Baselines, and Benchmarks And Goal Setting, OH MY!!

Andrew Shanock, PhD, NCSP

College of Saint Rose

NY Association of School Psychologists (NYASP), President

shanocka@strose.edu

AGREE?

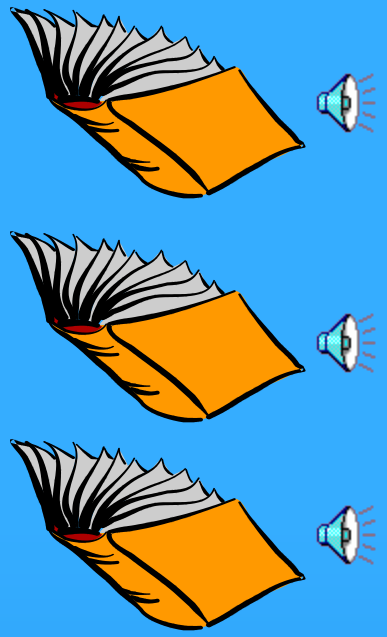
"A teaching method might work with all of the students some of the time

And some of the students all of the time

But a method doesn't work with all of the students, all of the time."

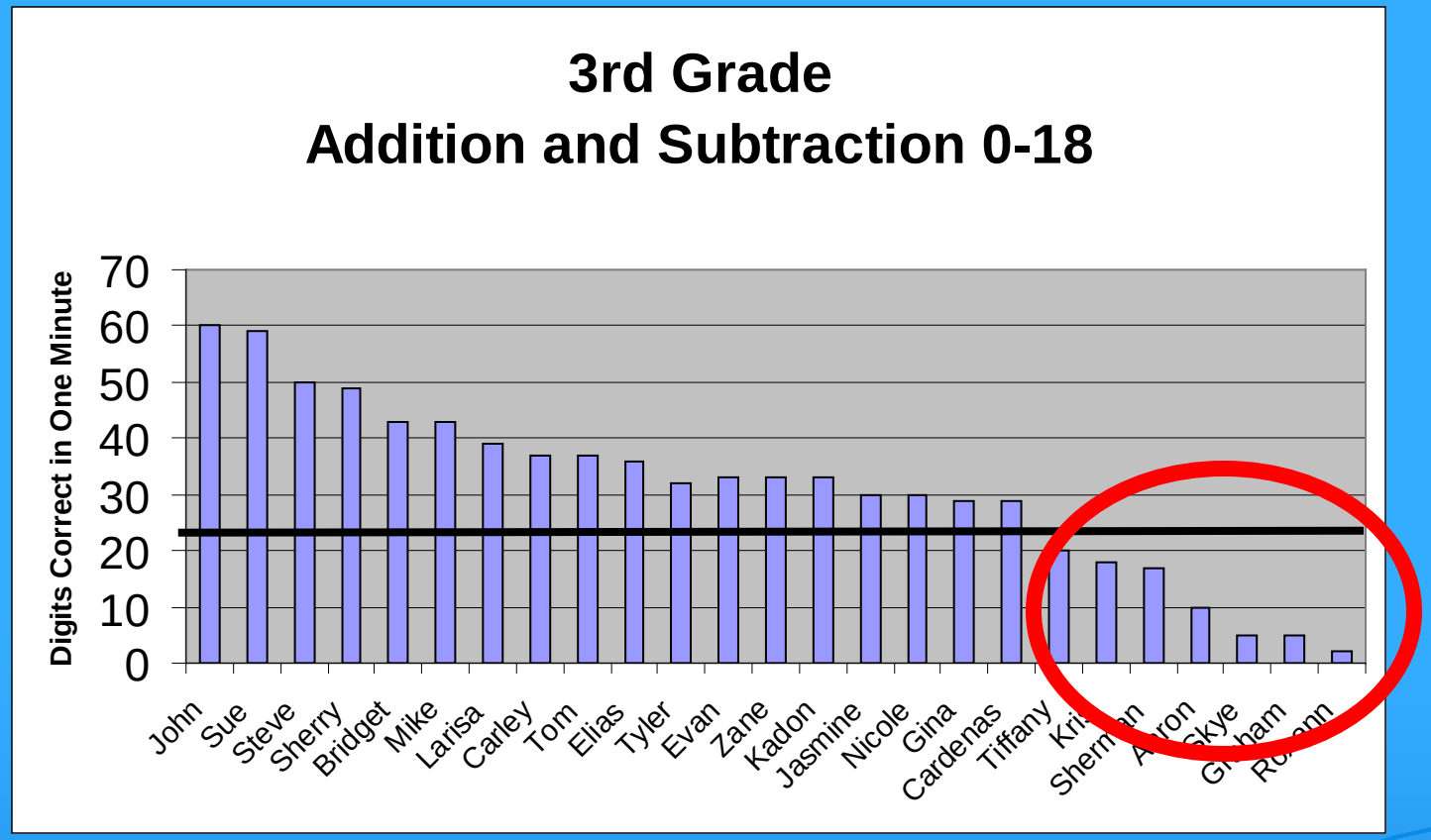
Supporting all children

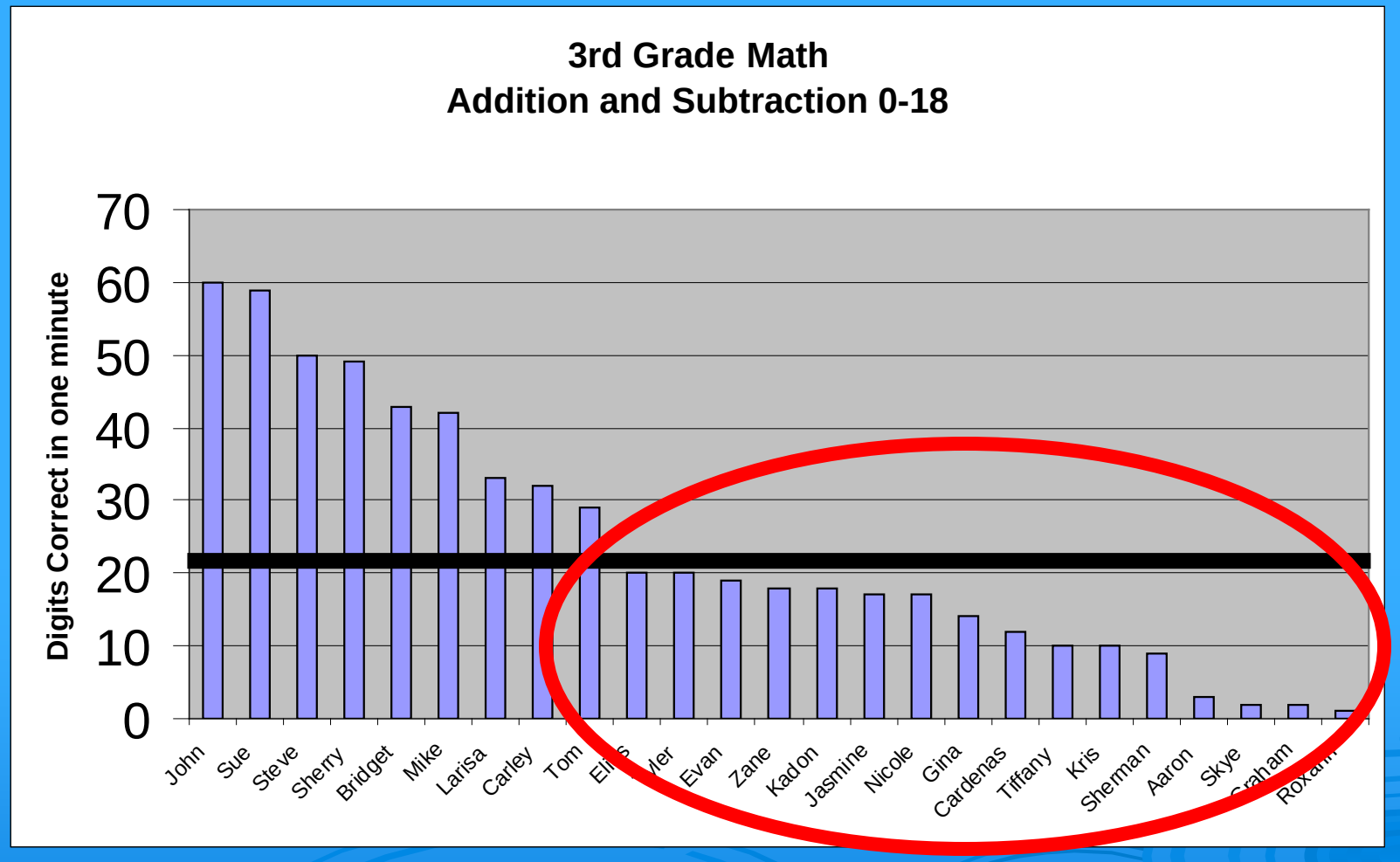
- *3rd Grade: 19 Words Per Minute*
- *3rd Grade: 70 Words Per Minute*
- *3rd Grade: 98 Words Per Minute*



School Wide Data Collection UNIVERSAL SCREENING

- Provides for frequent checks
- Early identification of students who need support
- Helps educators make program decisions
- Helps educators make curriculum decisions
- Has to be efficient, effective, and have a clear purpose
- Have to be valid and reliable
  - Increases confidence in appropriate identification


3rd Grade
Addition and Subtraction 0-18
Digits Correct in One Minute
70
60
50
40
30
20
10
0
John
Sue
Steve
Sherry
Bridget
Mike
Larisa
Carley
Tom
Elias
Tyler
Evan
Zane
Kadon
Jasmine
Nicole
Gina
Cardenas
Tiffany


3rd Grade Math
Addition and Subtraction 0-18
Digits Correct in one minute
70
60
50
40
30
20
10
0
John
Sue
Steve
Sherry
Bridget
Mike
Larisa
Carley
Tom
Evan
Zane
Kadon
Jasmine
Nicole
Gina
Cardenas
Tiffany
Kris
Sherman
Aaron
Skye

What CBM is..

- Direct assessments of student's academic performance
- Use of brief measures
- Fluency based- how accurate but also how fast
- Frequently administered
- Valid and reliable for student monitoring
- Easily graphed

McDougal, 2015

What CBM is.. DIBS?

- **D**ynamic- occurs over time, sensitive to short term gains
- **I**ndicator- Like a thermometer of academic functioning
- **B**asic **S**kills*- Measures the progression of basic skill development in reading, writing, spelling, and math
- **Emerging technology is getting at conceptual and secondary level skills*

McDougal, 2015

What CBM is not..

- A Mastery test (more later)
- A Nationally Normed test- Normed based on census data
- A comprehensive analysis of conceptual or skill development
- A suitable replacement for teaching observations or comprehensive outcome assessments

McDougal, 2015

More on CBM..

- A CBM fluency score will tell you who is having problems. It will NOT tell you why or what to do about it. It is a thermometer— it tells you if you have a fever, but not what the cause of the fever is or what the treatment should be.

Roxanne Hudson, Ph.D. Florida Center for Reading Research, 2006

Educators Use CBM to …

- Assess academic performance (competence) at a single point in time
- Identify the rate of progress- How students develop academic competence over time
- Assess student response to instructional change- Build more effective programs to increase student achievement

Fuchs & Oxaal, 2006

McDougal, 2015

Research Shows:

- CBM produces accurate, meaningful information about students' academic levels and their rates of improvement.
- CBM is sensitive to student improvement.
- CBM corresponds well with high-stakes tests.
- When teachers use CBM to inform their instructional decisions, students achieve better.

Fuchs & Oxaal, 2006

What We Look For in CBM

INCREASING SCORES:

Student is becoming a better reader.

FLAT SCORES:

Student is not profiting from instruction and requires a change in the instructional program.

Fuchs & Fuchs, 2005

CBM Group (‘Local’) Norms

Example CBM Grade-Wide Norms: Grade 4: Correctly Read Words:

31 34 34 39 41 43 52 55 59
61 68 71 74 75 85 89 102
108 112 115 118 118 131

Select boxplot values from this 4th Grade data series:

34 39 41 52 55 61 68 71 75 89 108

1st Quartile= ?

Median/2nd Quartile= ?

3rd Quartile= ?

High Value= ?

Low Value= ?

Median/2nd Quartile=61

1st Quartile=41

3rd Quartile=75

Low Value=34

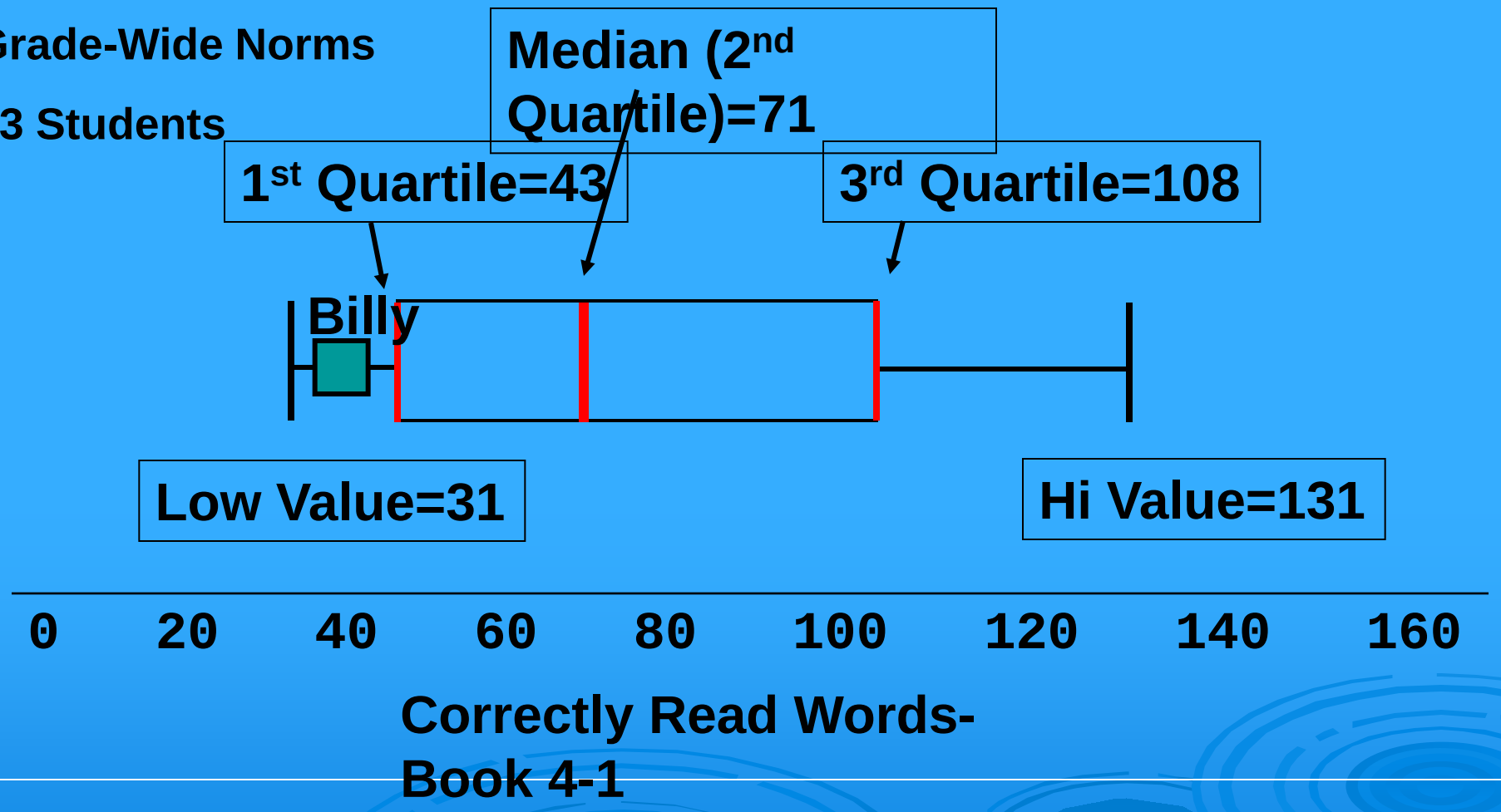
Hi Value=108

Displaying Group Norms:Boxplot

Baylor Elementary School

Grade-Wide Norms

23 Students



Decision making criteria
Cut Score vs Benchmark

- **Cut Score** – Performance at or below which a student is identified for possible intervention
- **Benchmark** – Standard against which student performance (and therefore instructional programming) is evaluated
- Can be the same but often differ

End of First Grade (DIBELS)

- Benchmark – 40 ORF. This helps judge if students are meeting expectations as well as evaluating the effectiveness of the program as a whole by examining the percentage of students who are meeting this goal

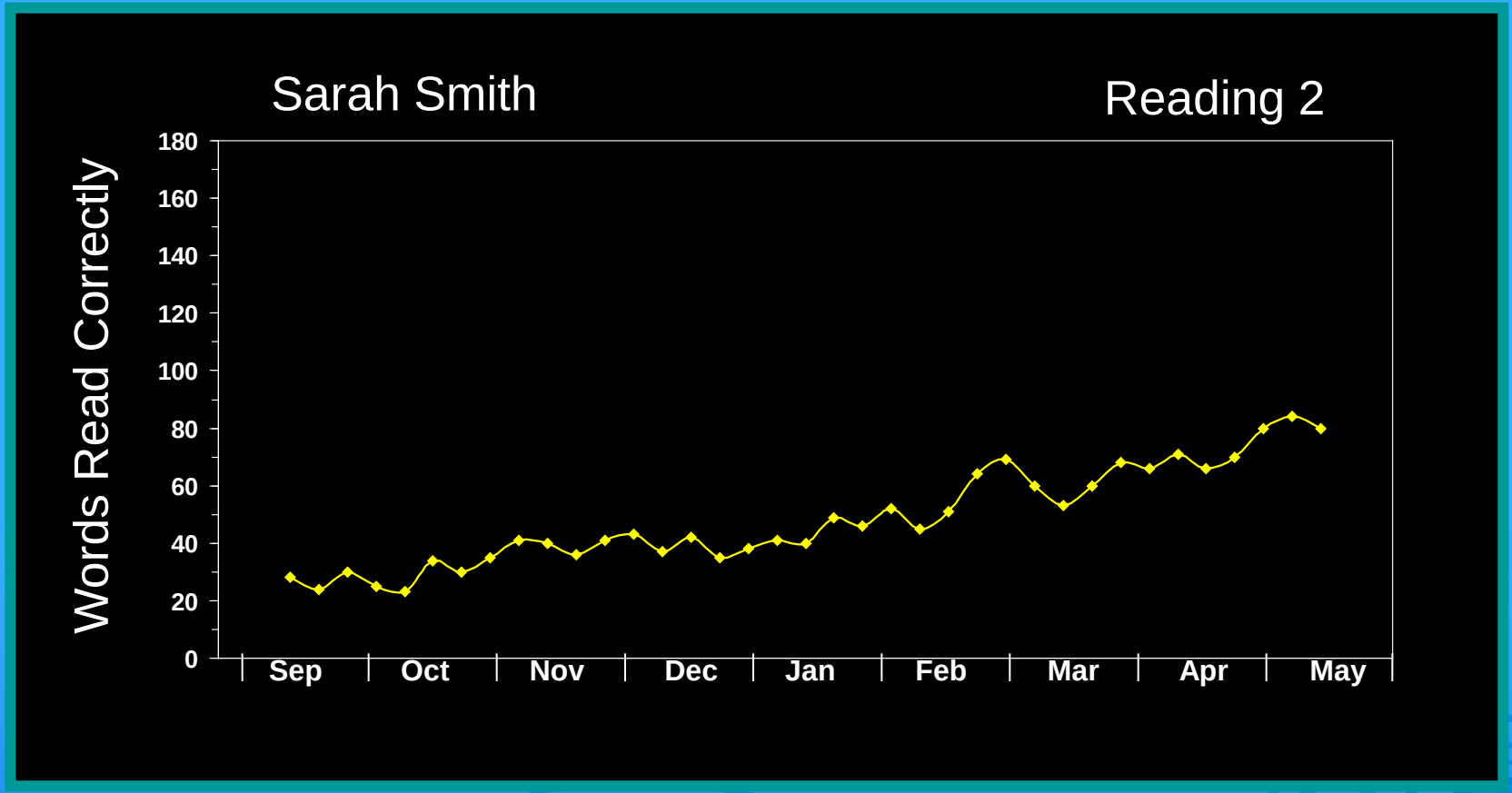
- Cut score – 10 ORF – Students at or below this level most likely need additional instructional support.

- Those falling between 10 and 40, may need additional monitoring and/or support.

Norms
National vs District vs School

- Are all schools created equal?
- Does SES have a relationship to learning?
- Where to begin?

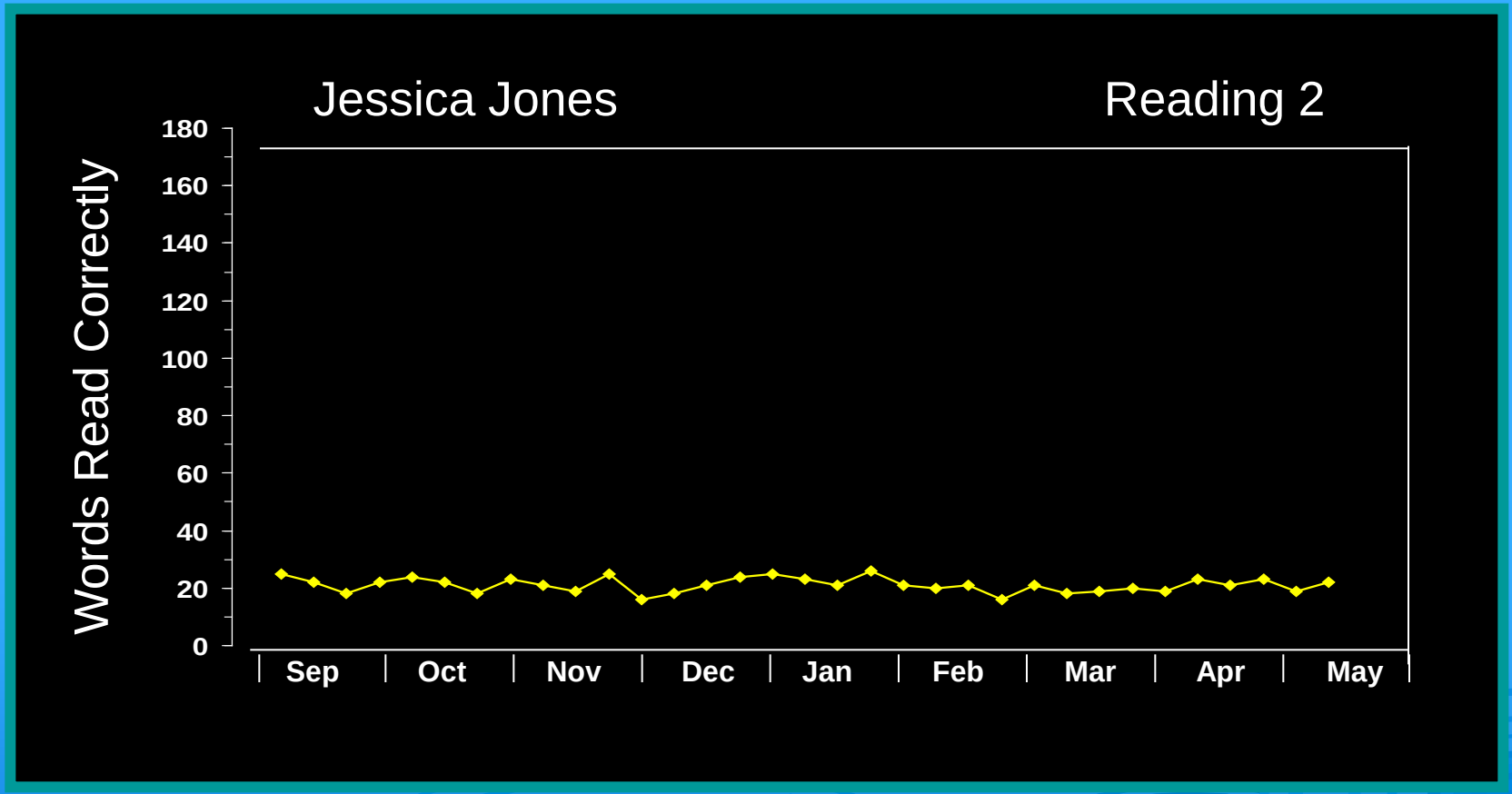
Sarah's Progress on Words Read Correctly



Fuchs & Fuchs, 2005

McDougal, 2015

Jessica's Progress on Words Read Correctly



Fuchs & Fuchs, 2005

McDougal, 2015

Link to High Stakes Assessments

- CCS data
- CBM fall and winter data used to predict success on ELAs
- Data reviewed for grades 4-8

McDougal, 2015

4th Grade

- Correlation between September ORF and ELA is .692
- <u>Cut off of 67 CRW</u>
  - 93% (70) of students scored 67 or above on ORF scored a 3 or better on ELA
  - 8% (6) student who scored 67 or above on ORF scored a less than a 3 on ELA
  - 4% (3) of students who scored below 67 on ORF scored a 3 or better on ELA (over-identification)

- Correlation between January ORF and ELA is .682
- <u>Cut off of 88 CRW</u>
  - 95% (71) of students who scored 88 and above on ORF scored a 3 or better on ELA
  - 5% (4) of students who scored 88 and above on ORF scored less than a 3 on ELA
  - 7% (5) of students scored below 88 on ORF scored a 3 or better on ELA (over- identification)

8th Grade

- Correlation between September ORF and ELA is .651
- Cut off of 140 CRW
  - 94% (77) of students scored 140 or above on ORF scored a 3 or better on ELA
  - 6% (5) student who scored 140 or above on ORF scored a less than a 3 on ELA
  - 4% (3) of students who scored below 140 on ORF scored a 3 or better on ELA (over-identification)

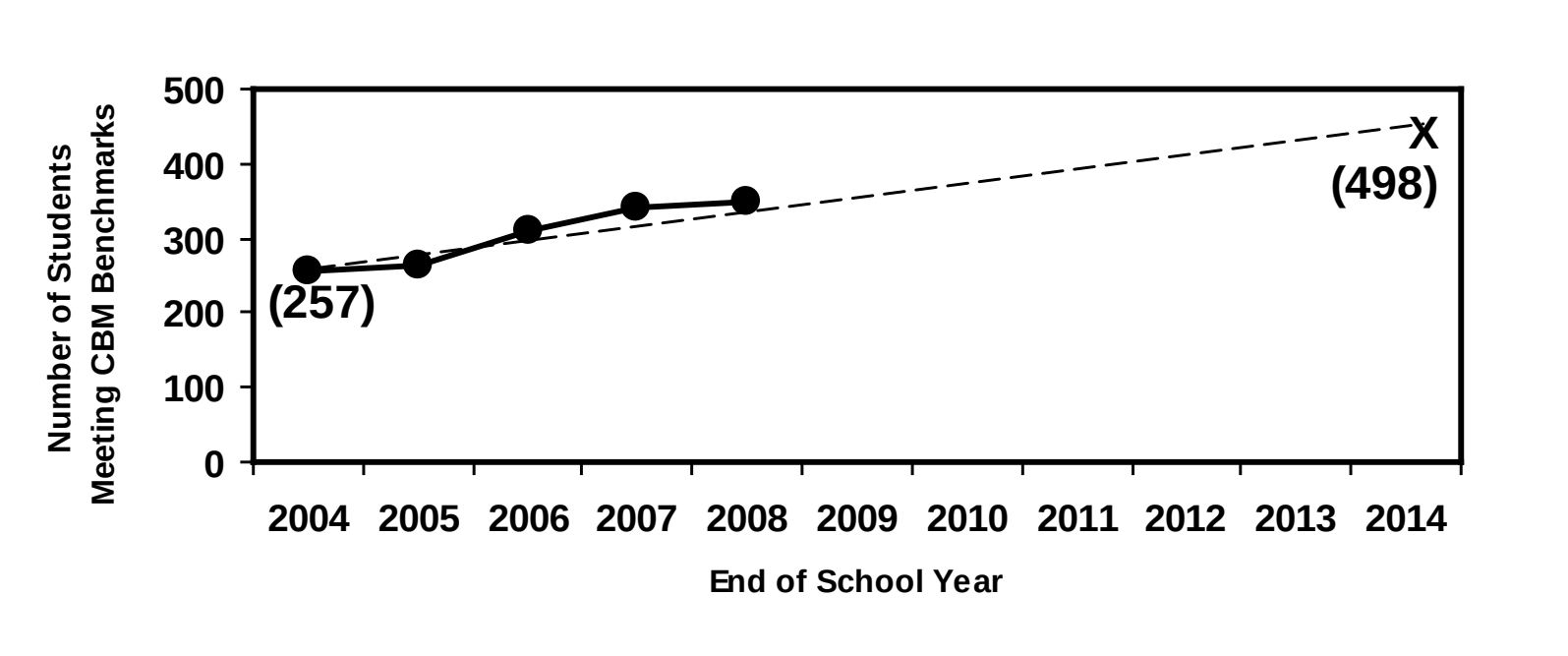
- Correlation between January ORF and ELA is .679
- Cut off of 155 CRW
  - 94% (77) of students scored 155 or above on ORF scored a 3 or better on ELA
  - 6% (5) student who scored 155 or above on ORF scored a less than a 3 on ELA
  - 12% (10) of students who scored below 155 on ORF scored a 3 or better on ELA (over-identification)

How to Use Curriculum-Based Measurement Data to Determine AYP

- No Child Left Behind requires all schools to show Adequate Yearly Progress (AYP) toward a proficiency goal.
- Schools must determine measure(s) for AYP evaluation and the criterion for deeming an individual student “proficient.”
- CBM can be used to support the AYP evaluation

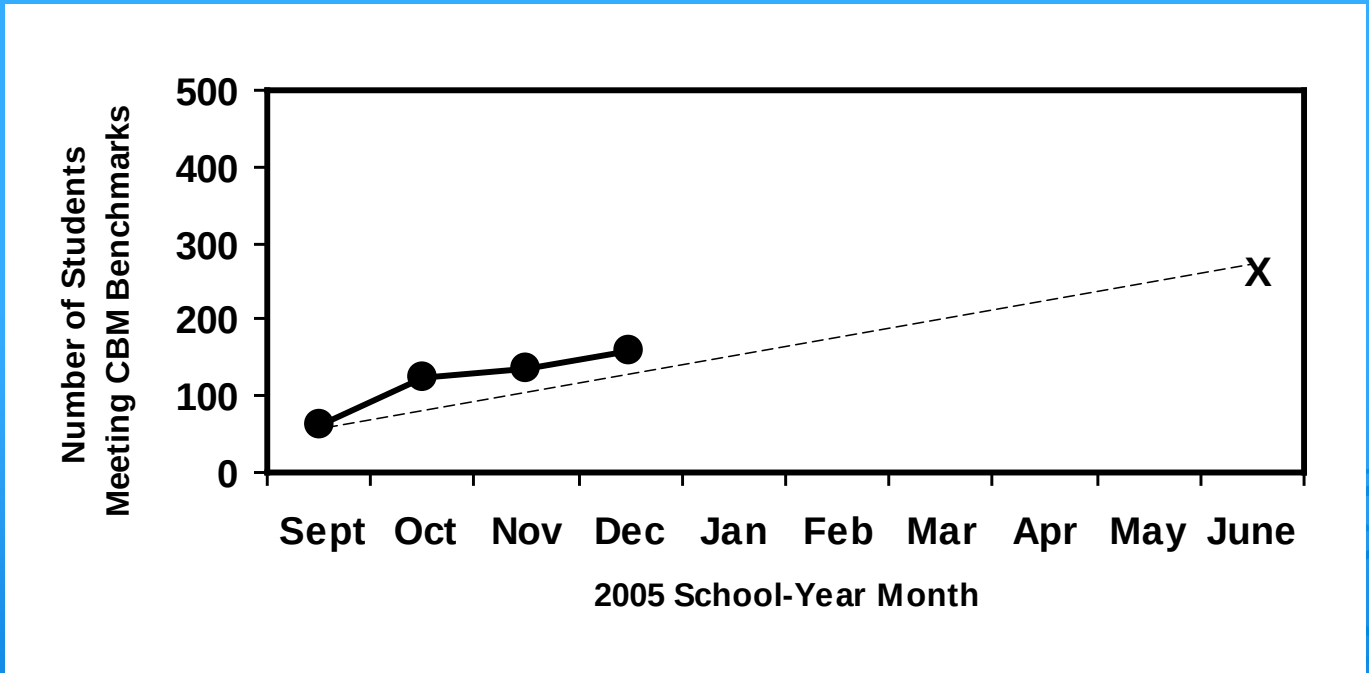
Using CBM to Determine AYP Across Years

Across-Year School Progress



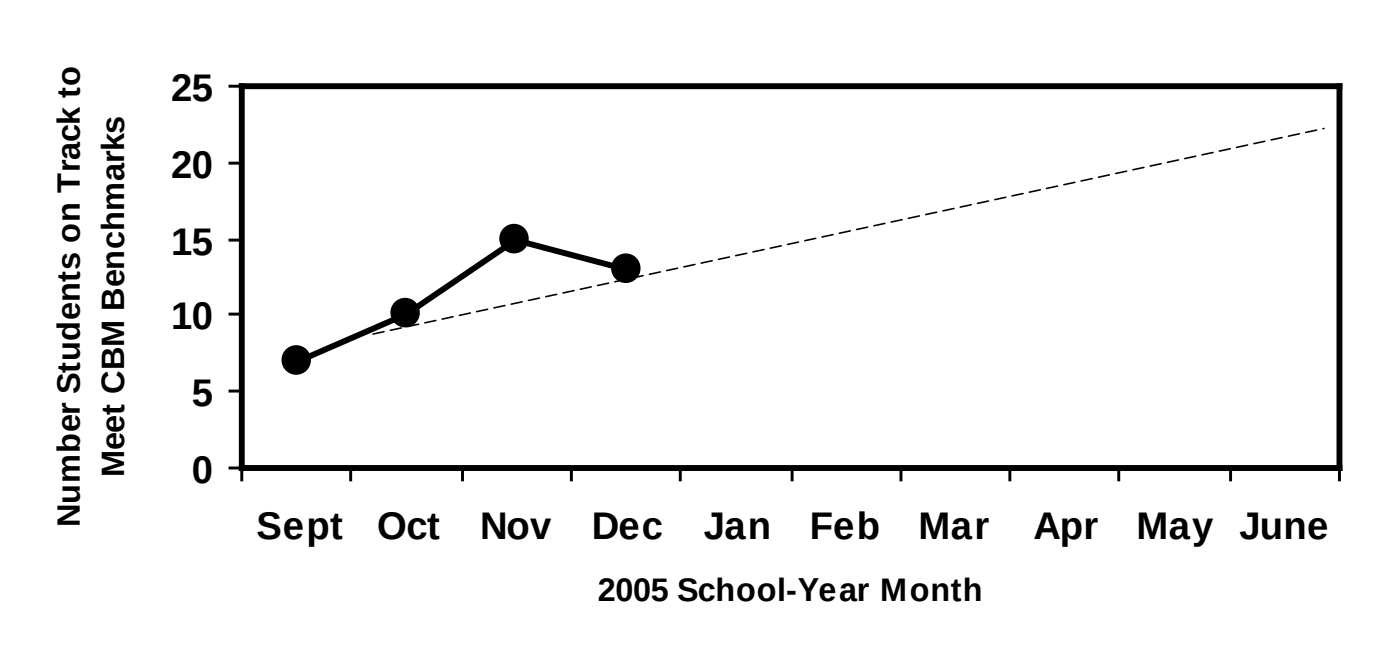
Using CBM to Determine AYP Within a School Year

Within-Year School Progress



Using CBM to Monitor a Teacher's Within-Year Progress

Within-Year Teacher Progress



CBM and RTI

- CBM allows us to develop objective student standards and effectively monitor student progress

DRA-2 vs ORF

- Does the DRA-2 predict future performance on the NYS ELA exam?
- How does its ability to predict performance compare to the DIBELS ORF?
- If the DRA-2 is a better predictor of student ELA performance, is it of any practical significance?

McDougal, 2015

Conclusion

- The DRA-2 and DIBELS ORF are both statistically significant predictors of NYS ELA scores

- The DRA-2 is a statistically better predictor however, in our ability to predict how the students will perform, this difference is not of any practical significance. (prediction improves less than one point)

Progress monitoring assessments (CBM):

- Randomly sample curriculum from across the school year
- Measure fluency (the measure is timed)
- Are brief (each task is from 1 to 5 minutes)
- Have been shown to predict success in the curriculum
- Predict performance on high stakes tests
- Are sensitive to short term changes in student progress
- Are used to develop local norms

McDougal, 2015

READING CBM's

- Reading Measures
  - Oral Reading Fluency
  - Maze fluency – Comprehension

CBM Reading : Passage 1

www.interventioncentral.org

CBM Reading Probe Example: Passage 1

CBM Reading Probe 1

One hundred years ago in Paris, when theaters and music halls 11
drew traveling players from all over the world, the best place to 23
stay was at the widow Gateau's, a boardinghouse on English 33
Street. Acrobats, jugglers, actors, and mimes from as far away 43
as Moscow and New York reclined on the widow's feather 53
mattresses and devoured her kidney stews. Madame Gateau 61
worked hard to make her guests comfortable, and so did her 72
daughter, Mirette. The girl was an expert at washing linens, 82
chopping leeks, paring potatoes, and mopping floors. She was 91
a good listener too. Nothing pleased her more than to overhear 102
the vagabond players tell of their adventures in this town and 113
that along the road. 117

CBM Reading Assessment: Recording Scores

Student Name: Franklin Jones Grade/Classroom: Mrs. Larrossa

Reading Skill Level: 3-2 Best Time(s) for CBM Monitoring: M,Th 1-2:30

Date: 9/23 Book/Reading Level: Lvl 4-1 Probe 1,2,3

	TRW	E	CRW	%CRW
A.	49	4	45	92%
B.				
C.				

CBM Reading : Passage 2

www.interventioncentral.org

CBM Reading Probe Example: Passage 2

CBM Reading Probe 2

Someone is lost in the woods. He might be hurt, or the weather 13
could turn bad. It is important to find him as fast as possible. 26
But he didn't follow a trail, and footprints don't show on the 38
forest floor. What to do? Call in the search and rescue dogs. 50
~~Dogs have a very fine sense of smell. They can find people lost~~ 63
by following their scents, because each person has his or her 74
own, unique scent. Panda is a Newfoundland dog trained to 84
locate lost people. She and her owner, Susie Foley, know how 95
to search through the woods, under the snow, or in the water. 107

CBM Reading Assessment: Recording Scores

Student Name: Franklin Jones Grade/Classroom: Mrs. Larrossa

Reading Skill Level: 3-2 Best Time(s) for CBM Monitoring: M,Th 1-2:30

Date: 9/23 Book/Reading Level: Lvl 4-1 Probe 1,2,3

	TRW	E	CRW	%CRW
A.	49	4	45	92%
B.	64	3	61	95%
C.				

CBM Reading : Passage 3

www.interventioncentral.org

CBM Reading Probe Example: Passage 3

CBM Reading Probe 3

In the busy rain forest of Malaysia, a grasshopper leaps into a 12
spray of orchids. Suddenly, one of the "flowers" turns on the 23
grasshopper. An orchid mantis, with wings like petals, grips it 33
tightly. For the grasshopper, there will be no escape. The 43
orchid mantis is a master of camouflage – the art of hiding while 55
in plain sight. Camouflage enables predators like the orchid 64
mantis to hide while they lie in wait for their prey. For other 77
animals, camouflage is a method of protection from their 86
enemies. Animals blend into the background in several ways. 95
Their colors and patterns may match their surroundings. 103

CBM Reading Assessment: Recording Scores

Student Name: Franklin Jones Grade/Classroom: Mrs. Larrossa

Reading Skill Level: 3-2 Best Time(s) for CBM Monitoring: M,Th 1-2:30

Date: 9/23 Book/Reading Level: Lvl 4-1 Probe 1,2,3

	TRW	E	CRW	%CRW
A.	49	4	45	92%
B.	64	3	61	95%
C.	42	2	40	95%

CBM Reading Assessment: Recording Scores

Student Name: Franklin Jones Grade/Classroom: Mrs. Larrossa

Reading Skill Level: 3-2 Best Time(s) for CBM Monitoring: M,Th 1-2:30

Date: 9/23 Book/Reading Level: Lvl 4-1 Probe 1,2,3

	TRW	E	CRW	%CRW
A.	49	4	45	92%
B.	64	3	61	95%
C.	42	2	40	95%

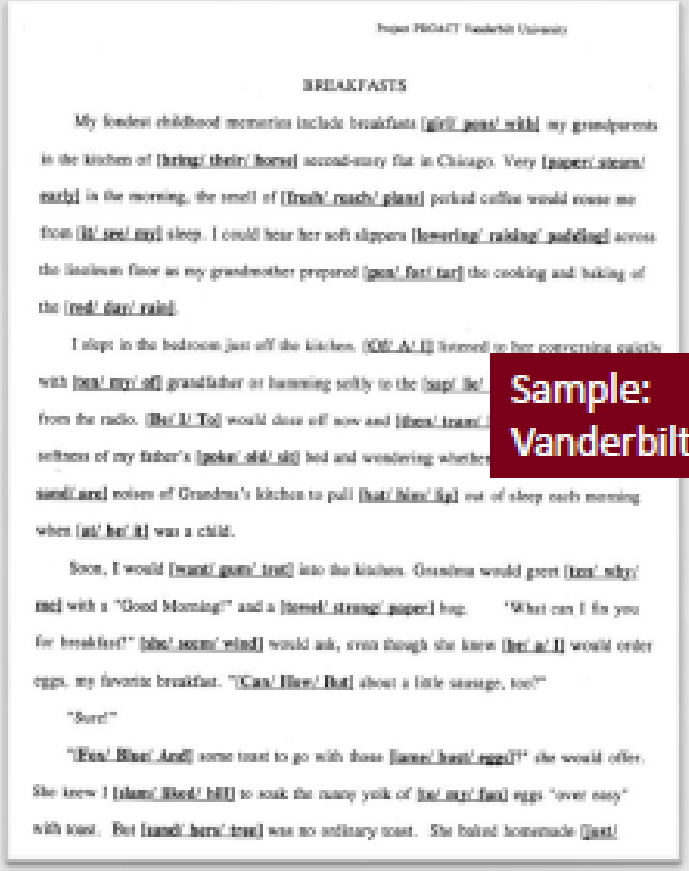
National High School Center
better-high-schools.org

CENTER ON INSTRUCTION

National Center on Response to Intervention
www.rti4success.org

Reading: Maze Task

- Description
  - Read silently for 2-3 min
  - Every 7th word replaced with three choices
  - Circle correct word
  - Count correct selections
- Research
  - Reliability: r = .79 to .96
  - Validity: r = .75 to .88
  - Sensitive to growth



Project PROJECT Vanderbilt University

BREAKFASTS

My fondest childhood memories include breakfasts [girl/ goes/ wild] my grandparents in the kitchen of [being/ their/ horse] second-story flat in Chicago. Very [paper/ steam/ early] in the morning, the smell of [fresh/ reach/ plant] perked coffee would rouse me from [it/ yes/ my] sleep. I could hear her soft slippers [lowering/ raising/ paddling] across the linoleum floor as my grandmother prepared [gets/ fast/ tart] the cooking and baking of the [real/ day/ rain].

I slept in the bedroom just off the kitchen. [Off/ A/ I] listened to her conversing quietly with [yes/ my/ all] grandfather or humming softly to the [sap/ he/ ... from the radio. [Be/ It/ To] would close off now and [does/ trans/ ... softness of my father's [poke/ old/ sit] bed and wondering whether ... sand/ are] noises of Grandma's kitchen to pull [hat/ blue/ fly] out of sleep each morning when [at/ he/ it] was a child.

Soon, I would [want/ goes/ trot] into the kitchen. Grandma would greet [too/ why/ me] with a "Good Morning!" and a [bowl/ strong/ paper] hug. "What can I fix you for breakfast?" [she/ seem/ wind] would ask, even though she knew [he/ a/ I] would order eggs, my favorite breakfast. "Can/ How/ But about a little sausage, too?"

"Sure!"

"[Fox/ Blue/ And] some toast to go with those [lame/ hunt/ eggs]?" she would offer. She knew I [slam/ Bird/ bill] to soak the runny yolk of [he/ my/ fast] eggs "over easy" with toast. But [sand/ here/ true] was no ordinary toast. She baked homemade [just]

Sample:
Vanderbilt Passages

IDEAs that Work

Espin, Wallace, Lembke, Campbell, & Long, 2010; Ticha, Espin, & Wayman, 2009

CBM Reading Fluency Probes: Example

Examiner Copy

One hundred years ago in Paris, when theaters and music halls	11
drew traveling players from all over the world, the best place to	23
stay was at the widow Gateau's, a boardinghouse on English	33
Street. Acrobats, jugglers, actors, and mimes from as far away	43
as Moscow and New York reclined on the widow's feather	53
mattresses and devoured her kidney stews. Madame Gateau	61
worked hard to make her guests comfortable, and so did her	72
daughter, Mirette. The girl was an expert at washing linens,	82
chopping leeks, paring potatoes, and mopping floors. She was	91
a good listener too. Nothing pleased her more than to overhear	102
the vagabond players tell of their adventures in this town and	113
that along the road.	117

Student Copy

One hundred years ago in Paris, when theaters and music halls drew traveling players from all over the world, the best place to stay was at the widow Gateau's, a boardinghouse on English Street. Acrobats, jugglers, actors, and mimes from as far away as Moscow and New York reclined on the widow's feather mattresses and devoured her kidney stews. Madame Gateau worked hard to make her guests comfortable, and so did her daughter, Mirette. The girl was an expert at washing linens, chopping leeks, paring potatoes, and mopping floors. She was a good listener too. Nothing pleased her more than to overhear the vagabond players tell of their adventures in this town and that along the road.

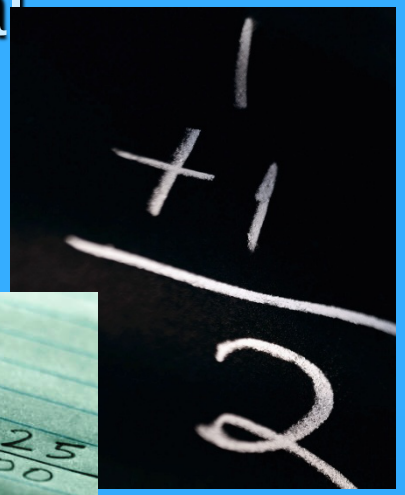
Table 1: Sample Estimates of 'Typical' CBM Instructional Reading Levels By Grade

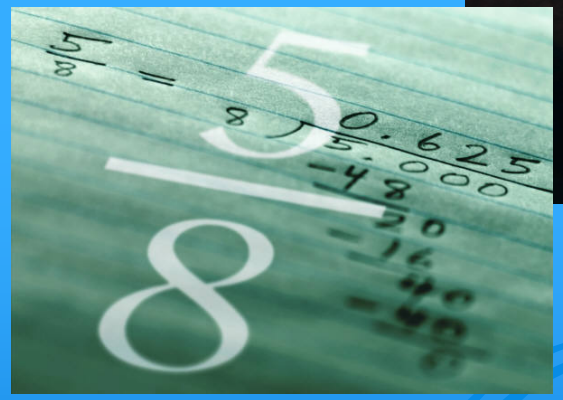
	Shapiro (1996)		Milwaukee Public Schools (Winter 2000-2001 Local Norms)
Grade	CRW Per Min	Reading Errors	CRW Per Min for Students in 25th-75th Percentile
1.....	40-60	Fewer than 5	22-64
2.....	40-60	Fewer than 5	36-78
3.....	70-100	Fewer than 7	47-88
4.....	70-100	Fewer than 7	60-104
5.....	70-100	Fewer than 7	77-121
6.....	70-100	Fewer than 7	95-146

Table 2: Predictions for Rates of Reading Growth by Grade
(Fuchs, Fuchs, Hamlett, Walz, & Germann, 1993)
Increase in Correctly Read Words Per Minute for Each Instructional Week

Grade Level	*Realistic Weekly Goal*	*Ambitious Weekly Goal*
Grade 1	2.0	3.0
Grade 2	1.5	2.0
Grade 3	1.0	1.5
Grade 4	0.85	1.1
Grade 5	0.5	0.8
Grade 6	0.3	0.65

The Elements of Mathematical Proficiency: What the Experts Say…





5 Strands of Mathematical Proficiency

1. Understanding
2. Computing
3. Applying
4. Reasoning
5. Engagement

Source: *National Research Council. (2002). Helping children learn mathematics. Mathematics Learning Study Committee, J. Kilpatrick & J. Swafford, Editors, Center for Education, Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.*

5 Big Ideas in Beginning Reading

1. Phonemic Awareness
2. Alphabetic Principle
3. Fluency with Text
4. Vocabulary
5. Comprehension

Source: Big ideas in beginning reading. University of Oregon. Retrieved September 23, 2007, from http://reading.uoregon.edu/index.php

MATH CBM

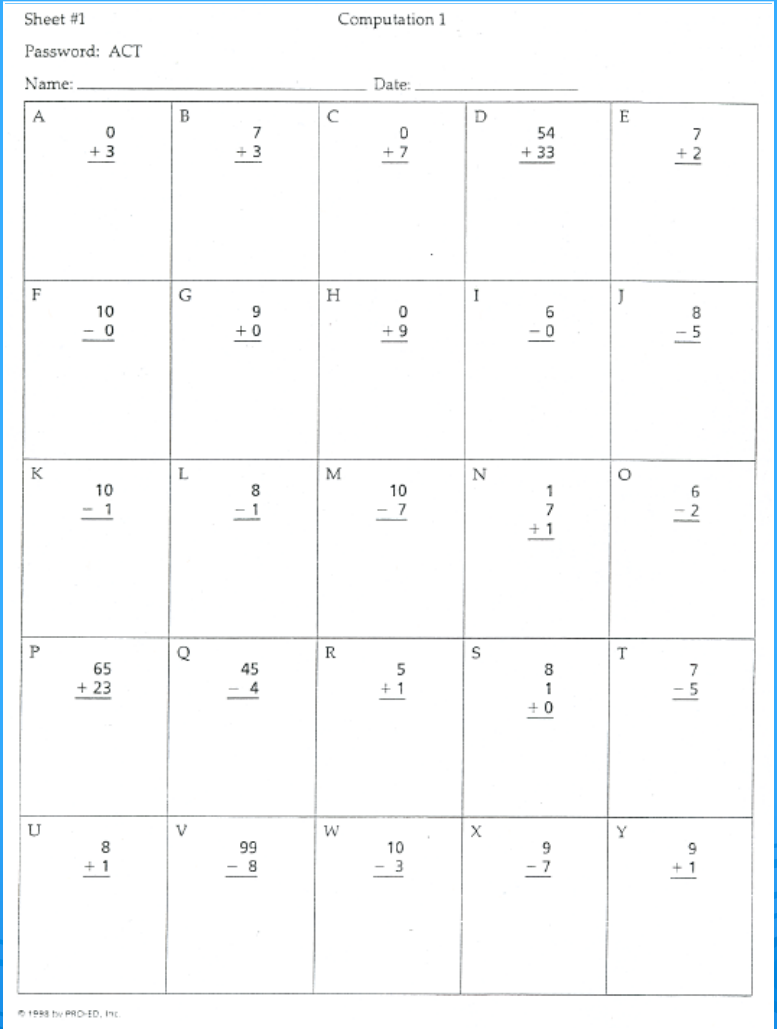
- **Math**
  - can be used with single-skill worksheets
    - (all 2 digits plus 2 digits with regrouping)
  - can be used with multiple-skill worksheets
    - (various skills)
  - give credit for each individual correct digit for example…
    - 13 + 9 = 21
    - One point (the 2) out of two

How to Identify the Level of Material for Monitoring Progress

- Generally, students use the CBM materials prepared for their grade level (AIMSweb).
- However, some students may need to use probes from a different grade level if they are well below grade-level expectations.
- Can do both computation and concepts and applications at all grade levels

Computation

Student Copy of a First Grade Computation Test



Sheet #1 Computation 1

Password: ACT

Name: _____ Date: _____

A 0 + 3	B 7 + 3	C 0 + 7	D 54 + 33	E 7 + 2
F 10 − 0	G 9 + 0	H 0 + 9	I 6 − 0	J 8 − 5
K 10 − 1	L 8 − 1	M 10 − 7	N 1 7 + 1	O 6 − 2
P 65 + 23	Q 45 − 4	R 5 + 1	S 8 1 + 0	T 7 − 5
U 8 + 1	V 99 − 8	W 10 − 3	X 9 − 7	Y 9 + 1

© 1998 by PRO-ED, Inc.

Computation

Correct Digits: Evaluate Each Numeral in Every Answer

4507	4507	4507
− 2146	− 2146	− 2146
2361	**2461**	**2441**
✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓
4 correct digits	**3 correct digits**	2 correct digits

Upper level math

- $X^2 + 2x + 1$ would be worth 7 points
- X, ^{2}, +, 2, x, +, 1
- Geometry – Each angle of a triangle or quadrangle can be a point.
- Can you think how we can do this in trigonometry

Concepts and Applications

- Student is presented with 18–25 Concepts and Applications problems representing the year-long grade-level math curriculum.

- Student works for set amount of time (time limit varies by grade, no more than 7 minutes).

Concepts and Applications

Name _____ Date _____ Test 5 Page 2

Column C — Applications 4 — Column D

(11)

Write the letter in each blank.

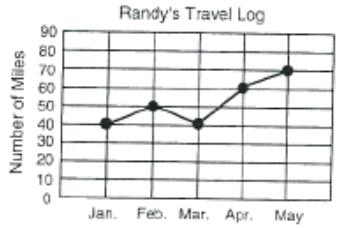
C

A

D

(A) line
(B) point
(C) ray
(D) line segment

(12)



Use the graph to answer the questions.

How many miles did Randy travel altogether? _____

How many fewer miles did Randy travel in January than in April? _____

How many miles did Randy travel in March? _____

(13)

Write a number in each blank.

Of these numbers,

33,763 8,745 33,824

33,824 is the largest.

8,745 is the smallest.

(14)

Write the number in the blank.

four hundred thousand, twenty-eight

400,028

(15)

Area = _____ sq. units

(16)

Write the letter in the blank.

Pat programmed his VCR to record in 4 hours. It is 5:00 in the evening now. At what time will the VCR begin recording?

(A) 1:00 a.m.
(B) 1:00 p.m.
(C) 9:00 a.m.
(D) 9:00 p.m.

D

(17)

Write the number in each blank.

3 tens, 2 tenths =

30.2

1 tens, 7 ones, 46 hundredths =

17.46

Name _____ Date _____ Test 5 Page 3

Column E — Applications 4 — Column F

(18)

Write the number in each blank.

$6\overline{)47}$ = 7 R5

The dividend is _____.

The remainder is _____.

The quotient is _____.

(19)

Write the fraction when:

6 is the numerator and 5 is the denominator. $\frac{6}{5}$

9 is the denominator and 3 is the numerator. $\frac{3}{9}$

(20)

Look at this number.

578.16

Which digit is in the hundredths place? 6

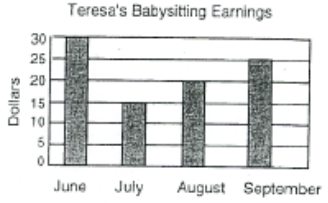
(21)

Solve the problem by estimating the sum or difference to the nearest ten.

In his stamp collection Jamar has 21 German stamps and 68 Dutch stamps. About how many fewer German stamps does he have than Dutch stamps?

_____

(22)



Use the bar graph to answer the questions.

Teresa babysat for 5 hours in July. How much does she charge for each hour? $ ____.00

How much money did Teresa earn altogether in the four months? $ ____.00

How much money did Teresa earn in August? $ ____.00

(23)

Look at this number.

7,954

Which digit is in the thousands place? _____

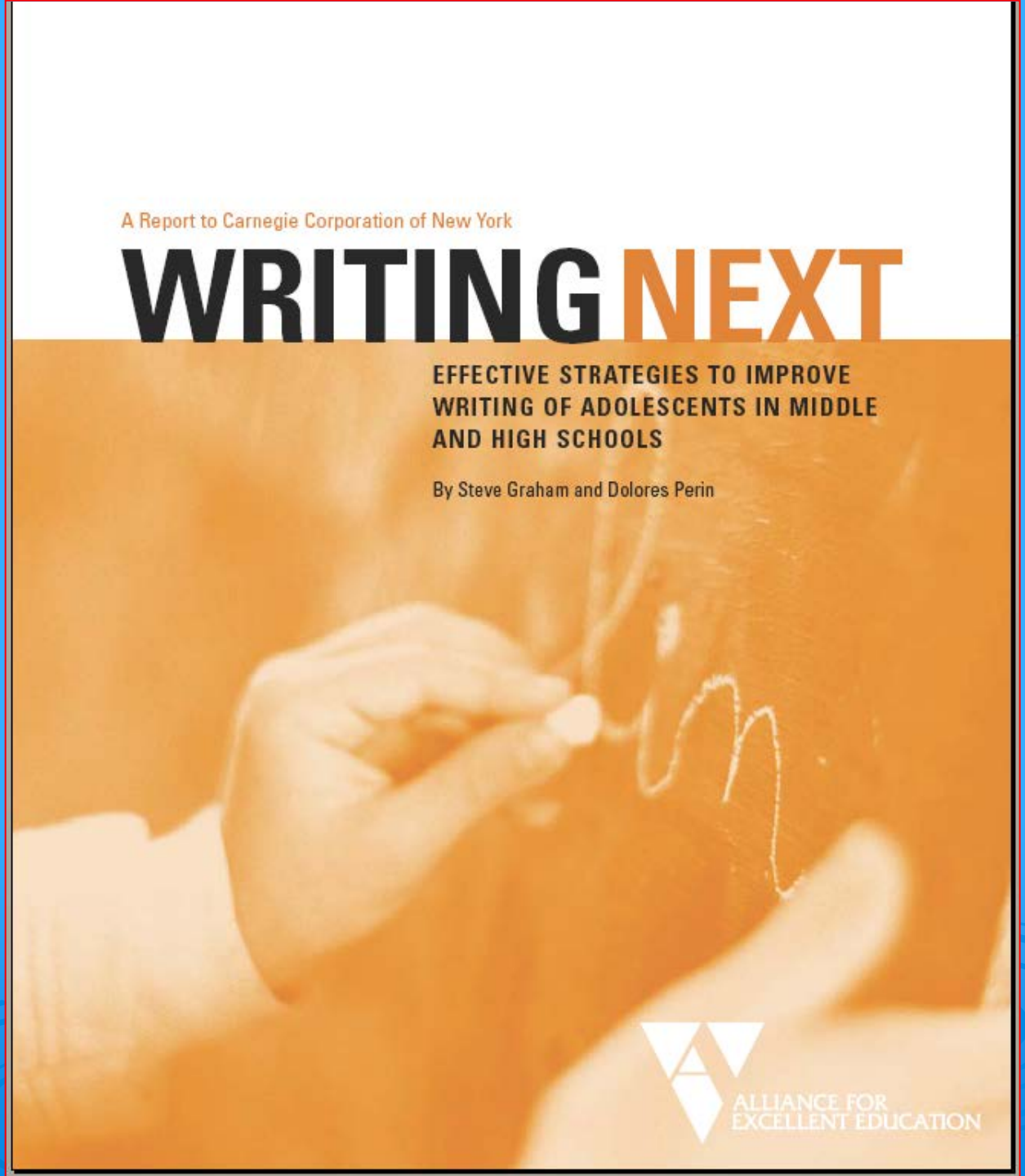
Which digit is in the hundreds place? _____

(24)

Write the time.

____ : ____

Graham, S., & Perin, D. (2007). *Writing next: Effective strategies to improve writing of adolescents in middle and high schools – A report to Carnegie Corporation of New York*. Washington, DC Alliance for Excellent Education. Retrieved from http://www.all4ed.org/files/WritingNext.pdf



How to Administer and Score Written Expression CBM

- I was on my way home from school and …
- I was talking to my friends when all of a sudden …
- It was a dark and stormy night …
- One day I found the most interesting thing …
- One night I had a strange dream about …
- I found a note under my pillow that said …
- The cave was very dark and …
- The 2008 Presidential Race was historic in that….
- The debate about global warming has many facets. Opposing opinions claim that…..

Correct Writing Sequences:

I *woud* drink water from the ocean and I *woud* eat the fruit off of the trees. Then I *woud bilit* a house out of trees, and I *woud* gather firewood to stay warm. I *woud* try and fix my boat in my spare time.

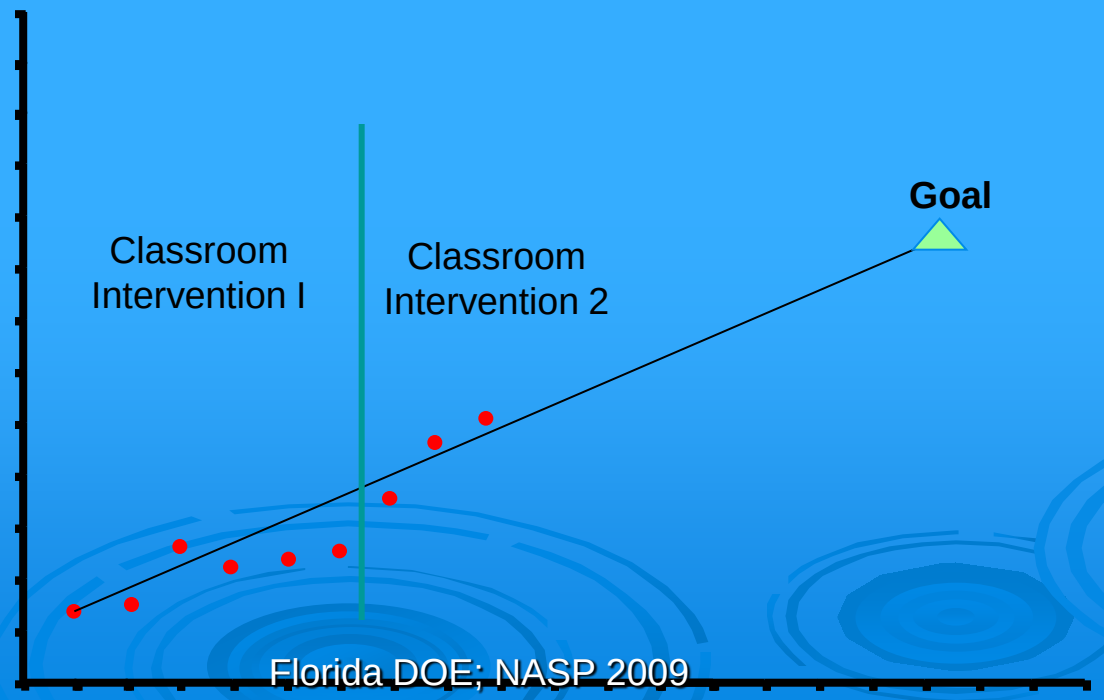
Correct Writing Sequences = 37

Is it working?

Progress Monitoring

Making <u>instructional decisions</u> based on the review and analysis of student data

Progress monitoring always includes graphing



Florida DOE; NASP 2009

Instructional Decision Making

Instructional Intervention Plan

Decision Making Plan:
Data will be collected at least once per week and charted. If three consecutive data points fall below the goal line the problem solving team will reconvene and an instructional change will be made.

Student Jacob **Goal Area** Reading

Intervention Designer Tammy Tyler **Advisor** D. Tilly

Phase	Instructional Procedure	Materials	Arrangements	Time	Motivational Strategies
1	Teach phonemic awareness skills . Focus on transitioning activities. Provide cues when reading	Say it and Move It Word Cards Disks	During small group reading in the classroom. Time added to Jacob's group each day for this instruction	10 minutes Daily	Verbal Praise
2					
3					

Data Collection and Charting

Student Improvement is Job #1 Goal Area Reading

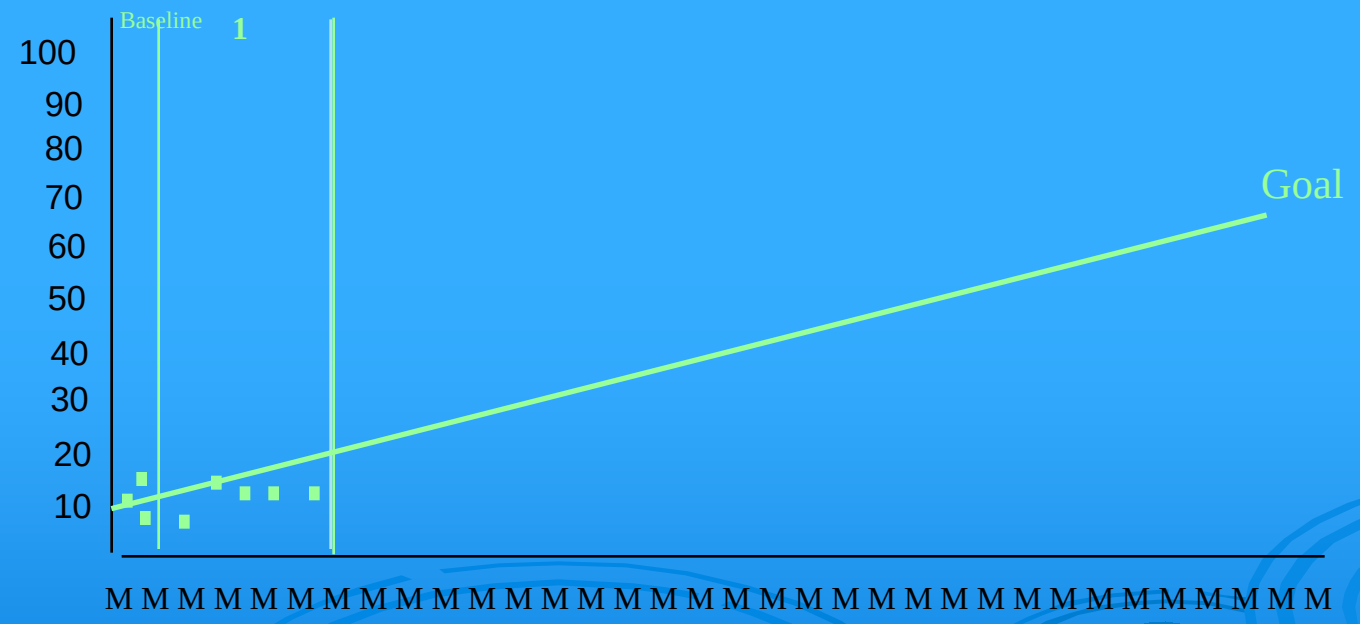
Name Jacob District _____ School _____ Year 94 Teacher Ruso

Goal By January, given passages from the third grade curriculum Jacob will read 70 words correct in one minute.

10 Words Correct per Minute

Service Providers _____

Parent Participation Parent will provide extra oral reading time at home. They would like graph sent home biweekly.



Instructional Decision Making

Instructional Intervention Plan

Decision Making Plan:
Data will be collected at least once per week and charted. If three consecutive data points fall below the goal line the problem solving team will reconvene and an instructional change will be made.

Student Jacob **Goal Area** Reading

Intervention Designer Tammy Tyler **Advisor** D. Tilly

Phase	Instructional Procedure	Materials	Arrangements	Time	Motivational Strategies
1	Teach phonemic awareness skills . Focus on transitioning activities. Provide cues when reading	Say it and Move It Materials Word Cards Disks	During small group reading in the classroom. Time added to Jacob's group each day for this instruction	10 minutes Daily	Verbal Praise
2	Instruction provided by general and sp ed teacher. Continue phonemic awareness training. Begin rereadings of passages.	Same 2.0 reading passages	Special Ed teacher will coteach Small groups will rotate between teachers increasing teacher contact time.	45 minutes Daily	Verbal Praise Classroom motivators
3					

Data Collection and Charting

Student Improvement is Job #1 Goal Area Reading

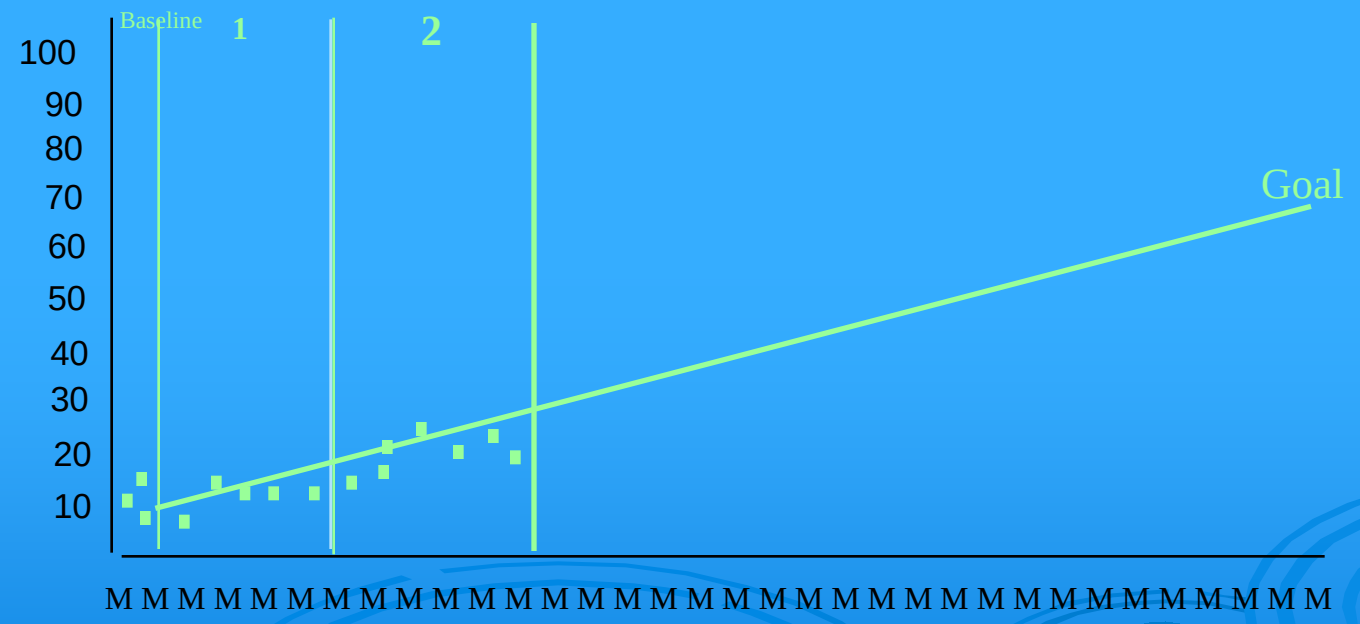
Name Jacob District _____ School _____ Year 94 Teacher Ruso

Goal By January, given passages from the third grade curriculum Jacob will read 70 words correct in one minute.

10 Words Correct per Minute

Service Providers _____

Parent Participation Parent will provide extra oral reading time at home. They would like graph sent home biweekly.



Instructional Decision Making

Instructional Intervention Plan

Decision Making Plan:
Data will be collected at least once per week and charted. If three consecutive data points fall below the goal line the problem solving team will reconvene and an instructional change will be made.

Student Jacob **Goal Area** Reading

Intervention Designer Tammy Tyler **Advisor** D. Tilly

Phase	Instructional Procedure	Materials	Arrangements	Time	Motivational Strategies
1	Teach phonemic awareness skills . Focus on transitioning activities. Provide cues when reading	Say it and Move It Materials Word Cards Disks	During small group reading in the classroom. Time added to Jacob's group each day for this instruction	10 minutes Daily	Verbal Praise
2	Instruction provided by general and sp ed teacher. Continue phonemic awareness training. Begin rereadings of passages.	Same 2.0 reading passages	Special Ed teacher will coteach Small groups will rotate between teachers increasing teacher contact time.	45 minutes Daily	Verbal Praise Classroom motivators
3	Same instructional procedures Add explicit phonics instruction Add oral reading time each day	Same Tradebooks SRA decoding materials	At the end of each day, Jacob will read orally to resource teacher	Add 15 minute Daily	Verbal Praise Classroom motivators

Data Collection and Charting

Student Improvement is Job #1 Goal Area Reading

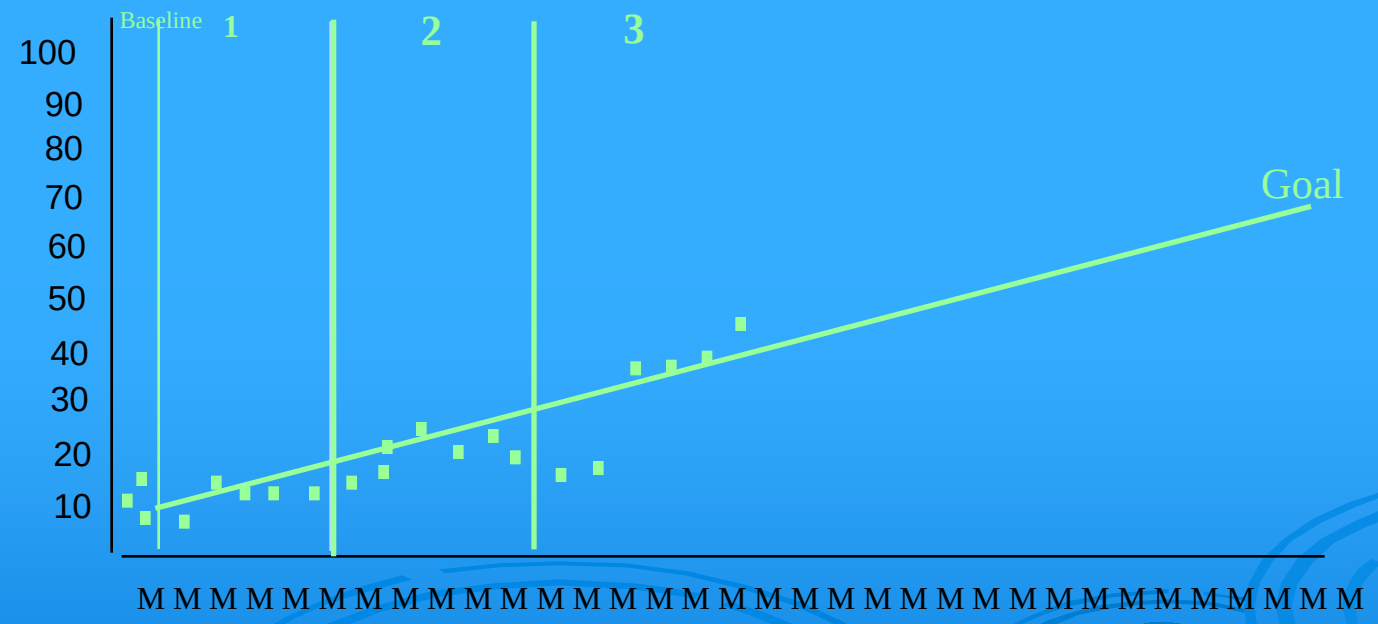
Name Jacob District School Year 94 Teacher Ruso

Goal By January, given passages from the third grade curriculum Jacob will read 70 words correct in one minute.

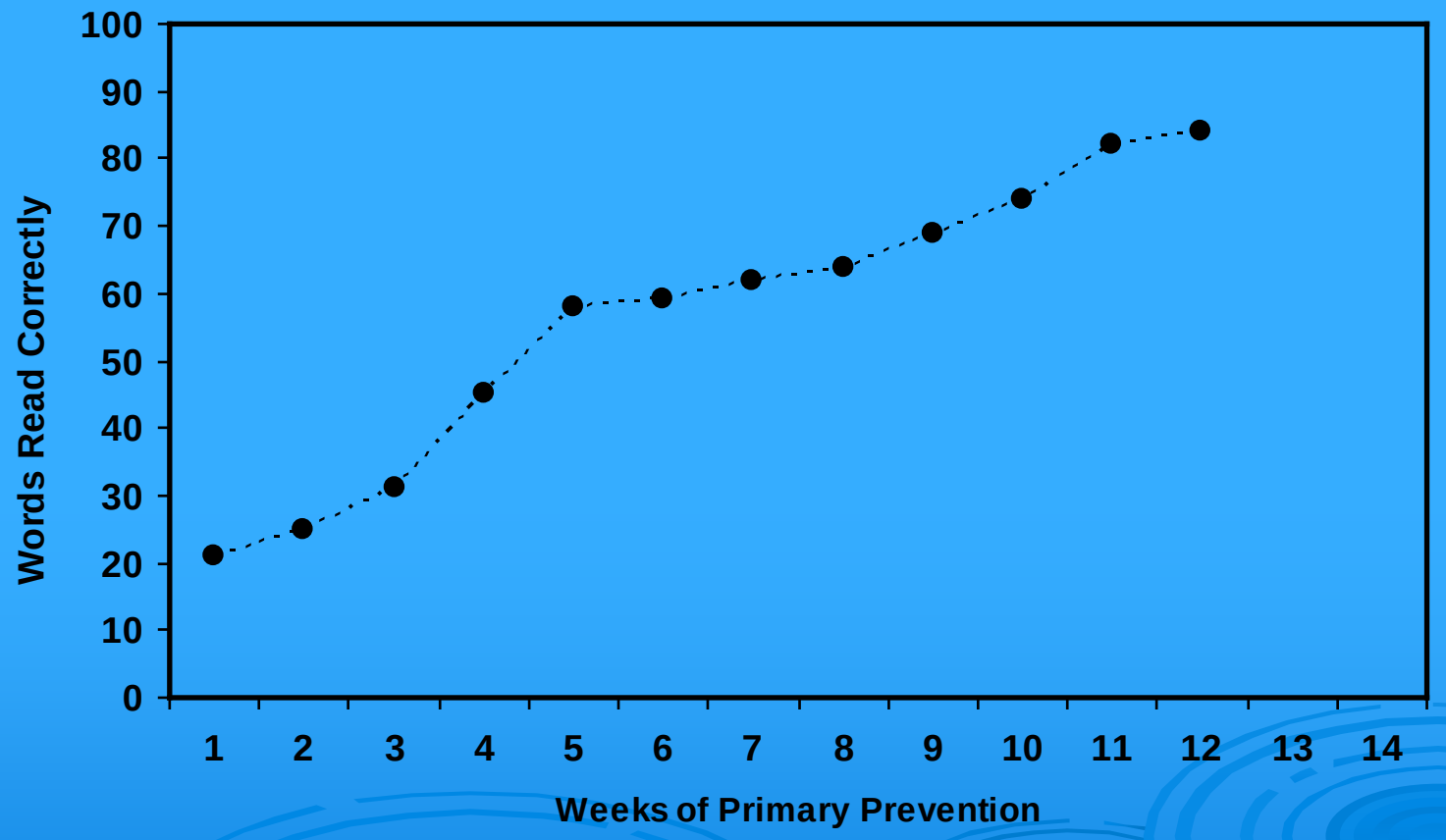
10 Words Correct per Minute

Service Providers

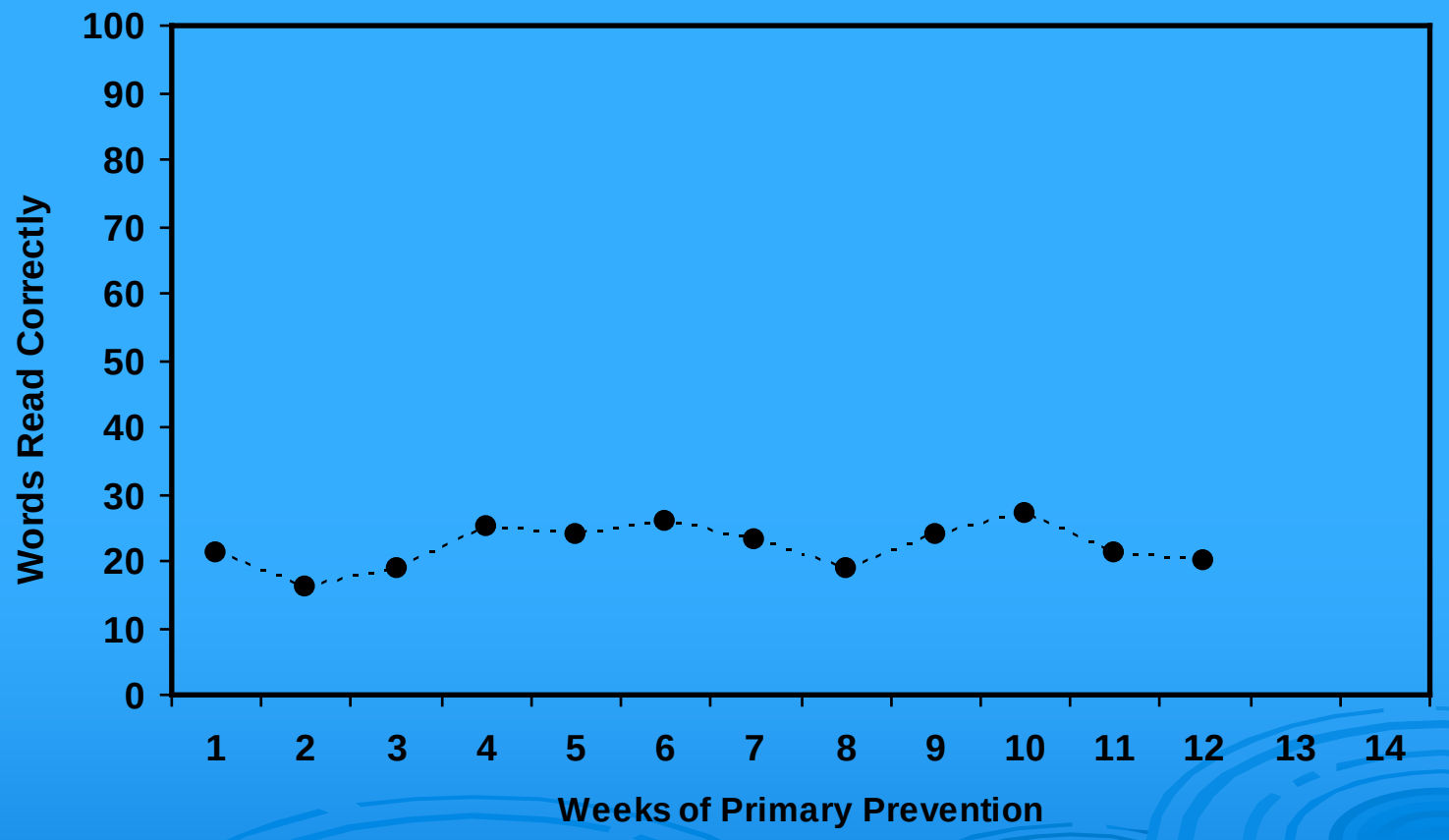
Parent Participation Parent will provide extra oral reading time at home. They would like graph sent home biweekly.



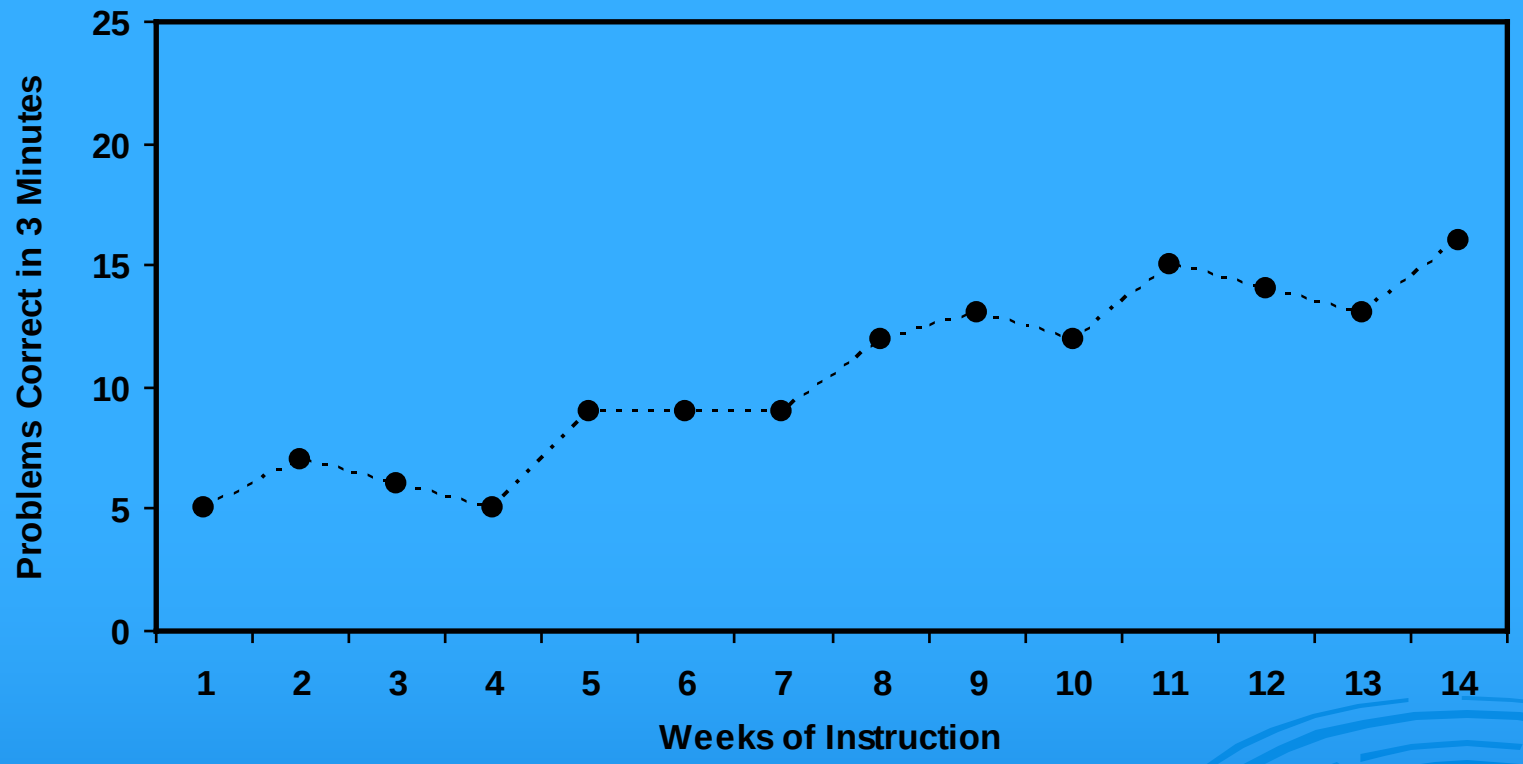
Graphing CBM Scores



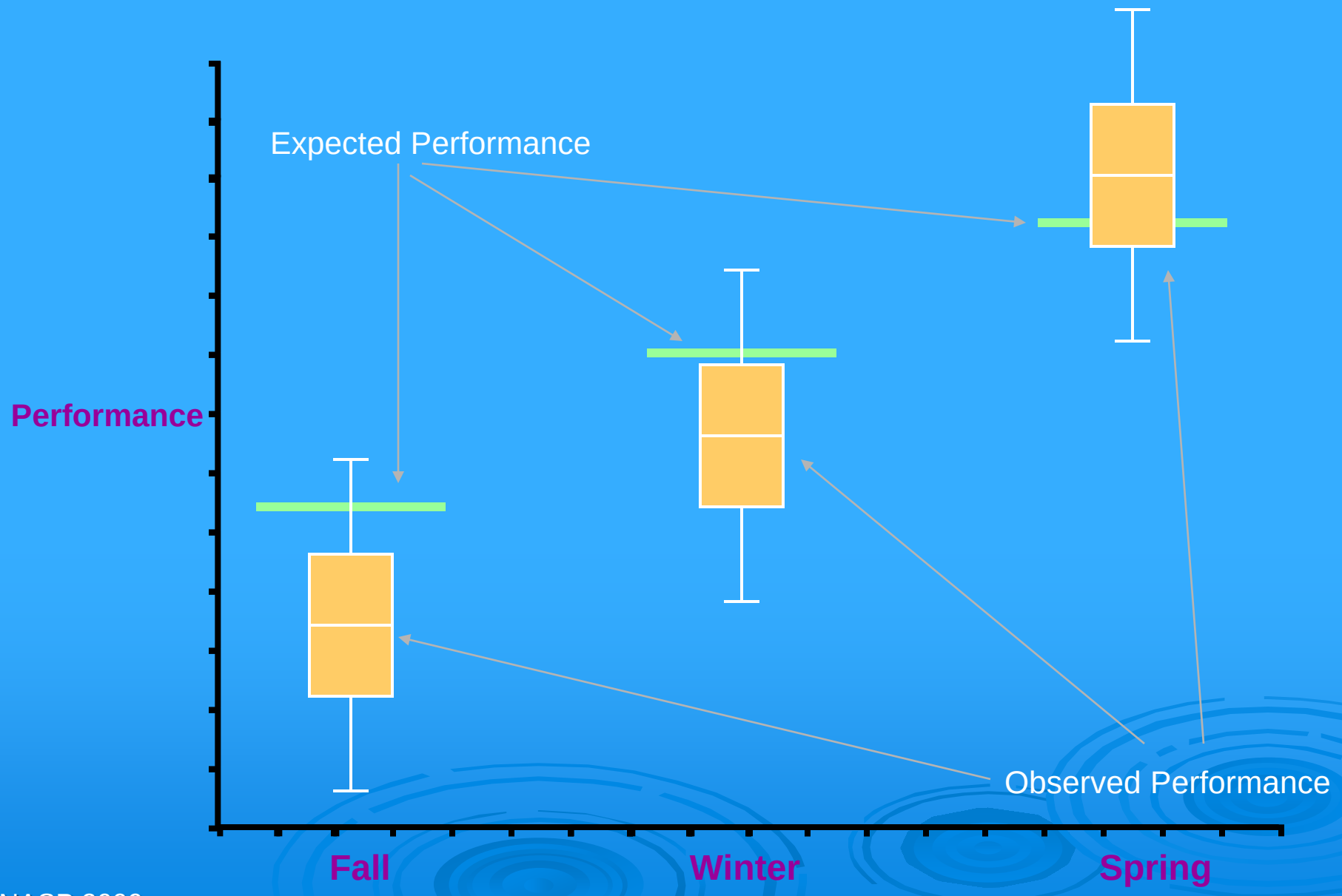
Graphing CBM Scores



Graphing CBM Scores

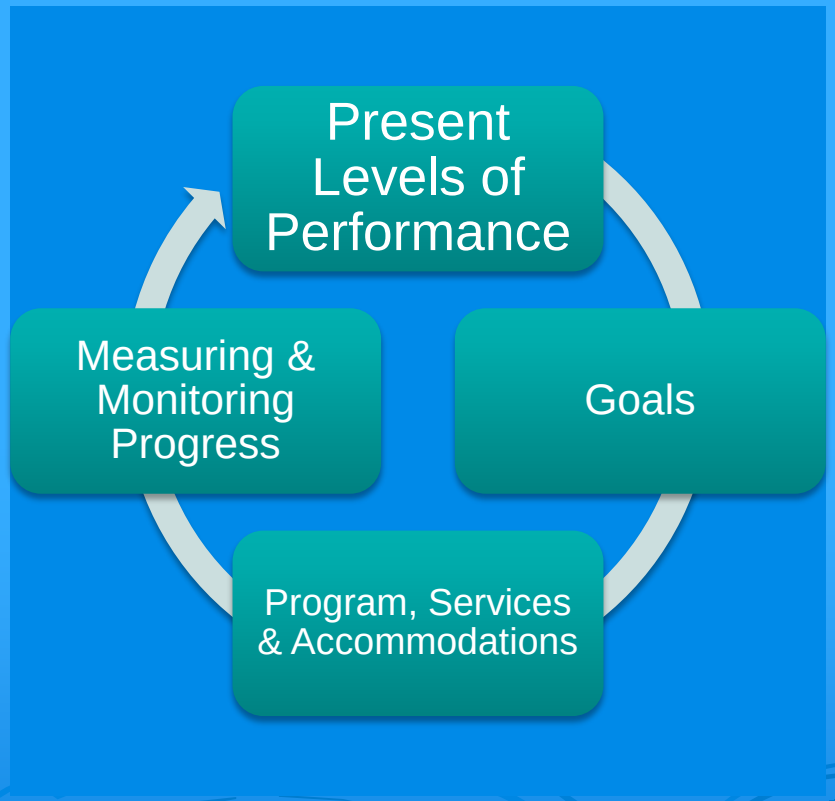


Positive Response to Intervention



Florida DOE; NASP 2009

Annual Goals



Measurable Annual Goals –
8NYCRR 200.4(d)(2)(iii)

- The IEP must list *measurable* annual goals consistent with the student's needs and abilities. Goals are based on the skill weaknesses of THIS STUDENT
  - Academic, Social, Physical, Functional, Behavioral
- There should be a goal associated with all or most needs identified in Present Levels (THE BASELINE!!!!!)
- There is no limit on the number of goals in an IEP

Additional Goal Requirements for Certain Students…

For *preschool* and *students assessed using alternate standards*, goals must include **objectives**

- measurable intermediate steps between the student's present level of performance and the measurable annual goal

8 NYCRR 200.4(d)(2)(iv)

Educational Decisions and Corresponding Types of Assessment

- **SCREENING/BENCHMARKING DECISIONS: Tier 1: Brief screenings to quickly indicate whether students in the general-education population are academically proficient or at risk.**
- **PROGRESS-MONITORING DECISIONS: At Tiers 1, 2, and 3, ongoing 'formative' assessments to judge whether students on intervention are making adequate progress.**
- INSTRUCTIONAL/DIAGNOSTIC DECISIONS: At any Tier, detailed assessment to map out specific academic deficits , discover the root cause(s) of a student's academic problem.
- OUTCOME DECISIONS: Summative assessment (e.g., state tests) to evaluate the effectiveness of a program.

Source: Hosp, M. K., Hosp, J. L., & Howell, K. W. (2007). The ABCs of CBM: A practical guide to curriculum-based measurement. New York: Guilford Press.

AIMSweb Cut-Points: Using National Aggregate Sample

- **Low Risk:** At or above the 25th percentile: *Core instruction alone is sufficient for the student.*
- **Some Risk:** 10th to 24th percentile: *Student will benefit from additional intervention, which may be provided by the classroom teacher or other provider (e.g., reading teacher).*
- **At Risk:** Below 10th percentile : *Student requires intensive intervention, which may be provided by the classroom teacher or other provider (e.g., reading teacher).*

AIMSweb® Growth Table
Reading-Curriculum Based Measurement
Multi-Year Aggregate
2006-2007 School Year

		Fall		Winter		Spring		
Grade	Percentile	Num	WRC	Num	WRC	Num	WRC	ROI
2	90	80328	105	73547	131	84689	145	1.1
	75		80		106		120	1.1
	50		55		79		94	1.1
	25		28		53		69	1.1
	10		14		25		42	0.8
	Mean		57		79		95	
	StdDev		36		39		40	
3	90	75327	133	69394	151	80557	164	0.9
	75		105		127		140	1
	50		78		98		112	0.9
	25		50		69		84	0.9
	10		30		42		53	0.6
	Mean		80		97		111	
	StdDev		40		42		43	

Source: AIMSweb® Growth Table Reading-Curriculum Based Measurement: Multi-Year Aggregate: 2006-2007 School Year

How to Set a Goal for an 'Off-Level' Intervention

1. **Comparing Student Performance to Benchmarks and Identifying Severe Discrepancies.** The student is administered reading fluency probes equivalent to his or her current grade placement (during the Fall/Winter/Spring schoolwide screening) and the results are compared to peer norms. If the student falls significantly below the level of peers, he or she may need additional assessment to determine whether the student is to receive intervention and assessment 'off grade level'.

Example of Progress-Monitoring Off-Level: Randy

In January, Mrs. Chandler, a 4th-grade teacher, receives her classwide reading fluency screening results. She notes that a student who has recently transferred to her classroom, Randy, performed at **35 Words Read Correct** (WRC) on the 1-minute AIMSweb Grade 4 fluency probes.

Mrs. Chandler consults AIMSweb reading-fluency research norms and finds that a reasonable **minimum** reading rate for students by winter of grade 4 (25th percentile) is **89 WRC**.

Example of Progress-Monitoring Off-Level: Randy

AIMSweb® Growth Table
Reading-Curriculum Based Measureme
Multi-Year Aggregate
2006-2007 School Year

		Fall		Winter		Spring
Grade	Percentile	Num	WRC	Num	WRC	
4	90	57382	151	58592	169	
	75		125		141	
	50		100		114	
	25		73		89	
	10		48		62	
	Mean		100		115	
	StdDev		40		42	

AIMSweb Norms: 'Typical' reader (25th percentile) in Gr 4 at mid-year (winter norms): **89 WRC**

Target Student Randy: **35 WRC**

Conclusion: Randy's grade-level performance is in the 'frustration' range.

He requires a Survey-Level Assessment to find his optimal 'instructional' level.

Source: AIMSweb® Growth Table Reading-Curriculum Based Measurement: Multi-Year Aggregate: 2006-2007 School Year

How to Set a Goal for an 'Off-Level' Intervention

2. **Conducting a Survey Level Assessment (SLA).** For students with large discrepancies when compared to benchmarks, the teacher conducts a SLA to determine the student's optimal level for supplemental intervention and progress-monitoring.

- The teacher administers AIMSweb reading probes from successively earlier grade levels and compares the student's performance to the benchmark norms for that grade level.
- The student's 'instructional' level for intervention is the first grade level in which his reading-fluency rate falls at or above the 25th percentile according to the benchmark norms.

Example of Progress-Monitoring Off-Level: Randy

Because Randy's reading fluency rate is so far below the grade-level norms (a gap of 54 WRC), his teacher decides to conduct a Survey Level Assessment to find the student's optimal grade level placement for supplemental reading instruction.

Example of Progress-Monitoring Off-Level: Randy

AIMSweb® Growth Table
Reading-Curriculum Based Measurement
Multi-Year Aggregate
2006-2007 School Year

		Fall		Winter		Sp		
Grade	Percentile	Num	WRC	Num	WRC	Num		
2	90	80328	105	73547	131	84689		
	75		80		106			
	50		55		79			
	25		28		53			
	10		14		25			
	Mean		57		79			
	StdDev		36		39		40	
3	90	75327	133	69394	151	80557	164	0.9
	75		105		127		140	1
	50		78		98		112	0.9
	25		50		69		84	0.9
	10		30		42		53	0.6
	Mean		80		97		111	
	StdDev		40		42		43	

On Grade 2-level probes, Randy attains a median score of **64 WRC.**

The AIMSweb winter norm (25th percentile) for a 2nd grade student is **53 WRC.**

The student is now in the **'instructional'** range and the Survey Level Assessment ends.

l Year

How to Set a Goal for an ‘Off-Level’ Intervention

3. **Selecting an ‘Off-Level’ Progress-Monitoring Goal.** To set a progress-monitoring goal, the teacher looks up the benchmark WRC for the 50th percentile at the student’s off-level ‘instructional’ grade level previously determined through the Survey Level Assessment.

Example of Progress-Monitoring Off-Level: Randy

AIMSweb® Growth Table
Reading-Curriculum Based Measureme
Multi-Year Aggregate
2006-2007 School Year

		Fall		Winter				
Grade	Percentile	Num	WRC	Num	WRC			
2	90	80328	105	73547	131			
	75		80		106			
	50		55		79			
	25		28		53			
	10		14		25			
	Mean		57		79			
	StdDev		36		39			
3	90	75327	133	69394	151			
	75		105		127			
	50		78		98	80557	112	0.9
	25		50		69		84	0.9
	10		30		42		53	0.6
	Mean		80		97		111	
	StdDev		40		42		43	

Goal-Setting. To find the progress-monitoring goal for Randy, his teacher looks up the benchmark WRC for the 50th percentile at Grade 2 (his off-level 'instructional' grade level)—which is **79 WRC.**

This becomes the progress-monitoring goal for the student.

Source: AIMSweb® Growth Table Reading-Curriculum Based Measurement: Multi-Year Aggregate: 2006-2007 School Year

How to Set a Goal for an 'Off-Level' Intervention

4. **Translating the Progress-Monitoring Goal into Weekly Increments.**

The teacher's final task before starting the progress-monitoring is to translate the student's ultimate intervention goal into 'ambitious but realistic' weekly increments.

One useful method for determining weekly growth rates is to start with research-derived growth norms and to then use a 'multiplier' to make the expected rate of weekly growth more ambitious.

How to Set a Goal for an 'Off-Level' Intervention

4. **Translating the Progress-Monitoring Goal into Weekly Increments. (Cont.)**

- The teacher first looks up the average rate of weekly student growth supplied in the research norms. (NOTE: If available, a good rule of thumb is to use the growth norms for the 50th percentile at the 'off-level' grade at which the student is receiving intervention and being monitored.)

- The teacher then multiplies this grade norm for weekly growth by a figure between 1.5 and 2.0 (Shapiro, 2008). Because the original weekly growth rate represents a typical rate student improvement, using this multiplier to increase the target student's weekly growth estimate is intended accelerate learning and close the gap separating that student from peers.

Randy's ultimate goal is **79 WRC** (the 50th percentile norm for grade 2).

During the Survey Level Assessment, Randy was found to read **64 WRC** at the 2nd grade level.

There is a **15-WRC** gap to be closed to get Randy to his goal.

At **2 additional WRC** per week on intervention, Randy should close the gap within about 8 instructional weeks.

Randy of about 2.0 additional WRCs.

AIMSweb® Growth Table
Reading-Curriculum Based Measurement
Multi-Year Aggregate
School Year

					Winter		Spring		
					Num	WRC	Num	WRC	ROI
						131	84689	145	1.1
						106		120	1.1
						79		94	1.1
						53		69	1.1
						25		42	0.8
						79		95	
						39		40	
						151	80557	164	0.9
						127		140	1
						98		112	0.9
						69		84	0.9
	10		30			42		53	0.6
	Mean		80			97		111	
	StdDev		40			42		43	

Source: AIMSweb® Growth Table Reading-Curriculum Based Measurement: Multi-Year Aggregate: 2006-2007 School Year

How to Set a Goal for an 'Off-Level' Intervention

5. **Advancing the Student to Higher Grade Levels for Intervention and Progress-Monitoring**

   The teacher monitors the student's growth in reading fluency at least once per week (twice per week is ideal).

- When the student's reading fluency exceeds the 50th percentile in Words Read Correct for his or her 'off-level' grade, the teacher reassesses the student's reading fluency using AIMSweb materials at the next higher grade.
- If the student performs at or above the 25th percentile on probes from that next grade level, the teacher advances the student and begins to monitor at the higher grade level.
- The process repeats until the student eventually closes the gap with peers and is being monitored at grade of placement.

Example of Progress-Monitoring Off-Level: Randy

AIMSweb® Growth Table
Reading-Curriculum Based Measurement
Multi-Year Aggregate
School Year

Advancing the Student to Higher Grade Levels (Cont.).
So Mrs. Chandler assesses Randy on AIMSweb reading fluency probes for Grade 3 and finds that he reads on average **72 WRC** —exceeding the Grade 3 25th percentile cut-off of **69 WRC**.

Therefore, Randy is advanced to Grade 3 progress-monitoring and his intervention materials are adjusted accordingly.

				Winter		Spring		
				Num	WRC	Num	WRC	ROI
				73547	131	84689	145	1.1
					106		120	1.1
					79		94	1.1
					53		69	1.1
					25		42	0.8
					79		95	
					39		40	
				69394	151	80557	164	0.9
					127		140	1
					98		112	0.9
3	25	75327	50		69		84	0.9
	10		30		42		53	0.6
	Mean		80		97		111	
	StdDev		40		42		43	

Source: AIMSweb® Growth Table Reading-Curriculum Based Measurement: Multi-Year Aggregate: 2006-2007 School Year

The “I” in RtI

- RtI is based on the actuality of interventions delivered as intended
- We ***CANNOT*** assess RtI if the ***intervention*** was not implemented as designed
- Intervention integrity must be ensured and documented
- *Integrity* and *documentation* will become part and parcel of procedural safeguards

Research tells us…

- Most interventions are not implemented correctly
- Often interventionists report using interventions when in actuality they're not
- Implementation frequently diminishes after only a few days

Florida DOE; NASP 2009

Intervention Support

- IF YOU CANNOT CREATE A SUPPORT SCHEDULE DO NOT DO INTERVENTION UNTIL ONE CAN BE ESTABLISHED
- It is critical that building administrators understand the importance of the support schedule

Why do most interventions fail?

(cont'd)

- Teacher perception
- Lack of knowledge/skill or training
- Lack of support
- Lack of time
- Interventions too complex

TIER I interventions

- Build the intervention capacity of classroom teacher
- Can be delivered in the class or throughout the school
- Create a consistent menu of interventions
- Teachers have to show they used intervention(s) from menu prior to referral.
- Exhibits differentiated instruction

Creating Tier I menu

- Generate list of top academic/behavioral concerns that lead to student referrals
  - Analyze past records
  - Review IST notes/referrals
- Survey teachers about effective strategies that address common referral questions
  - Create survey with common referral concerns
  - Teachers write in effective strategies
  - Synthesize those strategies that is SUPPORTED by research

Tier I intervention

- Set expectation that before referring a student, teachers will use ideas from the Tier I menu
  - School determines how many interventions have to be tried before referral
  - Documentation needed before referral
    - When did intervention begin
    - How frequently was it used
    - What was the group size
    - How long did each session last
    - Progress monitoring data that demonstrates the response

How to support your educators

- Professional Development
- Acknowledging Role and its impact on job description, performance, availability.
- Allow for mistakes
- Practice, practice, practice
- Regular review of progress and functioning

Intervention Support

- Intervention plans should be developed based on student need and interventionist skill
- All intervention plans should have intervention support
- Principals should ensure that intervention plans have intervention support
- ***Teachers should not be expected to implement plans without support***

Florida DOE; NASP 2009

Intervention can only work if

- Student receives EXPLICIT instruction
  - Skills are taught in small detailed steps
  - Student given opportunity to watch, practice, and receive immediate feedback
- Student is required to respond actively to instruction
  - Student has to show what they know by actively and accurately responding
- Student receives performance feedback

Intervention can only work if

- Student is motivated to do the work
  - Can’t do vs. Won’t do
- Stage of instruction is identified
  - Acquisition
    - Not able to perform reliably or accurately
    - Exit goal – student can perform skill accurately with little adult support
  - Fluency
    - Performs tasks slowly and haltingly
    - Exit goal – skill is retained, can combine skill with other skills, as fluent as peers
  - Generalization
    - Fails to apply skill to new situations, confuses skill with similar skills (+ vs. x)
    - Exit goal – Uses skill across settings, does not confuse skills
  - Adaptation
    - Does not modify skill as needed to fit new situations