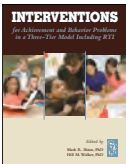


# Taking Elementary RTI to the Next Level: Using Your Screening and Progress Monitoring Data in a Coordinated Intervention Model

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## Disclosure

- \* *Mark R. Shinn, Ph.D. Serves as a Consultant for AIMSweb, which provides CBM assessment materials and organizes and report the information from 3 tiers, including RTI.*
- \* *Mark R. Shinn, Ph.D. Serves as a Consultant for Vmath, a remedial mathematics intervention from Voyager.*
- \* *Mark R. Shinn, Ph.D. Serves as a Consultant for Glencoe Publishing for their Jamestown Reading Navigator (JRN) product.*



### Much of This Presentation is Based on Chapters Written for New NASP Interventions Book

Gresham, F., Reschly, D., & Shinn, M. R. (2010). RTI as a driving force in educational improvement: Historical legal, research, and practice perspectives. In M. R. Shinn & H. M. Walker (Eds.), *Interventions for achievement and behavior problems in a three-tier model, including RTI* (pp. 47-77). Bethesda, MD: National Association of School Psychologists.

Shinn, M. R. (2010). Building a scientifically based data system for progress monitoring and universal screening across three tiers including RTI using Curriculum-Based Measurement. In M. R. Shinn & H. M. Walker (Eds.), *Interventions for achievement and behavior problems in a three-tier model, including RTI*. Bethesda, MD: National Association of School Psychologists.

Walker, H. M., & Shinn, M. R. (2010). Systemic, evidence-based approaches for promoting positive student outcomes within an RTI framework: Moving from efficacy to effectiveness. In M. R. Shinn & H. M. Walker (Eds.), *Interventions for achievement and behavior problems in a three-tier model, including RTI* (pp. 1-26). Bethesda, MD: National Association of School Psychologists.

## Accessing Your Materials

[markshinn.org](http://markshinn.org)

1. Click on the Downloads for Professionals Icon
2. Click on the Presentations and Handouts Folder
3. Click on **Utah ABC UBI 2010**



## Goals

1. Issues in Using Curriculum-Based Measurement (CBM) in RTI Data-Based Decision Making
2. Building Out Evidence-Based Tier 2 (and 3) Interventions in a Coordinated Manner

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## Brief Review: The Elementary Path

1. Begin with a Comprehensive Self Study
2. Make a Commitment to Improve General Education Instruction
3. Build Your Data System using Curriculum-Based Measurement As Your Progress Monitoring and Universal Screening Tool
4. Commit to Effective Behavior Support School-wide, but also Classroom and Tier 2 and Tier 3
5. Ensure Tier 3 Interventions are Maximally Powerful (and Worth It) with Scientifically Based Progress Monitoring (e.g., CBM)
6. Build Coordinated Scientifically Based Tier 2 Remedial Reading and Behavior Programs
7. Make Reading Volume a Priority for All Students to Encourage Wide Reading
8. Shift Related Services Roles to Minimal Testing and Maximum Consultation and Coaching Support

## Brief Review

Ensure Understandings  
of  
**Big Ideas**  
to  
**Promote Understanding**  
and  
**Reduce Push Back**

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## Big Idea for Students and Families

Students Get the **Services They  
Need...**

**As Soon As They Need Them!**



## Big Idea for Educators



**Better Tools  
Better Training  
More Support**



## Big Idea



**Design Feature**

**If You Add Something In**

**You Must Drop Something Out!**



## (Nearly) Everyone Agrees...

1. Increase the quality, consistency, and reach of instruction in every K-3 classroom
2. Universal Screening and Timely and Valid Assessments of Reading Growth for Progress Monitoring
3. Provide more intensive interventions to “catch up” the struggling readers

## Service Delivery is Changing Because of 3 Little Letters Originally Linked to SLD

### (6) SPECIFIC LEARNING DISABILITIES-

(A) IN GENERAL- Notwithstanding section 607(b), when determining whether a child has a specific learning disability as defined in section 602, *the local educational agency shall not be required to take into consideration whether the child has a severe discrepancy between achievement and intellectual ability* in oral expression, listening comprehension, written expression, basic reading skill, reading comprehension, mathematical calculation, or mathematical reasoning.

(B) ADDITIONAL AUTHORITY- In determining whether a child has a specific learning disability, *a local educational agency may use a process which determines if a child responds to scientific, research-based intervention* as a part of the evaluation procedures in paragraphs (2) and (3).

## Big Ideas About Data Systems

- One of the Features of a Multi-Tier, Coordinated Early Intervening Services Model (aka RTI) is Data-Based Decision Making, Particularly Reading Screening (Universal) and Progress Monitoring
- BUT, Schools Tend to Focus First on Intervention Before Building the Capacity to Measure Response...PROGRESS in an Efficient and Scientifically Based Way
- Without R (The Capacity to Measure Response), Schools Will Continue to Argue About Intervention(s) and Effectiveness
- Curriculum-Based Measurement (CBM) Remains the Best Evidence-Based Practice for Progress Monitoring (and Screening) in RTI

## WHEN WE GET SERIOUS ABOUT PROGRESS MONITORING

*Don't Reinvent the Wheel:*

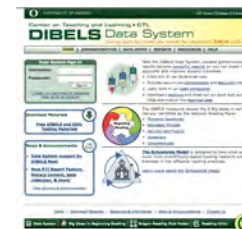
*Use Proven Tools!*



## CBM is the GENERAL Label for a "Family" of Assessments



[www.aimsweb.com](http://www.aimsweb.com)



[dibels.uoregon.edu](http://dibels.uoregon.edu)



Easy CBM [www.easycbm.com](http://www.easycbm.com)



[http://www2.ctb.com/products\\_services/ypp](http://www2.ctb.com/products_services/ypp)

## Consequences of (Mis) Interpretation...

<i>If Interpreted As Fluency</i>	<i>If Interpreted (Correctly) As General Reading Ability</i>
<i>Goal is to Read Fast</i>	<i>Goal is to Read WELL</i>
<i>Interventions Emphasize Speed</i>	<i>Interventions Emphasize Quality</i>
<i>Interventions are "Slices" or Band-aids</i>	<i>Interventions are Integrated or Bandages</i>

## The Intervention Effects of "Reading Faster"?

*Implementing repeated reading and wide reading interventions without more formative intervention is not likely to be valuable (p. 9)*

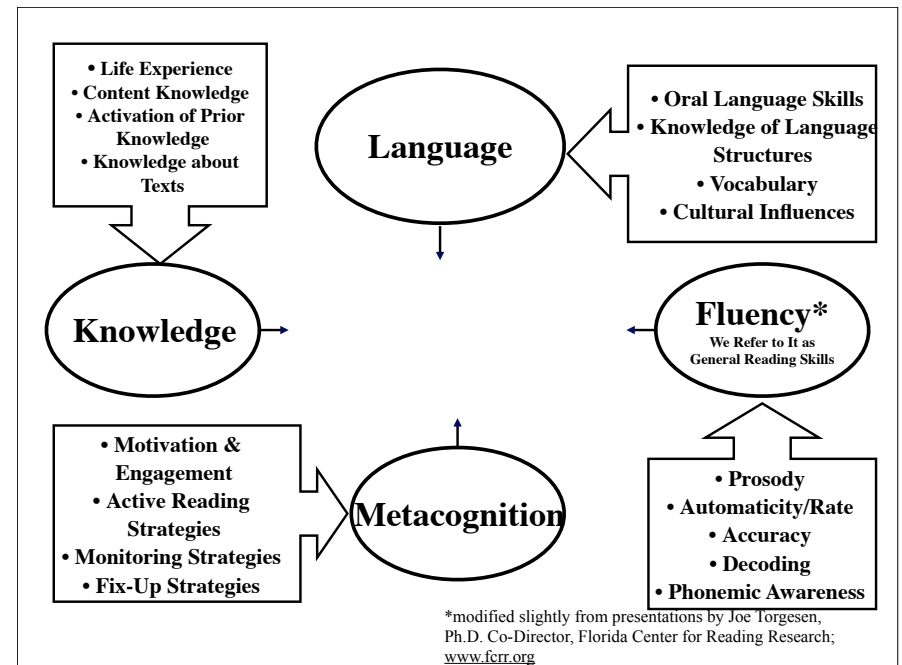
Wexler, J., Vaughn, S., Roberts, G., & Denton, C. A. (2010). The efficacy of repeated reading and wide reading practice for high school students with severe reading disabilities. *Learning Disabilities Research & Practice, 25*, 2-10.

*Our results indicate that repeated reading does not qualify as an evidence-based or promising practice for students with or at risk for learning disabilities (p. 276)*

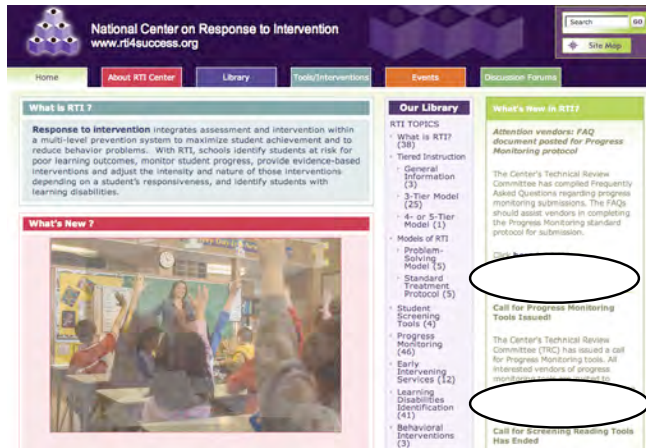
Chard, D. J., Ketterlin-Geller, L. R., Baker, S. K., Doabler, C., & Apichatabutra, C. (2009). Repeated reading interventions for students with learning disabilities: Status of the evidence. *Exceptional Children, 75*, 263-281.

## R-CBM is an IRI on Steroids...

Problem	Solution
Different Ways of Doing an IRI	Standardize the Directions
100 Word Passages Were Challenging for Low Performers, Too Short for Good Readers	Fix the Length of the Test Time, Not the Length of the Test Materials
Accuracy Scores Don't Correlate Nor Are Sensitive to Meaningful Improvement	Find a Better Score That IS Correlated and Sensitive (WRC)



# "PROVEN" By Review of the USDE/ OSEP National RTI Center



[www.rti4success.org](http://www.rti4success.org)

# National RTI Center Progress Monitoring Minimum Criteria

1. *Alternate forms* are of equal and controlled difficulty or if IRT based, evidence of item or ability invariance.
2. *Minimum acceptable growth* (slope of improvement or average weekly increase in score)
3. *Benchmarks* for minimum acceptable end-of-year performance specified in manual or published materials?
4. Monitoring system produces data that are sensitive to student improvement.
5. Reliability of the performance level score (e.g., internal consistency, stability, test-retest reliability).
6. Reliability for the slope by grade level.
7. Validity for the performance level score (e.g., content, concurrent, predictive, and/or construct)
8. Predictive validity information for the slope of improvement.



# National RTI Center PM Results

**General Outcome Measures**

Tools	Area	Reliability of the Performance Level Score	Validity of the Performance Level Score	Prognostic Validity of the Score of Improvement	Stability	Internal Consistency	End-of-Year Benchmark	Alternate Assessment (Standard)	Norm-Referenced (Percentile)	Comprehensible (Grade-Level)
Reading	AIMSweb	●	●	●	●	●	●	●	●	●
	Reading CBM (R-CBM)	●	●	●	●	●	●	●	●	●
	DIBELS	●	●	●	●	●	●	●	●	●
	Easy CBM	●	●	●	●	●	●	●	●	●
	Monitoring Basic Skills Progress	●	●	●	●	●	●	●	●	●
	Mclass Math	●	●	●	●	●	●	●	●	●
	Scholastic	●	●	●	●	●	●	●	●	●
	STAR	●	●	●	●	●	●	●	●	●
	STEEP	●	●	●	●	●	●	●	●	●
	Yearly Progress Pro (YPP)	●	●	●	●	●	●	●	●	●

# Most Tools (7 of 10) are Members of the CBM "Family"

AIMSweb	CBM
Reading CBM (R-CBM)	CBM
DIBELS	CBM
Easy CBM	CBM
Monitoring Basic Skills Progress	CBM
Mclass Math	?
Scholastic	NO
STAR	NO
STEEP	CBM
Yearly Progress Pro (YPP)	CBM

# National RTI Center Screening Minimum Criteria

(1) Can you provide *direct evidence*\* on the effects of using your tool?

\*Direct evidence refers to data from a study that has been conducted based on the tool submitted for evaluation. Studies that use data from the use of another tool, even if it is similar, are considered indirect evidence and will not be considered as adequate evidence for the purposes of this review.

(2) Do you have the following *classification data* for your tool?

- a. Specificity
- b. Sensitivity
- c. Positive predictive power
- d. Negative predictive power
- e. Kappa



(3) Is your *outcome variable* a reading measure?

# National RTI Center Screening Tool Results

National Center on Response to Intervention  
www.rti4success.org

IDEAS/Work  
The National Center on Response to Intervention

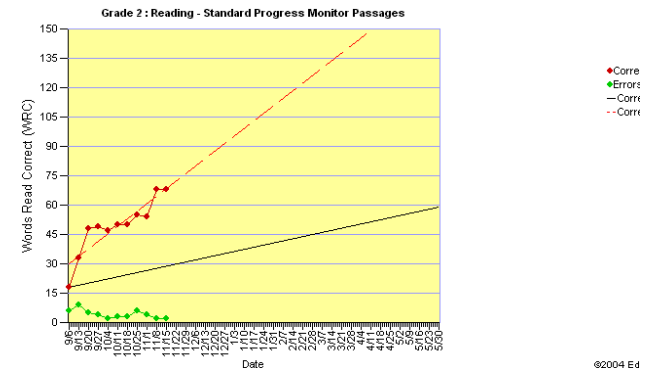
Tools	Area	Classification Accuracy	Generalizability	Reliability	Validity	Disaggregated, Reliability, Validity, and Classification Data for Diverse Populations	Efficiency			
							Administration Format	Administration & Scoring Time	Scoring Key	Behavioral Notes
AP Learning Link Progress in Math	Math	⊖	Moderate Low	⊖	⊖	---	Group	35-40 minutes	Computer Scored	Yes
AIMSweb	Math - CBM	⊖	Moderate High	⊖	⊖	---	Group	2 minutes	Yes	Yes
	CBM Oral Reading	⊖	Moderate High	⊖	⊖	---	Individual	2 minutes	Yes	Yes
	Test of Early Numeracy - Missing Number	⊖	Good	⊖	⊖	---	Individual	2 minutes	Yes	Yes
	Test of Early Numeracy - Number Identification	⊖	Good	⊖	⊖	---	Individual	2 minutes	Yes	Yes
	Test of Early Numeracy - One Counting	⊖	Good	⊖	⊖	---	Individual	2 minutes	Yes	Yes
	Test of Early Numeracy - Quantity Discrimination	⊖	Good	⊖	⊖	---	Individual	2 minutes	Yes	Yes
Discovery Education Predictive Assessment	Math	⊖	Moderate High	⊖	⊖	---	Group	40 minutes	Yes	Yes
	Reading	⊖	Moderate High	⊖	⊖	---	Group	40 minutes	Yes	Yes
Dynamic Indicators of Basic Early Literacy Skills (DIBELS)	Letter Naming Fluency	⊖	Moderate Low	⊖	⊖	---	Individual	2 minutes	Yes	Yes
	Nonsense Word Fluency	⊖	Moderate Low	⊖	⊖	---	Individual	2 minutes	Yes	Yes

Chart Legend: ● Convincing Evidence | ⊖ Partly Convincing Evidence | ⊖ Unconvincing Evidence | --- No Evidence Submitted  
 \* Added in the 2010 review | \* Information updated during the 2010 review



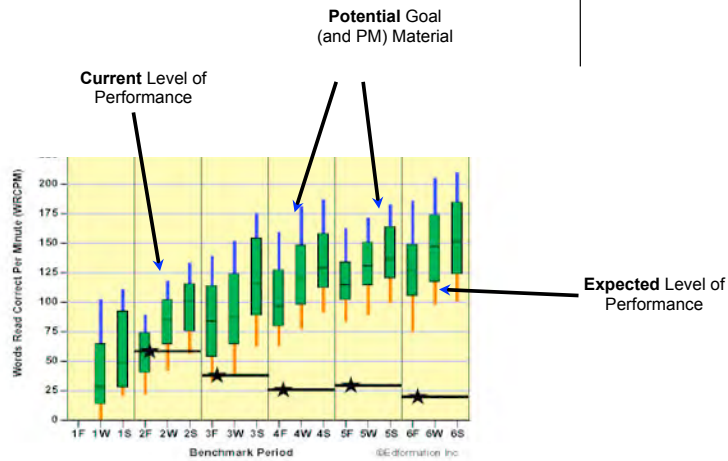
Step 1: Focussing On Progress Monitoring

## The Gold Standard for IEP Goals and Frequent Progress Monitoring

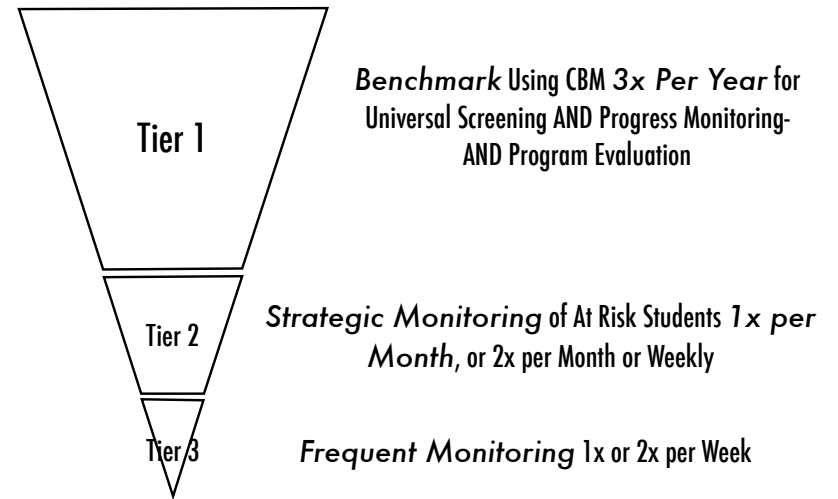


In 1 year, Johnny will read 60 WRC with less than 3 errors in Grade 2 Reading Passages.

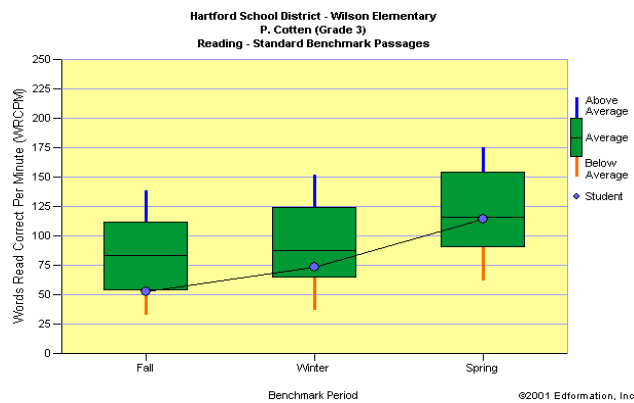
## For Some Students, Know How to Do a Survey Level Assessment to Write Individualized Goals



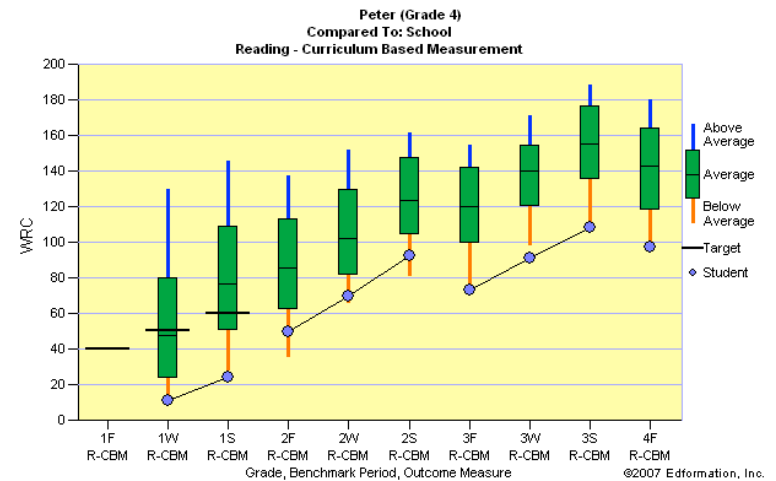
## Build a Common and Coordinated Data System with CBM Across 3 Tiers



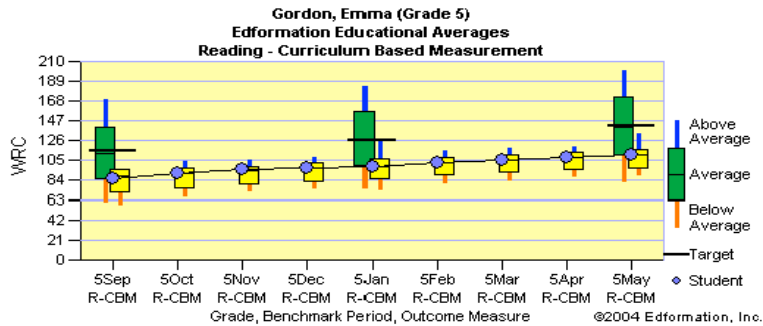
## Monitoring Progress at Tier 1: Benchmark Assessment to Measure Educational Need and Benefit for All



## A Picture of Progress Across Years

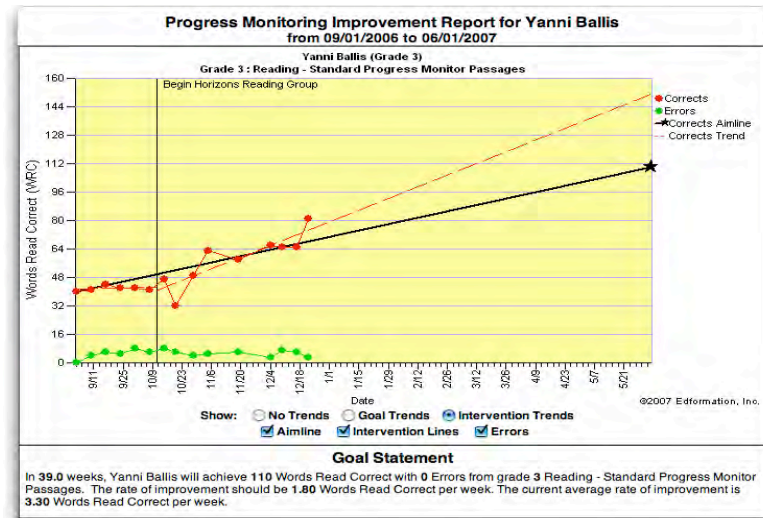


## Tier 2: Strategic Monitoring of At Risk

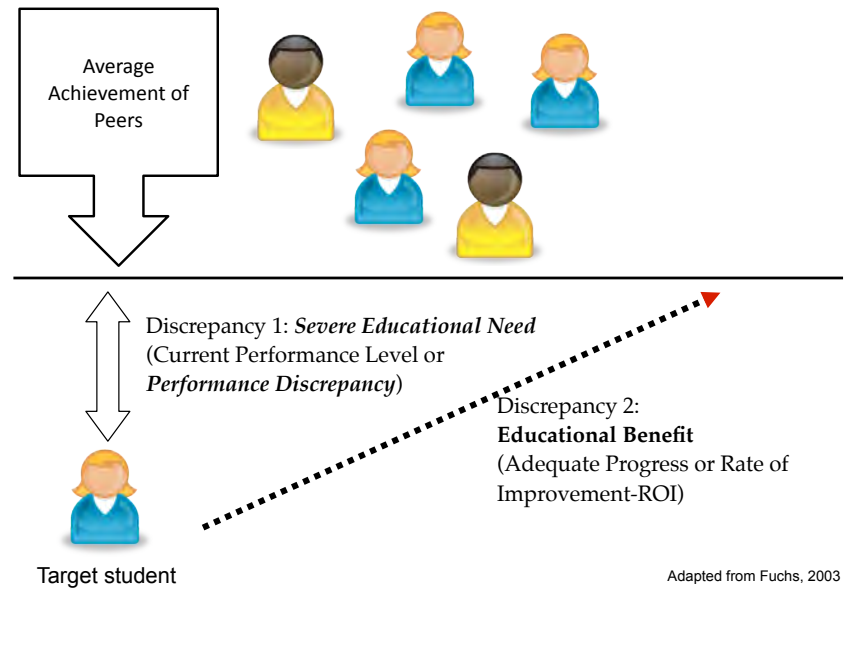
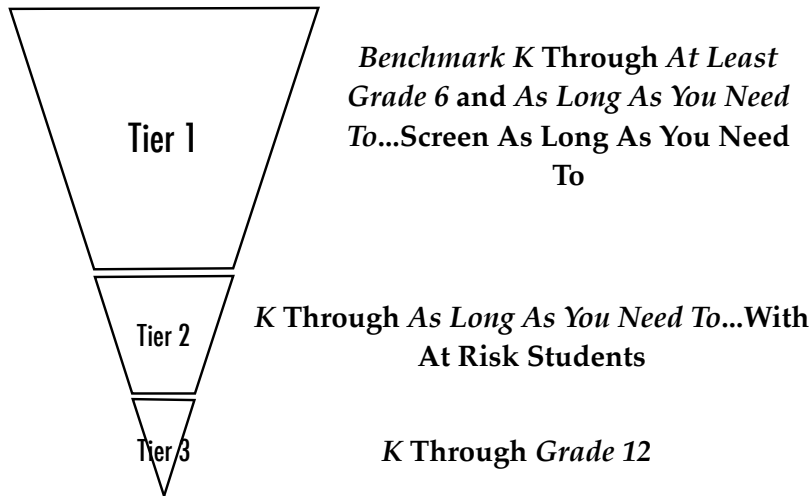


This chart shows that Emma Gordon improved from 85 Words Read Correct (WRC) from grade 5 Passages at the September Benchmark to 90 Words Read Correct (WRC) at the October Benchmark and to 94 Words Read Correct (WRC) at the November Benchmark and to 98 Words Read Correct (WRC) at the December Benchmark and to 98 Words Read Correct (WRC) at the January Benchmark and to 101 Words Read Correct (WRC) at the February Benchmark and to 104 Words Read Correct (WRC) at the March Benchmark and to 107 Words Read Correct (WRC) at the April Benchmark and to 110 Words Read Correct (WRC) at the May Benchmark. The rate of improvement (ROI) from the September Benchmark is 0.8 WRC per week. Currently, Emma Gordon's score is **Average** compared to Edformation Educational Averages.

## Tier 3 Progress Monitoring

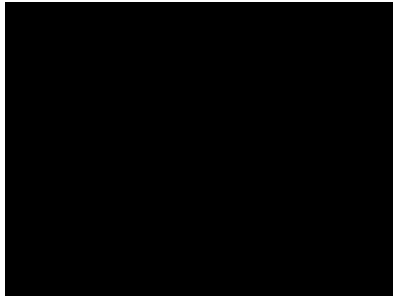


## How Long Do We Screen and Progress Monitor with CBM?



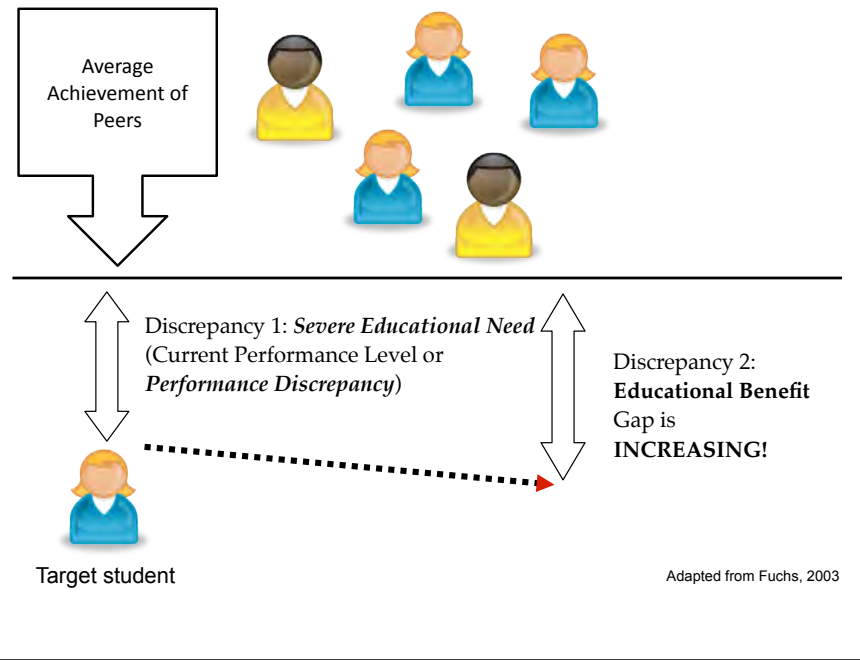
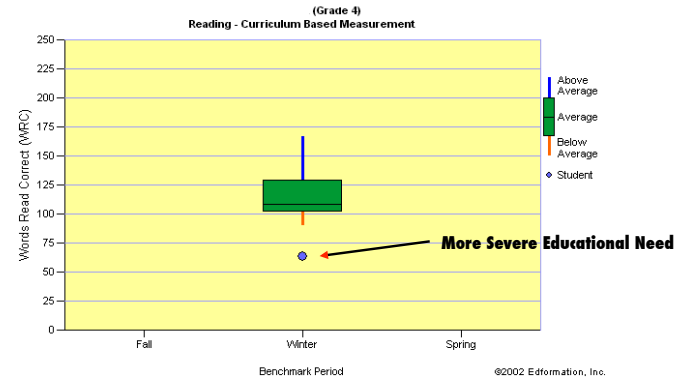
# A Different Level of Reading Skill

It was a pretty good composition. I felt proud knowing it was the best one at my school. After I'd read it five times, I was impatient to start reading it out loud. I followed the book's directions again. First I read the composition out loud without trying to sound impressive, just to hear what the words sounded like.

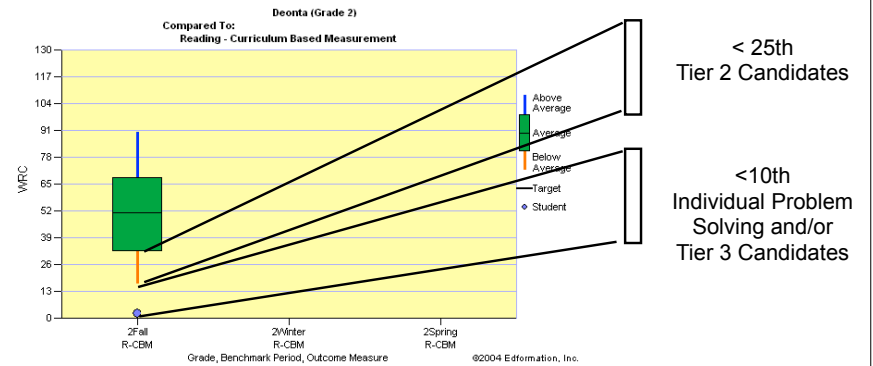


**Billy, Another 4th Grader**

## Educational Need: A Significant Performance Discrepancy



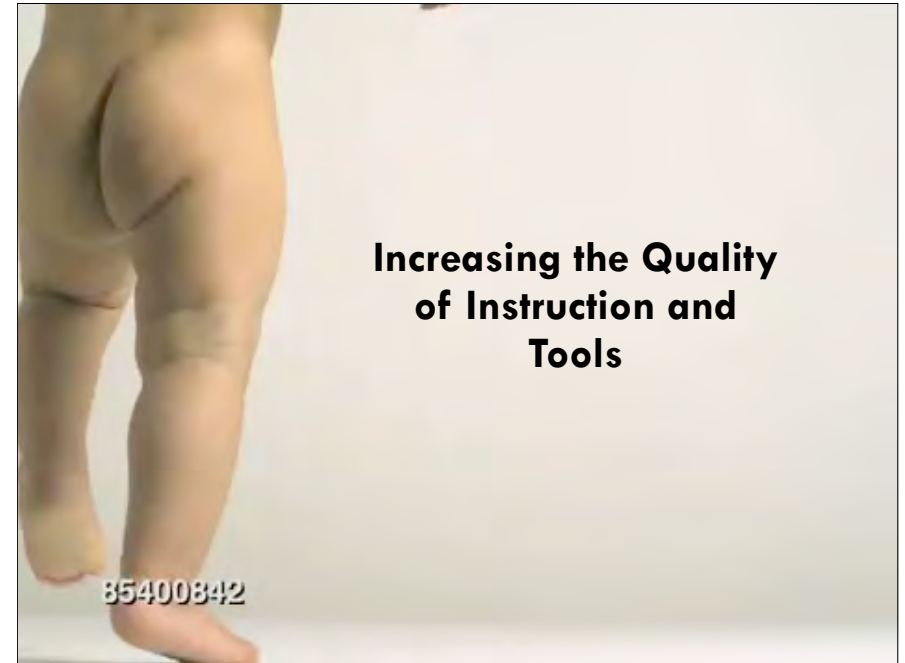
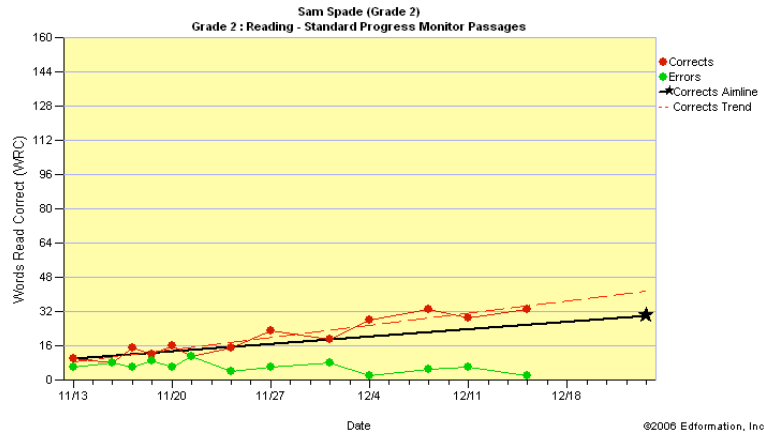
## Schools Use CBM in Universal Screening Instead of Referral Driven Practices



< 25th Tier 2 Candidates

< 10th Individual Problem Solving and/or Tier 3 Candidates

## Schools Use the Highly Similar Process to Monitor a Specific Student's RTI



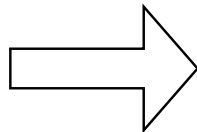
**Increasing the Quality of Instruction and Tools**

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## Old Way

**Who?**

Find the Kid (1 at a Time)



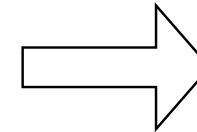
**What?**

Figure Out What to Do for the Kid (1 at a Time)

## New Way

**What?**

Find the PROGRAM (What GROUPS of Kids Need)



**Who?**

THEN Find the Kid(s) Thru Triage

# Avoid Bias Against Proven Programs!

To achieve large scale reform you cannot depend on people's capacity to bring about substantial change in the short run, so you need to propel the process with

High quality teaching and training materials (print, video, electronic)  
There is still the problem of superficial implementation when new materials are in use, and even new practices in evidence, without the deeper understanding required for substantial and sustained implementation.

But you get farther, faster by producing quality materials and establishing a highly interactive infrastructure of pressure and support.

Finally, the materials do not have to be treated as prescriptive. May judgments can and should be made during implementation as long as they are based on evidence linking teacher practices with student performance (p. 92)

Fullan, M. (2007). *The new meaning of educational change* (4th ed.). New York, NY: Teachers College Press.

# Use Our IES Resources



Gersten, R., Compton, D., Connor, C. M., Dimino, J., Santoro, L., Linan-Thompson, S., & Tilly III, W. D. (2009). *Assisting students struggling with reading: Response to intervention and multi-tier intervention in the primary grades*. Washington, DC: US Department of Education.

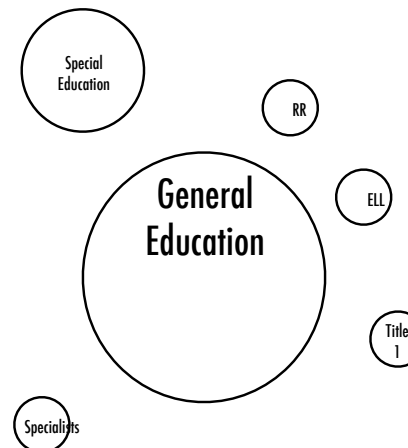
Table 2. Recommendations and corresponding levels of evidence

Recommendation	Level of evidence
1. Screen all students for potential reading problems at the beginning of the year and again in the middle of the year. Regularly monitor the progress of students at risk for developing reading disabilities.	Moderate
Tier 1 intervention/general education	
2. Provide time for differentiated reading instruction for all students based on assessments of students' current reading level.	Low
Tier 2 intervention	
3. Provide intensive, systematic instruction on up to three foundational reading skills in small groups to students who score below the benchmark score on universal screening. Typically, these groups meet between three and five times a week, for 20 to 40 minutes.	Strong
4. Monitor the progress of tier 2 students at least once a month. Use these data to determine whether students still require intervention. For those students still making insufficient progress, schoolwide teams should design a tier 3 intervention plan.	Low
Tier 3 intervention	
5. Provide intensive instruction on a daily basis that promotes the development of the various components of reading proficiency to students who show minimal progress after reasonable time in tier 2 small group instruction (tier 3).	Low

# Build Coordinated Interventions

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# Elementary Level: The Old Model

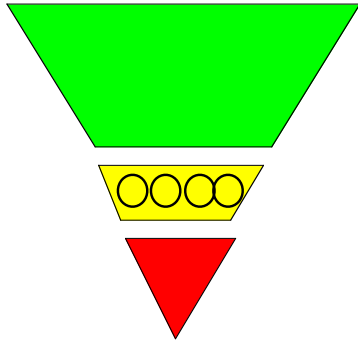


Most Schools Have Resources to Build Tier 2

But...Too Many Remedial Programs with Different

- Entry Criterion
- Curricula/Interventions,
- Assessment and Progress Monitoring Systems

## Coordinated and Powerful Tier 2 Interventions



- Use *Universal Screening* to Identify *Tier 2 Candidates*
- Use a *Focused and Scientifically Based Curriculum* with an *Emphasis on Explicit Teacher-Led Instruction* with *Explicit Language Support*
- Use the Same *Scientifically Based Progress Monitoring System*

## SBR Core Program and Coordinated Plan with Core Related Intervention Program, Low Risk Learners

School A Tier 1 Core Program	School A Tier 2	School A Tier 3
SBR Core Program (e.g., Scott Foresman <i>Reading Street</i> )	Scott Foresman <i>My Sidewalks</i>	The Most Explicit, SBR Teacher Led Intervention Program Like <i>Corrective Reading, Language!</i>
Reduces Dependency on Expert Teaching of Critical Reading Skills with All Readers; Leaves Less to Chance	Reduces Dependency on Expert Teaching of Critical Reading Skills with At Risk Readers; Leaves Less to Chance	Reduces Dependency on Expert Teaching of Critical Reading Skills with Very Poor or Non-Readers; Leaves Less to Chance
On the Core SBR Program	On the Intervention Program	On the Intervention Program
Monthly Walk Thrus to Ensure Fidelity of Implementation	Monthly Walk Thrus to Ensure Fidelity of Implementation	Monthly Walk Thrus to Ensure Fidelity of Implementation
Benchmark Assessment, Heavy on Oral Reading (R-CBM)	Oral Reading (R-CBM), Benchmark and More Frequent Assessment (1x-2x Per Month); Program Placement and Diagnostic Assessments	Oral Reading (R-CBM), Benchmark and Most Frequent Assessment (1x-2x Per Week) Program Placement and Diagnostic Assessments
Reading Volume at Students' Level	Need to Ensure Lots of Additional Independent Level Reading	Need to Ensure Lots of Additional Independent Level Reading

## SBR Core Program and Coordinated Plan with Core Related Intervention Program, Moderate Risk Learners

School B Tier 1 Core Program	School B Tier 2	School B Tier 3
SBR Core Program + Intervention Component for Everyone (e.g., Scott Foresman <i>Reading Street + My Sidewalks</i> )	Supplemental Teacher-Led Intervention Program Like <i>Reading Mastery, Language!</i>	Most Supplemental, if Not Supplanted Explicit, SBR Teacher Led Intervention Program Like <i>Corrective Reading, Language!</i> With SBR Language Interventions
Reading Volume at Students' Level	Need to Ensure Lots of Additional Independent Level Reading	Need to Ensure Lots and LOTS of Additional Independent Level Reading

## SBR Core Program and Coordinated Plan with Core Related Intervention Program, Capable Learners

	Tier 1 Core Program	Tier 2	Tier 3
Tools	SBR Core Program (e.g., Scott Foresman <i>Reading Street</i> or <i>Harcourt Story Town</i> )	Scott Foresman <i>My Sidewalks</i> or <i>Harcourt Intervention Program</i>	The Most Explicit, SBR Teacher Led Intervention Program Like <i>Corrective Reading, Language!</i>
Advantage(s)	Reduces Dependency on Expert Teaching of Critical Reading Skills with All Readers; Leaves Less to Chance	Reduces Dependency on Expert Teaching of Critical Reading Skills with At Risk Readers; Leaves Less to Chance	Reduces Dependency on Expert Teaching of Critical Reading Skills with Very Poor or Non-Readers; Leaves Less to Chance
Training	On the Core SBR Program	On the Intervention Program	On the Intervention Program
Support	Monthly Walk Thrus to Ensure Fidelity of Implementation	Monthly Walk Thrus to Ensure Fidelity of Implementation	Monthly Walk Thrus to Ensure Fidelity of Implementation
Assessment	Benchmark Assessment, Heavy on Oral Reading (R-CBM)	Oral Reading (R-CBM), Benchmark and More Frequent Assessment (1x-2x Per Month); Program Placement and Diagnostic Assessments	Oral Reading (R-CBM), Benchmark and Most Frequent Assessment (1x-2x Per Week) Program Placement and Diagnostic Assessments
Points of Vulnerability	Reading Volume at Students' Level	Need to Ensure Lots of Additional Independent Level Reading	Need to Ensure Lots of Additional Independent Level Reading

What Would Your Grid Look Like?

For Reading, Math, Behavior

## Building Tier 2: Families of How's

- [ Within the General Education Class
- [ Flexible Skill Grouping Across Classes within a Grade
- [ Flexible Skill Grouping Across Classes Across Grades
- [ Before or After School
- [ Computerized Interventions
- [ Coordinated Remedial Resources
- [ Intervention or Enrichment Periods

## Building Tier 2: Families of Whats

Teachers Invent the Intervention

Interventions that are Part of the SBR Core (Tier 1) Program

Single Skill (Band Aid) Programs

More Comprehensive (Bandage) Proven Programs

## A Decision Making Matrix

WHSCT HOW	general education teachers delivering Tier 2 in addition to the core		general education teachers delivering Tier 2 by using flexible skill groups across classes within a grade		general education teachers delivering Tier 2 in addition to the core but by using flexible skill groups across classes across grades		before, after school and summer school programs, SEE (computerized instruction)		enhancement of whole school intervention practices		coordinated intervention services across non-general and general ed staff	
	How	When	How	When	How	When	How	When	How	When	How	When
Intervention that addresses the core												
Intervention that addresses the core												
Single skill intervention												
Intervention that addresses the core												
Intervention that addresses the core												

## The Elementary Path

1. Begin with a Comprehensive Self Study
2. Make a Commitment to Improve General Education Instruction
3. Build Your Data System using Curriculum-Based Measurement As Your Progress Monitoring and Universal Screening Tool
4. Commit to Effective Behavior Support School-wide, but also Classroom and Tier 2 and Tier 3
5. Ensure Tier 3 Interventions are Maximally Powerful (and Worth It) with Scientifically Based Progress Monitoring (e.g., CBM)
6. Build Coordinated Scientifically Based Tier 2 Remedial Reading and Behavior Programs
7. Make Reading Volume a Priority for All Students to Encourage Wide Reading
8. Shift Related Services Roles to Minimal Testing and Maximum Consultation and Coaching Support