# Educators as Physicians:

Using Data from Reading Assessments for RTI/MTSS Decision-Making



Presented by Jan Hasbrouck, Ph.D.

## **Topics**

- Using assessments within the SAILS model: Standards, Assessments, Instruction & Intervention, Leadership & Sustained, System-wide Commitment
- Response to Intervention: a working definition
- Using data to make decisions about our students: Educators as Physicians!
- The RIGHT reading assessments for Screening, Diagnosis, Progress Monitoring: What, Why & How?
- Questions & Answers & Conversation

## **Educators as Physicians:**

Using RTI Data for Effective Decision-Making

#### Jan Hasbrouck, Ph.D.

#### **Four Modules**

- Framework for Intervention
- Benchmark/Screening
- Diagnosis
- Progress Monitoring

Summary booklets sold in sets of 4

Available online at www.gha-pd.com





### **CCSS GOAL**

**ALL** students must be able to read increasingly complex literary and informational text independently and proficiently.

"So...
how do
we get
there?



## Henry 7<sup>th</sup> grader



- Henry, 7th grade
- Retained in 2<sup>nd</sup> grade
- Title I reading 4-6th
- Low grades and test scores.

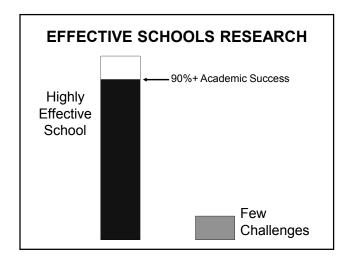
# Lupita 3<sup>rd</sup> grader

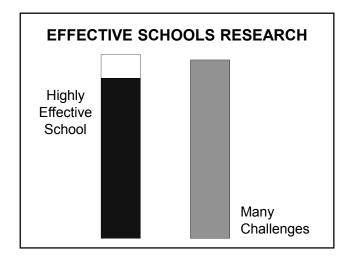


- Lupita, 3rd grade
- L1 Spanish
- Teacher has concerns about behavior and reading

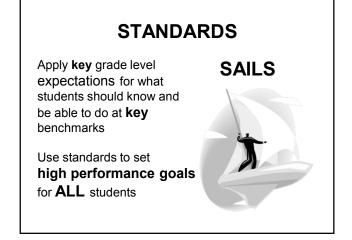


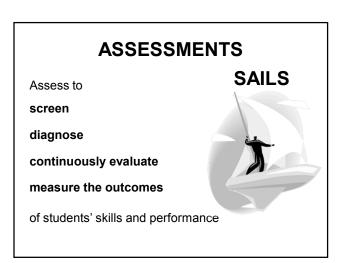
What key elements have been identified by research as **MOST** important for student success?











## **BIG IDEA of ALL ASSESSMENTS**

All assessments are conducted to answer a **QUESTION!** 



### **ASSESSMENTS**

SAILS

#### Benchmark/Screening

Which students **MIGHT** need extra assistance?

#### Diagnostic

What are a student's skills strengths & needs?

#### **Progress Monitoring**

Is **learning** happening?

#### Outcome

Did students make progress toward **standards**?

### **ASSESSMENTS**

SAILS

#### **FORMATIVE**

Benchmark/Screening Diagnostic **Progress Monitoring** 

**SUMMATIVE** 

**Outcome** 

☑ Diagnose

☑ Continuously evaluate

☑ Measure outcomes

**SHARE DATA** 

## **ASSESSMENTS**

#### Assess to









SAILS

## SHARING Student Data



Research shows teams have a powerful and positive effect on the school & students:

- Reduced referrals to special education
- Improved academic performance
- Improved behavioral performance

Burns & Symington, 2002 McDougal, Clonan & Martens, 2000

### **SHARING Student Data**



"The principal put scores on a wall and asked the instructors to discuss why some of the teachers were doing better than others. Initially resistant, teachers began to recognize areas where they needed help."

**SAILS** 

"You start to question yourself, and that's the whole point... Eventually it gives you the freedom of knowing that even as a seasoned teacher you can say 'This isn't working."

Los Angeles Times August 22, 2010

### SHARING Student Data



SAILS

The new principal at a middle school started a voluntary program of posting student's assessment results during grade level meetings.

meetings.

"It was a little uncomfortable at first, but that level

"It was a little uncomfortable at first, but that level of transparency really helped. We were able to see where we needed to improve and see how we could help each other."

Los Angeles Times August 22, 2010

### **ASSESSMENTS**

Assess to

☑ Screen

☑ Diagnose

☑ Continuously evaluate

☑ Measure outcomes

## **SAILS**



#### SHARE DATA

in frequent, public, nonjudgmental, collaborative meetings

#### USE

the results to make all key instructional decisions

#### **INSTRUCTION & INTERVENTION**

Effectively **ORGANIZE** & **MANAGE** the classroom environment

PLAN lessons and interventions DIFFERENTIATED to meet the identified needs of ALL students, at all ability & skill levels

**DELIVER** instruction using validated, effective instructional **STRATEGIES & MATERIALS** 



SAILS

### **LEADERSHIP**

SAILS

Provides

VISION, GUIDANCE & SUPPORT to ensure that:



Effective **instruction & interventions** designed to meet **standards** are implemented for ALL students

Instructional decisions are based on continuous **assessment** data

Focused & sustained **professional development** provided to support S-A-I

### SUSTAINED COMMITMENT

Adopt a system-wide

#### "no excuses"

model to sustain progress.
Administrators, teachers, parents, and staff partner to

help **ALL** students achieve success.

Encourage and support

**collaboration** across classrooms, special programs, home, and community.



## **ALL 5 Elements**

of **SAILS** must be incorporated into an instructional system to ensure that **ALL** students achieve success



**SAILS** must be launched into a **safe** and **positive** school environment

## What to do about...?





## **Old Response**



- "Wait to fail"
- I.Q./achievement discrepancy
- Hope & pray??

Today we have better responses...

# RESPONSE TO INTERVENTION RTI / MTSS

#### **DEFINED:**

A process where a student's response to appropriate, high-quality, evidence-based instruction and intervention is documented across tiered levels of services.



### **PURPOSE OF RTI / MTSS?**

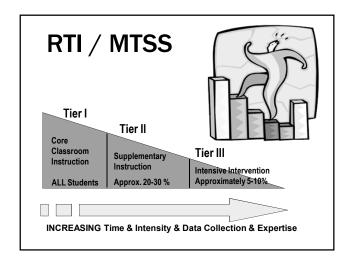
#### **GOAL K-3**: Prevention!

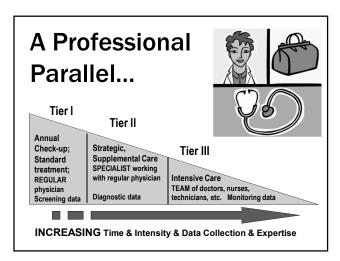
To reduce the number of students with academic or behavior problems incorrectly designated as "disabled"

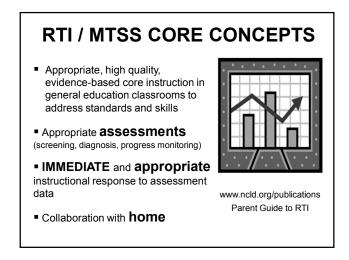
#### GOAL 4-12: Rescue!

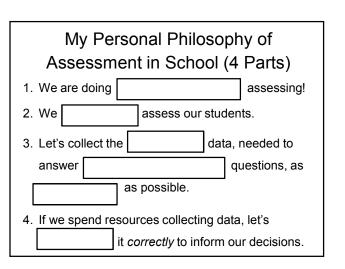
To find **EVERY** student with academic or behavioral needs and provide appropriate intervention services

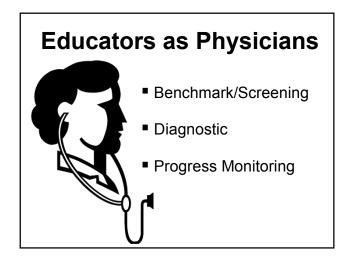


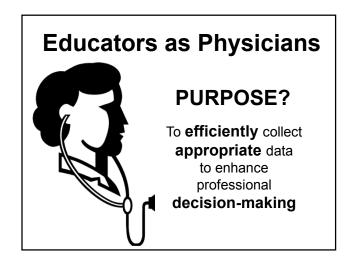


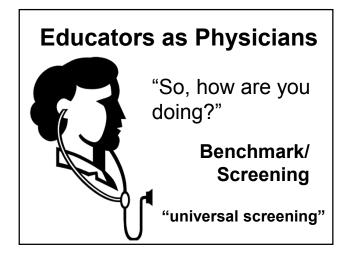




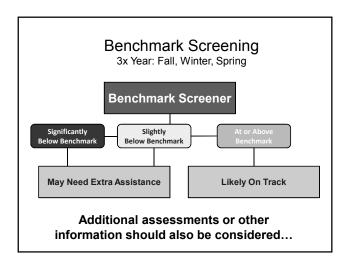












# Common Assessments for Benchmark Screening

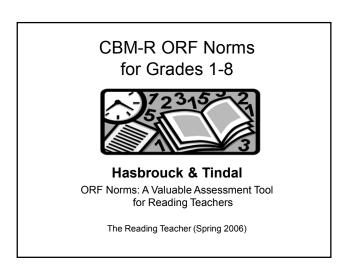
DIBELS Dynamic Indicators of Basic Early Literacy Skills K-6

Reading Fluency Benchmark Assessor (RFBA) Read Naturally K-8

AIMSWeb Edformation K-8

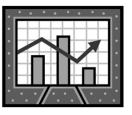
EasyCBM Riverside K-8

All are versions of CBM-R ORF assessments



## **Statistical Terminology**

- Obtained Score
- True Score
- Error ("noise")
- Confidence intervals



# Estimated SEM for ORF



Likely range of CBM-R SEM values is:

6 to 13 wcpm

If **CORRECTLY ADMINISTRED** SEM might approximate:

**5 wcpm** (Gr 1 & 2) to **9 wcpm** (Gr 3-8+)

Christ & Coolong-Chaffin (2007)

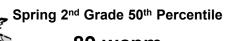


Spring 2<sup>nd</sup> Grade 50<sup>th</sup> Percentile

89 wcpm

89 + 10 = 99

89 - 10 = 79



89 wcpm

99 wcpm or higher

GREEN ZONE 1

05 ....

85 wcpm

YELLOW ZONE

84 wcpm

to

79 wcpm

RED ZONE

78 wcpm or lower

# Benchmark/Screening EXAMPLE #1

3<sup>rd</sup> grader reading **3<sup>rd</sup>** grade passages

**FALL** 

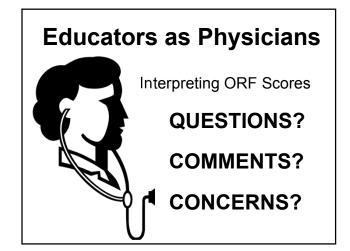
**78 WCPM** 



# Benchmark/Screening EXAMPLE #2

4th grader reading 4th grade passages





### SHARING & USING Benchmark Data

#### Collaborative Assessment Team

- All grade level teachers bring: Assessment data, Social/ emotional/ behavioral information, & Health concerns
- "Team": Principal, reading coach, interventionist, special educator, ELL, counselor, school psychologist, speech/pathologist, others...
- 40-60 minutes per classroom
- INDIVIDUAL ACTION PLANS: Group students; match to instructional program; identify who may need more assessments; modify current interventions, etc.



## **NORMS** for Team Meeting

- All targeted staff present for all meetings
- COLLABORATIVE, nonjudgmental tone: **STUDENT** focus
- Teacher's voice most significant
- Teachers come with current data on each student
- Team will focus on the whole child, with reading as primary academic concern
- Student needs will be addressed through appropriate interventions
- Master spreadsheet records follow-up plan



## **AFTER** Team Meeting

- Action Plans document student instructional needs & follow up
- Teachers implement personalized learning plan for each student and seek support as necessary
- Teachers monitor students' progress
- Teachers collaboratively review progress monitoring data at grade level meetings & discuss needed instructional changes
- Documented follow-up information distributed to all team members

## Henry 7th grader



- Mid-November
- Home room teacher makes referral to reading specialist: low grades in most content classes + low test scores
- English/L.A. teacher concerned about general literacy skills

Diagnostic tests scheduled...

## Lupita 3<sup>rd</sup> grader



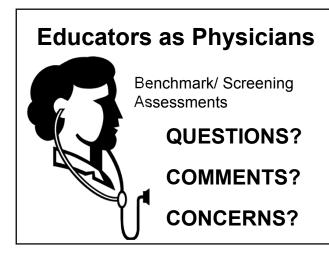
- Universal fall screening:
   Reading Fluency
   Benchmark Assessor
- RFBA scores: 59, 65, 64
   Mean = 62.66 = 63 wcpm

Compare to norms...

## Lupita 3<sup>rd</sup> grader



- Universal fall screening RFBA scores: 59, 65, 64 Mean: 63 wcpm YELLOW FLAG
- Lupita's teacher also sees concerns in daily work and behaviors
- Discuss at assessment team meeting— further diagnosis

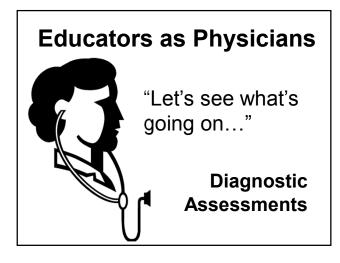


## **Educators as Physicians:**

Using RTI Data for Effective Decision-Making

- MODULE THREE Diagnostic Assessments
- 5 Key Reading Elements
- Diagnosing Phonemic Awareness
- Informal Reading Assessments
- · Diagnosing Phonics & Decoding
- · Diagnostic Data Checklist

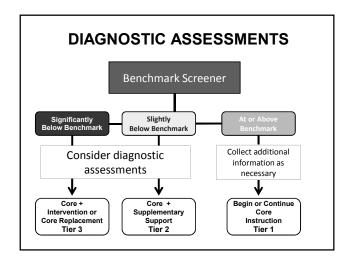


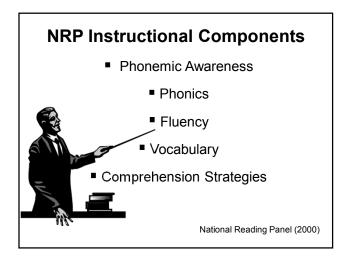


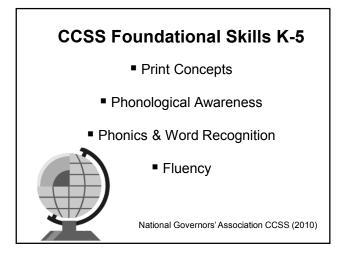


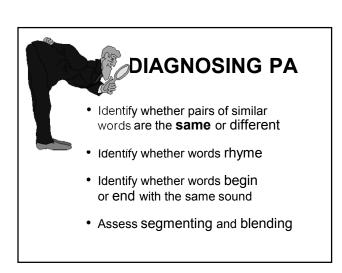
# The Question?

What are this student's skill strengths and needs?









#### **PA Assessments**

- Comprehensive Test of Phonological\_Awareness (CTPA)
- Test of Phonological Awareness in Spanish (TPAS)
- Test of Phonological Awareness (TOPA)
- Lindamood Auditory Conceptualization Test
- Yopp-Singer Test of Phoneme Segmentation (K-1)
- Rosner-Simon Auditory Analysis Test (Grade 2+)
- Texas Primary Reading Inventory (TPRI) (K-2)

#### **Yopp-Singer Test of Phoneme Segmentation**

**DIRECTIONS**: Today we're going to play a word game. I'm going to say a word and I want you to break the word apart. You are going to tell me each sound in the word in order. For example, if I say "old," you should say /ol-/I/-/d/." (Administrator: Be sure to say the **sounds**, not the **letters**, in the word.) Let's try a few together.

**PRACTICE ITEMS**: Assist the child in segmenting these items as necessary: ride go man

#### 22 Items:



dog keep fine no she wave grew that red me sat lay race zoo three job in ice at top by do

#### **Yopp-Singer Test of Phoneme Segmentation**

Serves as **GENERAL INDICATOR** of overall PA skill strength/weakness

- High Score: Move on to phonics/decoding instruction!
- Correctly Segment Some Items: Keep teaching all PA skills as part of normal instruction.
- Only A Few Items or None: Provide intensive, focused INTERVENTION (consult speech/language specialist and/or reading specialist if possible)



- Identify sounds in isolation
- Apply decoding strategies to nonsense and real words
- Assess full range of skills cvc, ccvc, ccve, ccvcc, etc. & multi-syllable words

Quick Phonics Screener (QPS) 2nd Ed.



Written by Dr. Jan Hasbrouck

Available from Read Naturally

www.readnaturally.com



You **MUST** listen to the student read aloud!

And not just for 60 seconds!



- Assess **prosody** (subjective)
- Assess sound or letter or word fluency (beginning readers)
- Assess fluency in connected text

# Diagnosing Prosody NAEP Reading Fluency Scale

**LEVEL 4** Expressive interpretation

**LEVEL 3** 3-4 words phrased in groups

**LEVEL 2** Awkward & unrelated groupings

**LEVEL 1** Word-by-word

National Assessment of Educational Progress

# What are the ACCURACY & RATE

scores we should be looking for?



## What are the ACCURACY & RATE scores we should be looking for?

**# 1 LIMITED EVIDENCE** from research or theory or practice that suggest a benefit to reading significantly ABOVE the 50th%ile

**# 2 SIGNIFICANT EVIDENCE** that it is crucial to help students read with fluency at or near the 50<sup>th</sup>%ile to support comprehension and motivation

### **DIAGNOSIS EXAMPLE: FALL**

4th grader reading 4th grade passage

94% accuracy 5.5 / 7 comprehension instructional level

ORF: 83 wcpm

### **DIAGNOSIS EXAMPLE: WINTER**

6th grader reading **5th** grade passage





Try 4th grade passage...

### **DIAGNOSIS EXAMPLE: WINTER**

6th grader reading **4th** grade passage



93% accuracy 6 / 8 comprehension

instructional level

ORF: **113 wcpm** 

# Diagnostic Assessments for Henry & Lupita





# Henry 7<sup>th</sup> grader



- Mid-November
- Home room teacher makes referral to reading specialist: low grades in most content classes + low test scores
- English/L.A. teacher concerned about general literacy skills

Diagnostic tests scheduled...

# Henry 7<sup>th</sup> grader



IRI RESULTS
Gr 4 INDEPENDENT

98% correct 6 / 8 questions correct

**Gr 5 INSTRUCTIONAL** 

93% correct 5.5 / 8 questions correct

113 wcpm

# Henry 7<sup>th</sup> grader



### **IRI RESULTS**

**Gr 4 INDEPENDENT** 

**Gr 5 INSTRUCTIONAL** 

Gr 6?

# Henry 7th grader

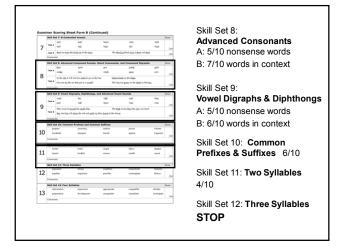


### **IRI RESULTS**

**Gr 4 INDEPENDENT** 

**Gr 5 INSTRUCTIONAL** 

**Gr 6 FRUSTRATION** 



# Henry 7th grader



✓ Reading two years below level **IRI** 

✓ Fluency is OK at 5<sup>th</sup> grade **IRI** 

✓ Phonics Vowel digraphs & diphthongs; prefixes & suffixes; multisyllable words

**QPS** 

## Lupita 3<sup>rd</sup> grader



- Universal fall screening RFBA scores: 59, 65, 64
   Mean: 63 wcpm YELLOW FLAG
- Lupita's teacher also sees concerns in daily work and behaviors
- Assessment team: Further diagnosis

## Lupita 3<sup>rd</sup> grader



# IRI RESULTS Gr 2 INDEPENDENT

96% correct 6.5 / 8 questions correct

#### **Gr 3 INSTRUCTIONAL**

91% correct 4.5 / 8 questions correct

62 wcpm

# Lupita 3<sup>rd</sup> grader

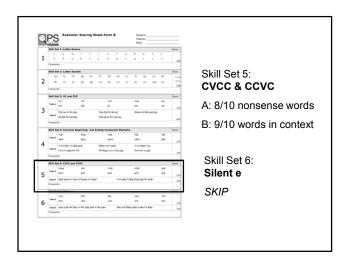


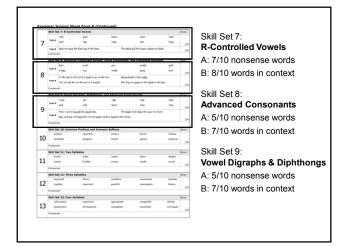


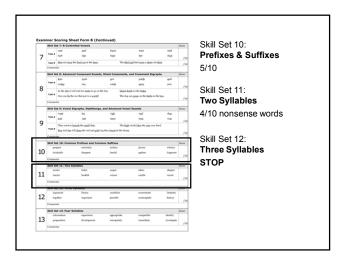
Gr 2 INDEPENDENT

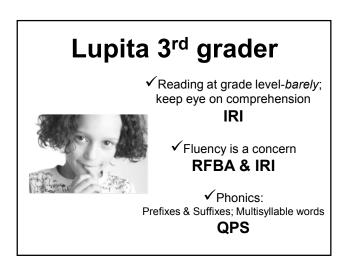
Gr 3 INSTRUCTIONAL

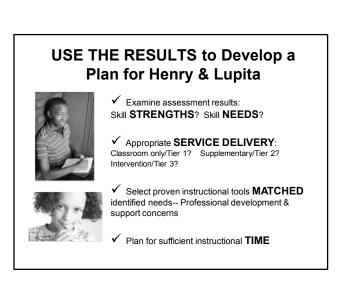
**Administer QPS** 

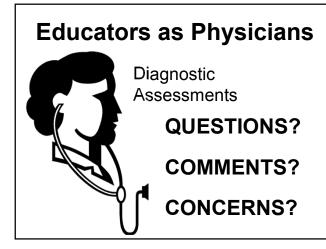












## **Educators as Physicians:**

Using RTI Data for Effective Decision-Making

#### MODULE FOUR

**Progress Monitoring** 

- · Effective Instruction
- CBM Progress Monitoring
- Setting up a CBM Graph
- · Options for Charting Progress
- Interpreting Graphs





# The Question?

Is the student making progress toward instructional goals?

Progress
Monitoring
in Reading: 2 Forms

On-Level (Tier I)
Repeat benchmark assessments
3x year

+ daily observation & in-program assessments

Supplemental (Tier II) or Intervention (Tier III) Curriculum-based Measurement (CBM) ORF or maze Some adjustments in the procedures

# CBM Progress Monitoring for Reading



Scores compare students' to individual goals rather than grade norms or benchmarks

# CBM-R Progress Monitoring **DIFFERENCES**



- Level of passages?
- Frequency?
- Number of passages?
- Graph results

# Research on CBM Progress Monitoring

- Insufficient research
- Schools must use multiple sources of information to support decisions about progress
- All CBM scores are estimates
- Confidence intervals must be used

Ardoin & Christ (2009)

# CBM Monitoring Reading Progress using oral reading fluency

- 1 minute oral reading sample
- Administered 1:1
- Score for words correct per minute
- INSTRUCTIONAL or GOAL level (?)
- Assess 1x week or 2x month (?)
- One passage each time (?)

Jenkins, Graff & Miglioretti (2009) suggest that 3 scores collected every 3 weeks may be the most accurate measure of student progress



# CBM Monitoring Reading Progress using oral reading fluency

- 1 minute oral reading sample
- Administered 1:1
- Score for words correct per minute
- INSTRUCTIONAL or GOAL level (?)
- Assess 1x week or 2x month (?)
- One passage each time (?)
- Graph the results



### Setting Up a Progress Monitoring Graph

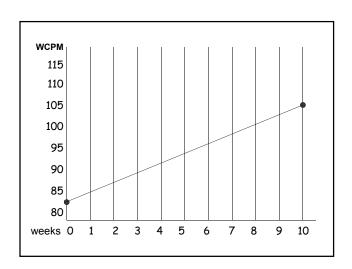
4th gr. student; 2nd gr. reading level

- 1. 2-3 passages at **INSTRUCTIONAL** or **GOAL** level to establish **baseline** score (Gr. 3?)
- 2. 83, 78, 85 wcpm (median: 83; mean 82)
- 3. Determine weekly **goal** (2 words/wk?)
- 4. Determine goal period (10 weeks?)
- # words per week (weekly goal) x # weeks; add to mean/median score (2 X 10 + 83 ≈ 105)
- 6. Plot baseline and goal scores on graph
- 7. Draw "aim line"... & begin instruction

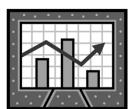
### How Much Growth?

Fuchs, et al. (1993)

Grade	Realistic Goals	Ambitious Goals
1	2.0 words per week	3.0 words per week
2	1.5 words per week	2.0 words per week
3	1.0 words per week	1.5 words per week
4	.85 words per week	1.1 words per week
5	.5 words per week	.8 words per week
6	.3 words per week	.65 words per week



# PLOTTING DATA on Progress Monitoring Graphs



plot every wcpm score

OR

the **median** of three consecutive wcpm scores (floating median technique)

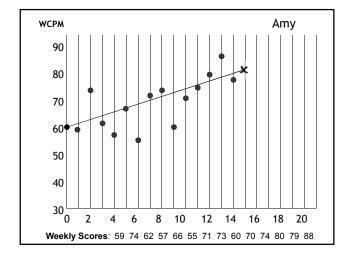
## **Options for CBM Graphing**

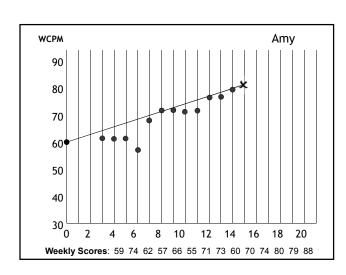




**TM** pages 161-163

**AG** pages 141-142





#### **INTERPRETING**

### **Progress Monitoring Graphs**



#### **General Rules:**

from National Center for Progress Monitoring

Use 5 consecutive scores

- If all **ABOVE** goal-line:
  - Keep current intervention and increase goal
- If all **BELOW** goal-line:

Keep current goal and modify the instruction

■ If NEITHER ABOVE OR BELOW goal-line:

Maintain goal & instruction & continue monitoring



# What to "MODIFY"?

- Appropriate "MATCH" of instruction?
- QUALITY of program & instruction?
- FIDELITY of instruction?
- INTENSITY of instruction?
- DURATION of instruction?



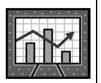
# CBM Information Sources

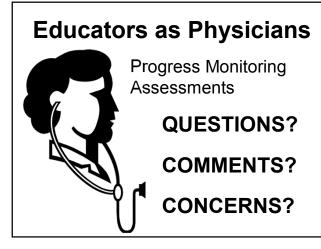
The ABCs of CBM Hosp, Hosp, & Howell (2007)

> CBM: From Skeptic to Advocate Hasbrouck & Ihnot (2007)

National Center on Student Progress Monitoring www.studentprogress.org

Fluent Reader.org www.fluentreader.org





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# SAILS NEEDS ASSESSMENT

Jan Hasbrouck, Ph.D. & Carolyn Denton, Ph.D.

Rate your current level of need to address each of the SAILS indicators

INDICATOR	Low Need	Some Need	High Need
STANDARDS			
• Teachers, administrators, specialists & other key stakeholders aware of state & district standards & benchmarks			
<ul> <li>Instructional materials aligned with standards</li> </ul>			
<ul> <li>Teachers &amp; specialists use standards &amp; benchmarks to plan instruction &amp; interventions, evaluations &amp; setting IEP goals</li> </ul>			
ASSESSMENTS			
<ul> <li>Assessments to screen, diagnose, continuously monitor,</li> <li>&amp; measure outcomes administered</li> </ul>			
<ul> <li>Teachers, administrators, specialists &amp; key stakeholders aware of the purpose of assessments</li> </ul>			
Sufficient assessment materials available			
Teachers & specialists know when & how to correctly administer different types of assessments			
• Results <b>shared</b> (frequent, public, nonjudgmental, collaborative)			
Results <b>used</b> to make all key instructional decisions			
INSTRUCTION & INTERVENTIONS			
<ul> <li>Teachers, administrators, &amp; specialists aware of multi-tiered instruction, RTI, and effective instruction</li> </ul>			
Classrooms organized & managed effectively			
<ul> <li>Teachers &amp; specialists know how to plan differentiated lessons</li> </ul>			
Teachers & specialists know how to use materials			
<ul> <li>Teachers &amp; specialists know how to effectively teach skills</li> <li>&amp; strategies for content, grade &amp; instructional needs</li> </ul>			
<ul> <li>Lessons &amp; interventions planned &amp; delivered to meet identified needs of ALL students at all ability &amp; skill levels</li> </ul>			
District has a program <b>roadmap</b> for instructional materials			

INDICATOR	Low Need	Some Need	High Need
LEADERSHIP			
Building & district leaders <b>aware</b> of key success factors (S-A-I-L-S?)			
Leaders creating & communicating a vision for focus?			
<ul> <li>Leaders providing guidance and supportincluding focused and sustained professional development</li> </ul>			
<ul> <li>Leaders receive guidance and support for providing effective leadership</li> </ul>			
SUSTAINED, SYSTEM-WIDE COMMITMENT			
A system-wide "no excuses" model in place			
<ul> <li>Plans in place or being developed to sustain successes achieved through S-A-I</li> </ul>			
<ul> <li>Encourage and support collaboration across classrooms, special programs, and home (including TIME to collaborate)</li> </ul>			
<b>SAILS</b> launched in a <i>SAFE &amp; POSITIVE</i> environment for students, faculty, parents, community			

## **COMMENTS or ACTION ITEMS:**

# NATIONAL ORAL READING FLUENCY NORMS

Hasbrouck & Tindal (2006)

Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*
	90		81	111
	75		47	82
1	50		23	53
	25		12	28
	10		6	15
	90	106	125	142
	75	79	100	117
2	50	51	72	89
	25	25	42	61
	10	11	18	31
	90	128	146	162
	75	99	120	137
3	50	71	92	107
	25	44	62	78
	10	21	36	48
	90	145	166	180
	75	119	139	152
4	50	94	112	123
	25	68	87	98
	10	45	61	72

Grade	Percentile	Fall WCPM*	Winter WCPM*	Spring WCPM*
	90	166	182	194
	75	139	156	168
5	50	110	127	139
	25	85	99	109
	10	61	74	83
	90	177	195	204
	75	153	167	177
6	50	127	140	150
	25	98	111	122
	10	68	82	93
	90	180	192	202
	75	156	165	177
7	50	128	136	150
	25	102	109	123
	10	79	88	98
	90	185	199	199
	75	161	173	177
8	50	133	146	151
	25	106	115	124
	10	77	84	97

<sup>\*</sup>WCPM = Words Correct Per Minute

# **NATIONAL ORF NORMS**

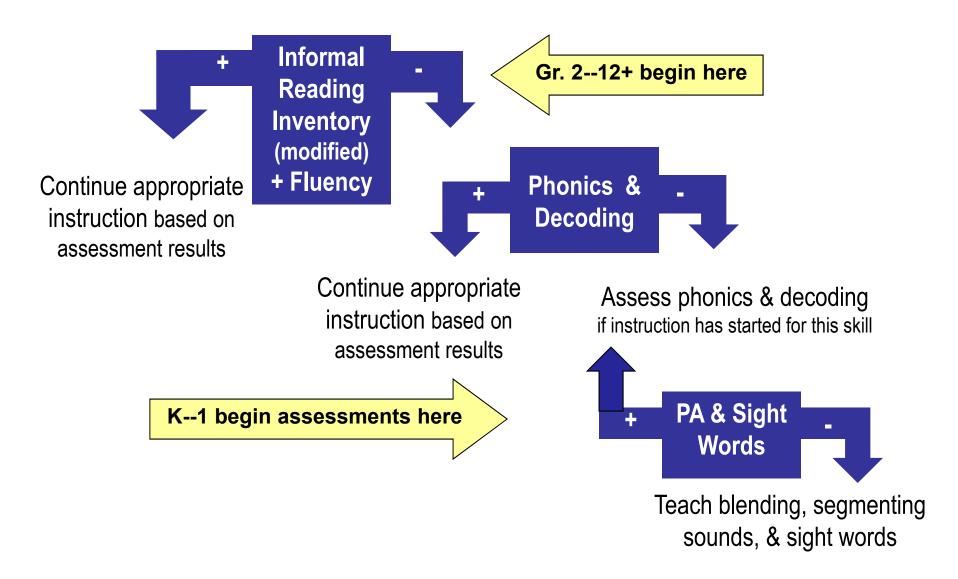
50th Percentiles

Hasbrouck & Tindal (2006)

Grade	Fall wcpm	Winter wcpm	Spring wcpm
1		23	53
2	51	72	89
3	71	92	107
4	94	112	123
5	110	127	139
6	127	140	150
7	128	136	150
8	133	146	151

GREEN zone 10 or more to -4 YELLOW Zone -5 to -10 RED Zone > 10 below

# Diagnostic Assessment Sequence



FROM: Educators as Physicians: Using RTI Data for Effective Decision-Making Jan Hasbrouck, Ph.D. (2010) www.gha-pd.com