

Monitoring Instructional Effectiveness in Grades 1-3 with the purpose of guiding school level initiatives and classroom instruction

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The most important Reading First goals:

1. Increase the percentage of students reading “at grade level” each year at each grade level from kindergarten through third grade
2. Decrease the percentage of students with serious reading difficulties each year at each grade level

Our most important measures of success in doing this assess student performance on reading comprehension measures at the end of the year- particularly at end of third grade

Whether or not we achieve these goals depends on the strength of our instruction to accomplish two things during the year

All students who begin the year meeting grade level expectations continue to meet grade level expectations at the end of the year-they make expected yearly growth

All students who begin the year reading below grade level accelerate their development so they make expected yearly growth plus catch-up growth

Whether or not we achieve these goals depends on the strength of our instruction to do two things during the year

Insuring all students make expected yearly growth

Strong core reading instruction for all students

Enough time spent to meet the needs of many students who do not typically receive powerful support at home

Enough quality so that the increased instructional time is spent effectively

Time X quality = yearly growth

Whether or not we achieve these goals depends on the strength of our instruction to do two things during the year

Insuring students who are behind make expected yearly growth plus catch-up growth

Effective differentiated instruction by classroom teacher

Effective school-level systems and resources to provide additional intensive intervention in small enough groups for enough time, and with enough skill

Time X quality = yearly growth + catch-up growth

In order to effectively prevent early reading difficulties, we need to apply two kinds of knowledge

From the “science of reading”

From effective schools

Information about the *individual* components of instruction and assessment that are most effective in raising literacy levels

Information about leadership, organizational, and classroom practices that are most effective in raising literacy levels

Understanding, and Motivation to Apply

Lessons learned from the Kennewick, Washington school district:

Located in southeastern Washington

Has about 15,000 students – 13 elementary schools, four middle schools, and 3 high schools

25% of students are ethnic minorities, and 48% elementary school students qualify for free or reduced price lunch

Lessons learned from the Kennewick, Washington school district:

In 1995, the school board in Kennewick challenged the elementary schools to have 90% of their students at grade level in reading by the end of third grade –within 3 years

The primary responsibility for accomplishing this was assigned to the school principals

Lessons learned from the Kennewick, Washington school district:

From David Montague, a principal:

“We thought the board and the superintendent were crazy...I saw in the White Paper that elementary principals were responsible, and said ‘Why don’t they come down to our building and see the kids that come to our school?’ I mean, our kindergarten kids seem to enter school every year with lower skills...”

Lessons learned from the Kennewick, Washington school district:

From David Montague, a principal:

“After that, the whining died down. The goal started to grow legs....Principals are messengers. When you’re in the message business, it doesn’t help to criticize the message. It drives a wedge. It empowers those who don’t want to change. Since we’re responsible for implementation, it makes no sense to send a mixed message. Principals cannot play ‘loyal opposition’ harping against accountability and at the same time provide effective leadership for growth”

Lessons learned from the Kennewick, Washington school district:

The District passed a bond that provided a district reading teacher for each school, and began to hold public meetings at a different elementary school every two weeks.

At the schools...

“We began to have serious staff meetings...we began going through the district White Paper and looking at the test data to see how far behind some of our kids were. It was the first time Washington had ever had such precise data. In the fall of 995, 23% of our 3rd graders were reading at second grade level and 41% of our 3rd graders were reading at a kindergarten or 1st grade level.

“In the United States, public schools deliver 85% or more of their curriculum by reading textbooks, whiteboards, worksheets, and computer screens. Students must read well to do well. It matters little what else they learn in elementary school if they do not learn to read at grade level. Even math depends on reading. There are far more words than numbers in math books. As the math concepts become more complicated, the verbal descriptions become more involved as well. As Kennewick has focused on reading, our math scores have improved at a rate similar to our reading scores. The reading problem becomes more obvious in middle school where students who cannot read well struggle to absorb content in all other subjects.” P. 49

Fielding, L., Kerr, N., & Rosier, P. (2007). *Annual growth for all students, catch-up growth for those who are behind*. Kennewick, WA: The New Foundation Press, Inc.

School	2006 Free or Reduced	2006 Minority Enrollment	2006 Stability	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Washington														
Cascade		19	85	78	79	72	83	88	91	99	96	93	97	95
Vista		33	79	83	73	90	79	80	93	91	95	94	100	94
Southgate		18	79	92	80	81	86	88	82	90	93	91	86	94
Ridge View		20	70	80	69	78	88	79	84	94	90	92	91	92
Canyon View		31	74	71	66	78	65	83	76	90	90	90	88	93
Sunset View		16	77	82	86	92	85	84	87	89	95	93	94	91
Lincoln		23	77	79	75	73	85	87	86	78	99	92	94	92
Hawthorne		47	70	69	62	62	78	73	87	90	92	80	84	85
Westgate		52	72	58	55	47	51	57	49	55	76	82	82	85
Eastgate		77	74	53	55	52	40	53	54	67	68	80	68	85
Amistad		68	65	66	65	55	52	44	47	51	65	80	71	80
Edison		61	67	66	68	71	54	53	55	53	46	74	51	80
District	48	38	75	74	70	71	72	77	78	82	86	88	86	90

Washington Elementary School

Growth in % of 3rd grade students meeting grade level standards

School Year

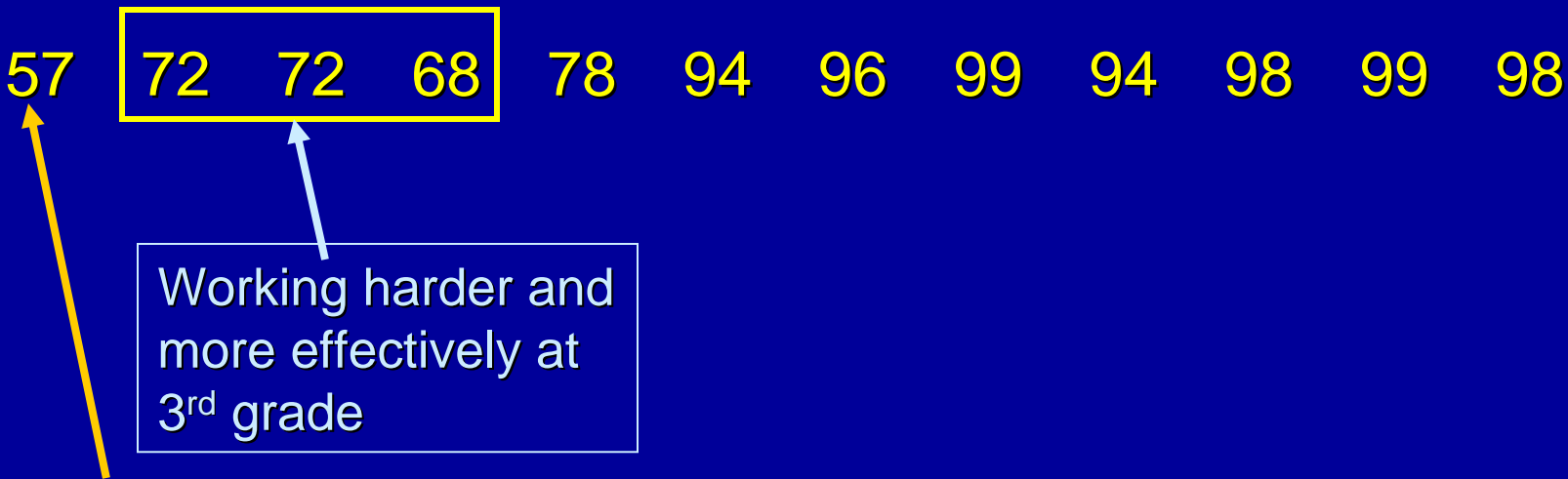
95 96 97 98 99 00 01 02 03 04 05 06

Percent at Grade level

57 72 72 68 78 94 96 99 94 98 99 98

Working harder and more effectively at 3rd grade

Baseline year



From the Principal:

"By the 3rd year, we had exhausted our work-harder-at-third-grade strategy...More of the catch-up gain had to be made at second and first grade. Our first-and second-grade teachers realized that they had to become more accountable for their students' learning. Even our kindergarten teachers, who had spent most of their class time on social activities, began the transition to teaching phonemic awareness along with letter and sound recognition."

Washington Elementary School

Growth in % of 3rd grade students meeting grade level standards

School Year

95 96 97 98 99 00 01 02 03 04 05 06

Percent at Grade level

57 72 72 68 78 94 96 99 94 98 99 98

Working harder and more effectively at 3rd grade

Began providing intensive interventions in the afternoon to many students

Result of improvement at both 2nd and 3rd Grade

Baseline year

Began testing in 2nd grade and focusing on earlier improvement

Washington Elementary School

School Characteristics

55% Free/reduced lunch

28% Minority

85% Stability

Teaching Staff

2 half-day kindergarten teachers

3 classroom teachers each in 1-5

1 District Reading Specialist

3 Title I Teachers

1.5 Resource room/special ed teachers

1 PE teacher

1 librarian, 1 Librarian secretary

3 Specials teachers

9 paraprofessionals

Washington Elementary School

How they get additional instructional power in first grade

During the Morning Reading Block

Small group reading during 1st hour of the day

It puts 13 adults with 75 students during the first hour in first grade

Struggling students get 1:3 with most skilled instructor
Advanced students get 1:7 ratios with paras and others

In the afternoon

Many students get additional small group or 1:1 instruction time as interventions

Washington Elementary School

The reading block for 3 first grade classrooms

1st hour (8:45-9:45)

Small group instruction

3 classroom teachers

1 District Reading Teacher

2 Title I teachers

Specials teacher

PE teacher

6 paraprofessionals

2nd hour (9:45-10:45)

Whole group instruction

2nd hour (9:45-10:45)

Also, during the second hour, paras, Title 1, and others work in small groups with 2nd-5th grades

In the afternoon, many students are provided an additional 40-90 minutes of intervention

From David Motague

”By the fifth year, I was convinced high performance reading was about more time and better use of that time. Students who were behind needed more direct instruction. Some of them started getting 60 to 90 minutes extra each day for a total of 180 to 210 minutes a day. We spent that time on the sub-skills they hadn’t mastered.”

“For most of Kennewick’s high performance elementary schools, increasing the amount of time spent on direct reading instruction was an intuitive decision. They tried more time. It worked, and they kept on doing it. It was merely an extension of what remediation was about. Principals and many teachers at these schools saw the direct connection between increasing instructional time and increasing reading growth. Students who were a little behind needed a little more instructional time. Students who were a lot behind needed a lot more time.” P. 38.

“Growth is directly proportionate to the quality and quantity of instructional time. When we looked at our data student by student, we saw a painful fact with painful clarity. Most students who start behind stay behind. Time-starved reading programs that rely on sudden growth bursts from extraordinary instruction rarely move students from the 5th-30th percentiles up to grade level.” P. 48

“Catch-up growth is driven primarily by proportional increases in direct instructional time. Catch-up growth is so difficult to achieve that it can be the product only of quality instruction in great quantity.”

Teacher quality x time = growth

“Quantity of instructional time can be doubled or tripled in a semester. Quality of instructional time cannot. Improving quality occurs over extended periods of time, at different rates for different teachers in the same school, as a constant process of arduous, intelligent labor.

Teacher quality (1) x time (1) = growth (1)

Teacher quality (1) x time (2) = growth (2)

Teacher quality (1) x time (3) = growth (3)

Teacher quality x time = growth

“This is why the primary and immediate strategy for catch-up growth is proportional increase in direct instructional time.

Catch-up growth rarely occurs unless principals and teachers have good data, know each student’s learning needs, and schedule proportional increases in direct instructional time.”

School	% FR Lunch	% at Grade Level, 2003	1 st Grade Reading Block	1 st Grade Interventions	2 nd Grade Reading Block	2 nd Grade Interventions	3 rd Grade Reading Block	3 rd Grade Interventions
Canyon V.	38	90	195	25	135	24	150	32
Westgate	80	76	120	79	120	55	120	67
Cascade	35	96	120	51	120	55	120	55
Hawthorne	60	92	120	56	120	33	120	51
Amistad	76	65	120	25	140	27	125	33
Ridge View	23	90	120	51	120	34	90	42
Southgate	20	93	120	34	120	29	120	33
Washington	54	94	120	24	120	28	120	43
Vista	50	95	120	10	120	25	120	40
Lincoln	41	99	120	17	120	27	120	30
Sunset View	9	95	74	45	105	27	73	23

Two indices from progress monitoring measures that provide data about effectiveness of core instruction and interventions

Effectiveness of Core Instruction (ECI) measures the percentage of students who began the school year (Assessment 1) on grade level (in green zone) and remained on grade level in the assessment period being reported (middle or end of year) –make expected yearly gain

The ECI in one classroom

screening

outcome

1	→	1
2	→	2
3		3
4	→	4
5		5
6	→	6
7		7
8	→	8
9	→	9
10		10
11	→	11
12	→	12
13	→	13
14		14
15		15
16		16
17		17
19		19
20		20
21		21

One academic year

9 of 13 students
who were at grade
level continue at
grade level

$$ECI = .69$$

ECI

Green Students

STAY

Green Students

From

Assessment 1 to Assessment 2

Assessment 1 to Assessment 3

Two indices from progress monitoring measures that provide data about effectiveness of core instruction and interventions

Effectiveness of Interventions (EI) shows the percentage of students who began the year at some level of risk for reading difficulties (reading below grade level) but who grew rapidly enough to advance to a lower level of risk, or to grade level, by the end of the year.

The EI in one classroom

screening

outcome

1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
19	19
20	20
21	21

One academic year

3 of 7 students who were at “at risk” moved to a lower risk level

$$EI = .43$$

EI

Red or Yellow Students

IMPROVE TO

Yellow or Green Students

From

Assessment 1 to Assessment 2

Assessment 1 to Assessment 3

The EI index can be broken into two more specific indicators

EI-I shows the percentage of students who began the year at the “intensive” or highest level of risk (red) but who grew rapidly enough to advance to strategic (yellow) or grade level (green) by the end of the year.

EI-S shows the percentage of students who began the year at the “strategic” or moderate level of risk (yellow) but who grew rapidly enough to advance to grade level (green) by the end of the year.

The EI in one classroom

screening

outcome

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
19
20
21

One academic year

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
19
20
21

1 of 3 students who were at “high risk” moved to a lower risk level

$$EI-I = .33$$

2 of 4 students who were at “moderate” risk moved to grade level

$$EI-I = .50$$

EI-I

Red Students

IMPROVE TO

Yellow or Green Students

From

Assessment 1 to Assessment 2

Assessment 1 to Assessment 3

EI-S

Yellow Students

IMPROVE TO

Green Students

From

Assessment 1 to Assessment 2

Assessment 1 to Assessment 3

What They Are

ECI and EI are two measures, based on the Recommended Instructional Level (RIL) for students, that can be used to monitor the performance of the core reading program and the intensive intervention program(s) in schools.

Splits the reading program into two separate parts—core instruction and interventions- more analytic

What They Are Not

ECl and EI should not be considered as the primary measure in evaluating schoolwide performance in reading.

These are formative assessment- meant to help focus professional development, resources, school level planning. They are not the same as outcome measures.

Cautions

■ Population Sensitive

- ❑ Based on students that remain in the same school for each assessment
- ❑ Small populations have volatile measures
- ❑ Can lose all students=have no measure
- ❑ Kindergarten and 1st grade Assessment 1 measures are different than assessment 3

■ Data requirements

- ❑ Must have within year, longitudinally identifiable data
-

Cautions

- **What should we expect?**
 - **With a new measure, we often don't know what to expect, or what is "good performance"**

Goal for ECI should be 100%

Goal for EI should be around 50%

Looking at trends in outcome data
over time as a way of thinking
about needed changes or
improvements

Using School, or District, or State Level Reading outcome data to make decisions about allocation of resources and activities to improve school performance

Two kinds of analysis

1. Examining trends across measures for purposes of planning professional development, support and guidance
2. Examining differences in performance across schools for purposes of planning and implementing differentiated support and oversight

Using School, or District, or State Level Reading outcome data to make decisions about allocation of resources and activities to improve school performance

Two kinds of analysis

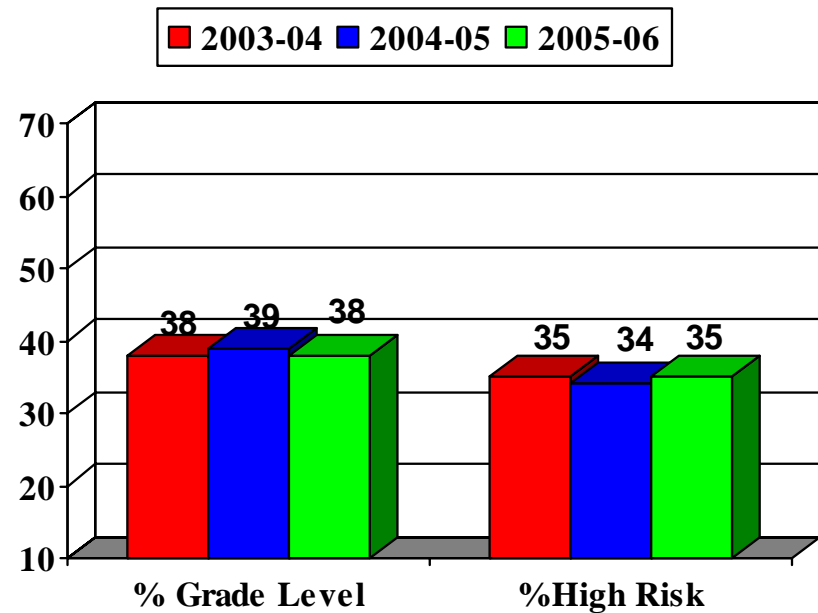
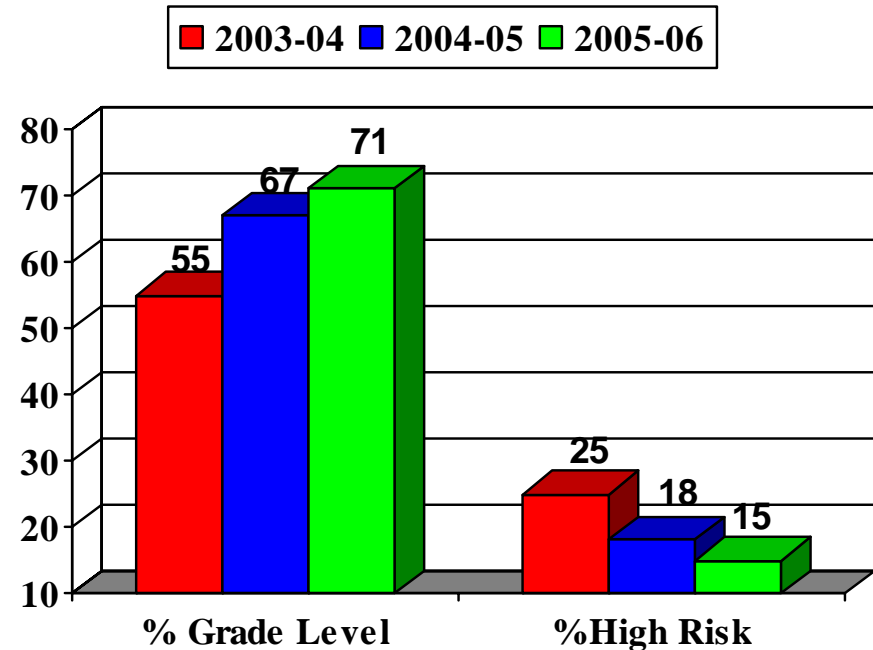
1. Examining trends across measures for purposes of planning professional development, support and guidance

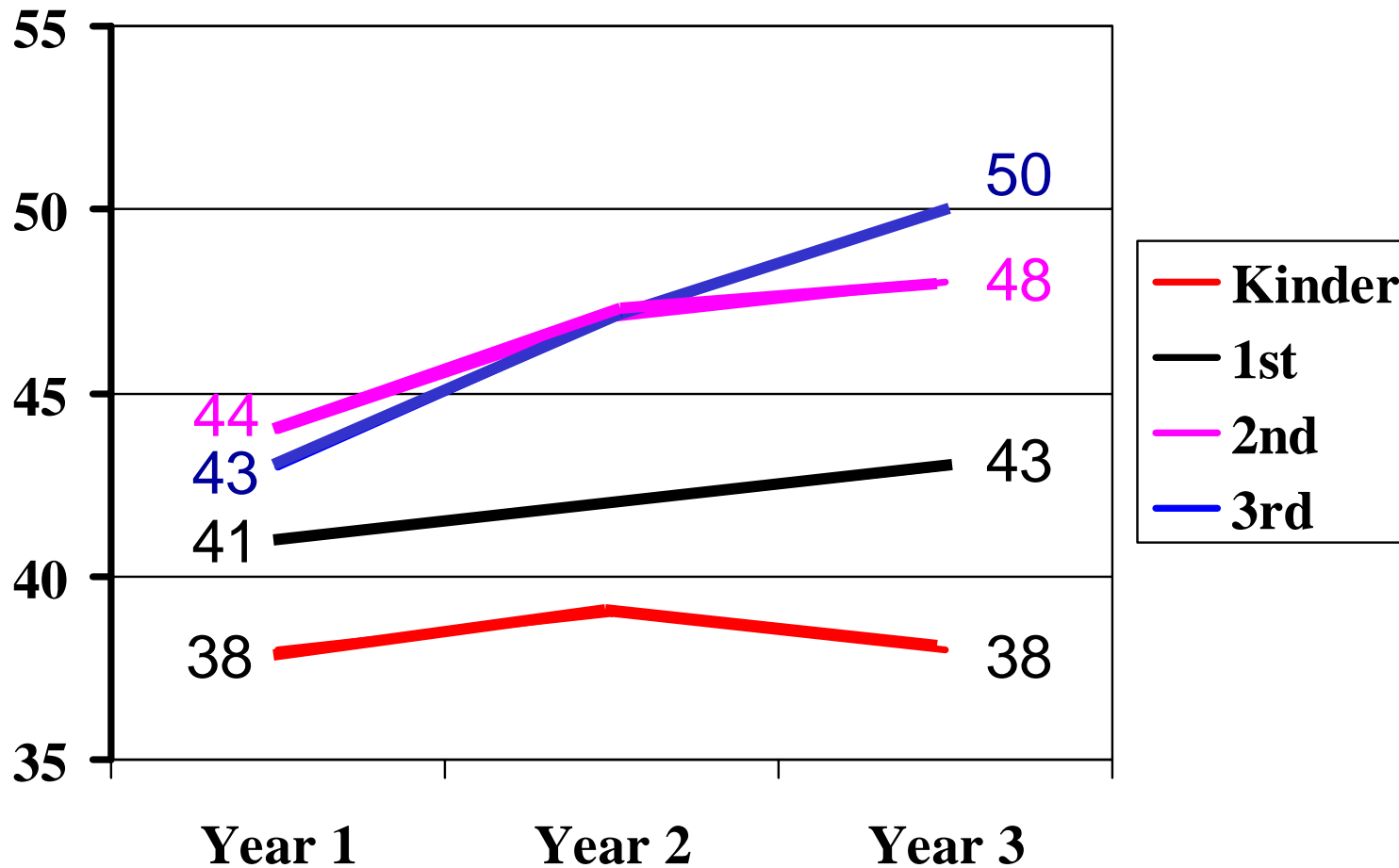
2. Examining differences in performance across schools for purposes of planning and implementing differentiated support and oversight

Year to Year changes in performance on a combined measure of PA, Letter knowledge, and decoding

Kindergarten End of year

Year to Year changes in measure of oral vocabulary





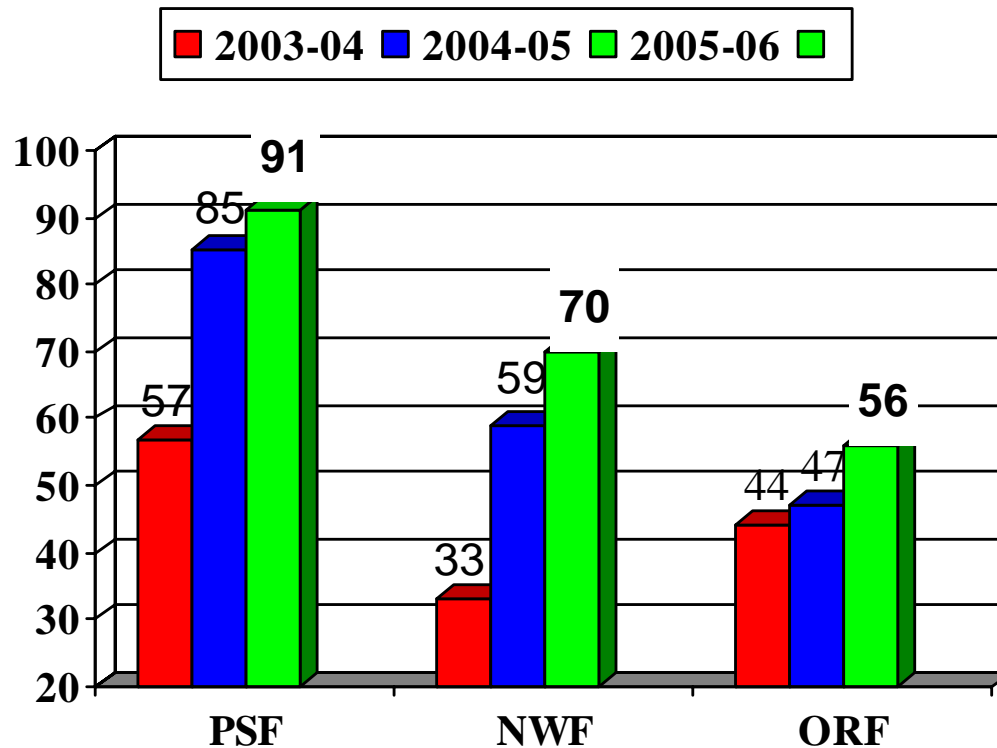
Year to Year improvement in % of students at “grade level” in oral vocabulary in grades Kindergarten through Third

Other patterns that might be observed, and that would have clear implications for focus and professional development

1st Grade growth in decoding >> growth in Fluency

2nd Grade growth in fluency >> growth in Reading Comprehension

3rd grade -- 60% of students are at grade level in reading fluency, but only 45% are at grade level in reading comprehension



Year to Year changes in performance on the PSF, NWF, and ORF tests on DIBELS at the end of First Grade

Are they really doing that much better in phonemic awareness and phonemic decoding than in reading fluency?

When comparing performance across measures, it is very important to know that you are using equivalent standards for “grade level” performance on each measure - setting bar at the same height

Percentile ranks derived from DIBELS norms for end of year targets in PSF, NWF, and ORF at end of first grade

PSF = 13th percentile

NWF = 29th percentile

ORF = 35th percentile

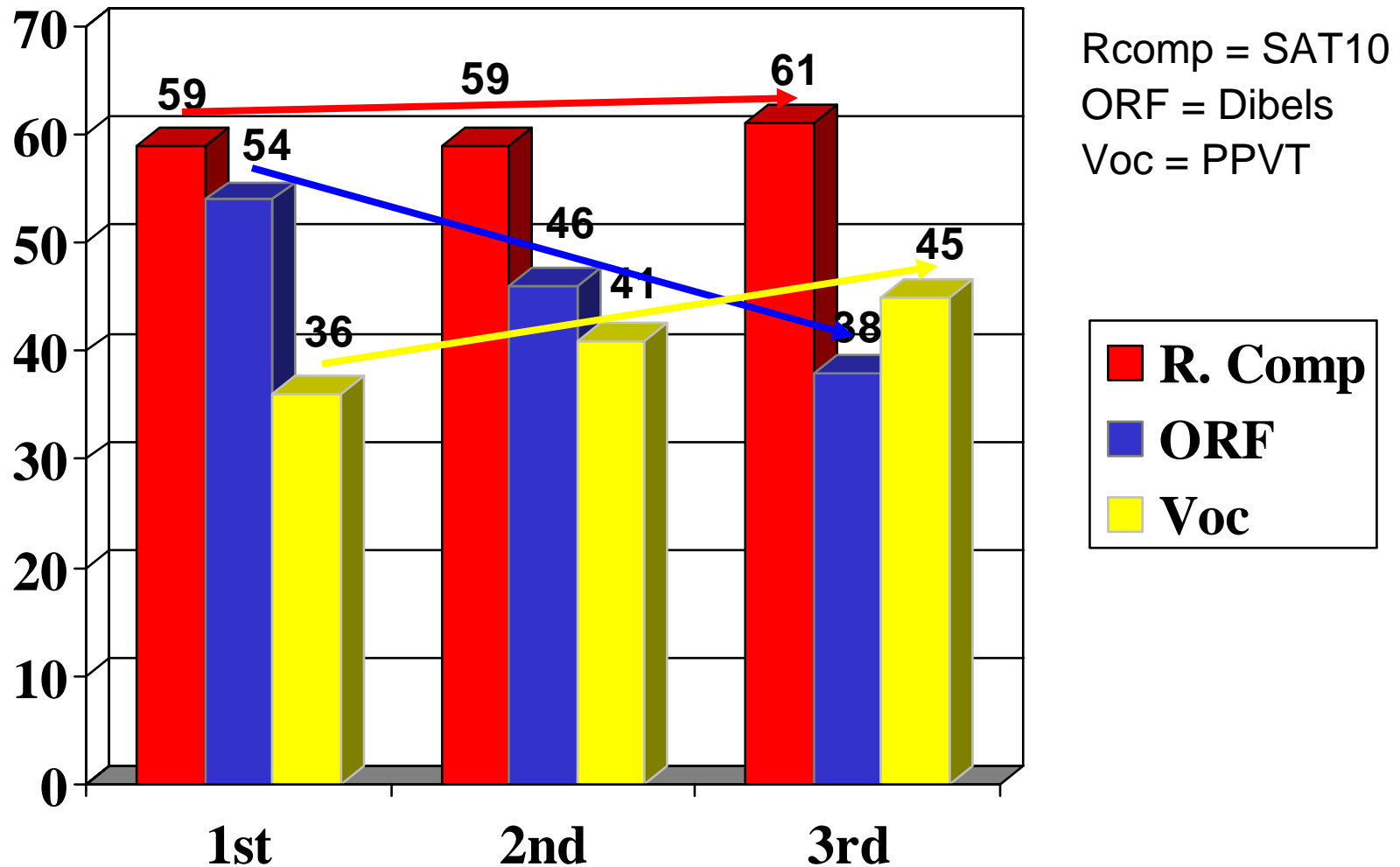
Good, et al., (2002).
System-wide Percentile
Ranks for DIBELS
Benchmark Assessment
(Tech. Report 9).
University of Oregon.

1. Examining state level trends across measures for purposes of planning state wide professional development and support

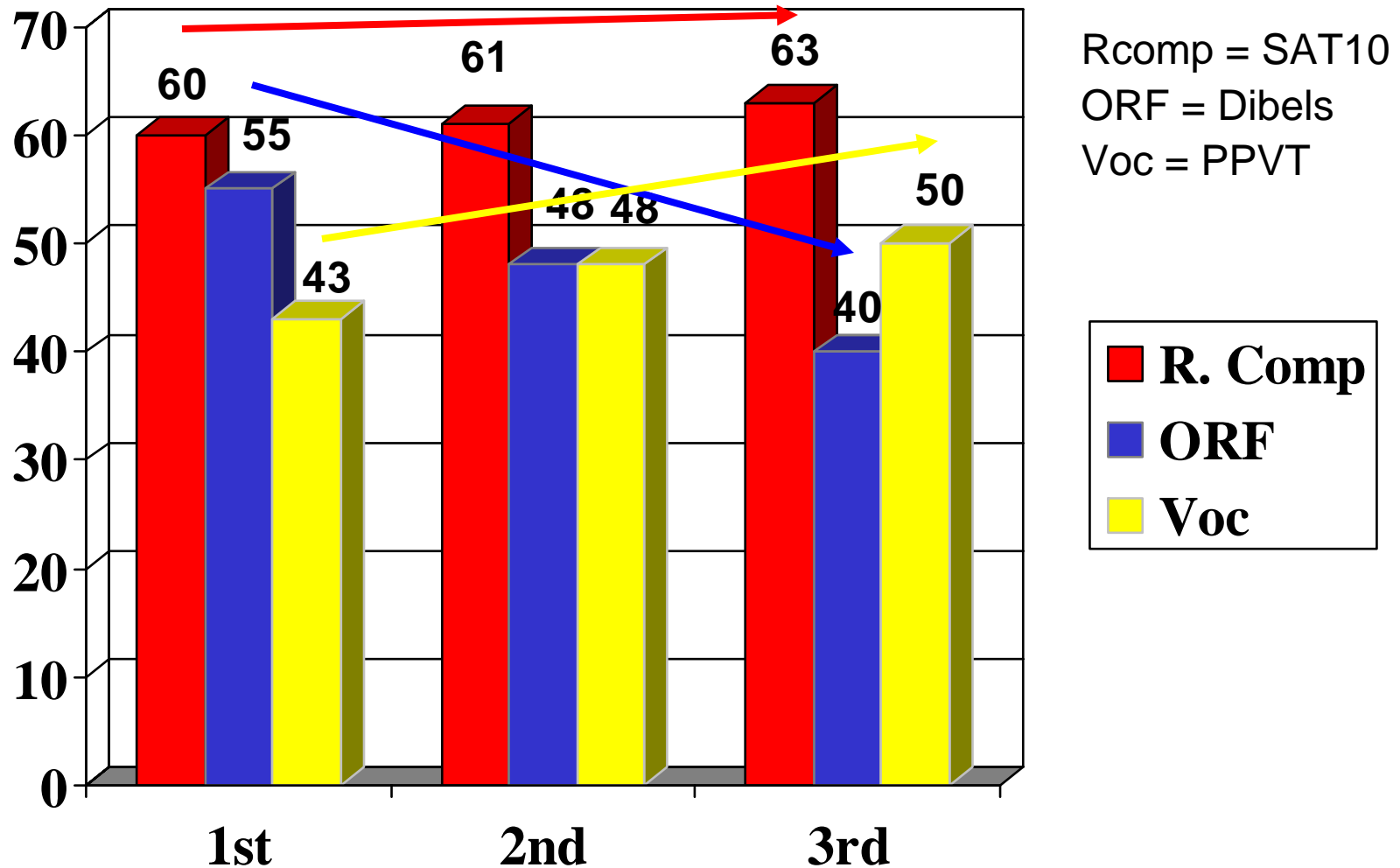
Looking at year to year improvements on different measures as well as relative levels of performance on different measures

Examining performance on different measures across grade levels

If progress monitoring measures are available, examining growth within a year at different grade levels – looking for grade level weaknesses



Percent of Students at “grade level” in Reading Comprehension, Oral Reading Fluency, and Oral Vocabulary in grades 1-3, 584 schools from 3 cohorts—1st through 3rd year schools



Percent of Students at “grade level” in Reading Comprehension, Oral Reading Fluency, and Oral Vocabulary in grades 1-3 – 318 schools after three years

There are two possible measurement problems associated with this comparison

The DIBELS end of year targets, because of the way they were developed, correspond to different percentile ranks across grades

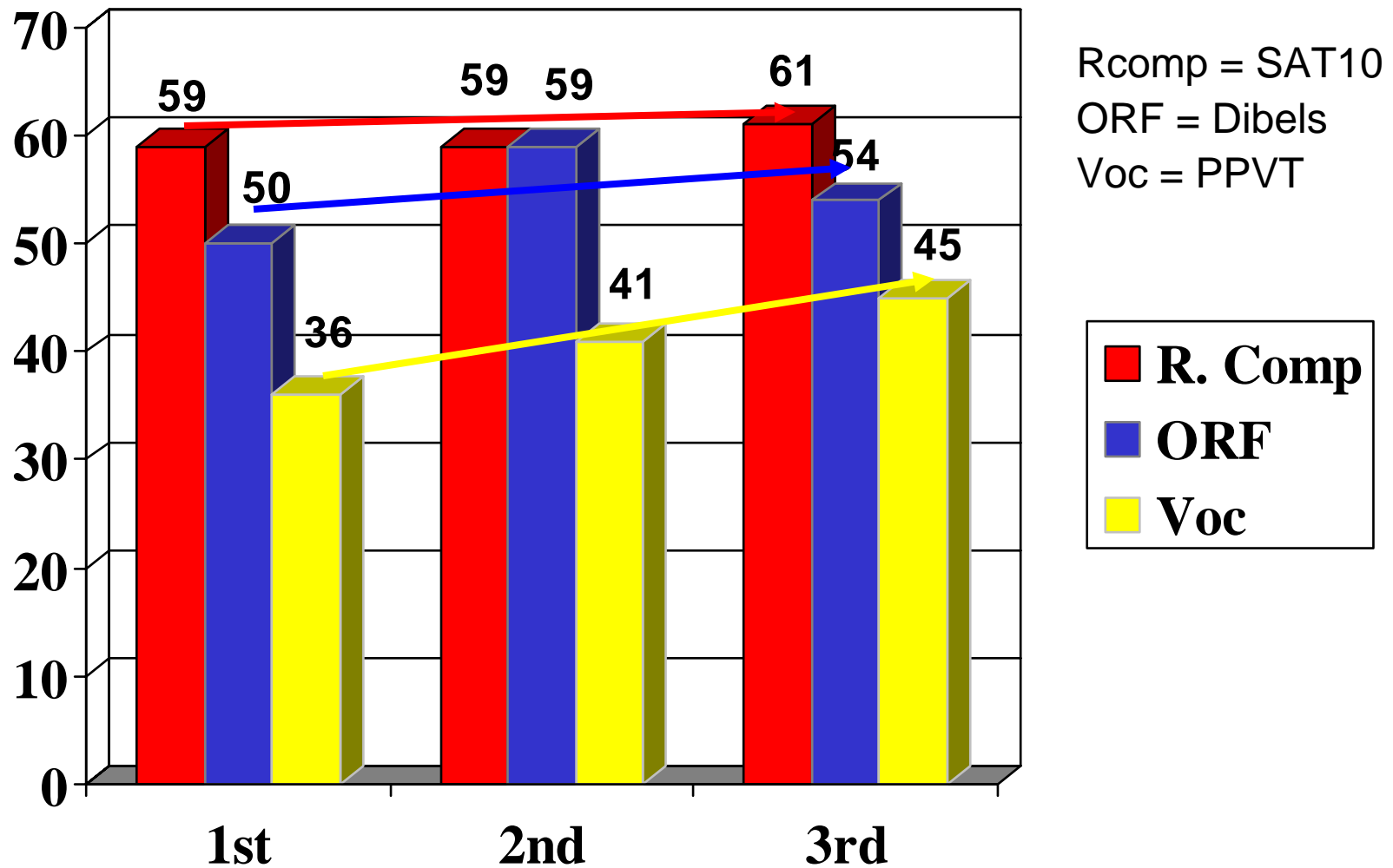
1st grade = 35th percentile

2nd grade = 39th percentile

3rd grade = 40th percentile

The DIBELS norms seem to set a higher standard at the 40th percentile than other norms—particularly at 2nd and 3rd grade

	<u>DIBELS norms</u>	<u>H&T norms</u>	<u>Aimsweb norms</u>
1 st	45wpm	43wpm	45wpm
2 nd	91wpm	79wpm	85wpm
3 rd	110wpm	96wpm	102wpm



Percent of Students at “grade level” in RC, ORF, and Vocab in grades 1-3 using Hasbrook and Tindal ORF norms and 40th percentile as goal

1. Examining state level trends across measures for purposes of planning state wide professional development and support

Looking at year to year improvements on different measures as well as relative levels of performance on different measures

Examining performance on different measures across grade levels

If progress monitoring measures are available, examining growth within a year at different grade levels – looking for grade level weaknesses

Summary of Instructional Effects in Grades K-3

	% "Intensive"	% "on grade level"
Kindergarten	reduced 4.3	increased 26.1
1 st Grade	<u>increased 6.0</u>	<u>decreased 20.2</u>
2 nd Grade	<u>increased 17.4</u>	<u>decreased 10.6</u>
3 rd Grade	decreased 7.1	increased 2.8

Some outcomes in first grade
that led us to be worried about
the quality and power of our
“differentiated instruction”

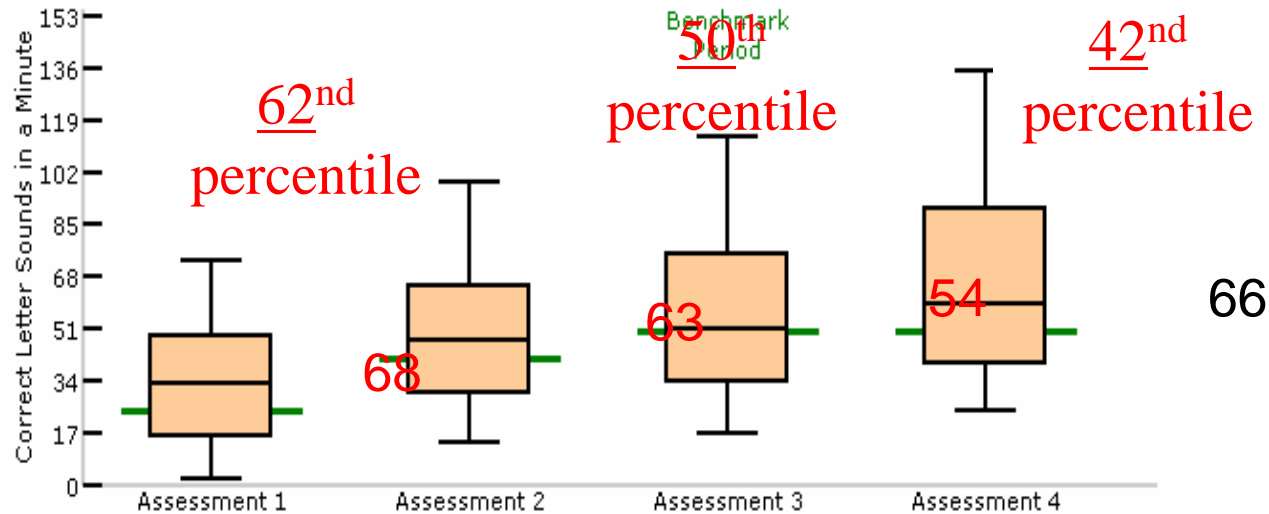
Progress Monitoring & Reporting Network: Reports

State Progress Report

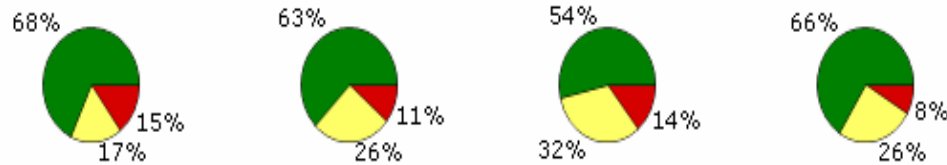
District: RF Only
School: RF Only
Class: All

Grade: 1st Grade
Probe: Nonsense Word Fluency
Student: All

Assessment: 4
School Year: 2005-2006
Date/Time: 8/19/2006 2:01 PM



# of Students	58895	58898	59059	58923
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Select a District:

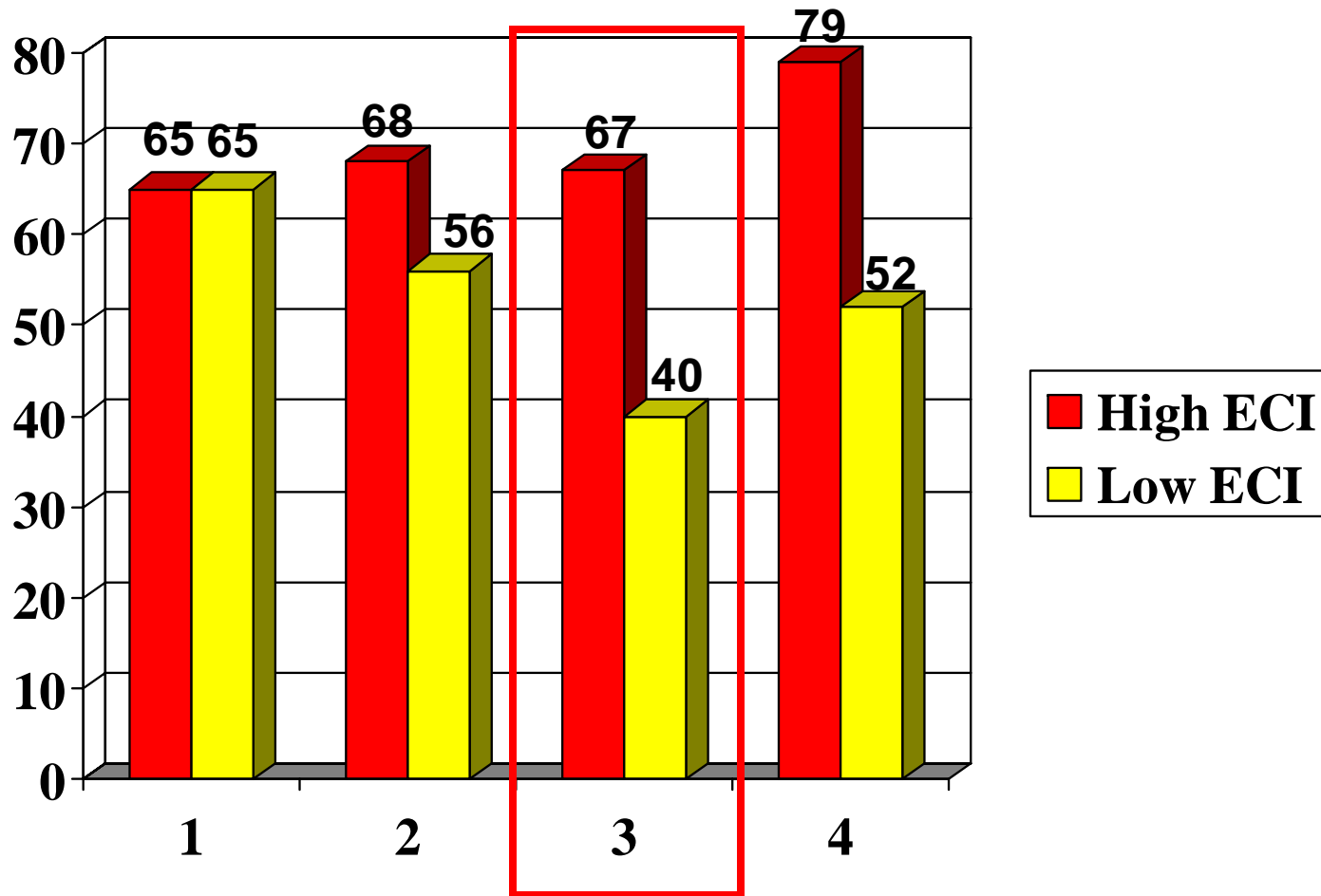
[Show Grade Summary Report](#)

Looking at growth in phonemic decoding in 20 RF schools that had different success in meeting targets for Oral Reading Fluency

10 high performing schools
10 low performing schools

Similar scores on NWF at beginning of the year

Percentage of students meeting benchmarks in 1st Grade NWF for High ECI and Low ECI Reading First Schools





Guidance Document for Florida Reading First Schools

Differentiated Reading Instruction: Small Group Alternative Lesson Structures for *All* Students



Marcia Kosanovich, Karen Ladinsky, Luanne Nelson, Joseph Torgesen

Download at:

<http://www.fcrr.org/assessment/pdf/smallGroupAlternativeLessonStructures.pdf>

Or, just go to the FCRR website (www.fcrr.org) and its listed on the home page under the new stuff

Using Reading outcome data to make decisions about district and state focus to improve school performance

Two kinds of analysis

1. Examining trends across measures for purposes of planning professional development and support

2. Examining differences in performance across schools for purposes of planning and implementing differentiated support

There are at least three important ways to examine school performance in RF schools

Year to year changes in % of students at “grade level” and % of students at “high risk”

Absolute levels of performance, in terms of % of students at grade level and % of students at “high risk”

“Value added” analysis that takes into consideration the “degree of difficulty” as indexed by student demographics

Identifying “Focus Schools” in Cohorts 1

Cohort 1

- YYGL-13** Compares % at grade level in Year 1 with % at Grade Level in Year 3 – positive numbers mean improvement
- YYHR-13** Compares % at High Risk in Year 1 with % at High Risk in Year 3 – positive numbers mean improvement

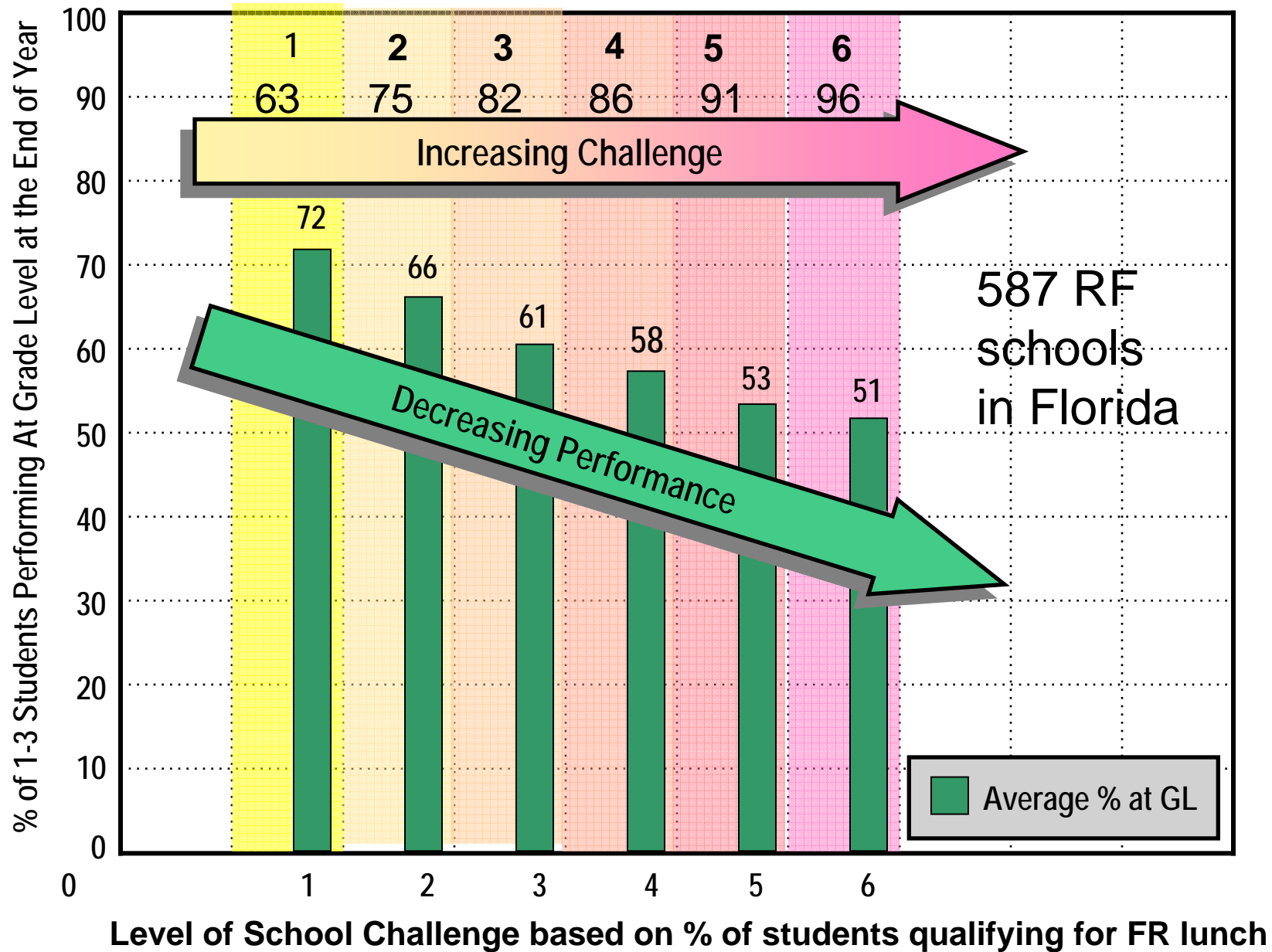
Identifying “Focus Schools” in Cohorts 1

Cohort 1

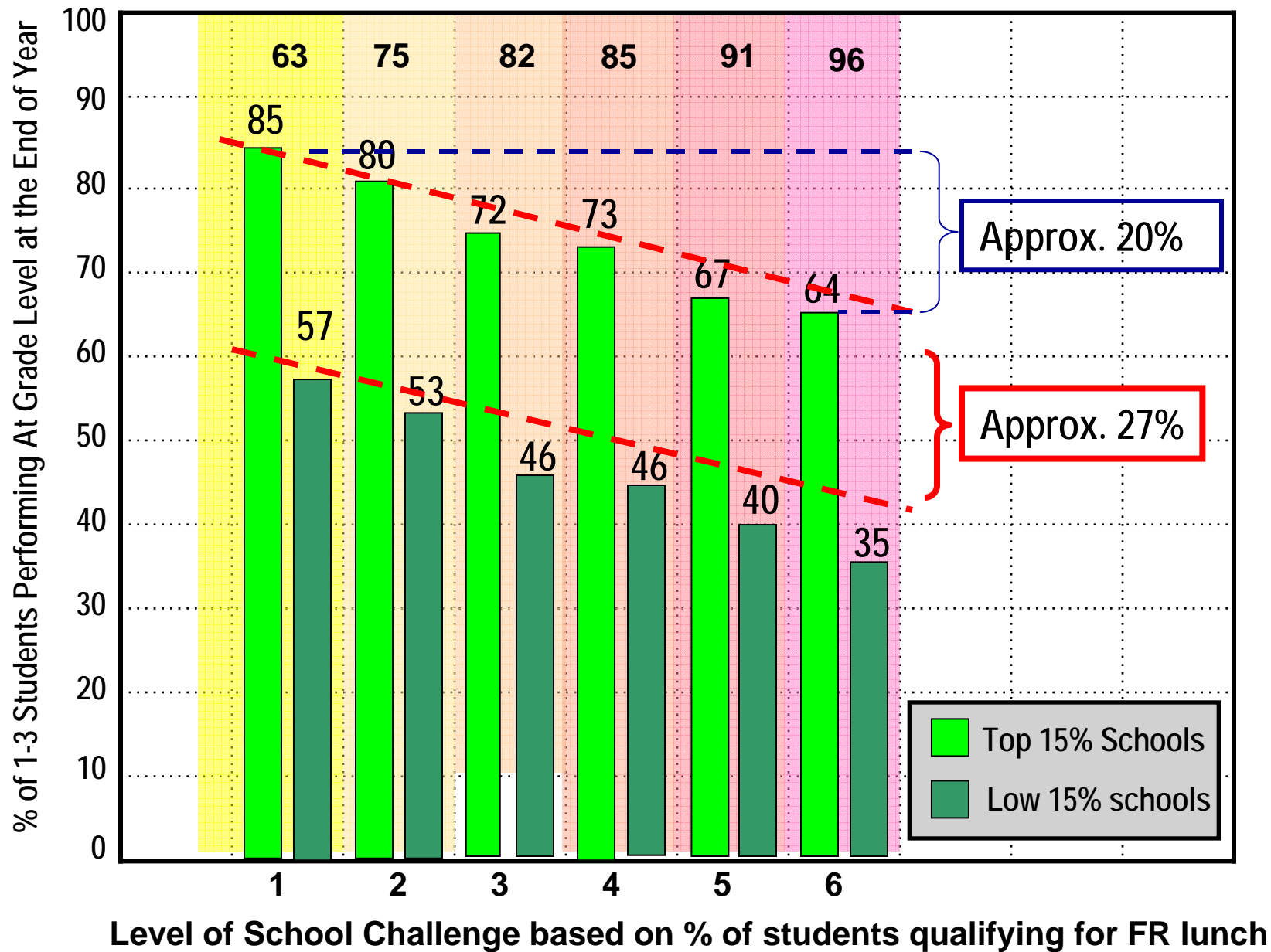
	Average	Number with 0 or less
YYGL-13-K	15.50	35
YYGL-13-1	1.40	148
YYGL-13-2	5.12	98
YYGL-13-3	9.21	46
YYGL-13-C	5.32	72
YYHR-13-K	10.10	46
YYHR-13-1	4.59	96
YYHR-13-2	4.83	79
YYHR-13-3	7.41	46
YYHR-13-C	5.73	43

Number of schools with scores greater than zero on both indices = 239, or 75% - 79 “focus schools”

Relationship of “school challenge” to student performance



The Adult Learning and Performance Gap



One possible way to identify schools as candidates for extra support

Not making adequate year to improvements in % of students at “grade level” and reductions in % of students at “High risk”

Seriously underperforming when student demographics are taken into account

Questions/Discussion