



"Implementing a Multi-Tier Model: How to get your school ready for screening, monitoring, and delivering effective interventions"

Douglas Marston, Ph. D.

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## Definition of Response to Intervention (RTI)

Response to Intervention (RTI) is a multi-tiered approach to help struggling learners. Students' progress is closely monitored at each stage of intervention to determine the need for further research-based instruction and/or intervention in general education, in special education, or both.

RTI Action Network

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



# Response to Intervention

- High quality, scientifically based classroom instruction
- Ongoing student assessment
- Tiered instruction

# Response to Intervention

## **Intensive Intervention (Tier 3)**

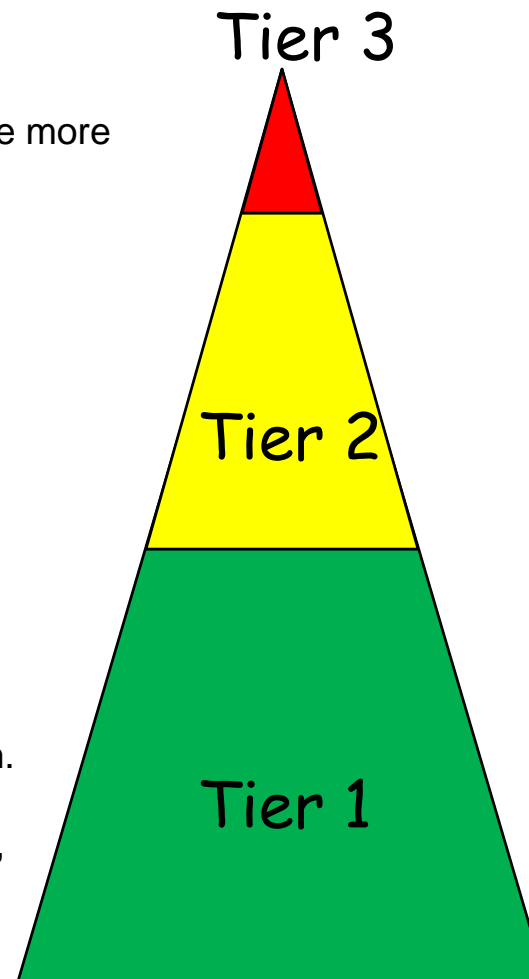
- Students not making adequate progress receive more intensive intervention (typically 1-5%)
- Weekly progress monitoring

## **Targeted Group Interventions (Tier 2)**

- Students identified through screening receive more intensive literacy help in small groups
- Weekly progress monitoring
- Approximately 15-20% of school.

## **Core Literacy Instruction (Tier 1)**

- All students receive evidence-based curriculum.
- Typically 75-80 % are Tier 1 only.
- All students screened or “benchmarked” in Fall, Winter, and Spring.





A consumers guide to analyzing core reading curriculum: Grades K-3  
Simmons & Kamenui (2006)

[http://reading.uoregon.edu/appendices/con\\_guide\\_3.1.03.pdf](http://reading.uoregon.edu/appendices/con_guide_3.1.03.pdf)

What Works Clearinghouse

<http://ies.ed.gov/ncee/wwc/>

Florida Center for Reading Research

<http://www.fcrr.org/>

Best Evidence Encyclopedia - Johns Hopkins University

[http://www.bestevidence.org/reading/begin\\_read/limited.htm](http://www.bestevidence.org/reading/begin_read/limited.htm)

National Center on Response to Intervention

<http://www.rti4success.org/>

RTI Action Network

<http://rtinetwork.org/>



**Sharon Vaughn: How many tiers are needed for RTI to achieve acceptable prevention outcomes? NRCLD RTI Symposium (2003).**

**Tier I**

- All of K-3 students
- Core reading program: Phonemic awareness, alphabetic understanding, fluency, vocabulary, and comprehension
- General education teacher in general education classroom
- 90 minutes per day, flexible grouping
- Ongoing professional development - Research
- Benchmark 3X year

**Tier II**

- For students falling behind grade level benchmarks
- Supplement to Core Reading Instruction (30 min. daily)
- Small group (1:3, 1:4, 1:5), Interventionist varies
- Systematic, explicit instruction tied to critical elements
- Instructional phases last 10 weeks, typically 10-20 weeks
- Progress monitoring twice per month

**Tier III**

- 1:3 customized instruction by interventionist (varies)
- Two 30 min./daily sessions in addition to 90 minutes daily
- Progress Monitoring twice per month on target skill
- Longer than 10-20 weeks, can last months/years



## Explaining the R in RTI

- Selecting at risk- students
- Monitoring at risk-students

Fuchs, D. & Fuchs, L. (2006). Introduction to Response to Intervention: What, why, and how valid is it? Reading Research Quarterly, 41 (10, 93-98.

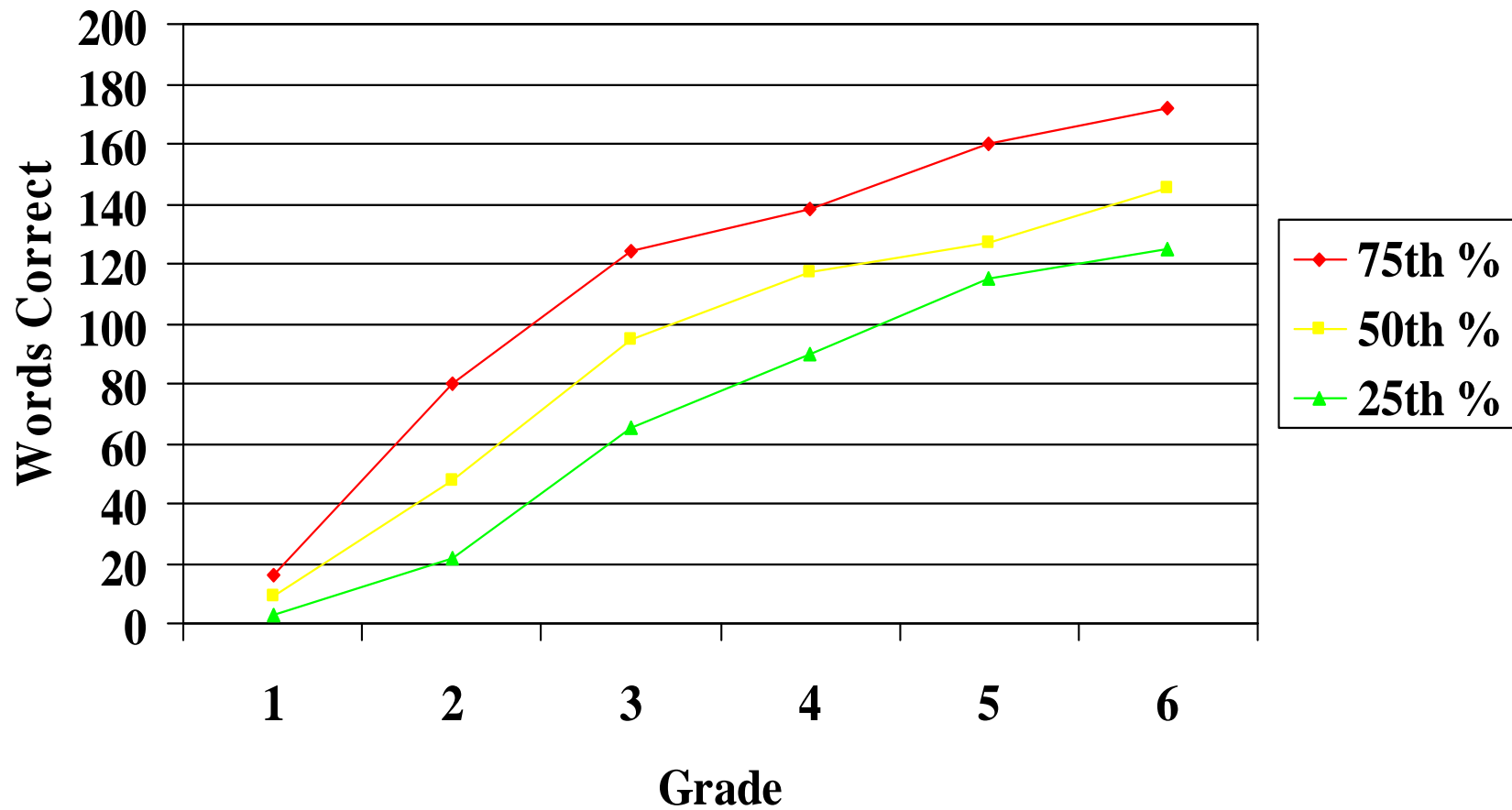


## Explaining the R in RTI

From a measurement perspective, perhaps the best strategy is to assess every student in the grade on a screening tool with a benchmark that demonstrates utility for predicting end-of-year performance on high-stakes tests (elementary grades) or on local graduation requirements (secondary level).

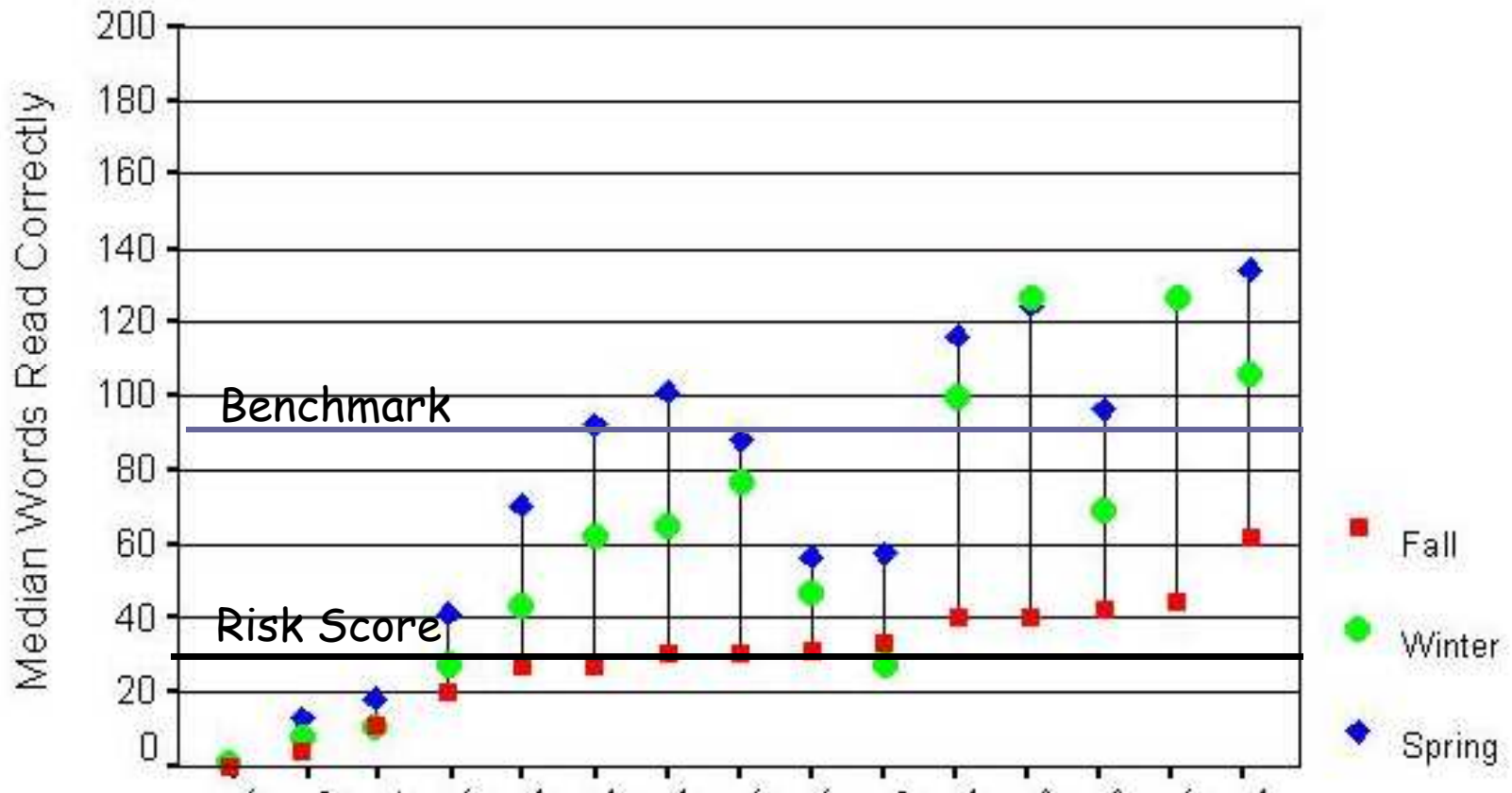
Fuchs, D. & Fuchs, L. (2006). Introduction to Response to Intervention: What, why, and how valid is it? Reading Research Quarterly, 41 (10), 93-98.

## CBM Growth Measures (Read Aloud)



# Fall-Winter-Spring Screening

2nd Grade, Room 113





## Getting Ready for Screening

Determination of materials

Identifying the assessors: 3 Models

Everyone shares

Cadre of within school

Cadre external to school

Setting Up the Schedule



# Reading Aloud

## KICKING STONES

Have you ever had nothing to do? Sometimes when I have nothing to do I take a walk. That's when I kick stones. I look for cans to kick. If I can't find any cans to kick, I just kick stones I look for big stones to kick. I walk down the road kicking one stone after another. This means I have nothing else I can think of doing.



# Reading Silently

## Farm Animals

After Mr. Jones showed Billy the cows he took him over to see the chickens. Billy had never seen so many (**chickens, jump, fooled**) in his life. Billy had started (**ring, to, very**) count, but soon ran out of (**sink, brag, numbers**). The farmer told him all about (**hill, red, chickens**) - that mother chickens were called hens (**and, sings, long**) that father chickens were called roosters. (**Then, Rest, Mark**) he took Billy to the hen (**bang, still, house**) where all the



## Validity Research


<b><u>Criterion Measures</u></b>	<b><u>Words Read Correctly</u></b>
<b>Stanford Diagnostic Reading Test</b>	<b>.76</b>
<b>Woodcock Reading Mastery: Word Ident.</b>	<b>.91</b>
<b>Woodcock Reading Mastery: Comprehension</b>	<b>.83</b>



# Basic plan

- Teachers screen entire class F-W-S using the same 3 "Grade Level" passages
- Identify "At Risk" Students (bottom 20-40%?)
- Monitor Progress of At Risk students (weekly/biweekly)
- Evaluate progress of individual At Risk students and revise programs as necessary
- Evaluate class progress W-S and revise

From Deno, Lembke, & Reschly - University of Minnesota  
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## Ten Most Frequently Cited Barriers to Implementation of Curriculum-Based Measurement (Yell, Deno & Marston)

1. Need for a variety of instructional strategies when data indicates a change is necessary.
2. Collecting data but not using it for instructional decisions.
3. CBM represents change which creates anxiety and resistance.
4. Ongoing training for general and special education staff.
5. CBM at secondary level.
6. Logistics of monitoring and making changes.
7. Staff resistant to making instructional changes.
8. Support necessary for new users.
9. Adequate staffing.
10. Concern over relationship between fluency and comprehension.



## Ideas for Saving Time, Increasing Efficiency and Minimizing Disruption of Small Group Instruction (Marston, 2003)

- Create expectation with students that “reading aloud” is part of instruction.
- Once a week monitoring versus 2/3 x per week.
- Technology for creating charts and trend lines.
- Establish progress monitoring as one of learning stations.
- Use educational assistants and/or tutors
- Measure during “independent level” instruction.
- Use group administered procedures when possible.

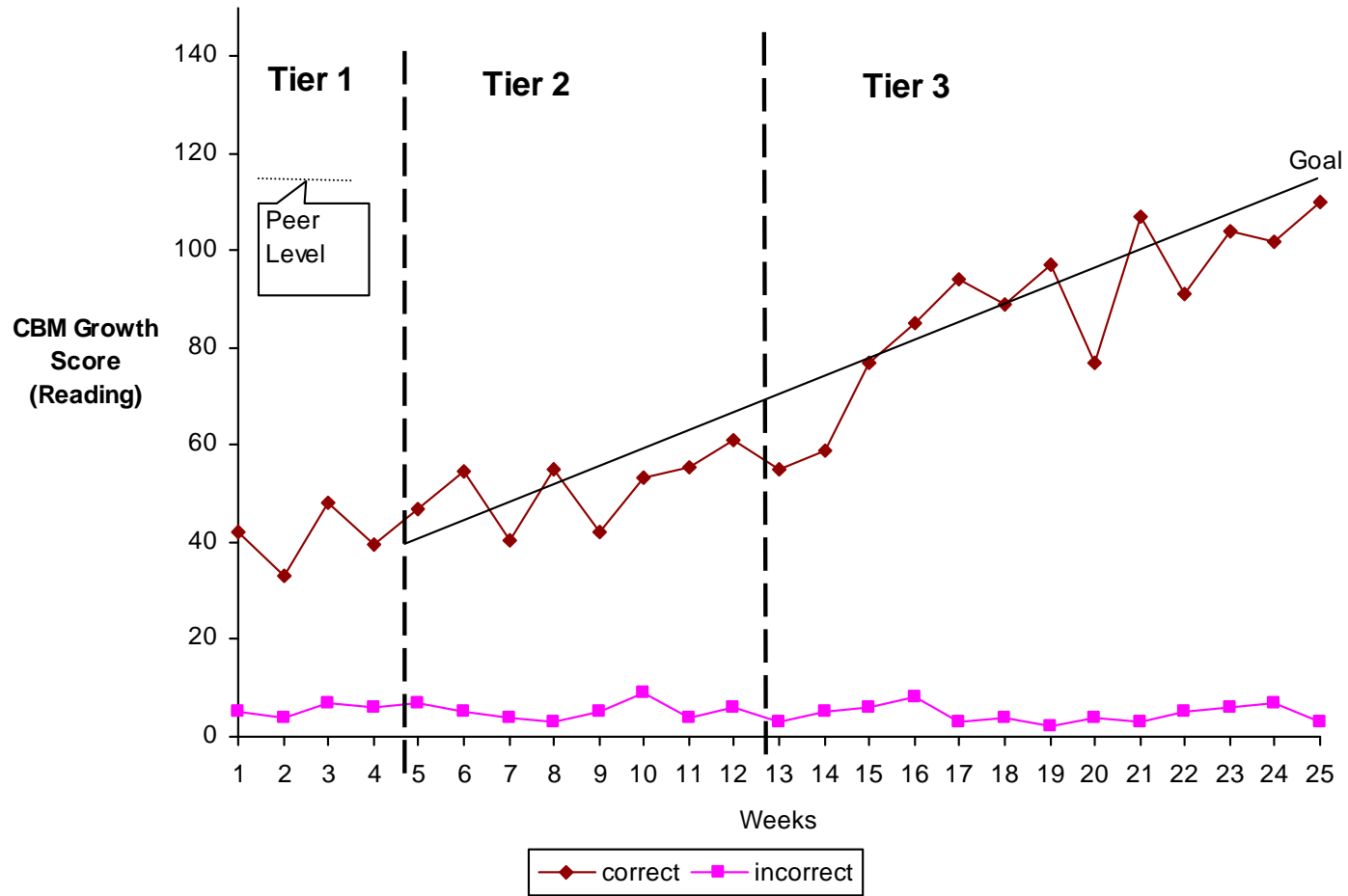


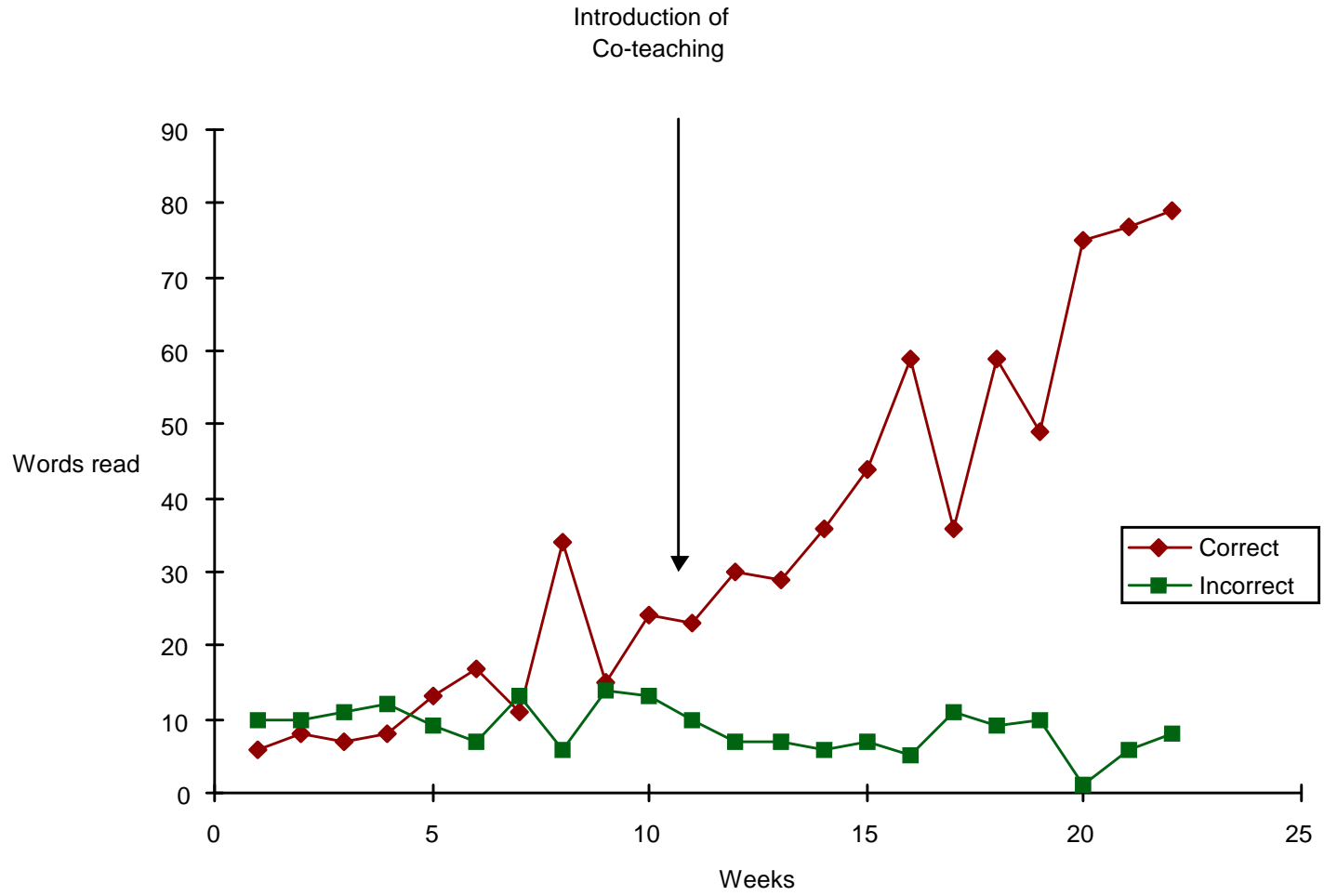
## Getting Ready for Progress Monitoring

1. Who gets measured
2. Determination of Materials
3. Identifying the assessors: 3 Models
  - a) Everyone shares
  - b) Cadre of within school
  - c) Cadre external to school
4. Setting Up the Schedule
5. Data Entry



## CBM Progress Monitoring Graph

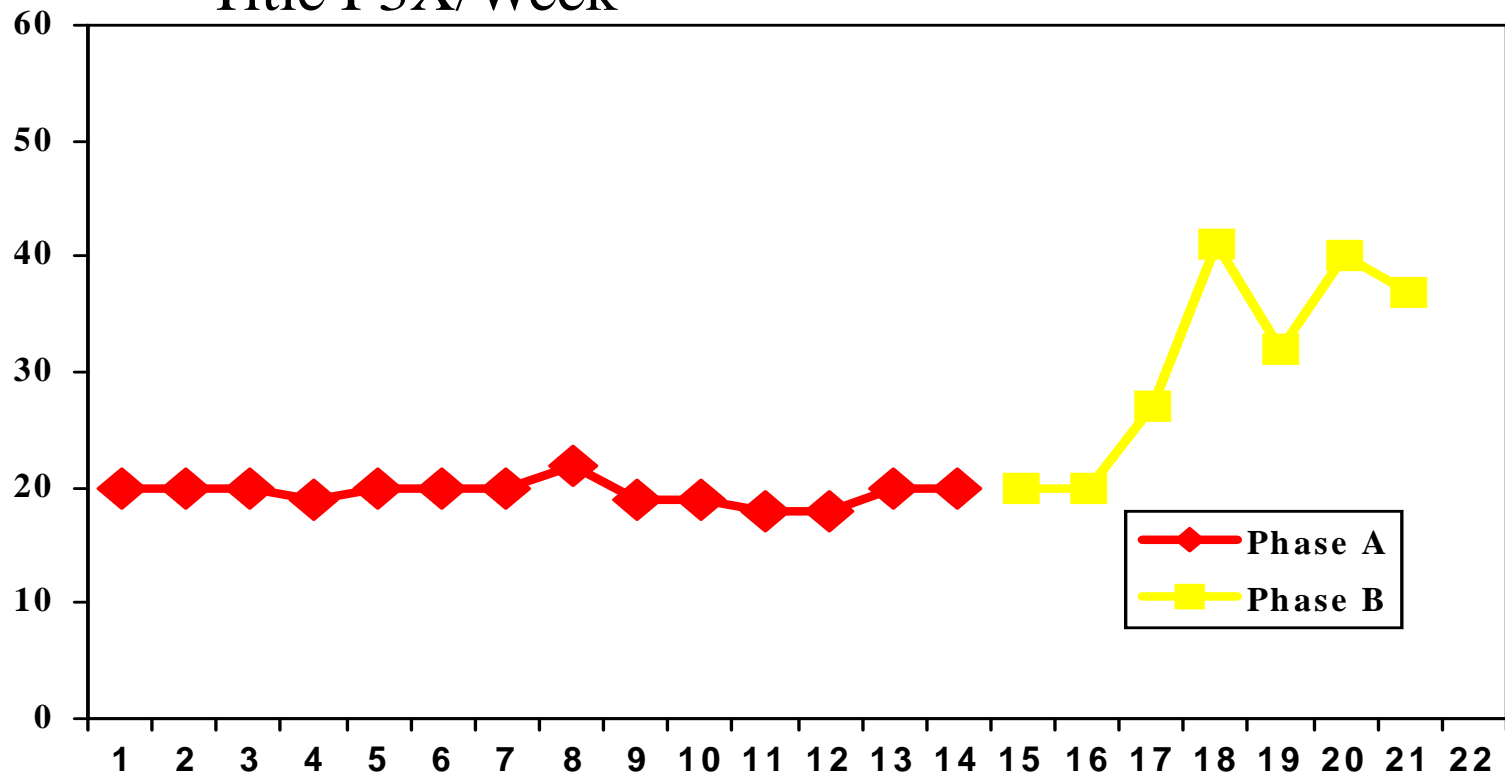






### Tier 1 Monitoring Title I 3X/Week

### Tier 2 Monitoring Title I 3X/Week+DI





## Getting Ready for Interventions

1. Identify Evidence-Based Interventions
2. Training of staff
3. Identify staff delivering instruction
4. Create Schedule
5. Create grade level data teams
6. Fidelity of interventions



## Explaining the I in RTI

Increasing intensity is achieved by

- a) Using more teacher-centered, systematic, and explicit instruction;
- b) Conducting it more frequently;
- c) Adding to its duration;
- d) Creating smaller and more homogenous groupings; or
- e) Relying on instructors with greater expertise.

Fuchs, D. & Fuchs, L. (2006). Introduction to Response to Intervention: What, why, and how valid is it? Reading Research Quarterly, 41 (10), 93-98.



# Evidence-Based Interventions

What Works Clearinghouse  
<http://ies.ed.gov/ncee/wwc/>

Florida Center for Reading Research  
<http://www.fcrr.org/>

Best Evidence Encyclopedia - Johns Hopkins University  
[http://www.bestevidence.org/reading/begin\\_read/limited.htm](http://www.bestevidence.org/reading/begin_read/limited.htm)



## Progress Monitoring Meetings

1. Meetings held monthly by grade level teams
2. Length of meeting approximately two hours
3. Members of team include: general, special, Title I and ELL teachers, Associate Educators and Educational Assistants, Administrators, and Group Facilitator
4. Fall screening used to determine the Initial tier of instruction Review student progress monitoring data (Weekly graphs)
5. Review progress monitoring data, student instructional groups, and discuss intervention strategies
6. Students needing more intensive or less intensive instruction are moved between groups



# Research and Outcomes for RTI

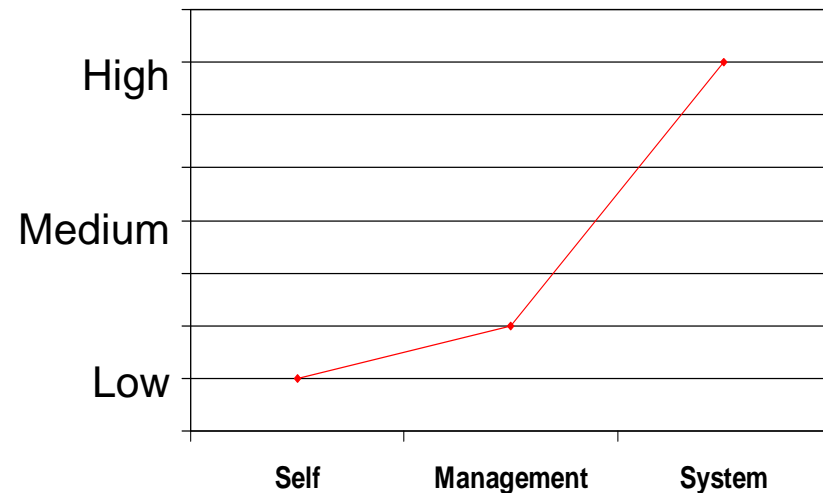
## Concerns Based Adoption Model (CBAM) (Hall & Rutherford)


- Self concerns ("What will it mean for me?")
- Task concerns ("How do I do it?")
- Impact concerns ("How will effect students/staff?"  
"Can we do it better?")

From Deno, Lembke, & Reschly - University of Minnesota

## Concerns-Based Adoption Model (CBAM) Hall & Rutherford (1977)

- Impact on Self
- Management Concerns
- System-Level Impact






Meta-analytic review of responsiveness-to-intervention research: Examining field-based and research-implemented models.

Journal of Psychoeducational Assessment,  
2005, 23, 381-394.

Matthew K. Burns, James J. Appleton, and  
Jonathon, D. Stehouwer



## Burns et al. (2005) RTI outcome data

- Cohen (1988) says significant effect sizes over .80.
- Student outcomes Effect Size for 11 studies was .96



## Research: Special Education Evaluations

Burns et al. (2006) examined the special education evaluations from two districts for pre and post-implementation of RTI. In both districts there was a significant reduction in evaluations after RTI implementation.

*Burns, M. K. & Coolong-Chaffin, M. (2006). Response to intervention: The role of effect on school psychology. School Psychology Forum: Research in Practice, 1 (1) , 1-13.*



## Research: Impact on Child Count

Marston et al. (2003) studied the use of the Problem Solving Model and found it did not significantly increase the numbers of students identified as having mild disabilities. The percentage of students with these disabilities was approximately 7% of the student population before and after implementation.

Marston, D., Muyskens, P., Lau, M., & Canter, A. (2003). Problem Solving Model for decision-making with high-incidence disabilities: The Minneapolis experience. 21 (7), 187-200.



## *Principal \**

- "The primary role is change agent
- Confront skepticism, lack of ownership, perceptions of increased work, and lack of support
- Move toward research-based practice where response-to-intervention is the basis for decisions, as opposed to basing decisions solely on subjective judgment or discrete tests
- Long-term commitment by the school and district can be shown by incorporating data-based decision making into the school's existing systems for supporting students, including the selection of interventions, allocation of resources, grouping decisions, etc.
- Administrative participation in team meetings, faithful implementation of data-based practices within the building, investment in research-based interventions, the provision of staff development and meeting time."

\* From Lau, Sieler, Muyskens, Canter, VanKeuren, & Marston. (2006). Perspectives on the use of the Problem-Solving Model from the viewpoint of school psychologist, administrator, and teacher. *Psychology in the Schools*, 43 (1), 117-127.



## Ideas for Successful Implementation \*

- Encourage participation by key stakeholders during planning and implementation.
- Strong administrative support in staff development, instructional integrity, and data collection.
- In-depth staff development with mentoring, modeling, and coaching.
- Follow-up trainings at beginning of year.
- Manual outlining procedures and materials necessary.
- Use technology to improve efficiency.
- Build PSM/RTI into school schedule and SIP process.

From Lau, Sieler, Muyskens, Canter, VanKeuren, & Marston. (2006). Perspectives on the use of the Problem-Solving Model from the viewpoint of school psychologist, administrator, and teacher. Psychology in the Schools, 43 (1), 117-127.



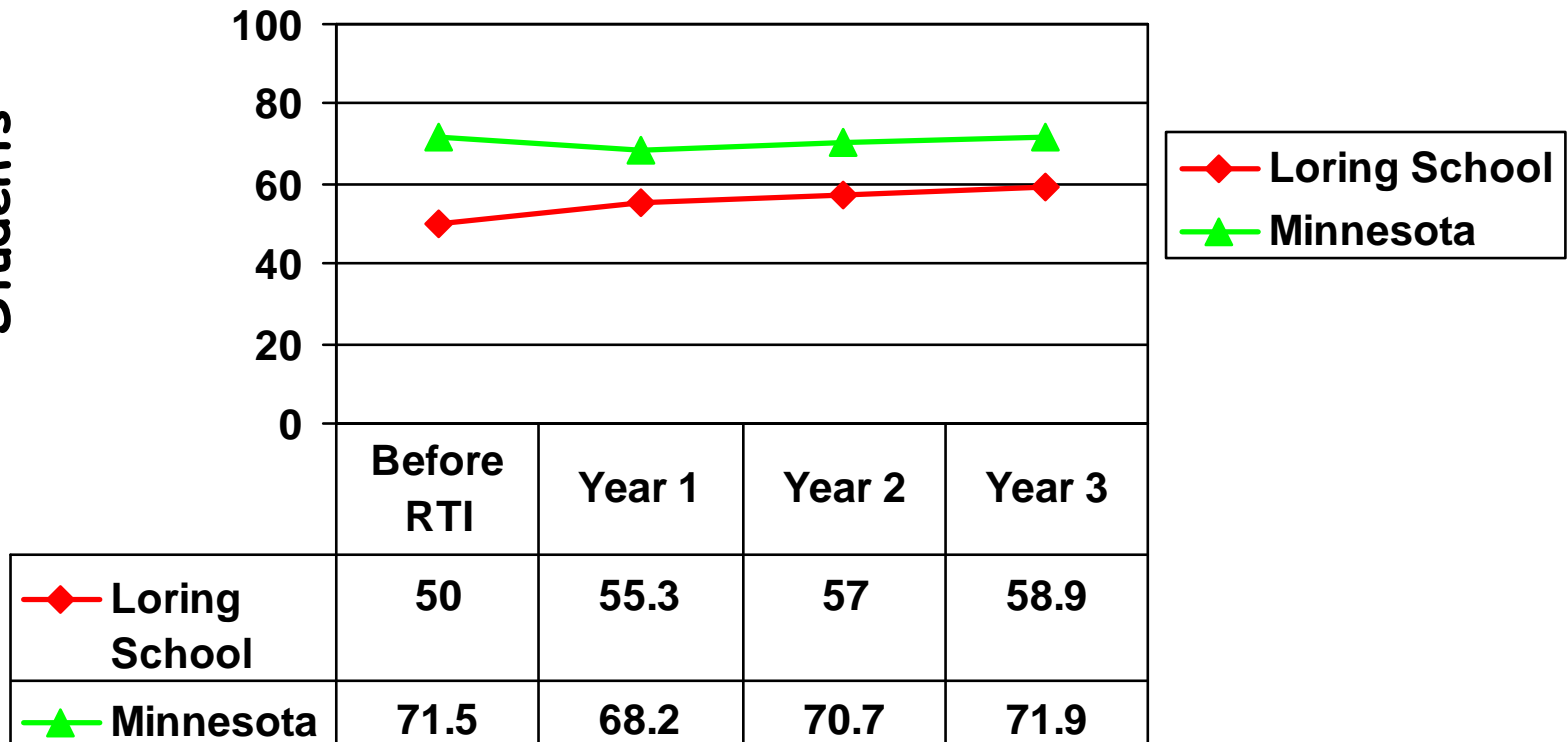
## *Support and Training for PSM and RTI*

- “Communicate with and encourage participation by key stakeholders (teachers, parents, and community members), ideally during planning, implementation, and evaluation stages.
- Obtain staff buy-in and include teachers and (if appropriate) parents in all decision making.
- Solicit and reinforce strong administrative support for the model (e.g., attend PSM team meetings and model the process) and expect administrators to hold staff accountable for treatment efficacy and data collection.
- Provide in-depth training beyond introductory PowerPoint presentations; and provide mentoring, modeling, and coaching that assists teachers in understanding and implementing them in going through the process. Ideally, district would invest a team of “experts” that would go into buildings to provide consultation and training.
- Plan to hold periodic follow-up trainings for all staff minimally at the beginning of each school year.
- Prepare a district manual detailing all the procedures, expectations, specific paperwork involved at each stage.
- Provide time for planning, training, meeting, and evaluating.”

\* From Lau, Sieler, Muyskens, Canter, VanKeuren, & Marston. (2006). Perspectives on the use of the Problem-Solving Model from the viewpoint of school psychologist, administrator, and teacher. Psychology in the Schools, 43 (1), 117-127.

## Comparison Before RTI and After 3 Years of Implementation at Loring School

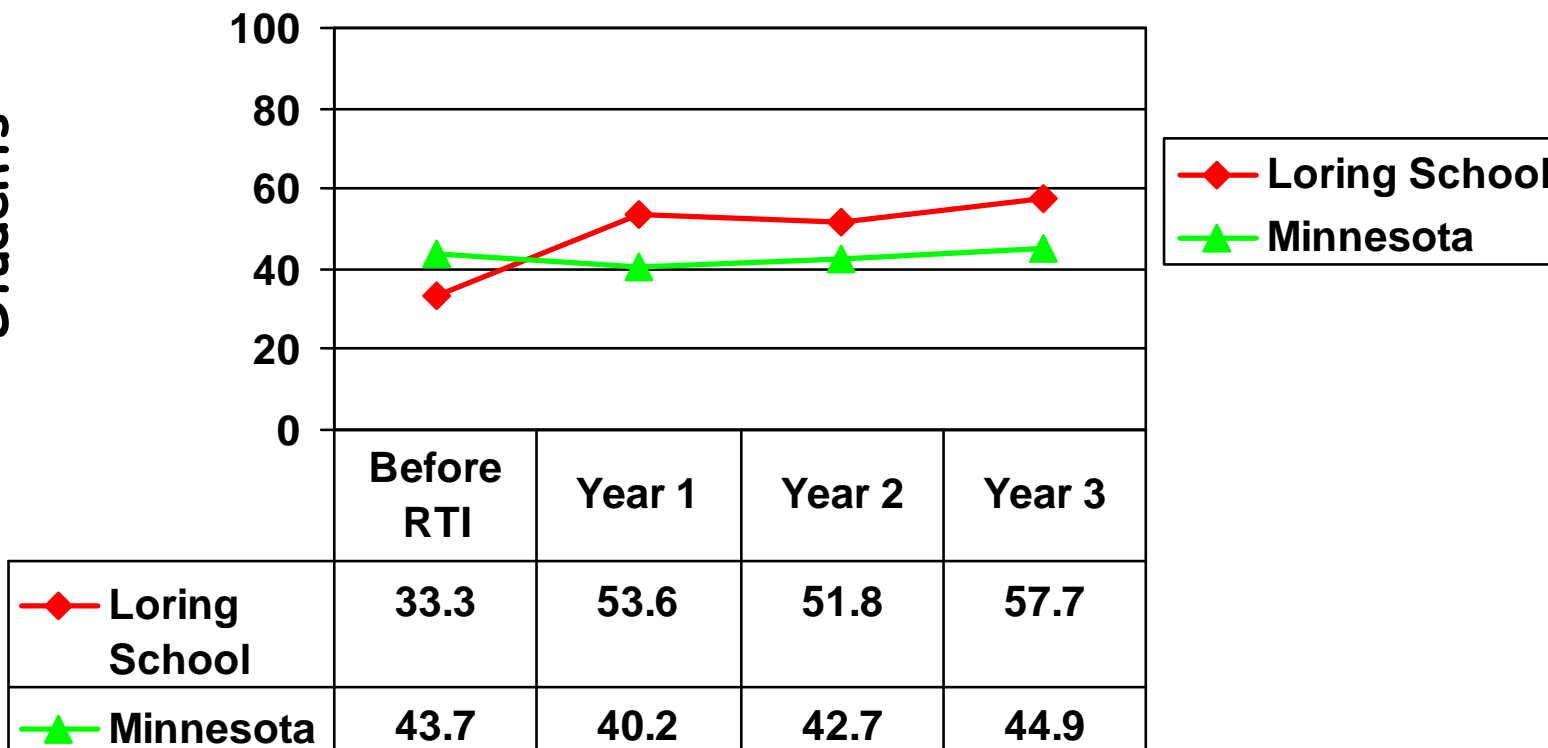
Percentage of Proficient Students



Source: Minnesota Department of Education Accountability Website

## Comparison of African American Students Before RTI and After 3 Years of Implementation at Loring School

Percentage of Proficient Students



Source: Minnesota Department of Education Accountability Website