

# Using DIBELS and RTI to Teach the Foundations of Assessment

DIBELS Summit 2010

## What is Assessment?

Do I know you?

What is your story?



## The story we want to tell...

➤ Academic success for ALL students

- Early intervention
- Effective instruction



## Today's story



- Students performing below grade level
- Disproportionate representation in Special Education
  - attributed to inadequate referral and evaluation practices
  - misidentified when they likely were not given access to appropriate instruction
- Wait to fail model
- Secretary of Education calling for "revolutionary reform" to our current system

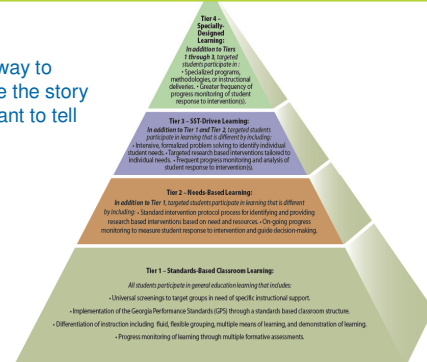
## National Story

- Gone up 1 or 2 points across the last decade (NAEP)
- NCLB (2001) 30% of 4<sup>th</sup> graders at grade level

	ALL students scoring below 4 <sup>th</sup> grade	Diverse students scoring below 4 <sup>th</sup> grade
Basic: partial mastery	34%	49-54%
Proficient: solid grade level performance	68%	80-86%

## Response to Intervention: The Georgia Student Achievement Pyramid of Interventions

One way to create the story we want to tell



"We will lead the nation in improving student achievement."  
Kathy Cox, State Superintendent of Schools

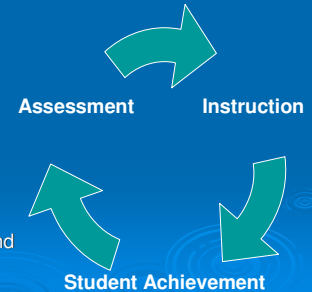


## Core RtI Principles (Multi-Tier) for Case Study Assignment

- Use a problem-solving method
  - to make decisions & increase student achievement
- Monitor student's progress
  - To inform instruction
  - To monitor effectiveness
    - Are students learning what we are teaching?
- Data-driven decision making
  - Student's response to intervention
  - Collect ongoing data & use data to make informed instructional decisions.

## Key Components: Multi-Tiered Model

1. Effective, **research-based instruction** designed to meet student needs; differentiated instruction
2. Quarterly **Assessment** to measure baseline and monitor progress



## Features of CBM

- Replicable / Standardized
  - Scores: chart over time, same format for fair comparison
  - Reliability and validity are high
  - Accountability
    - Data clearly shows progress or lack of progress
- Targeted instruction and assessment
  - To increase student achievement and behavioral success for **ALL**
    - By intervening early to prevent (Torgesen, 2007)
    - By using the most effective interventions (research-based)
    - By assessing student progress & instructional effectiveness
  - For systematic data-driven decision making
  - Skills assessed are from curriculum

## Use Professional Journal articles as Exemplars

- Making research accessible
- Fuchs, L. S., Compton, D. L., Fuchs, D., Pausen, K., Brant, J., & Hamlett, C. L. (2006). Responsiveness to Intervention: Preventing and identifying mathematics disability. *TEACHING Exceptional Children*, 37(4), p. 60-63.
- Mohdavi, J. N., & Haager, D. (2007). Linking progress monitoring results to interventions. *Perspectives on Language and Literacy*, 33(2). Retrieved from Mohdavi, J. N., & Haager, D. (2007). Linking progress monitoring results to interventions. *Perspectives on Language and Literacy*, 33(2). Retrieved from <http://www.rtinetwork.org/EssentialAssessment/Progress/ar/LinkingMonitoring/1> on January 1, 2010.
- Vaughn, S. & Roberts, G. (2007). Secondary interventions in reading: Providing additional instruction for students at risk. *TEACHING Exceptional Children*, 39(5), p. 40-46.
- Hasbrouck, J., & Ihnot, C. (2007). Curriculum-Based Measurement: From skeptic to advocate. *Perspectives on Language and Literacy*, 33(2). Retrieved from [www.rtinetwork.org/EssentialAssessment/Progress/ar/CBMAdvocate/1](http://www.rtinetwork.org/EssentialAssessment/Progress/ar/CBMAdvocate/1)

## CBM Case Study (Hasbrouck & Ihnot, 2007)

- What are the benefits of using CBM's in the classroom?
  - Use the Skeptic, Advocate, and Example sections
- Share your case study findings.
  - Was progress, or lack of progress, clear?
  - How did the use of CBM's inform instruction?
  - Did the use of CBM's increase, decrease, or have no impact on student achievement?

## Response to Intervention

### Problem-Solving Model (Wedl, 2005)

- RTI Steps 1-3 **Need**
  - Identifying and defining need for support
- RTI Steps 4-7 **Intervention Response**
  - Developing alternative interventions for students
- RTI Steps 8-10 **Decision Response**
  - Evaluation of response to intervention

## Case Study, RTI Steps 1-3, Need Tell the Student's Story

- Purpose
  - To identify and define student's area of need
  - To provide baseline data to monitor progress
- Components (in a ½ inch 3-ring binder)
  - Inventories: Multiple Intelligence Strengths, learning styles, & interests
  - Present levels of performance
  - CBM probes for 2 different skills to target area of need
    - After administering both CBM probes for different skills, decide which one is best to monitor this child's progress
    - Administer the best probe to chart progress, give 3 times for 3 baseline data points
    - Time series chart

## RTI Steps 4-7 Intervention

- Hypothesis
- Evidence-based Intervention
- Progress Monitoring Plan
  - Goals and Objectives
  - CBMs
  - Time series chart

## RtI Intervention: Hypothesis

- Hypothesis regarding student needs
  - A data-based statement that summarizes what you have learned about the area of need, then gives a viable reason or hypothesis
    1. Start with the present level
    2. **Why** do you think the problem is occurring?  
\*\*\*\*\* **Bonus Question**

## Hypothesis Format: Scores → Reason for scores

- Sam is reading **30 correct words** per minute with frequent pauses, multiple errors, and a reading rate below his peers **because he lacks fluency** in some letter sounds, letter blends, and irregular high-frequency words.
- Mark's average score for Nonsense Word Fluency is **6 CWPM and 10 CWPM** for Phoneme Segmentation Fluency. His difficulty decoding words may be **due to a lack of alphabetic understanding and phonemic awareness.**
- Suzie completes an average of **27 digits** of two digit by one digit multiplication with **6 errors, because she rushes through the work, does not check her work, and regroupes incorrectly.** She may not have her multiplication tables memorized for 6-9.

## How do you want the story to go?

- **Research-based Practice**
- "teaching practices that have been proven to work."  
(U.S. Department of Education, 2003)
- **Eminence-Based Practice**
- "Making the same mistakes with increasing confidence over an impressive number of years."



—O'Donnell, 1997, *A Sceptic's Medical Dictionary*

## What is Intervention?

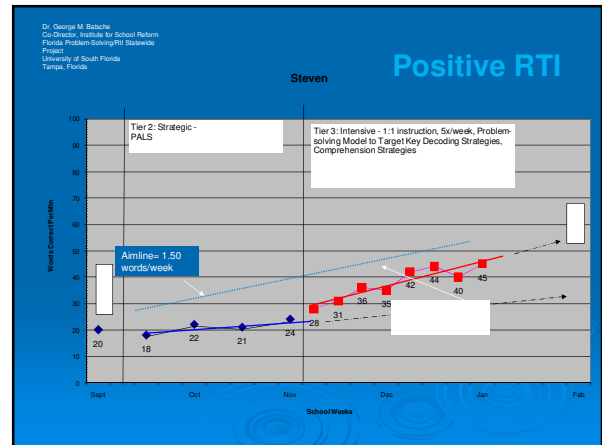
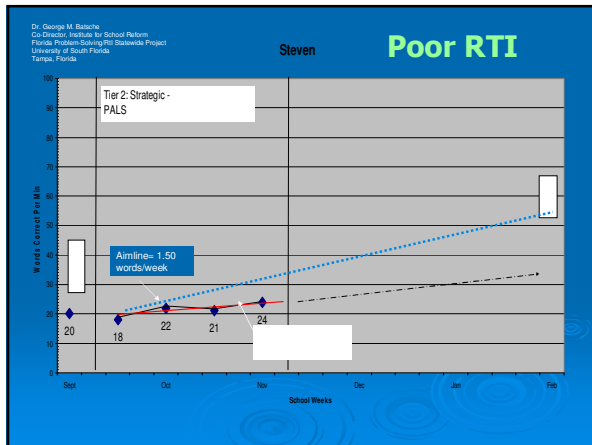
- What is done to support student's learning
  - Intervention
  - Instruction
  - Practice
- Evidence-Based
  - Research-based
  - Scientifically research-based
- Effective
  - [www.interventioncentral.org](http://www.interventioncentral.org)
  - 5 Big Ideas in Beginning Reading <http://reading.uoregon.edu/>
  - PALS: peer assisted learning [www.w-w-c.org](http://www.w-w-c.org)

## RTI Intervention: Given Student's Story, What Intervention...

- Link intervention to
  - hypothesis
  - assessment data & present levels
  - Learning styles & MI Strengths
  - Student interests
  - Effective practice and instruction
- Intervention is evidence-based
  - Case Study Assignment: pick interventions for one area; not behavioral/emotional issues
  - Provide evidence for choice
- Intervention is described in detail + setting

## RTI Intervention: Progress Monitoring Plan

- 1 CBM to monitor progress
- Goals & Objectives
- Schedule for Progress Monitoring
  - Time Series graph
    - Baseline
    - Goal data point
    - Goal line
    - Aimline
    - Projected instructional days/ Length of time of intervention (at least 4 sessions)
      - Not too long, or too short
      - 4-6 weeks (Fuchs & Fuchs; GaDOE, 2006)



## Why SMART Goals?

"Would you tell me, please, which way I ought to go from here?" asked Alice.

"That depends on a good deal on where you want to get to," said the Cat.

"I don't much care where-" said Alice.

"Then it doesn't matter which way you go." said the Cat.

-Lewis Carroll  
From *Alice's Adventures in Wonderland* (2002, p. 53)

## RTI Intervention: Goal & Objectives

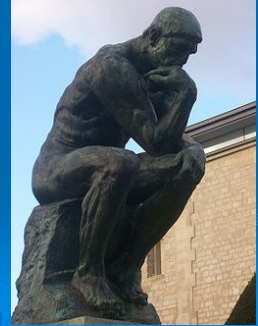
- S  
M  
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T
- Goal
    - Sam will read 60 words correctly per minute, or at grade level, by May 2009.
  - Objectives
    - Sam's reading fluency will increase by 2 words per week over 4 weeks. OR Sam will read 44 words correctly per minute by March 2009.
    - Sam will read with greater accuracy, reducing the number of errors to 3-4 errors per minute.
    - Sam will reduce anxiety created by the timed test using self-talk.
  - Case Study Goal and Objectives
    - Related to the tool you will use to monitor progress
    - Goal will be used to decide if student responded to the intervention

## Interventions to Address Goals

- Increased fluency & frequent pauses for students with learning disabilities
  - *Repeated Reading* ([www.interventioncentral.org](http://www.interventioncentral.org))
  - *Listening Passage Preview* ([www.interventioncentral.org](http://www.interventioncentral.org))
- Decrease test anxiety
  - *Managing Test Anxiety: Ideas for Students* ([www.jtmwrightonline.com/pdffdocs/testtips.pdf](http://www.jtmwrightonline.com/pdffdocs/testtips.pdf))
  - *Effective Strategies When Taking the Test* ([www.interventioncentral.org](http://www.interventioncentral.org))

## Building Reflective Behavior

- Is it working?
- Could it work better?



## RTI Decision, Steps 8-10: Evaluate the Data & Make a Data-based Decision

### Evidence of Response to Intervention

- Review data
  - Did student reach the goal? Why? Or Why not?
  - What contributed to growth?
  - Describe the evidence
  - Did the intervention work?
  - Was your hypothesis correct?

## RTI Decision : Data-Driven Recommendations

- **Decision 1**
  1. Sufficient progress made toward goal
  2. Non sufficient, lack of response
- **Decision 2:** If lack of response, what now?
  - Continue, intervention needs more time
  - Modify, increase intensity
  - Continue + Add another intervention
  - Different intervention

## Case Study Presentation

- Students present their Case Study results
  - CBM chosen to monitor progress & why
  - Evidence-based Intervention with Evidence of Effectiveness
  - Data-driven Decision Making process
- Tell their Problem Solving Story
- Handout for colleagues in class
  - See examples of Secondary CBMs that students created using the principles of effective progress monitoring and the foundations of assessment

## Questions

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