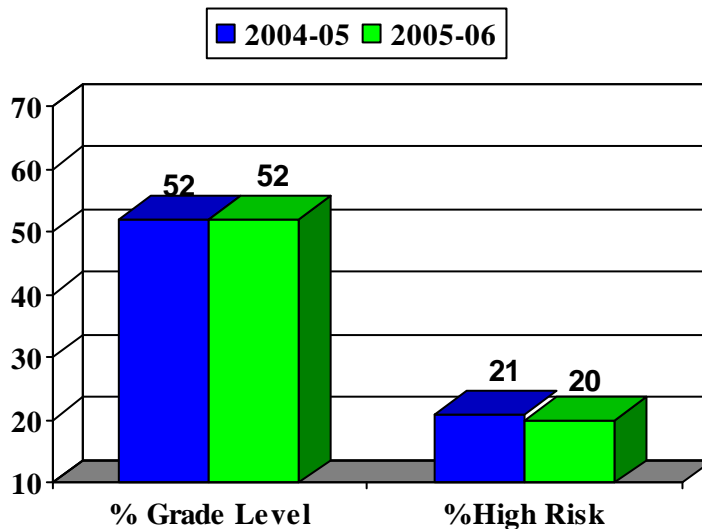


Figure 10: Cohort 2 Year-to-Year Changes First Grade student performance on the test of Oral Reading Fluency (n= 70)



Findings

- Change in the percent of students meeting grade level performance targets, and reductions in the percent of student classified as high risk on the ORF measures closely parallel those for reading comprehension. And Cohort 2 schools are showing a very similar year-to-year pattern as Cohort 1 schools.

Figure 11: Cohort 1 changes in Second Grade student performance on measures of Reading Comprehension and Oral Vocabulary (n= 318)

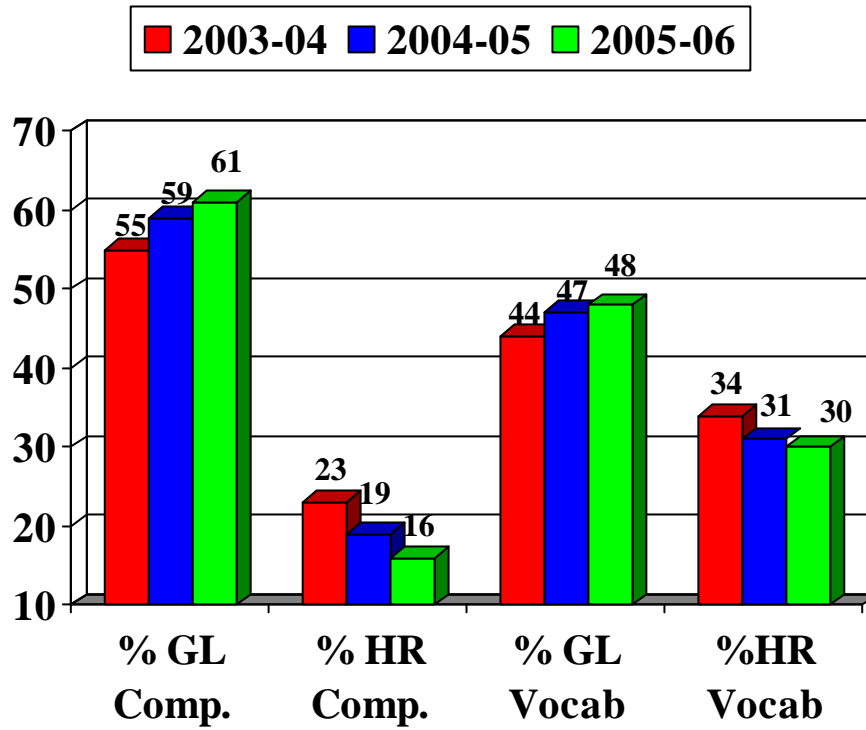
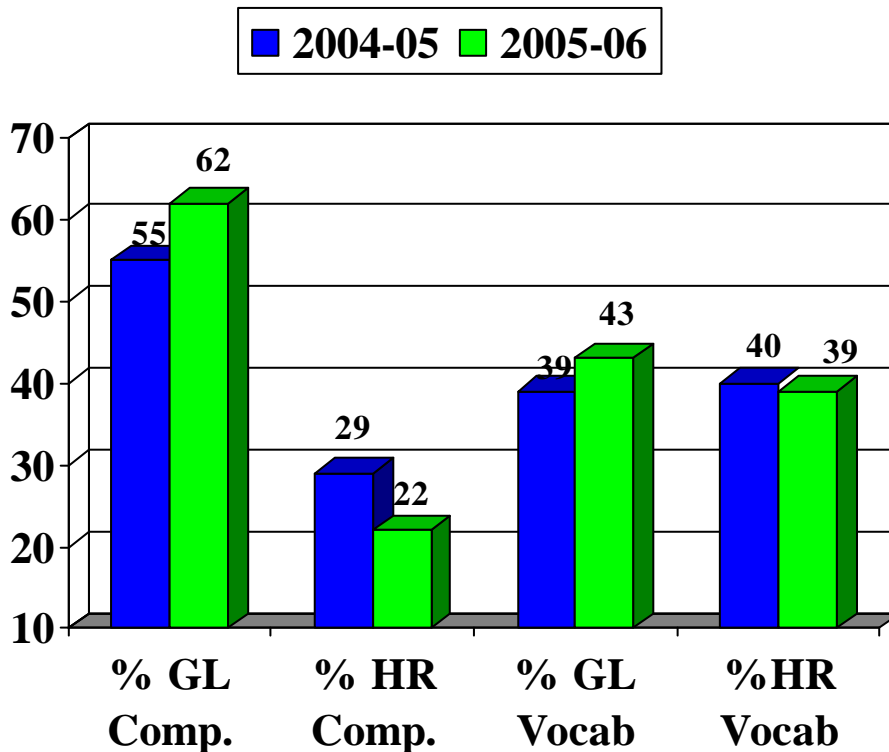


Figure 12: Cohort 2 changes in Second Grade student performance on measures of Reading Comprehension and Oral Vocabulary (n= 70)



Findings

- In second grade, Cohort 1 schools showed consistent Year-to-Year improvements in both the percent of students meeting grade level standards and the percent of students with serious difficulties in reading comprehension.
- Cohort 1 schools also showed more consistent year-to-year improvements in oral vocabulary in 2nd grade than in 1st grade or kindergarten.
- Cohort 2 schools made as much improvement in reading comprehension from Year 1 to Year 2 as Cohort 1 made from Year 1 to Year 3, and they also showed good improvements in oral vocabulary from Year 1 to Year 2.
- The trend for students to perform better on the vocabulary tests at first grade than kindergarten continues when second grade is compared to first grade. In Cohort 1, for example, 48% of second graders met the grade level standard for oral vocabulary at the end of 2006, while 43% of first graders did. Even more dramatic grade level improvements were noted for Cohort 2 schools (32% at grade level in first grade, 43% in second grade)

Figure 13: Cohort 1 Year-to-Year Changes in Second Grade student performance on the test of Oral Reading Fluency (n= 318)

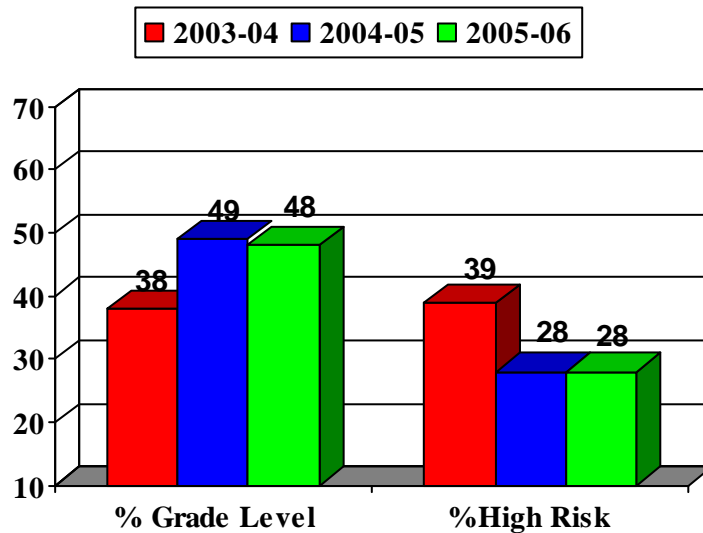
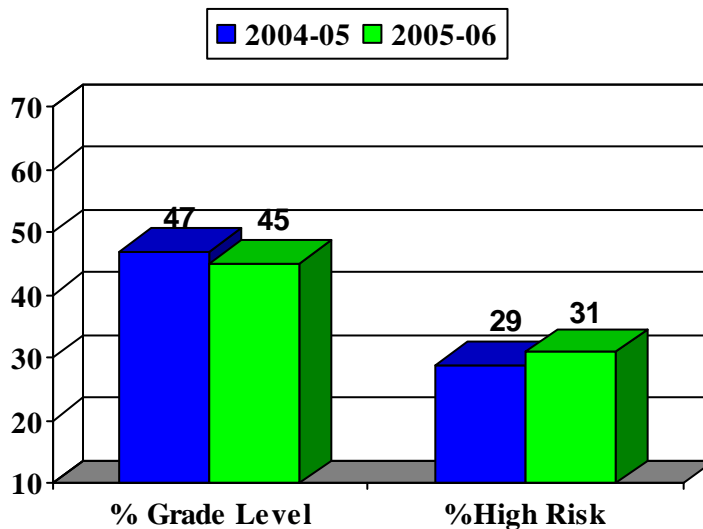


Figure 14: Cohort 2 Year-to-Year Changes Second Grade student performance on the test of Oral Reading Fluency (n= 70)



Findings

- Measurement of year-to-year changes in performance on the ORF measures is complicated in Florida by the fact that different passages have been used at the same measurement point across successive years implementation of the program. Regardless of Cohort, all RF schools are administered the same passages, but the passages used to assess end of year performance vary from

year to year. Although we administer three passages, and the child's score is the median value, there is still a certain amount of unexpected variability in passage difficulty from year to year. This may explain the very large improvement from the first year to second year in ORF performance in second grade, and the slight decline in performance from Year 2 to Year 3. The Year 1 to Year 2 change in ORF performance in Cohort 2 may have been influenced by the same passage difficulty issues.

- A more accurate assessment of year to year improvements on the ORF test is actually available when comparing Year 4 performance (the current implementation year) against Year 1 performance for Cohort 1, since the same passages are used at each assessment point in Year 1 and Year 4 of Florida's Reading First implementation. When comparing mid year performance in Year 1 against mid year performance in Year 4 for Cohort 1 at first grade, percent of students at grade level increased from 50% to 63%, while percent of students at high risk decreased from 18% to 8%. At second grade, percent of students at grade level on the mid year assessment increased from 45 to 58%, while percent of students at high risk decreased from 35% to 26%. At third grade, the percent of students at grade level increased from 40% to 53%, while the percent at high risk decreased from 27% to 19%. These changes are documented in the graph below.

Figure 15: Cohort 1 Year-to-Year Changes Second Grade student performance on the test of Oral Reading Fluency (n= 70)

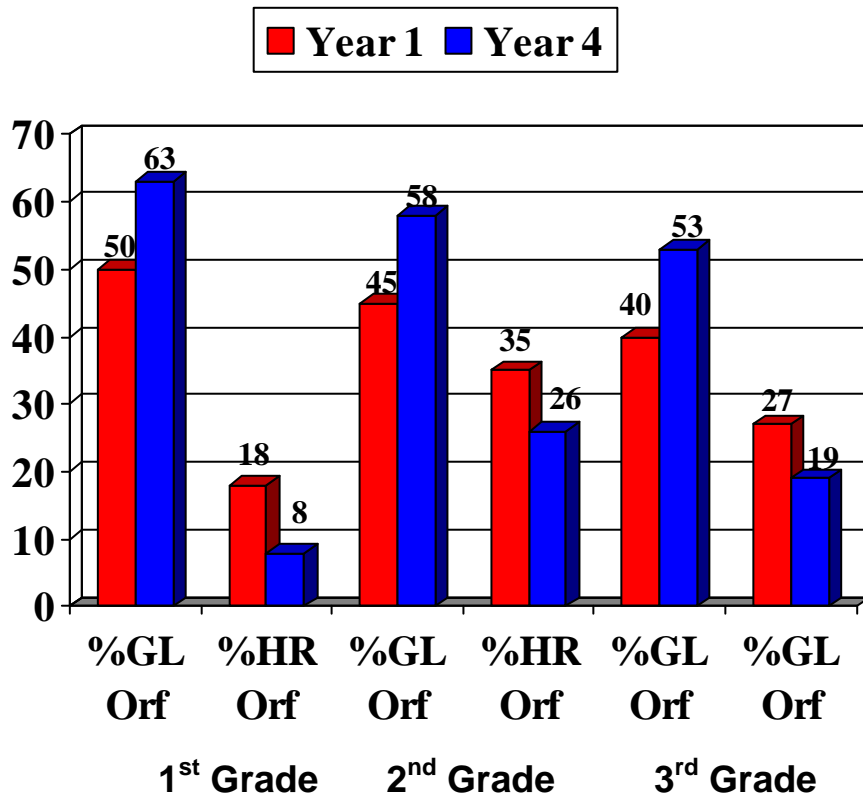


Figure 16: Cohort 1 changes in Third Grade student performance on measures of Reading Comprehension and Oral Vocabulary (n=318)

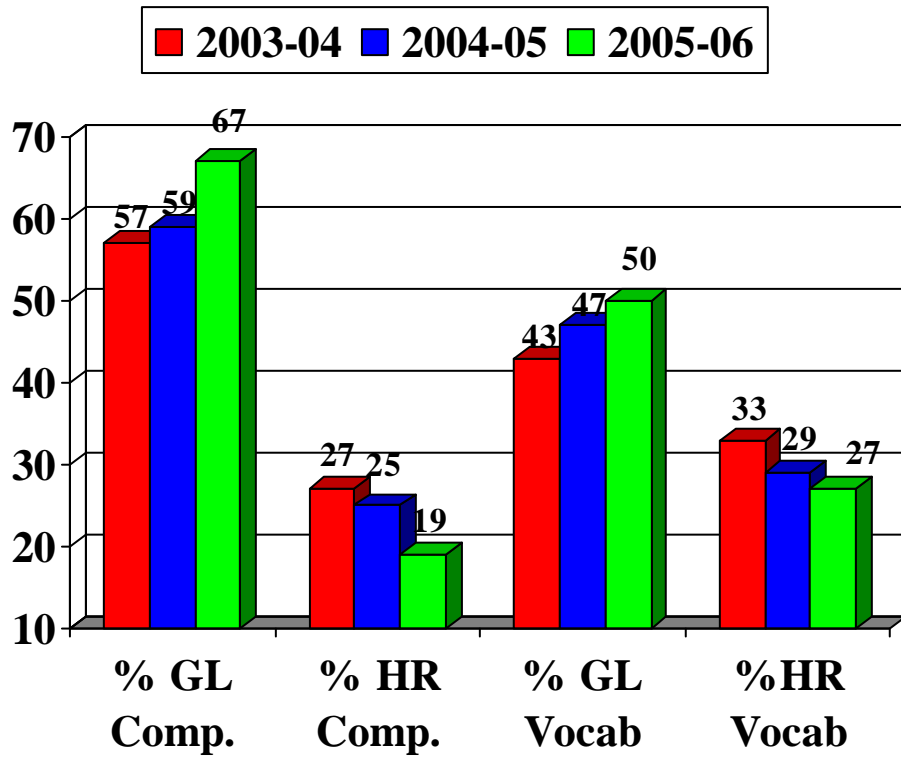
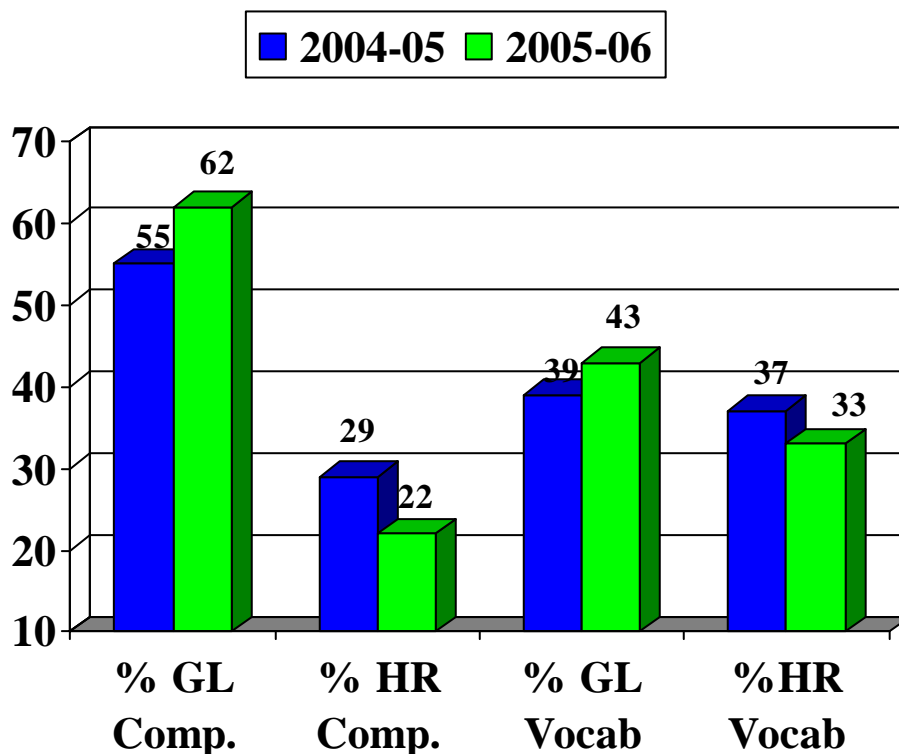


Figure 17: Cohort 2 changes in Third Grade student performance on measures of Reading Comprehension and Oral Vocabulary (n=70)



Findings

- Cohort 1 schools showed a 10% improvement in percent of students at grade level in reading comprehension from the end of Year 1 to the end of Year 3, while, at the same time, the percent of students with serious difficulties in reading comprehension fell from 27% to 19%. This is the largest year-to-year improvement in reading comprehension noted for any of the grades.
- Cohort 2 also showed a substantial increase (7%) in the numbers of students able to meet the grade level standard in reading comprehension from Year 1 to Year 2, along with a substantial reduction (7%) in the number of students with serious difficulties in reading comprehension.
- Year-to-year gains in vocabulary were also stronger in Grade 3 than the other grades, and for both Cohorts 1 and 2, more students were able to meet the grade level standard in vocabulary at the end of third grade than at the end of second grade. For Cohort 1 schools, the percent of students meeting the grade level standard in vocabulary increased from 38% in kindergarten to 50% in 3rd grade. For Cohort 2 schools, the analogous increase was from 29% to 43%. This represents a substantial closing of the gap in vocabulary between students in Reading First schools and student in the normative sample of the PPVT.

Figure 18: Cohort 1 Year-to-Year Changes in Third Grade student performance on the test of Oral Reading Fluency (n= 318)

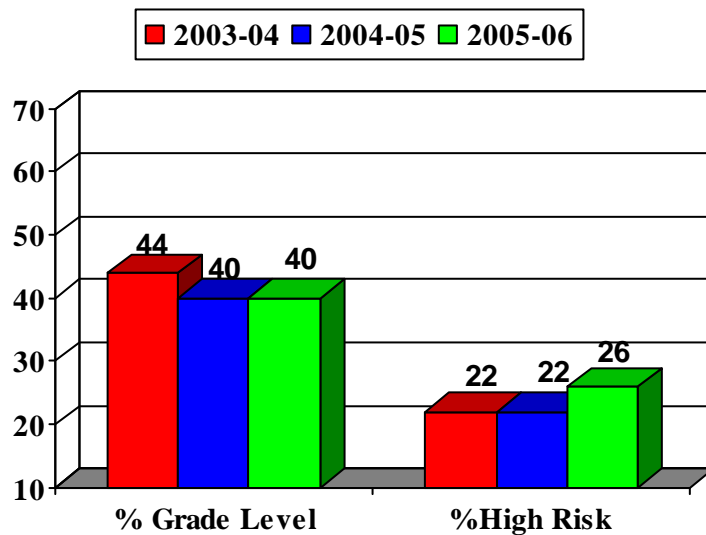
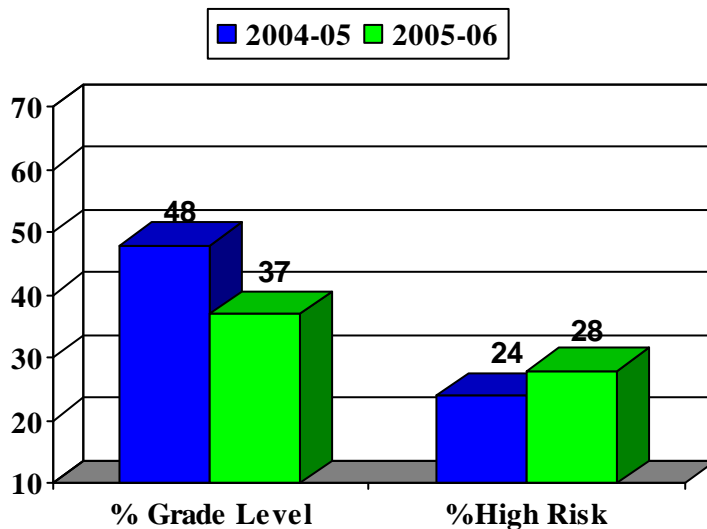


Figure 19: Cohort 2 Year-to-Year Changes Third Grade student performance on the test of Oral Reading Fluency (n= 70)



Findings

- These tables show that the change in percent of students achieving the grade level standard in Oral Reading Fluency at the end of the year has declined over years of implementation of Reading First in both Cohort 1 and Cohort 2 schools. By the same token, the percent of students at high risk on the ORF measure has increased across years of implementation.

- However, as with first and second grade, a more accurate assessment of change in oral reading fluency for Cohort 1 can be obtained by comparing mid year performance in year 1 with mid year performance in the present year, which is the fourth year of implementation for Cohort 1 schools. In this comparison, that was based on reading the same text passages in year 1 and year 4, percent of students at grade level on ORF increased from 40% in Year 1 to 53% in Year 4, and percent of students at high risk fell from 27% to 19. These changes were illustrated in Figure 15.

Summary Tables for all outcome measures

The following tables summarize the findings presented in the previous figures.

Table 1: Change from Year 1 to Year 3 for Cohort 1 and Change from Year 1 to Year 2 for Cohort 2 in percent of students meeting grade level standards

Cohort 1					Cohort 2			
Grade	Assessment	Year 1 Percent Of students Meeting standard	Year 3 Percent Of students Meeting standard	Change From Year 1- Year 3	Grade	Year 1 Percent Of students Meeting standard	Year 2 Percent Of students Meeting standard	Change From Year 1- Year 2
K	DIBELS LNF	51	66	15	K	60	62	2
K	DIBELS PSF	50	63	13	K	43	50	7
K	DIBELS NWF	60	70	10	K	61	65	4
K	PPVT Vocab	38	38	0	K	29	29	0
1	SAT10 Read Com.	58	60	2	1	52	56	4
1	PPVT Vocab	41	43	2	1	32	32	0
1	DIBELS ORF	53	55	2	1	52	52	0
2	SAT10 Read Com.	55	61	6	2	55	62	7
2	PPVT Vocab	44	48	4	2	39	43	4
2	DIBELS ORF	38	48	10	2	47	45	-2
3	FCAT Read Com	57	67	10	3	55	62	7
3	PPVT Vocab	43	50	7	3	39	43	4
3	DIBELS ORF	44	40	-4	3	38	37	-1

Table 2: Change from Year 1 to Year 3 for Cohort 1 and Change from Year 1 to Year 2 for Cohort 2 in percent of students with serious difficulties

Cohort 1

Cohort 2

Grade	Assessment	Year 1 Percent Of students With Serious Difficulties	Year 3 Percent Of students With Serious Difficulties	Change From Year 1- Year 3	Grade	Year 1 Percent Of students With Serious Difficulties	Year 2 Percent Of students With Serious Difficulties	Change From Year 1- Year 2
K	DIBELS LNF	26	16	-10	K	20	18	-2
K	DIBELS PSF	17	12	-5	K	17	14	-3
K	DIBELS NWF	23	15	-8	K	20	17	-3
K	PPVT Vocab	35	35	0	K	42	43	+1
1	SAT10 Read Comp	23	16	-7	1	22	19	-3
1	PPVT Vocab	38	37	-1	1	47	46	-1
1	DIBELS ORF	21	18	-3	1	21	20	-1
2	SAT10 Read Comp	23	16	-7	2	29	22	-7
2	PPVT Vocab	34	30	-4	2	40	39	-1
2	DIBELS ORF	39	28	-11	2	29	31	+2
3	SAT10 Read Comp	27	19	-8	3	29	22	-7
3	PPVT Vocab	33	27	-6	3	37	33	-4
3	DIBELS ORF	22	26	+4	3	28	28	+4