South Carolina Department of Education

Together, we can.

Response to Intervention for Classroom Teachers in Grades 1-5:

Continuity of general education and special education services to benefit students

RtI and Assessment

- Universal Screening
- Progress Monitoring
- Formative and Diagnostic Assessments
- RtI Processes

Issues overview

- Purposes of different types of assessments
- Reliability
- Validity
- RtI processes
- An example of a systems approach to RtI

Assessment Instrument:	Helps to Determine:
• Universal Screening	• Who needs extra help?
• Formative and Diagnostic Assessments	• Help with what? What kind of help?
• Progress Monitoring	• How is the child responding to instruction?

Different Purposes of Assessments in RtI

Universal Screening

"The main purpose of a screening instrument is to identify students whose performance on the measure warrants further investigation."

National Research Center on Learning Disabilities

Universal Screening

- Does not directly result in diagnosis
- Due to measurement error, it is important to cast a rather wide net to identify potentially at-risk students

National Research Center on Learning Disabilities

Expect Error

Because screening does not directly result in diagnosis, it is better for a screening instrument to err on the side of false positives (students identified as at risk, who through more intense assessment are found to have been misidentified) than on the side of false negatives (students not identified through screening who later turn out to be at risk). Therefore, a wider net with which to capture potentially at-risk students can be cast with screening measures.

National Research Center on Learning Disabilities

Screening measures

- Should demonstrate high reliability (consistency or dependability)
- High predictive validity: able to predict which students are likely to experience difficulty learning

Screening measures should be reliable

Reliability

- Is the degree to which an instrument can be depended upon to provide consistent, dependable (repeatable) results
- Depends on error control: the instrument is constructed to control systematic error
- Various ways to estimate

Reliability Estimates

- Test-retest
- Parallel forms
- Inter-rater

Screening measures should have high validity

Different types of validity

- **Construct validity**
- **Predictive validity**
- Internal Validity
- External Validity
- Conclusion validity

Screening measures should have high validity

Different types of Validity

- Construct Validity: Overall, how well does a particular instrument measure the construct (or idea) that it says it is measuring?
  - How do you determine if someone knows how to swim? Ride a bike? Add or subtract? Read?

Screening measures should have high validity

Different types of Validity

- Predictive Validity: The ability of an instrument to predict something it should theoretically be able to predict
  - Fairly accurate in identifying at-risk students

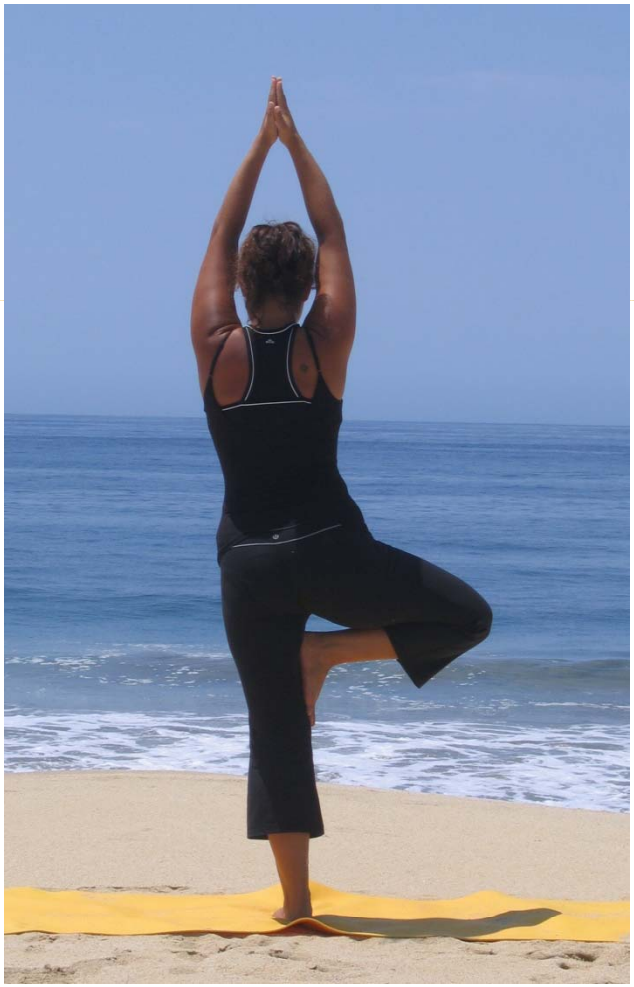
- Universal screens should meet the additional criteria of being quick to administer and score

By the end of the year, all SC teachers should be able to achieve and hold *Tree Pose* for at least 45 seconds.

THE STATE OF SOUTH CAROLINA HAS IMPLEMENTED A NEW LEARNER STANDARD FOR TEACHERS

Predictive Validity Example for New Learner Standard for Yoga

- By the end of the year, all teachers should be able to achieve and hold ***Tree Pose*** for at least 45 seconds.
  - No support
  - Controlled movement from start to finish
  - 3 tries



Universal Screening review

- Easy to administer
- Quick
- Fairly accurate in predicting who needs help to achieve the standard

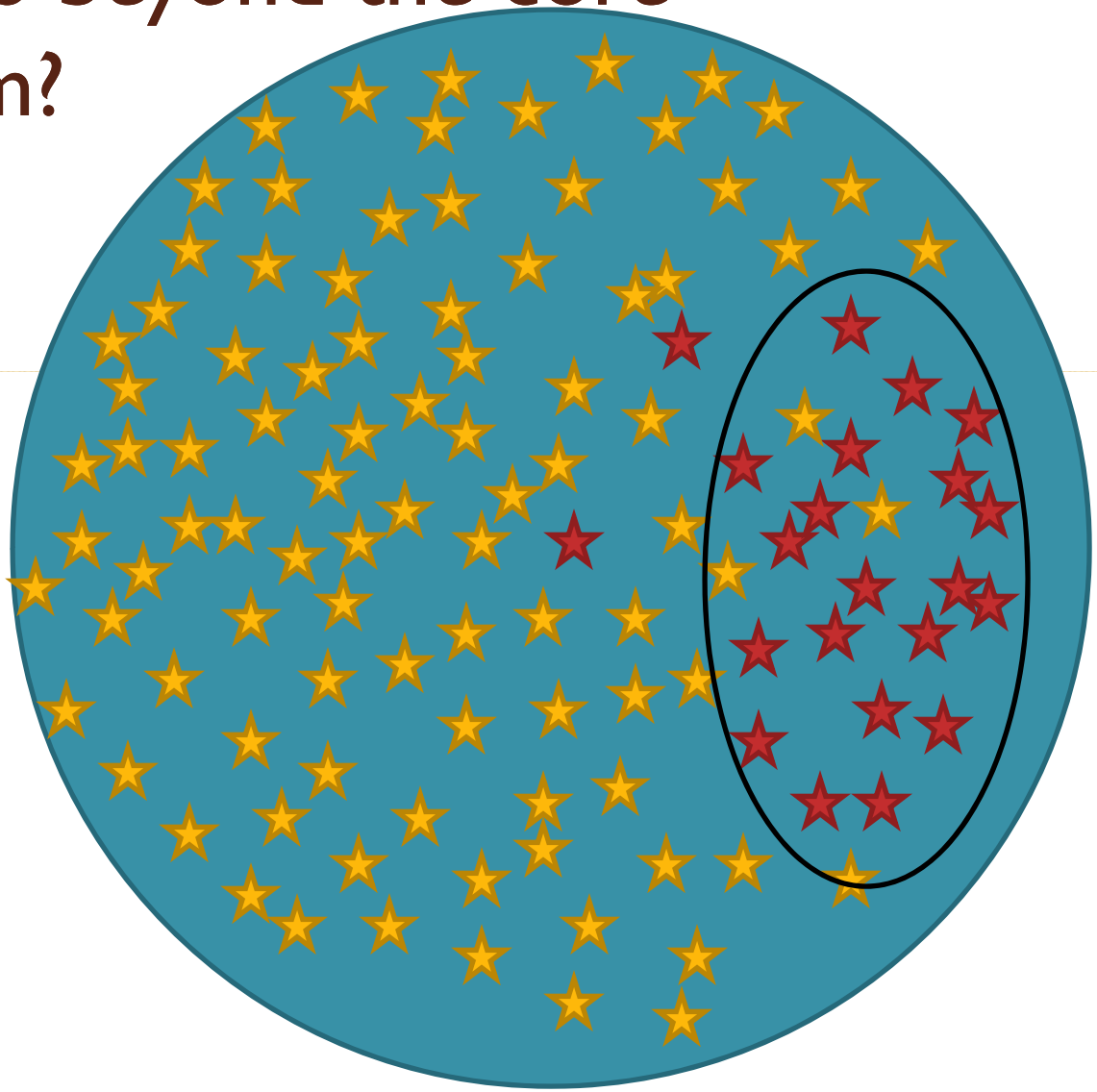
Which of these measures do you think has better predictive validity?

A. Ability to hop up and down on one foot for 45 seconds

B. Ability to stand on one foot for 45-60 seconds without losing balance

C. Ability to remember the name ***Tree Pose*** tomorrow

Universal Screening: Who probably needs help beyond the core curriculum?



Universal Screening: WHO?

Universal Screening: WHO?

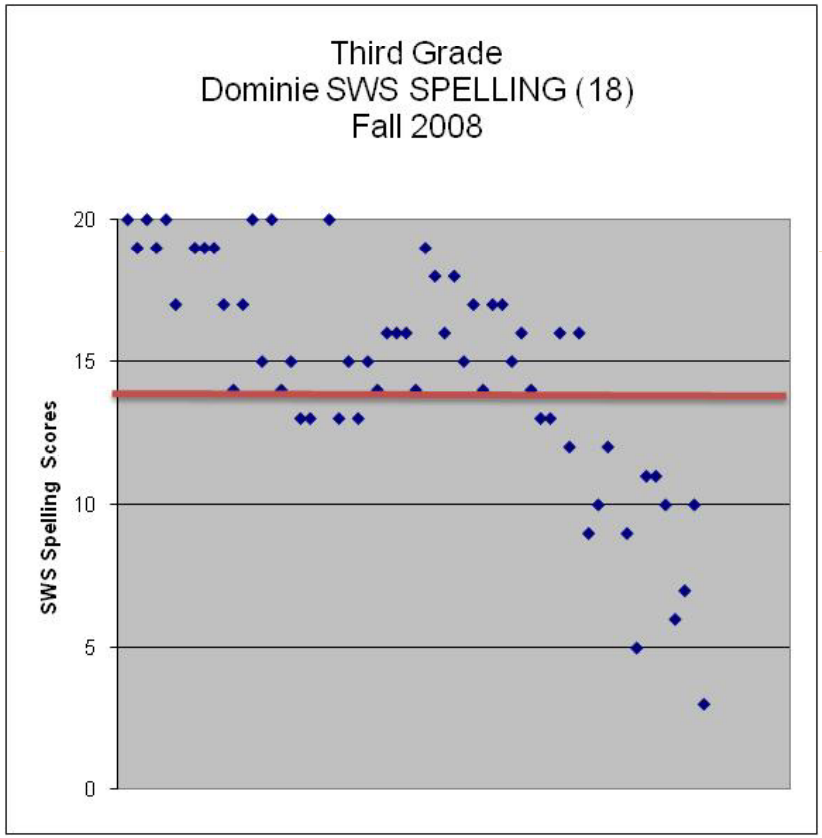
Beg. of Year

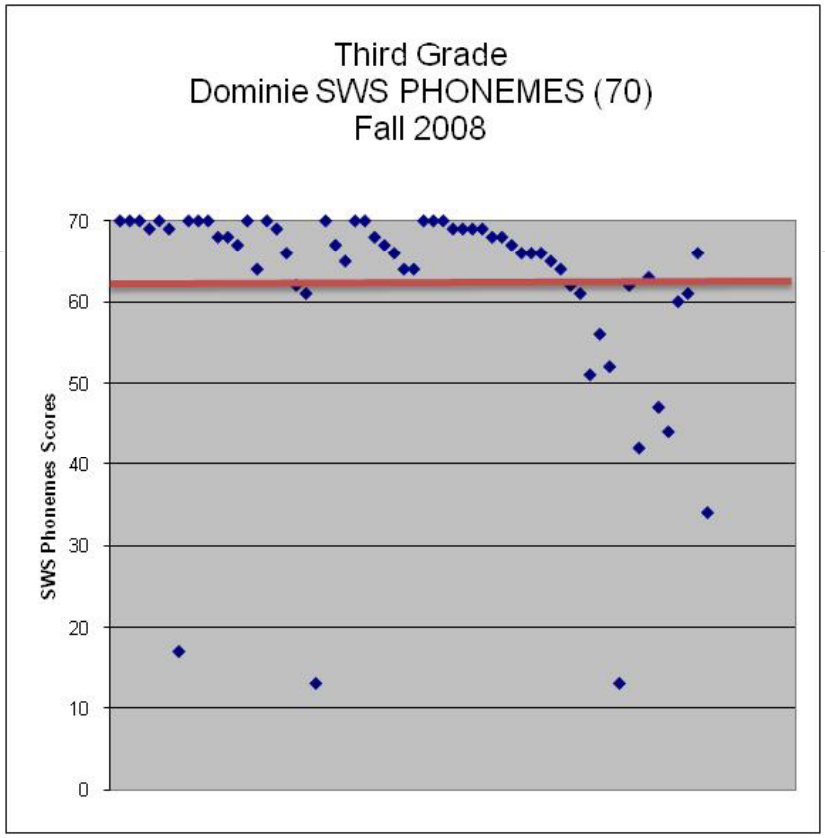
Mid. Of Year

SIT: School Intervention Team

- Analyzes data
  - At the school level
  - At the grade level
  - At the classroom level
- Uses U.S. data with other data sources and uses to manage (allocate) intervention resources and to match intensity of resources to level of need
- Uses data
  - to track change over time
  - To periodically reconfigure interventions and support to meet the changing needs of students

Who may need further screening?



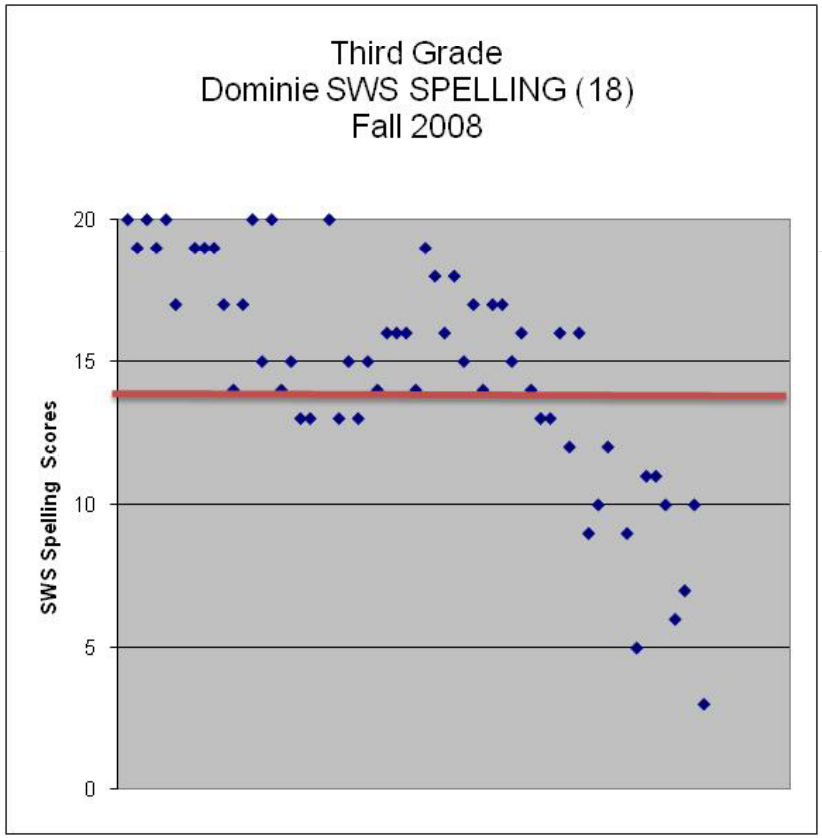


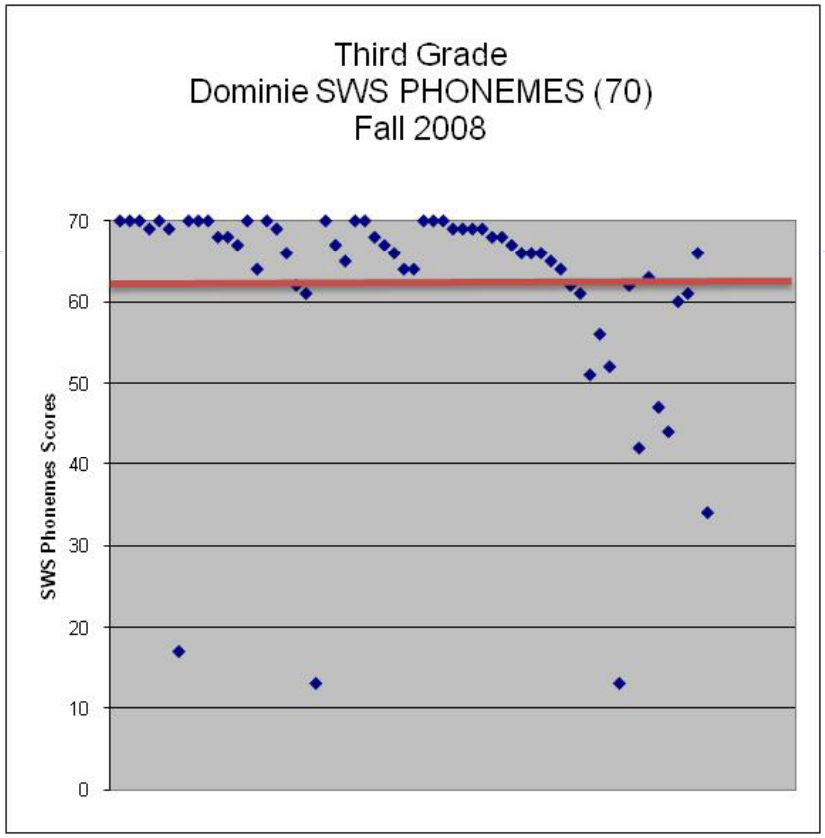
So now what?

"The main purpose of a screening instrument is to identify students whose performance on the measure warrants further investigation."

- So…we investigate further. For those students identified as likely to need additional assistance, we need to
  - Find out more about areas of strength and need
  - So we can figure out what is likely to help
  - So we know what to teach

Who may need further screening?





In a 3rd Grade with 61 Children further investigation for student below the 4th stanine using Dominie text reading levels

Lauren	3	18	68	14	11	4.0	97	75	3	AGL
Miles	3	22	68	14	9A	3.1	97	75	3	AGL
Ahvionne	3	21	66	14	9	3.0	97	75	3	AGL
Lexi	3	16	64	14	9A	3.1	98	75	3	AGL
Dylan	3	22	70	13	9A	3.1	94	100	3	AGL
Jenna	3	20	67	13	10	3.5	94	75	3	AGL
Robyn	3	15	66	13	9	3.0	93	75	3	AGL
Emily	3	9	65	13	9	3.0	95	100	3	AGL
Caleb	3	22	62	13	10A	3.7	98	88	3	AGL
Arviyance	3	18	61	13	8	2.5	97	100	3	NAI
Diamond	3	20	61	13	10A	3.7	97	97	3	AGL
Morgan	3	23	62	12	9	3.0	99	75	4	AGL
Matthew	3	20	52	12	8B	2.9	96	88	3	NAI
Anna	3	11	63	11	7A	2.1	94	75	3	NAI
Teanna	3	15	47	11	7A	2.1	94	75	3	NAI
Cristian	3	6	66	10	3B	1.3	93	80	3	NSI
Ryan	3	6	56	10	8B	2.9	94	88	3	NAI
Jacob	3	13	44	10	7	2.0	92	100	3	NSI
William	3	12	62	9	7B	2.3	91	88	3	NAI
Robyn	3	15	51	9	9	3.0	96	75	3	AGL
Kenley	3	4	61	7	4B	1.5	92	83	3	NSI
Ricky	3	5	60	6	6A	1.8	99	100	3	NSI
Santana	3	6	42	5	7B	2.3	91	75	3	NAI
DeMarcus	3	0	34	3	1B	0.6	100	100	3	NSI

Further investigation and instructional design must move beyond predictive validity

- Construct Validity (how well we translate an idea into practice):
  - ***Measurement:*** How well does a particular instrument measure whatever it is that it says it is measuring?
  - ***Instructional Design***: How well does instruction help students to learn whatever it is we think they need to learn to help them to accelerate reading progress?

From the SC RtI Guidance Manual:

- An individual screening measure should not be used in isolation to identify at-risk students
- The use of multiple sources of data (e.g., teacher observations or additional grade-, school- and district-level assessments) improves the reliability of decision-making regarding the identification of at-risk students

http://ed.sc.gov/agency/Standards-and-Learning/Academic-Standards/old/Instructional-Promising-Practices/documents/ResponsetoIntervention.html

Further investigation to reveal areas of strength and need

- Comprehension
- Fluency
- Vocabulary (including concept vocabulary, technical vocabulary, and high frequency vocabulary)
- Word analysis skills (phonics and phonemic awareness)

Further investigation can be accomplished in several ways

- Assessment or observation of students actually doing what it is we are trying to teach them to do determines areas of strength and need:
  - Student work samples
  - Running records of text reading
  - Fluency measures (rate, expression, phrasing)
  - Comprehension measures (including retellings, summaries, written responses)
  - Writing samples

Many ways to assess reading on continuous text

- DRA
- Observation Survey
- Dominie
- Running records
- Qualitative Reading Inventory 4
- Critical Reading Inventory
- Retelling, summarizing, discussing
- Reading Assessment: A Primer for Teachers and Coaches (Caldwell, 2008)
- Understanding and Using Reading Assessment K-12 (Afflerbach, 2007)

Using Student Achievement Data

USDOE: What Works Clearinghouse

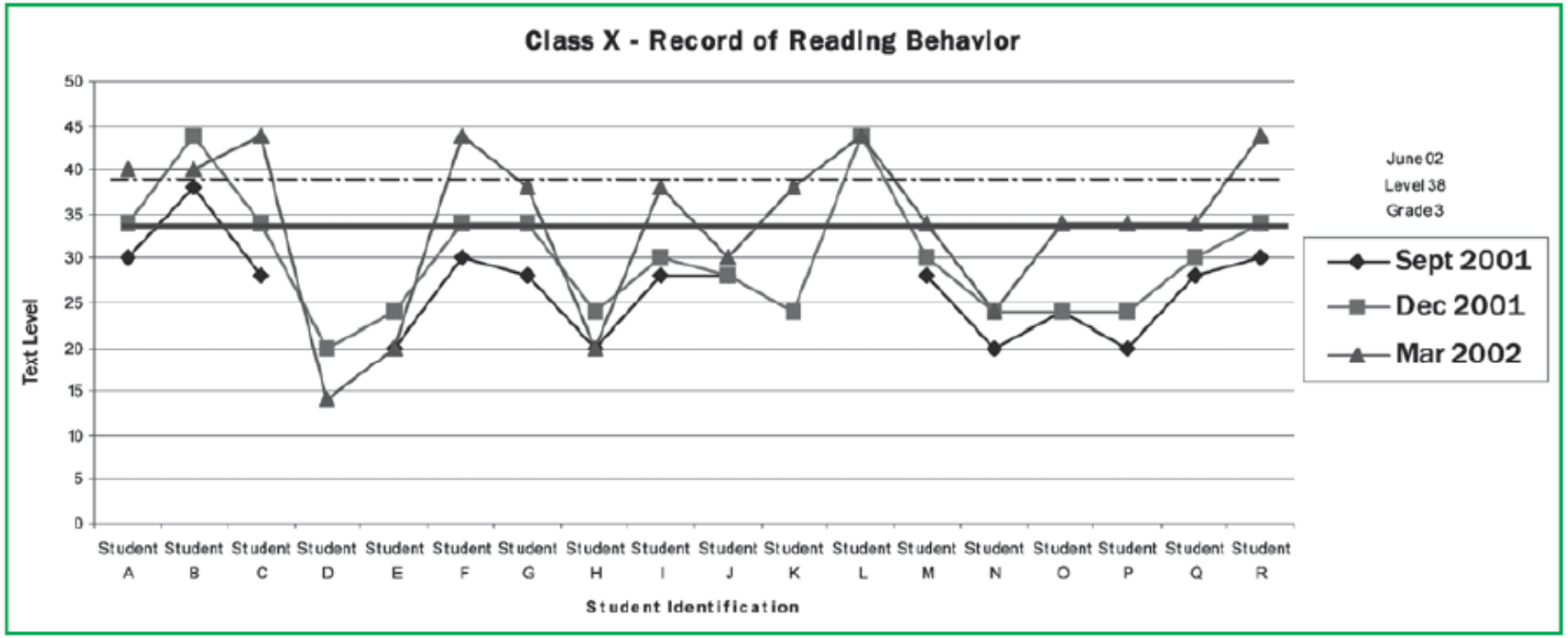
Examples of classroom and other data

- Curriculum-based unit tests
- Class projects
- Classwork and homework
- Attendance records
- Records from parent meetings and phone calls
- Classroom behavior charts
- Individualized educational plans (IEPs)
- Prior data from students' cumulative folders

Develop ways to track progress over time

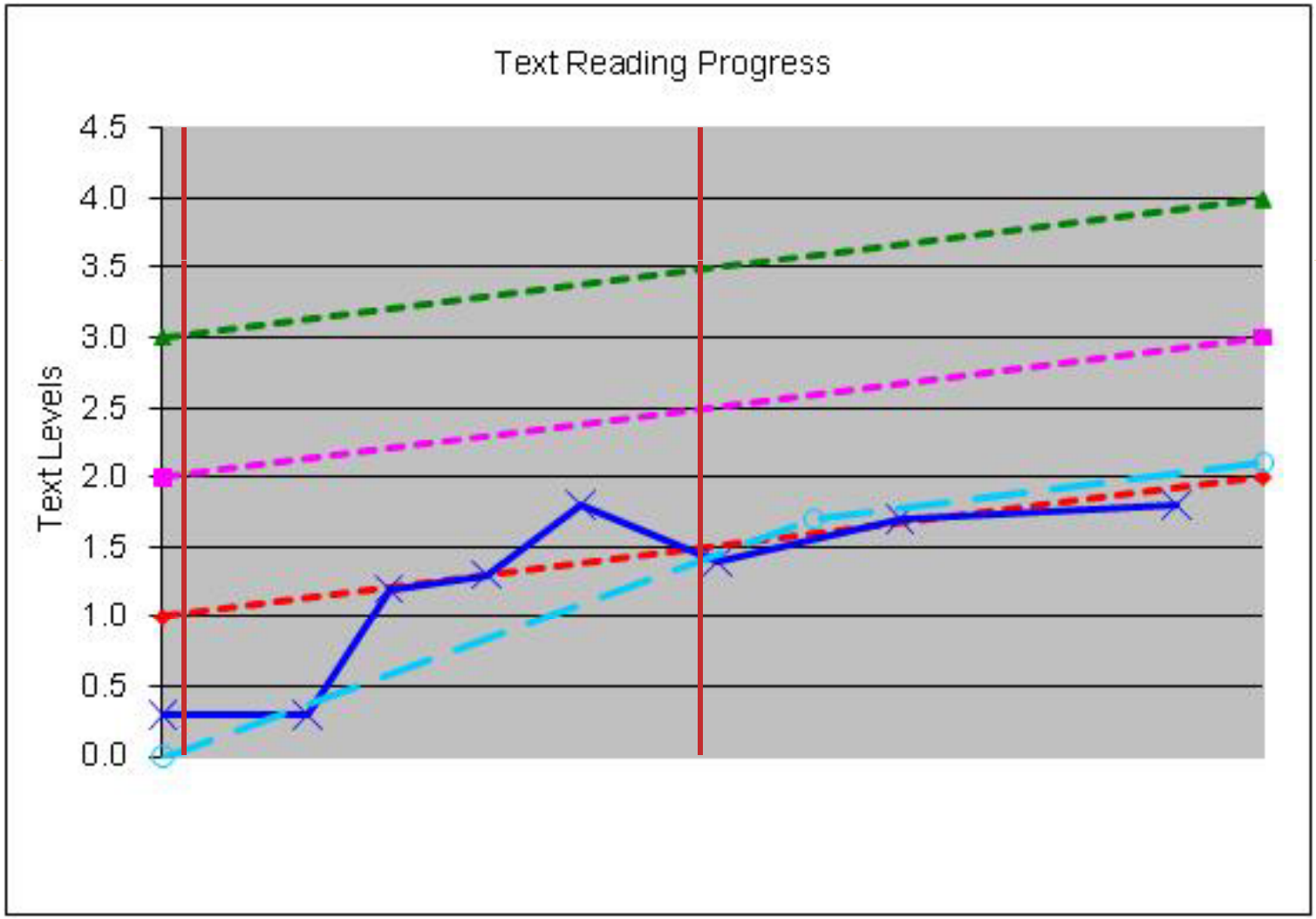
Using Student Achievement Data
USDOE: What Works Clearinghouse

Figure 2. Example of classroom running records performance at King Elementary School

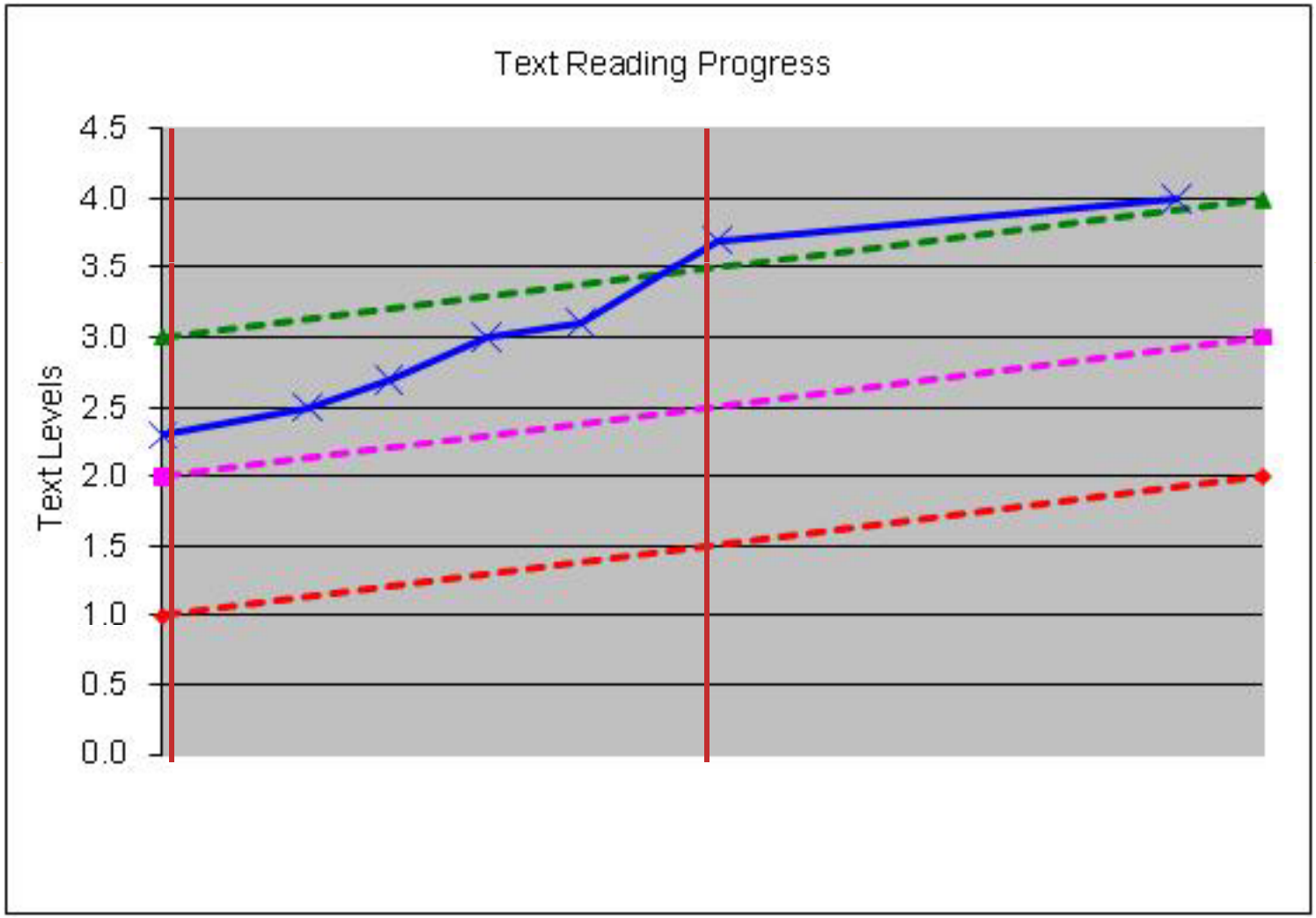


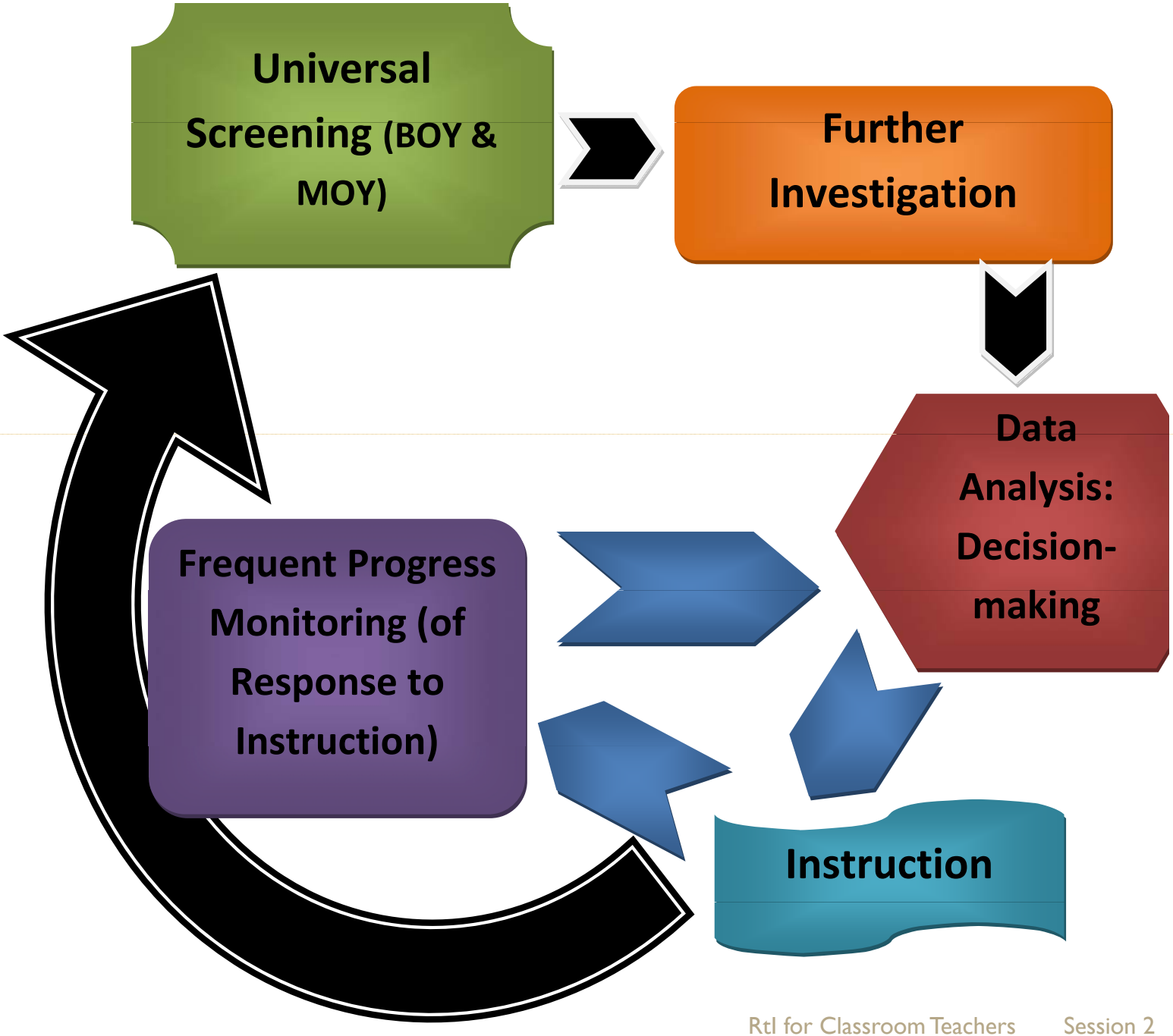
Source: Supovitz and Klein (2003).

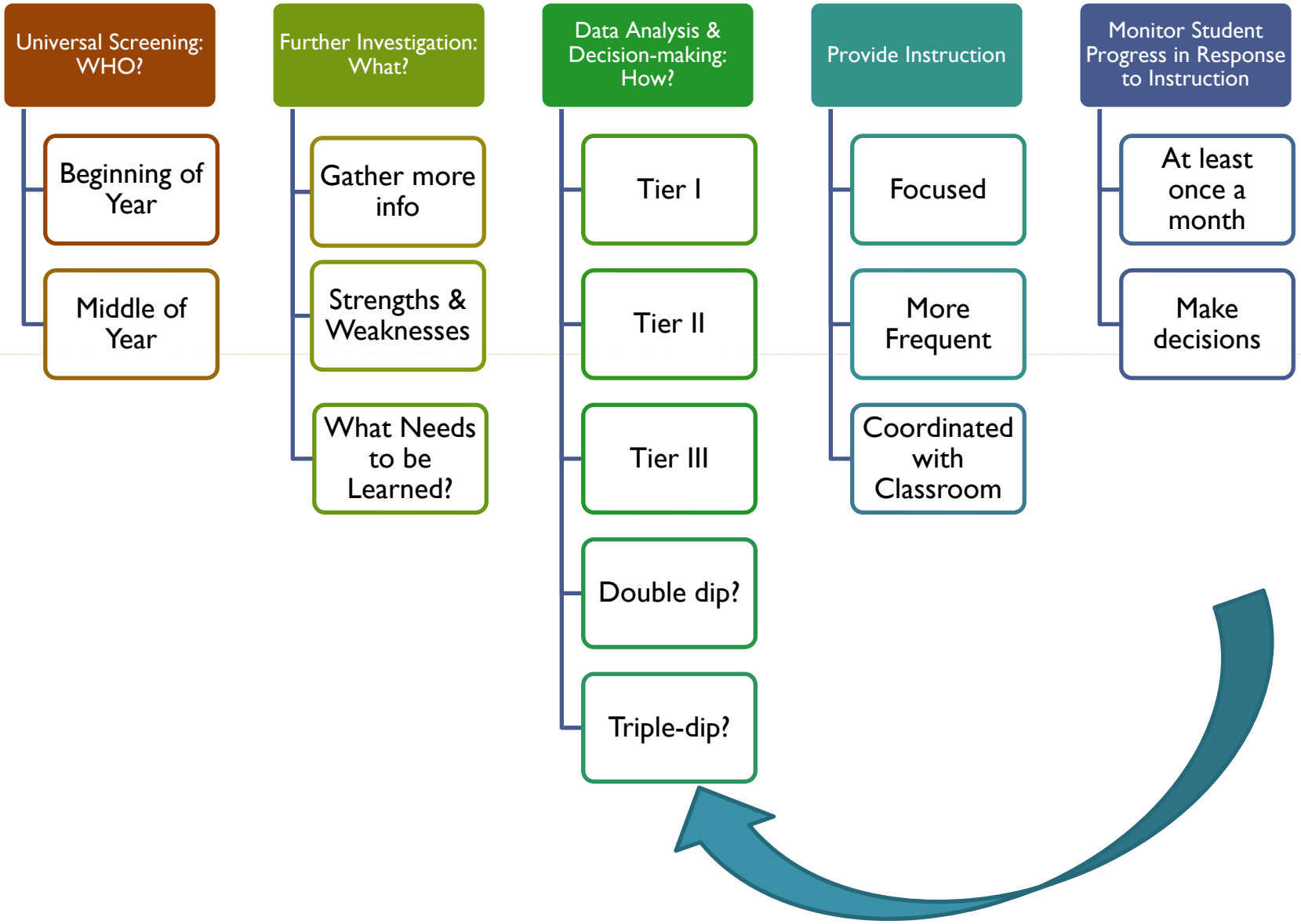
Text reading progress chart for a first grader who received intervention



Text reading progress chart for a third grader who received intervention




Universal Screening (BOY & MOY)
Further Investigation
Data Analysis: Decision-making
Instruction
Frequent Progress Monitoring (of Response to Instruction)


Universal Screening: WHO?
Beginning of Year
Middle of Year
Further Investigation: What?
Gather more info
Strengths & Weaknesses
What Needs to be Learned?
Data Analysis & Decision-making: How?
Tier I
Tier II
Tier III
Double dip?
Triple-dip?
Provide Instruction
Focused
More Frequent
Coordinated with Classroom
Monitor Student Progress in Response to Instruction
At least once a month
Make decisions

Progress Monitoring

- Curriculum-based measures
  - (Remember construct validity?)
- Should show children's *responses to the instruction that has been provided*
- IF instruction has been focused on spelling patterns, then a test of this is valid to show a child's response to that instruction

Progress Monitoring

- IF instruction has been focused on decoding nonsense words, then a test of this is valid to show a child's response to that instruction.
- IF instruction has been focused on reading and problem-solving in connected text with fluency and comprehension, then measures of text reading are valid to show a child's response to that instruction

Assessment Instrument:	Helps to Determine:
• Universal Screening	• Who needs extra help?
• Formative and Diagnostic Assessments	• Help with what? What kind of help?
• Progress Monitoring	• Curriculum-based: How is the child responding to instruction?

Different Purposes of Assessments in RtI

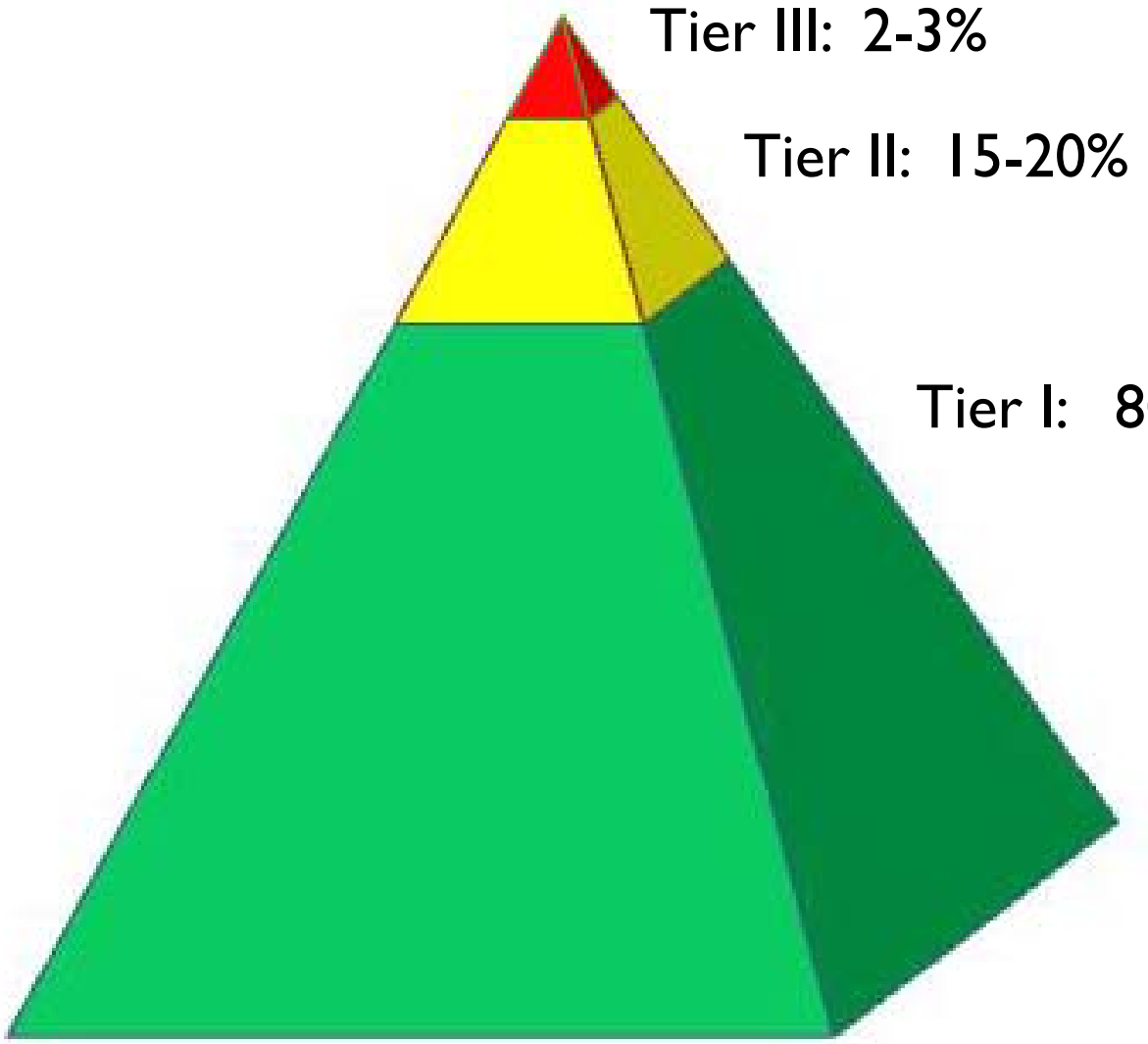
Assessment instruments for	Should have…	So it can help to determine:
• Universal Screening	• High Predictive Validity	• **Who** needs extra help?
• Formative and Diagnostic Assessments	• Construct Validity	• Help with what? **What** kind of help?
• Progress Monitoring	• Construct Validity	• How is the child responding to instruction?

Different Purposes of Assessments in RtI

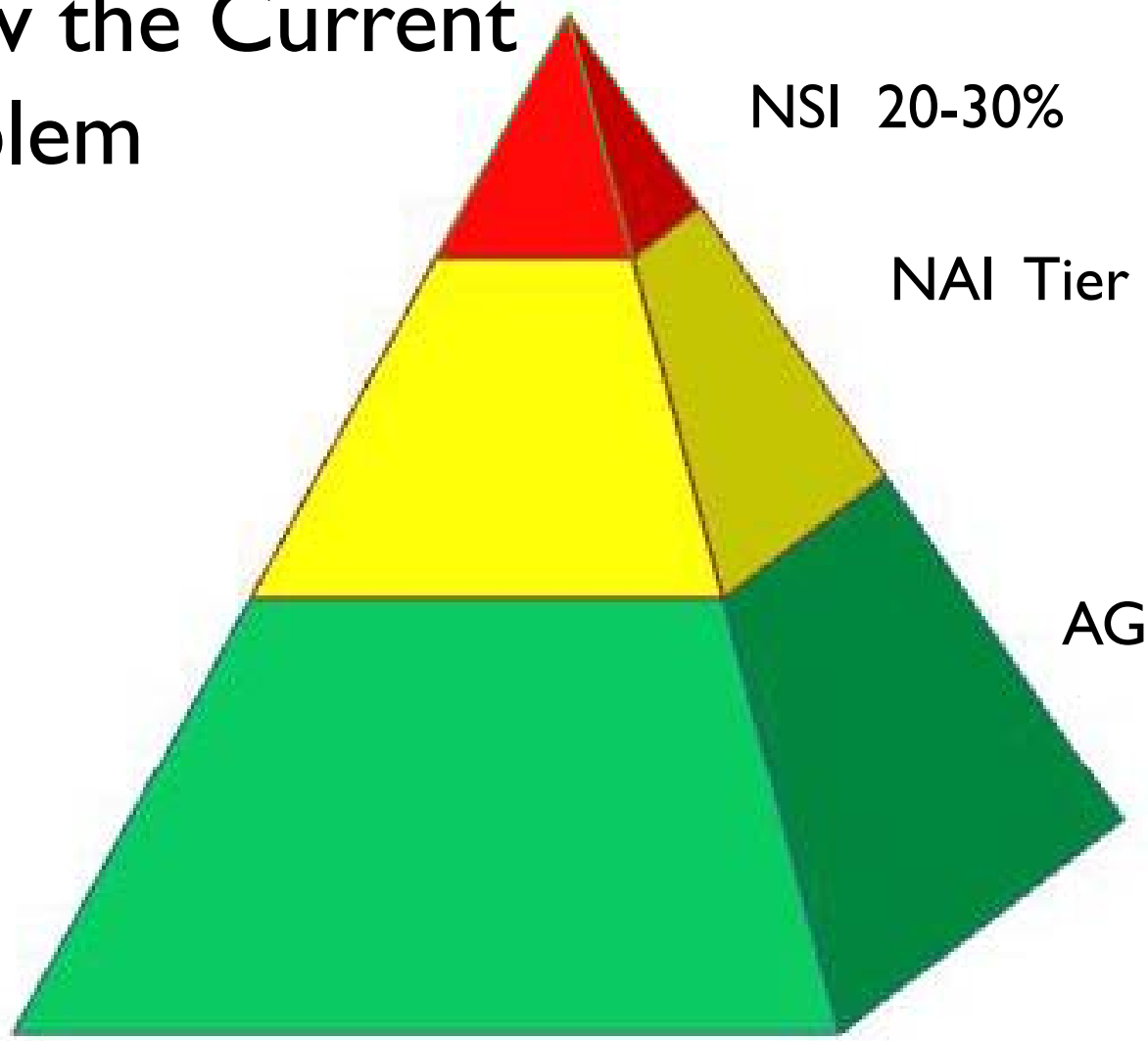
A few lessons from
SC Reading First

HOW ARE OTHERS MAKING RTI WORK?

Target Percentages



Real Percentages Show the Current Problem



Moving closer to the goal requires that we

- Continue to support and promote the learning of At or Above Grade Level (AGL) readers
- Intervene to accelerate progress for below grade level students
  - Move students less than one year below grade level (NAI) up to grade level
  - Move students more than one year below grade level (NSI) to less than one year below

Achieving change over time in SC Reading First Schools

- School Leadership Team lead the change process
- Literacy coach
- Uninterrupted literacy instruction (120 minutes)
  - Read Aloud
  - Sm. Grp. Guided Reading
  - Shared Reading
  - Ind. Reading

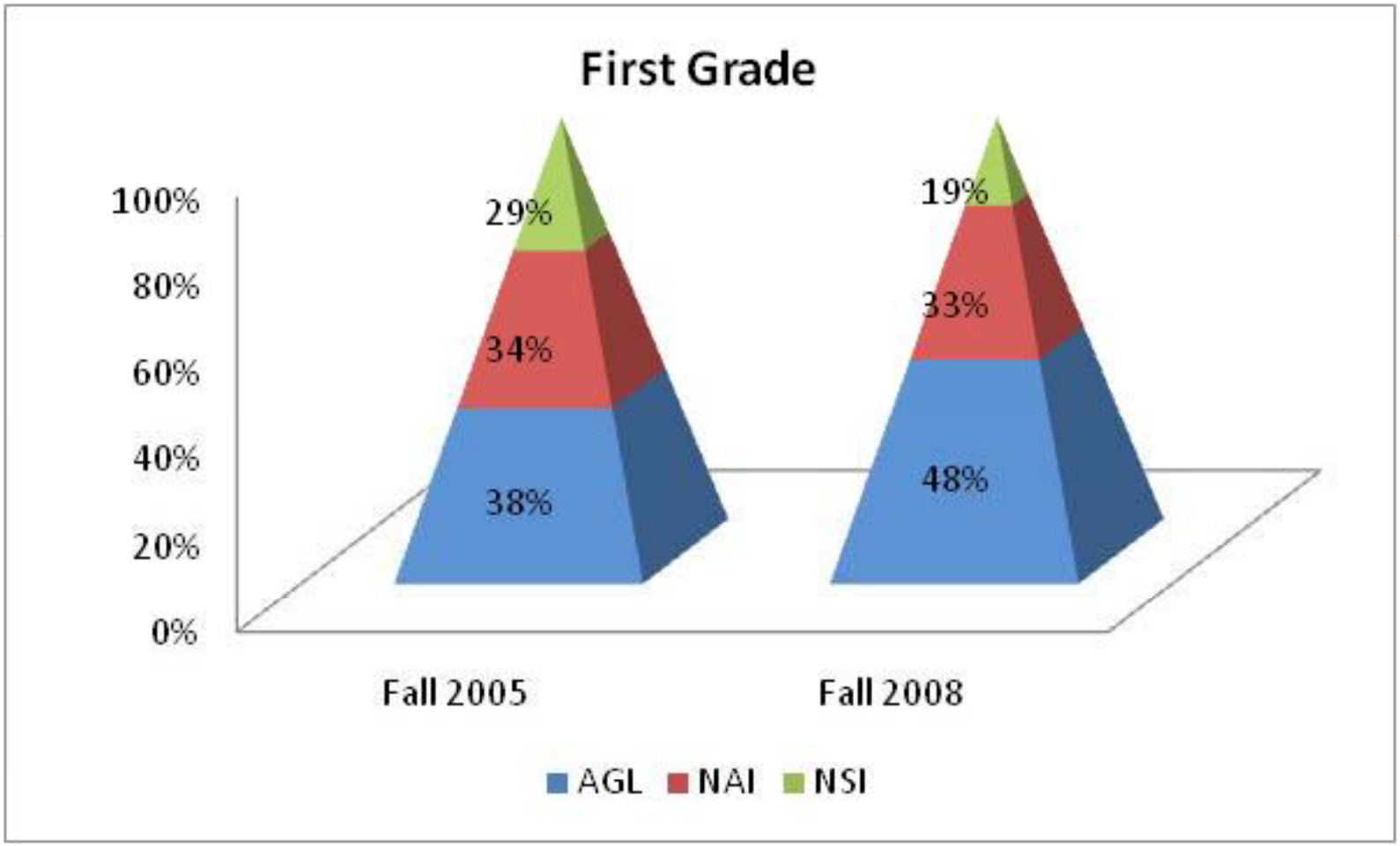
Achieving change over time in SC Reading First Schools

- School Intervention Team to analyze data and help to make decisions about interventions
- Classroom-based small group interventions for students below grade level
- Specially-trained interventionists for students more than a year below grade level
  - Reading Recovery® for the lowest first graders
  - Small group text-based interventions

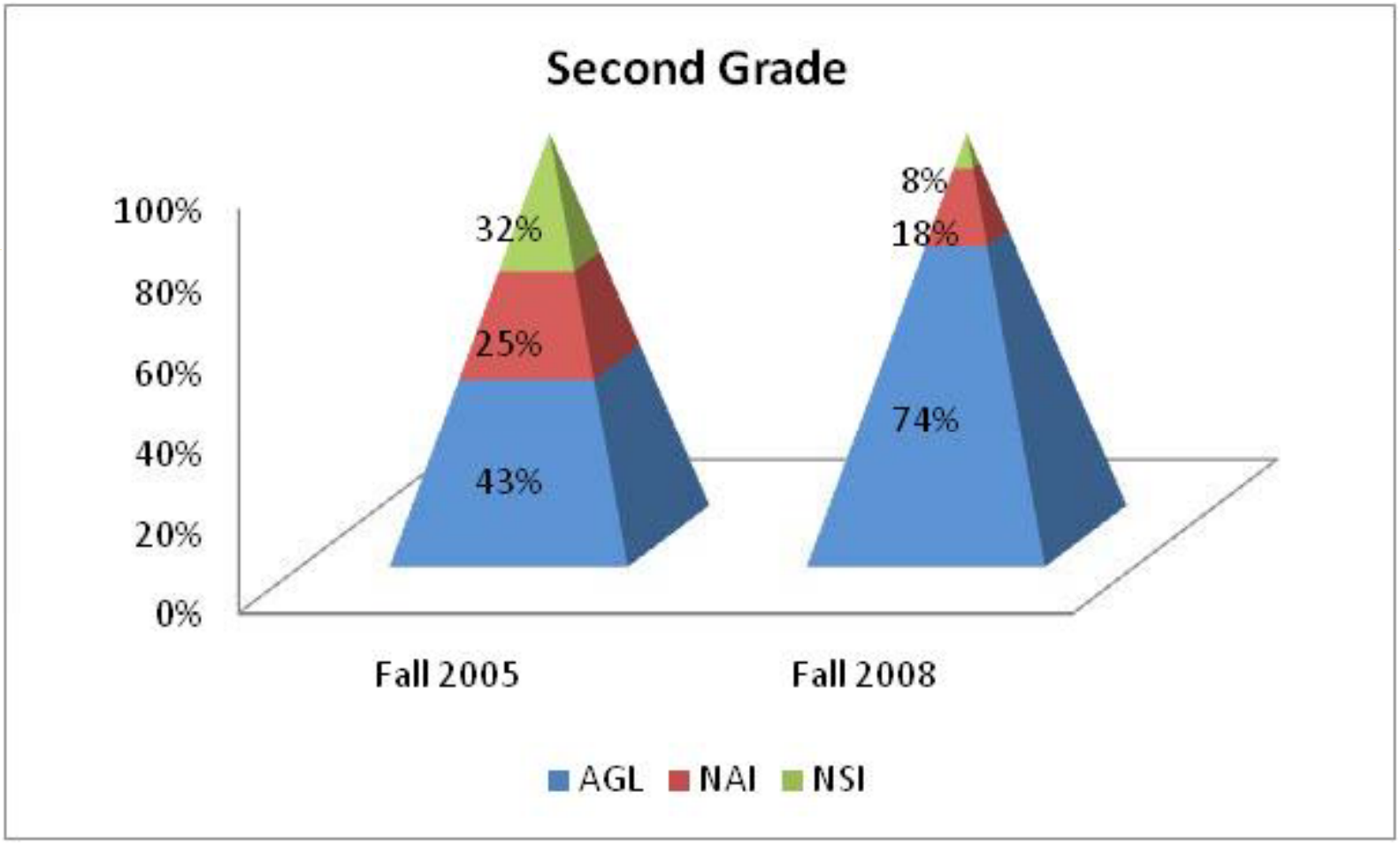
An Example from One School

- Approximately 300 students in pre-kindergarten through third grade
- 94% free and reduced lunch
- Title I school
- Student population
  - 77% African-American
  - 20% white and
  - 3% Hispanic.

Change over time: Fall 2005-2008



Change over time: Fall 2005-2008



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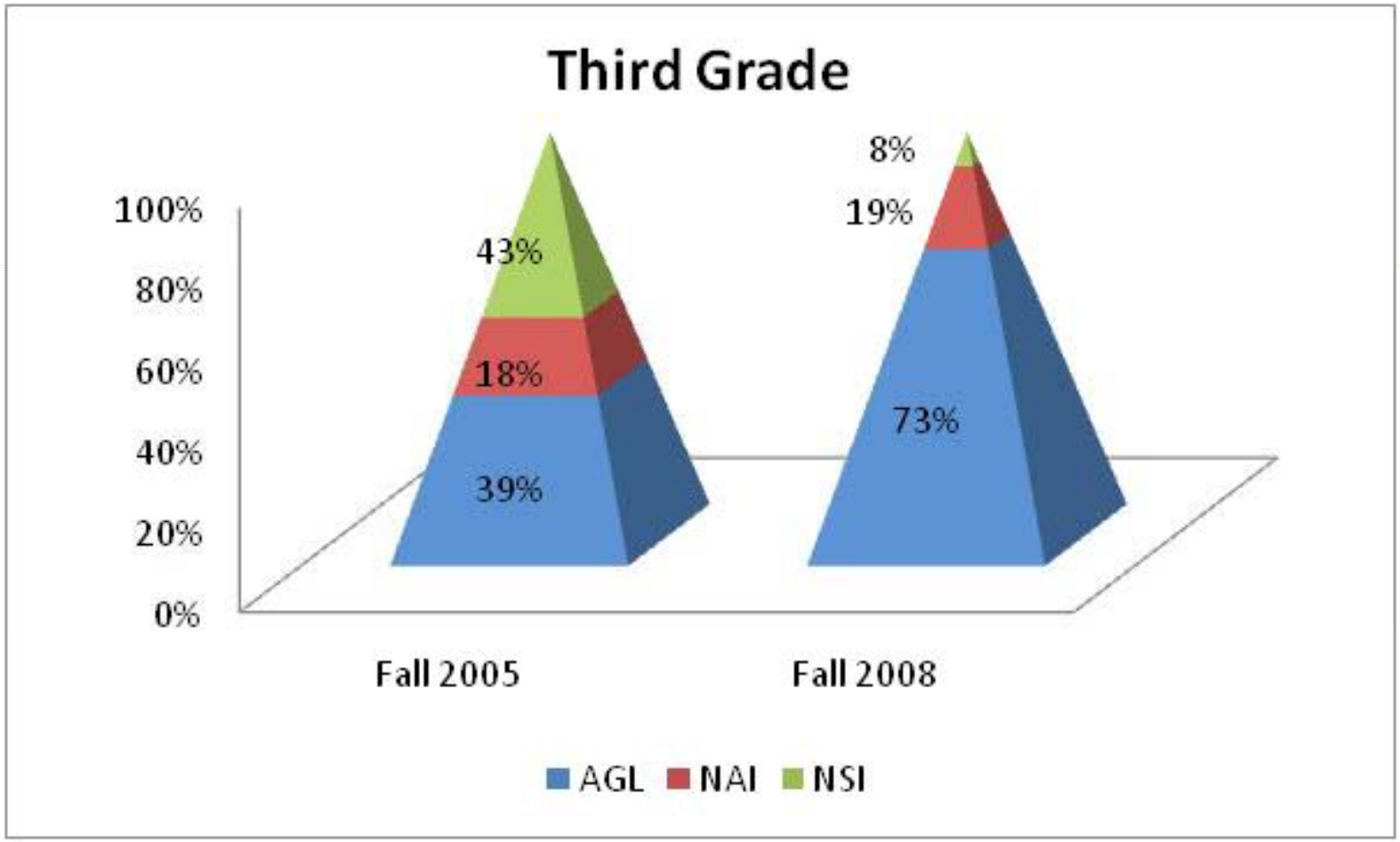
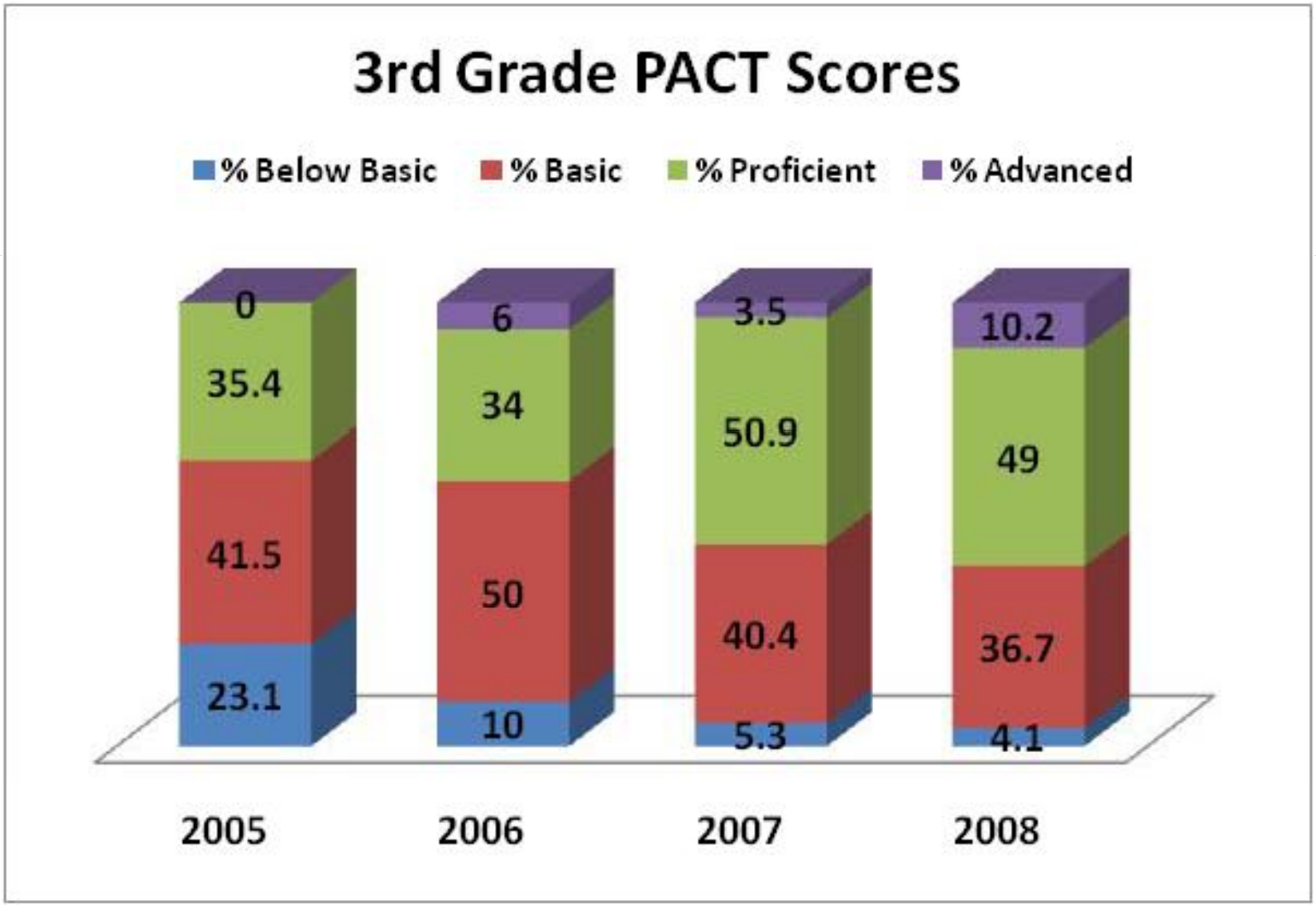


Change over time: PACT 2005-2008



How did they do it?

- By paying attention to the data
  - Time children spent reading
  - Instructional time
  - Identifying problems and working them
- By responding with
  - More time reading
  - More instruction
  - More focused instruction
  - More differentiated instruction

How did they do it?

- By "double dipping" and "triple dipping"
  - Classroom-based interventions
  - Small group pull-out interventions (2-5 students)
  - One-on-one interventions
- By paying attention to the progress and learning of every child
  - Time spent reading
  - Adjusting instruction using data about the child's responses to instruction
- "Whatever it Takes, No Excuses" Culture

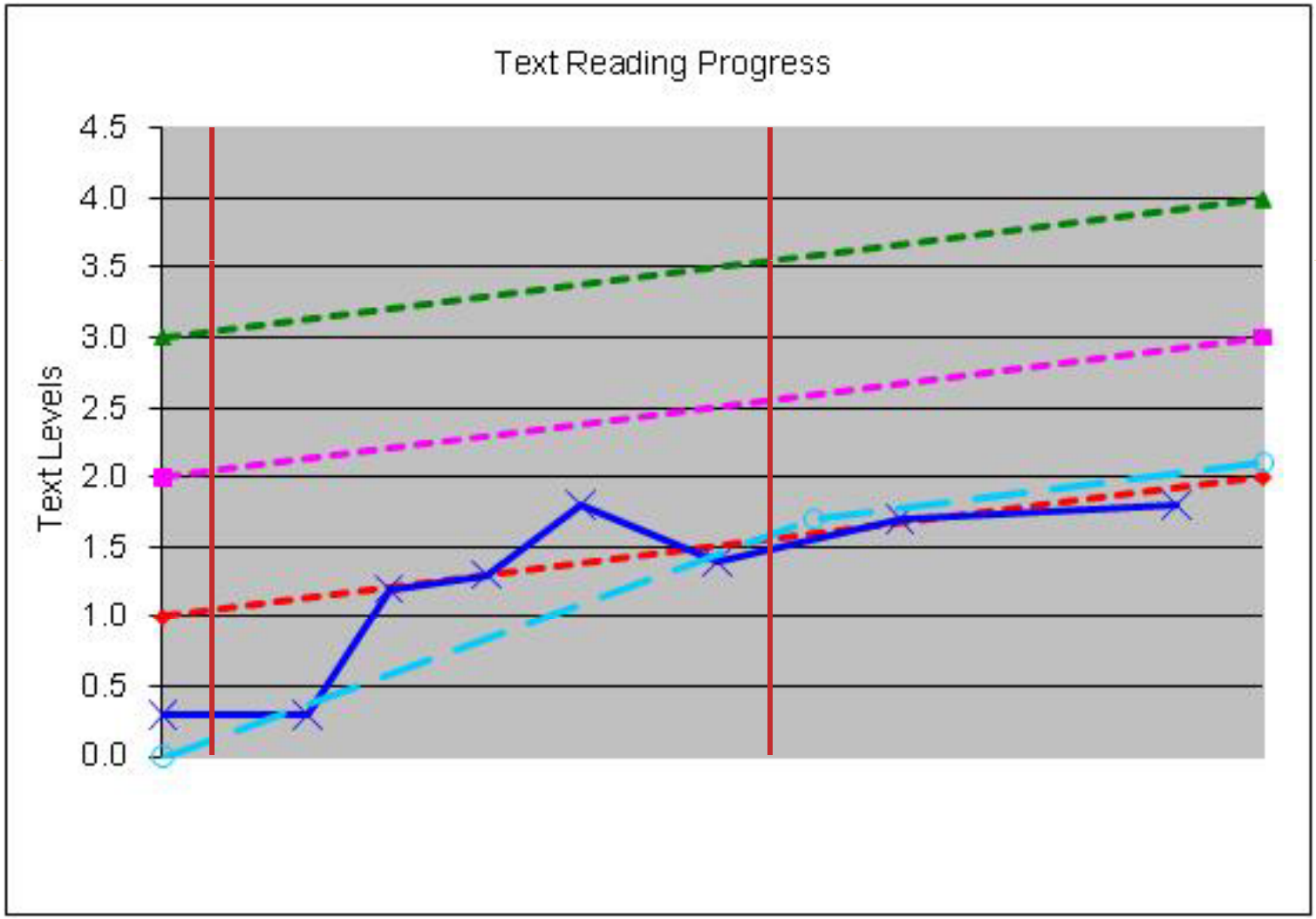
Tier One

- Core Reading Program: small group guided reading instruction three times a week
- Tier I Intervention: an additional 2-3 guided reading lessons from his classroom teacher each week
- Daily independent reading in the classroom
- More frequent reading conferences in the classroom
- Daily shared reading
- Daily writing
- Writing conferences

Tier Two (or Three)

- 16 weeks of Reading Recovery®
- 4 weeks of SCRF small group intervention taught by the RR teacher

By paying attention to the progress of each and every child



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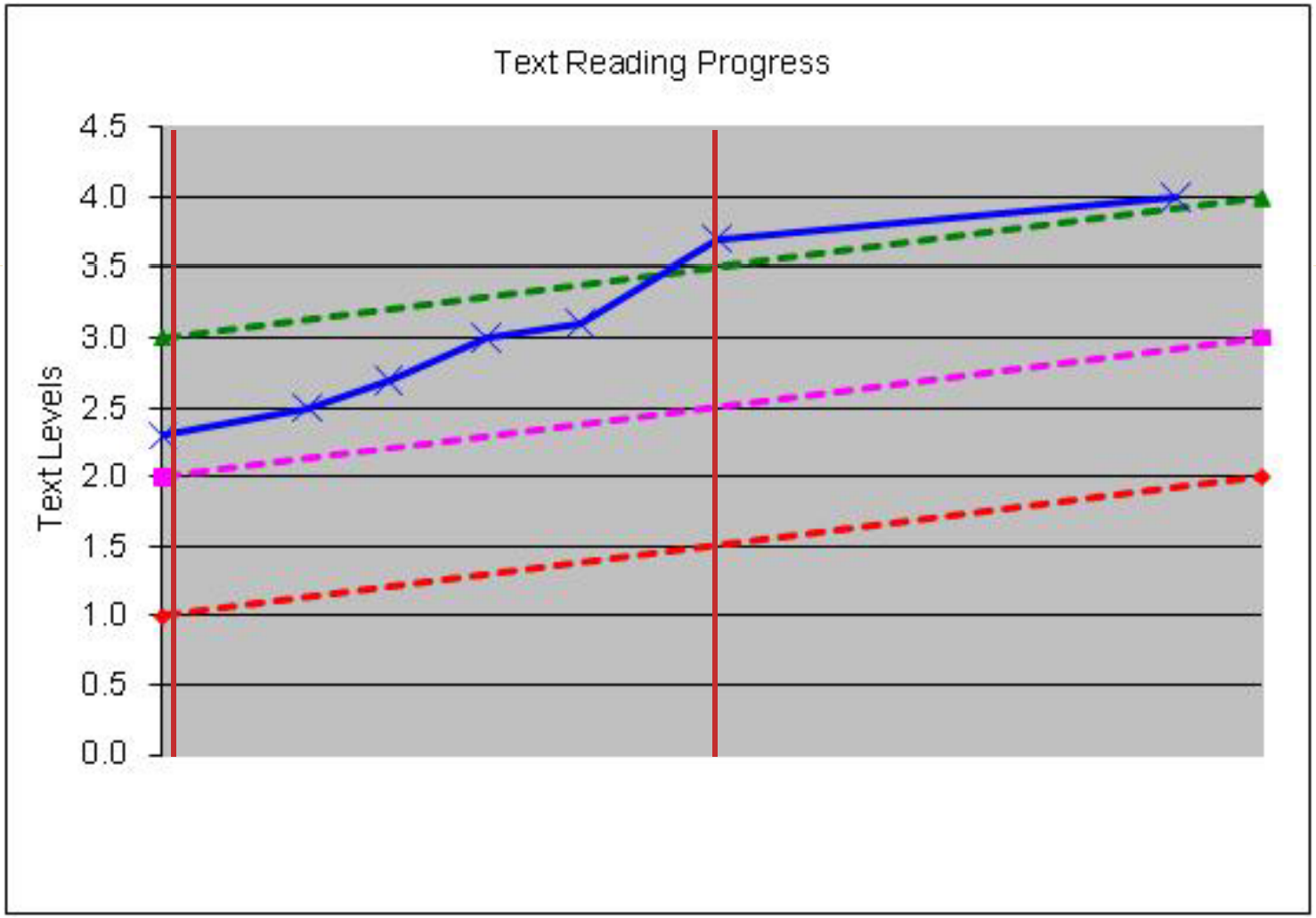

Collaboration and cooperation is critical

- Classroom teachers
- Administrators
- Coaches
- Support staff
- Special educators
- Parents