

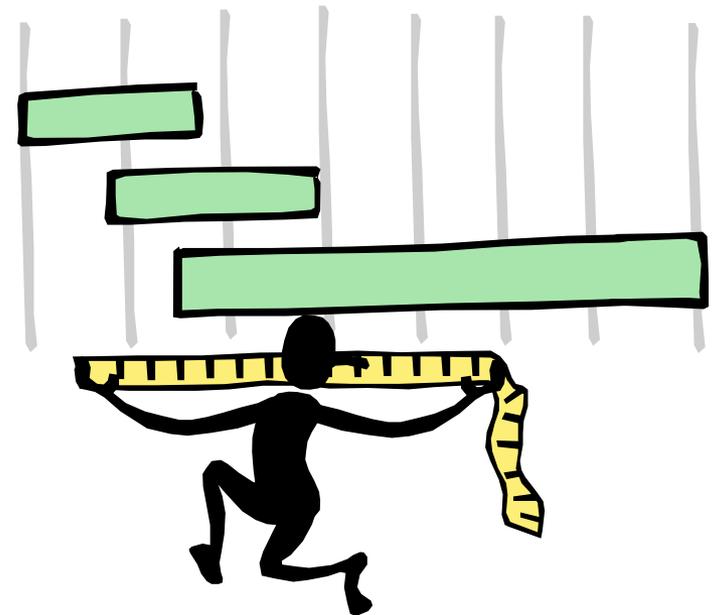
Assessment in RTI

Overview of Assessments

Focus:

Screening

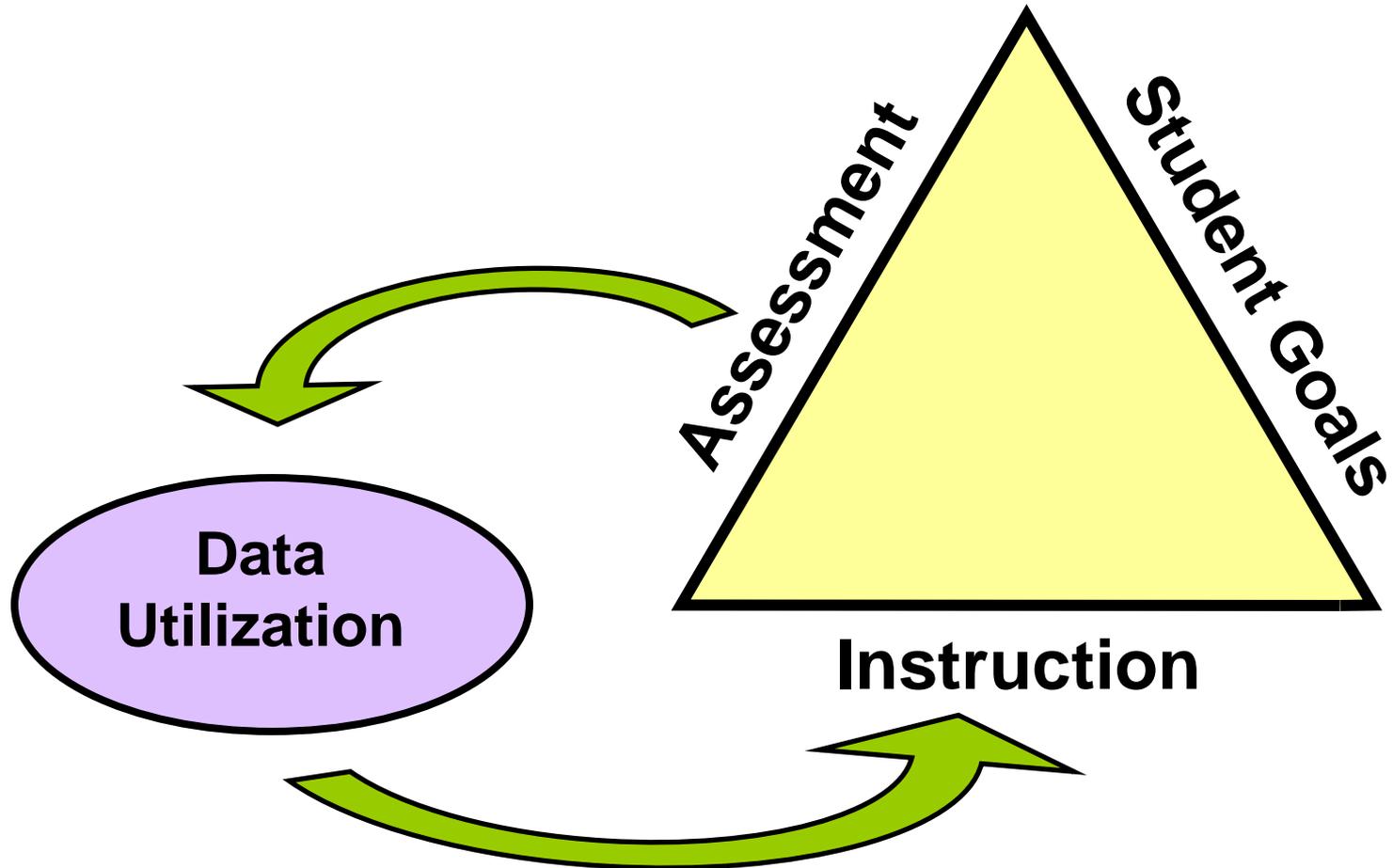
Progress Monitoring



Learning Objectives

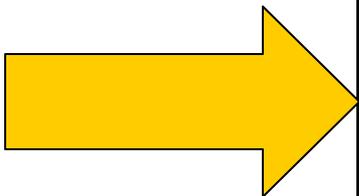
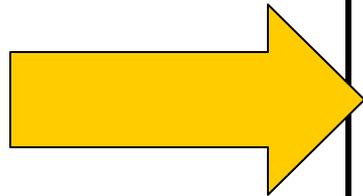
- Know the types and purpose of assessments essential in RTI framework
- Know types of screening/benchmark assessments
- Know how to use screening data at both the school and individual student level.
- Know types of progress monitoring (PM) assessments
- Know how to use PM data at the individual student level.

Ongoing Cycle: Linking Assessment, Instruction, and Student Goals



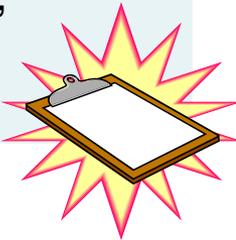
Assessments of Student Performance Essential to RTI

	Assessment
School Level	<ul style="list-style-type: none">• Systematic review of data to identify:<ul style="list-style-type: none">• students “at risk”• needed resources• how are we doing?• Screen All: “Benchmarking”• Fall, Winter, Spring
Student Level	<ul style="list-style-type: none">• Systematic review of data to evaluate individual RTI and inform intervention• Progress monitoring;<ul style="list-style-type: none">• CBM, CRTs• Diagnostic Assessment• Assess additional factors



Types of Assessment Essential to RTI

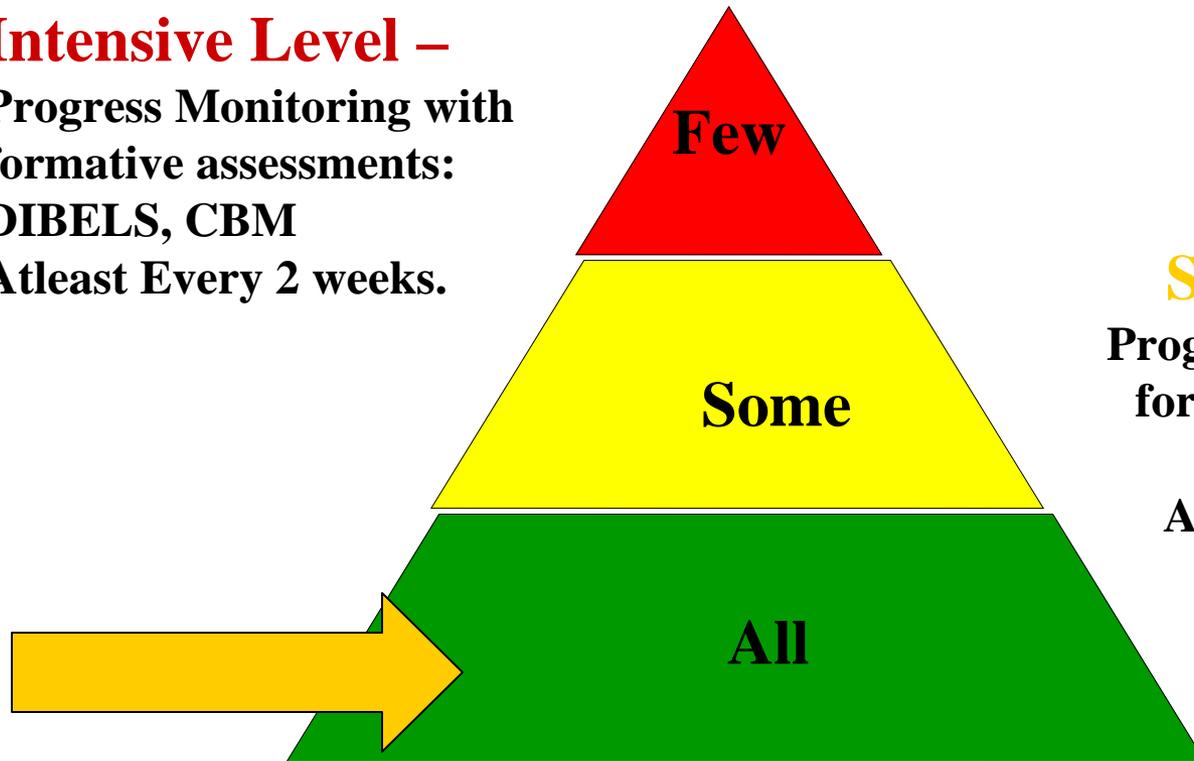
Assessment Type	Answers Question	Administered to	Assessment Example
Screening/ Benchmark	Who is struggling?	All students	DIBELS; AIMSweb CBM probes; classroom unit tests
Progress Monitoring	Is the student responding to intervention?	Students receiving intervention	Curriculum based measures (CBM) – 1 minute probes aligned with final outcome
Diagnostics	What specific skill(s) needs more attention?	Some students receiving intervention	Comprehensive Test of Phonological Awareness (CTOPP); Gray Oral Reading Test (GORT)
Outcome	Have students learned as expected?	All students	MontCAS Woodcock Reading Mastery
Informal	More specific information needed?	Some students receiving intervention	Checks for understanding; observe requested task; dynamic learning task



Assessments Indicators: How Are We Doing?

Intensive Level –

Progress Monitoring with
formative assessments:
DIBELS, CBM
Atleast Every 2 weeks.



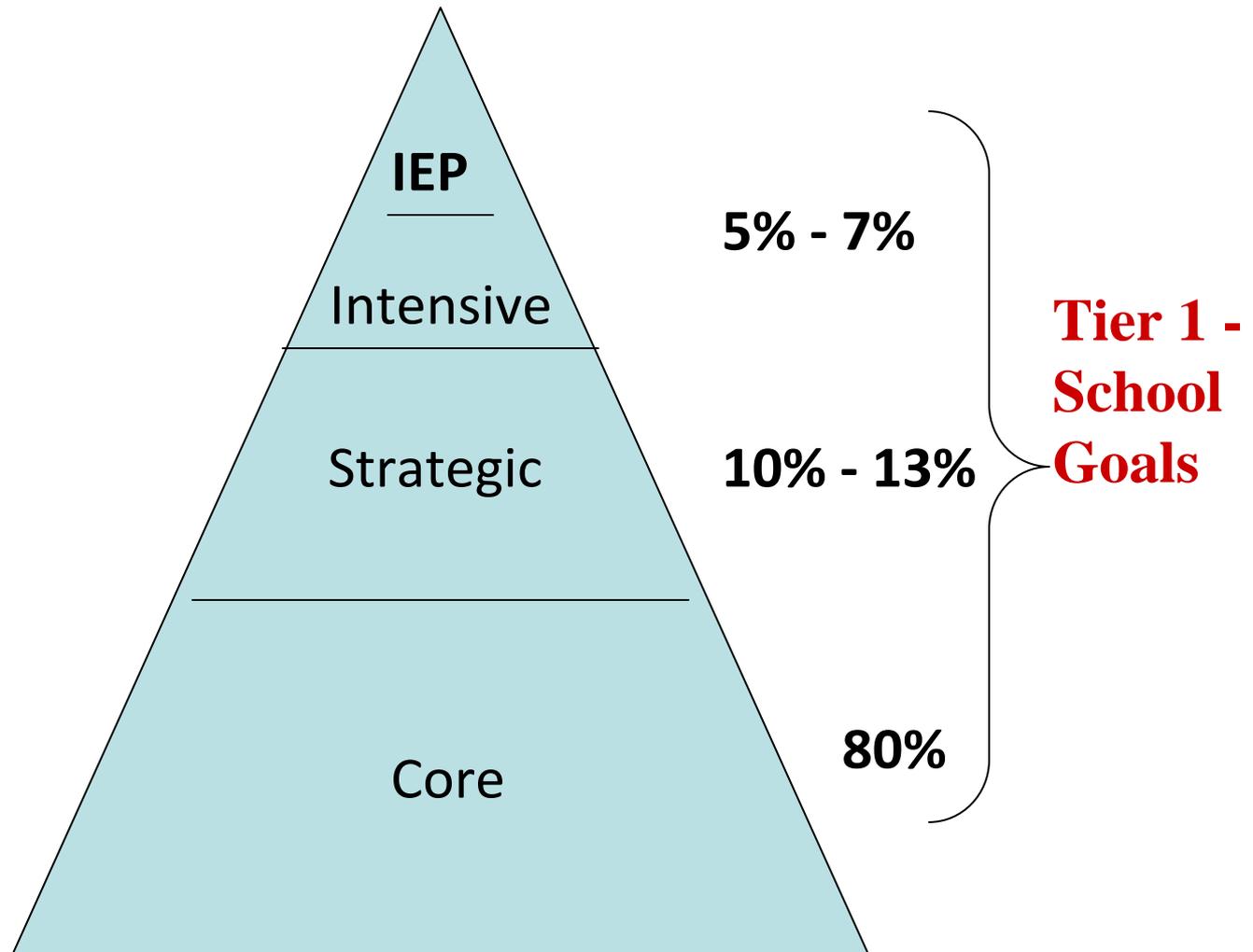
Strategic Level

Progress Monitoring with
formative assessments:
DIBELS, CBM
Atleast 1 X per mth.

Core Level –

School-wide Screening for Academic and Behavioral At-Risk
“Benchmark Assessment” – 3 X year
Ongoing Program Assessments

The RTI Framework: A System of Instructional Supports GUIDED by Assessment Data



Screening Measures

- Goal is to maximize the amount of information collected in the minimum amount of time
- Screening assessments must:
 - align with what is being taught
 - have *alternate* versions because of repeated use
 - be efficient – quick, reliable, valid
 - have “predictive validity”; e.g. a low score in the Fall predicts difficulty at the end of the year.

Screening Measures (cont'd)

- Most widely used for benchmark screening because of efficiency and utility of data are Curriculum Based Measurement (CBM) probes such as:
 - Dynamic Indicators of Basic Early Literacy Skills (DIBELS)
 - AIMSweb CBM Oral Reading Fluency or Early Literacy Skills for reading; Math Calculation probes for Math (and other measures)
- Other assessments that could be used to screen include Criterion Referenced Tests or Standardized Tests:
 - Comprehensive Test of Phonological Processing (CTOPP);
 - Woodcock Reading Mastery (WRMT)
 - Measures of Academic Progress (MAP) test (computerized)

Universal *Benchmark* Screening

- Administration of a screening assessment to *all* students to determine which students may be struggling with reading (or math, behavior, etc.)
- “Benchmarks” indicate the *lowest* score that indicates student is on track to meet learning expectations by the end of the year.
- School’s resources organized to identify and provide additional instruction/intervention to those students at risk.

Universal *Benchmark* Screening

- Options for schools to decide locally, based upon resources, culture, etc:
 - Frequency of screening
 - Selection of the screening measure(s)
 - Criteria used to determine which students are in need of intervention (what is the “benchmark” or “cut-off” for each grade level?)
 - Who administers screening assessments
 - Who aggregates and reviews outcomes
 - How and to whom results are disseminated

Recommended Frequency of Benchmark Screening

Time Administered	Purpose
Fall	<ul style="list-style-type: none">•Identify which students are performing at grade level•Identify which students are struggling and need intervention
Winter	<ul style="list-style-type: none">•Identify which students are performing at grade level.•Identify which students have begun to struggle later in the year and need intervention.
Spring	<ul style="list-style-type: none">•Document students' performance at the end of the year.•Identify students who may benefit from additional instruction in the summer or in the following school year.

DIBELS SCHEDULE OF ASSESSMENTS

DIBELS Oral Reading Fluency
(fluency)

DIBELS Retell Fluency
(comprehension)

DIBELS Nonsense Word Fluency
(phonics)

DIBELS Phoneme Segmentation Fluency
(phonemic awareness)

DIBELS Letter Naming Fluency
(phonics)

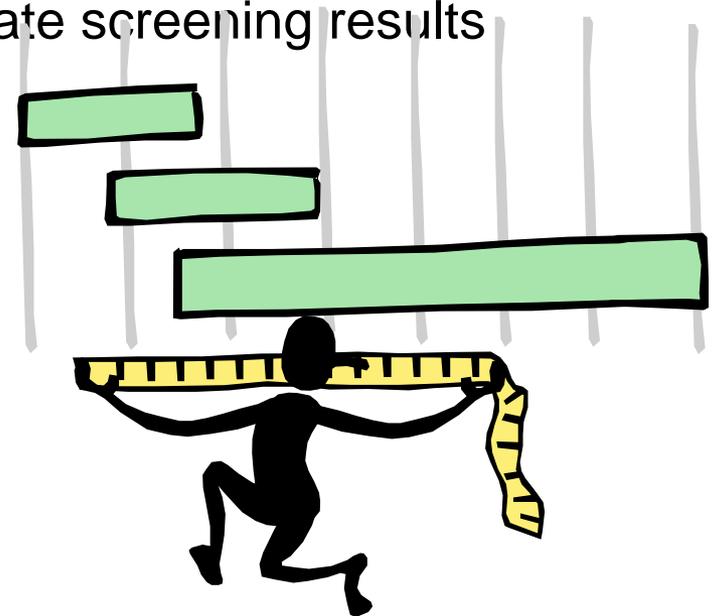
DIBELS Initial Sound Fluency
(phonemic awareness)

DIBELS Word Use Fluency
(vocabulary)

Beg	Mid	End	Beg	Mid	End	Beg	Mid	End	Beg	Mid	End	Beg	Mid	End
<u>Preschool</u>			<u>Kindergarten</u>			<u>First Grade</u>			<u>Second Grade</u>			<u>Third Grade</u>		

DATA Collection and Review

- Systematic and SYSTEMATIZED
 - Schedule Benchmarking (3 times per year optimal)
 - Establish data base and maintained in one place
 - Assign responsibility:
 - Data collection
 - Data entry
 - Data reports
 - Data review by teachers & teams
 - Classroom teachers cross-validate screening results
 - Dissemination and Review
 - RTI Steering Team
 - All Teachers
 - Individual Students
 - Parent Reports



Examples of Benchmarking
CBM probes for
Early Literacy Skills and
Oral Reading Fluency
Math Fluency

Reading CBM Example: Letter Naming and Letter Sound Fluency

- Administered for 1 minute
- Score is number of correct letters or sounds

b	c	h	a		
m	c	e	q	h	
d	j	y	a	n	
t	x	b	g	u	
s	z	p	f	l	
w	i	r	k	o	v

Reading CBM Example: Oral Reading Fluency

Denise and her parents go to the river almost every weekend when the weather is warm. Her parents are expert kayakers, but this is only Denise's second summer paddling a kayak. Her parents have decided Denise is ready for some "big water" and are taking her to the Ocoee River.

Denise is a little nervous as she takes her boat off the car at the put-in. She dresses for the river by putting on a spray jacket over her bathing suit. The water is very cold, and the waterproof jacket helps keep her warm. She pulls her spray skirt around her waist. This makes a waterproof seal when she sits in the cockpit of the boat and pulls the skirt tightly around the rim of cockpit of the boat. After putting on her life jacket and helmet, she pulls her boat to the edge of the water and sits in it with her legs stretched out in front of her. She holds her paddle as someone slides her into the water.

Although she is a little anxious, she remembers to keep paddling smoothly. As she and her family approach the first big rapid, her mother suggests they get out of the boats and walk down the river to look at the rapid. This is called "scouting" a rapid. Paddlers watch the patterns of the water and currents and decide which is the safest way to paddle without flipping over.

They get back into their kayaks. Denise and her father sit in the calm waters of an eddy and watch as her mother runs the rapids.

Denise's heart is pounding as she watches her father paddle his way through the rapid. It is her turn. Her parents are sitting in an eddy at the end of the rapid waiting for her to paddle her boat into the fast-moving white water.

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Example of Benchmarks: DIBELS

DIBELS Benchmarks K-6 available at www.dibels.org

Grade	Fall	Winter	Spring
1	--	20	40
2	44	68	90
3	77	92	110
4	93	105	118
5	104	115	124
6	109	120	125

Math CBM Example:

Computation

- Grade 6 computation test
- 6 minutes

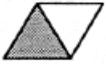
Sheet #8		Computation 6		
Password: BAT				
Name: _____ Date: _____				
A $\begin{array}{r} 4.63 \\ \times 9.1 \\ \hline \end{array}$	B $4 \div \frac{1}{7} =$	C $\begin{array}{r} 65997 \\ + 20042 \\ \hline \end{array}$	D $9 \times \frac{3}{10} =$	E $\begin{array}{r} 40270 \\ + 94679 \\ \hline \end{array}$
F $253 \overline{)9281}$	G $\begin{array}{r} 88062 \\ - 16325 \\ \hline \end{array}$	H $\begin{array}{r} 2.358 \\ \times 6.4 \\ \hline \end{array}$	I $\frac{3}{5} + \frac{1}{3} =$	J $9\frac{8}{11} - 4\frac{9}{11} =$
K $4.4 \overline{)924}$	L $2\frac{2}{5} - 1\frac{1}{2} =$	M $\begin{array}{r} 9.271 \\ - 4.8129 \\ \hline \end{array}$	N $4\frac{4}{5} + 9\frac{2}{5} =$	O $25 \overline{)1291}$
P $5.1 \overline{)459}$	Q $3\frac{1}{5} + 5\frac{17}{20} =$	R $\frac{19}{20} + \frac{1}{5} =$	S $\begin{array}{r} 8870 \\ \times 369 \\ \hline \end{array}$	T $44 \overline{)64}$
U $\begin{array}{r} 3.752 \\ + 1.45 \\ \hline \end{array}$	V $\frac{1}{2} \times \frac{3}{4} =$	W $\begin{array}{r} 69758 \\ - 32127 \\ \hline \end{array}$	X $\frac{2}{3} - \frac{1}{2} =$	Y $\begin{array}{r} 8913 \\ \times 836 \\ \hline \end{array}$

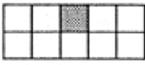
Math CBM Example: Concepts & Applications

Name Ben Date _____ Test 13 Page 2

Column C Applications 2 Column D

(8) Write the letter of the matching fraction in each blank.

✓ B  (A) $\frac{1}{3}$

✓ D  (B) $\frac{1}{2}$

A  (C) $\frac{1}{4}$

(D) $\frac{1}{10}$

(9) Write + or - in the blank.

$9 \overset{+}{\checkmark} 6 = 15$

(10) Write the number in the blank.

Of these numbers,
79 73 64

✓ 64 is the smallest.
✓ 79 is the largest.

(11) Counting by 2's, fill in the blanks.

8, 10, 12, 14, 15 ✓

(12) Write the number in the blank.

$10 + 1 = 1 + \underline{12}$

(13) Write the answer in the blank.

There are 13 white mice in the pet store and 14 gray mice. How many mice are there in all?

$\begin{array}{r} 13 \\ + 14 \\ \hline 27 \end{array}$ 27

(14) Look at this group of numbers.

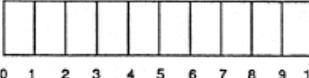
1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20

Write the third number. 3 ✓
Write the fifteenth number. 15 ✓
Write the twentieth number. 20 ✓

Name _____ Date _____ Test 13 Page 3

Column E Applications 2 Column F

(15) How long is the whale?

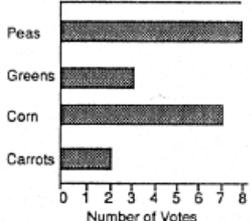


0 1 2 3 4 5 6 7 8 9 10



10 units ✓

(16) Favorite Vegetables



Peas
Greens
Corn
Carrots

0 1 2 3 4 5 6 7 8
Number of Votes

Write the number in each blank.

How many more votes did corn get than carrots? 2

How many votes did greens get? 3 ✓

How many votes did greens and peas get together? 11 ✓

$\begin{array}{r} 3 \\ + 8 \\ \hline 11 \end{array}$

(17) Write + or - in the blank.

$10 \underline{-} 7 = 3$

(18)

December

S	M	T	W	T	F	S
	1	2	3	4	5	
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

Holiday play

Write the letter in the blank.

The holiday play falls on which day of the week?

(A) Monday
(B) Wednesday
(C) Tuesday

Benchmarks for Math CBM

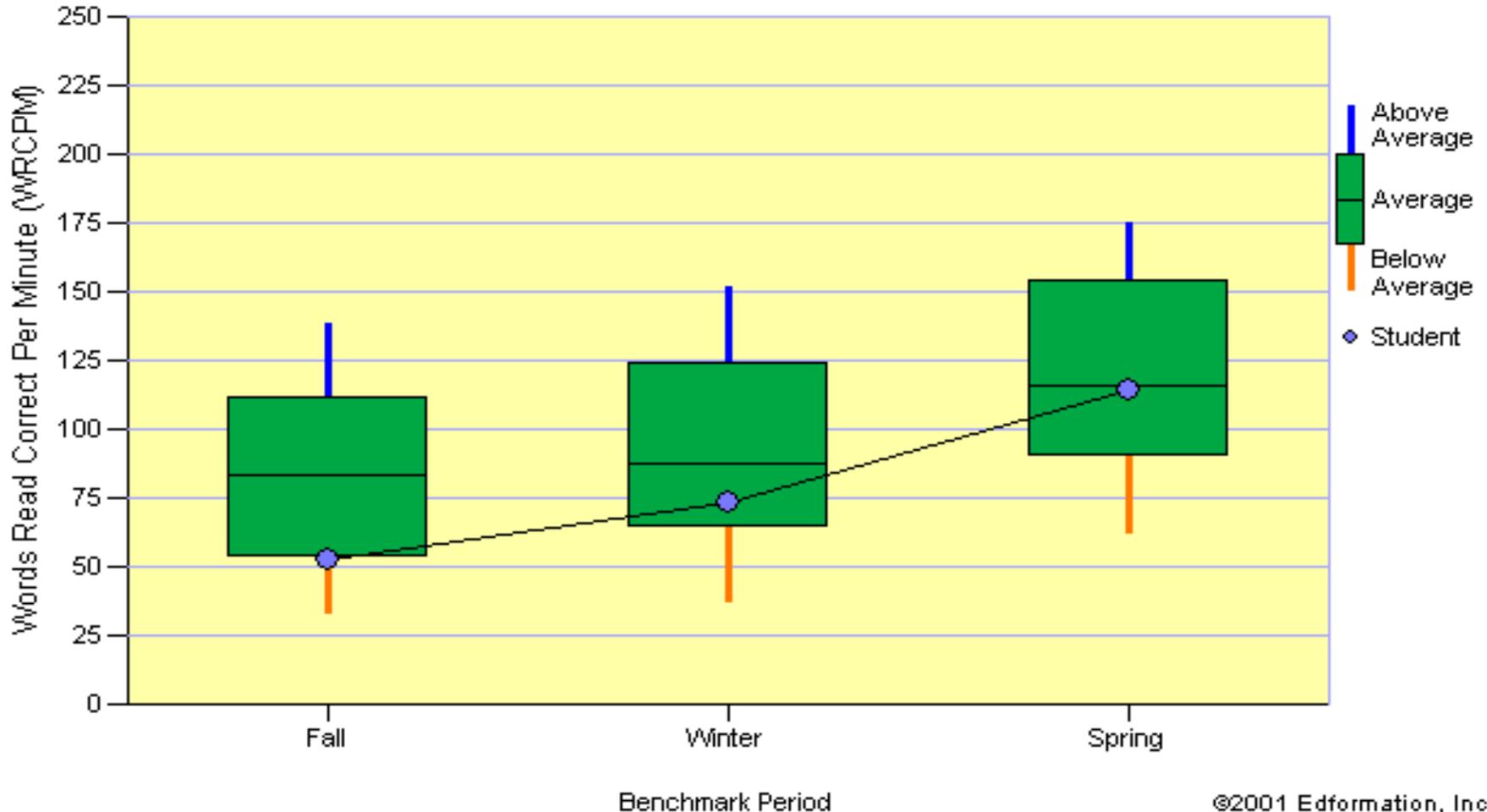
Grade	Probe	Maximum score	Benchmark
Kindergarten	Data not yet available		
First	Computation	30	20 digits
First	Data not yet available		
Second	Computation	45	20 digits
Second	Concepts and Applications	32	20 blanks
Third	Computation	45	30 digits
Third	Concepts and Applications	47	30 blanks
Fourth	Computation	70	40 digits
Fourth	Concepts and Applications	42	30 blanks
Fifth	Computation	80	30 digits
Fifth	Concepts and Applications	32	15 blanks
Sixth	Computation	105	35 digits
Sixth	Concepts and Applications	35	15 blanks

Benchmark Screening Results

- Organize individual student results by classroom
- Classroom teacher reviews student scores to cross validate results:
 - do students identified as at risk by results also perform as struggling learners in your classroom?
 - Classroom teacher can provide classroom screening assessments that refute benchmark
- Benchmark data + teacher validation = student identified as struggling and in need of intervention
 - Rank order by intervention intensity need (tier 2 or tier 3)
 - Make data-based decisions for intervention

Tier 1 : Screening of ALL Students

Hartford School District - Wilson Elementary
P. Cotten (Grade 3)
Reading - Standard Benchmark Passages



Each sticky note has student's name, teacher and score

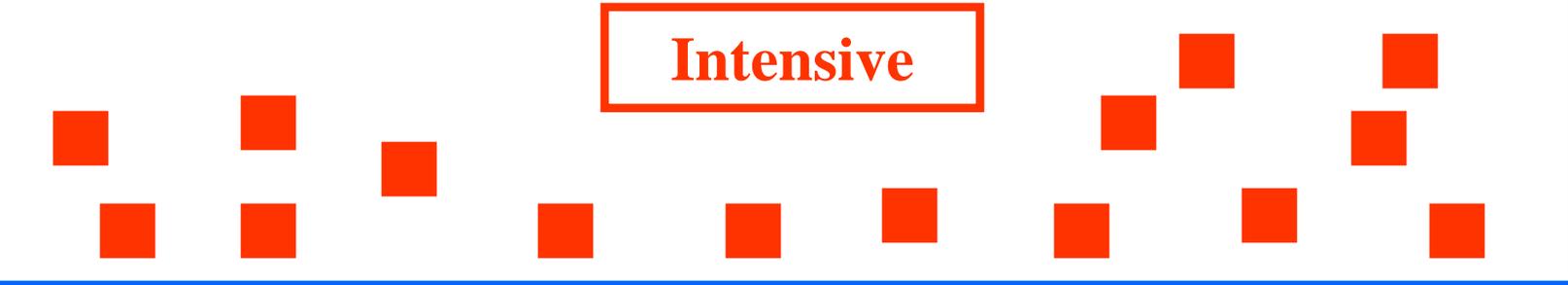
Benchmark

A large number of green sticky notes are scattered across the top section of the diagram. A central box with a green border contains the word "Benchmark" in green text.

Strategic

A moderate number of orange sticky notes are scattered across the middle section of the diagram. A central box with an orange border contains the word "Strategic" in orange text.

Intensive

A small number of red sticky notes are scattered across the bottom section of the diagram. A central box with a red border contains the word "Intensive" in red text.

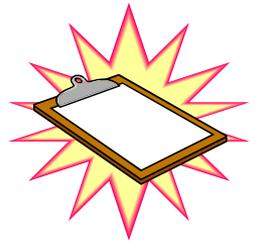
Magnet Board Visual Display



Using Benchmark Data at School Level

- Use benchmark data to:
 - Evaluate effectiveness of core program
 - Identify areas of concern in need of improvement
 - Identify professional development needs
 - Reallocation of resources
 - Staffing patterns
 - Scheduling issues
 - Attendance issues
 - And more.....

School Team Activity

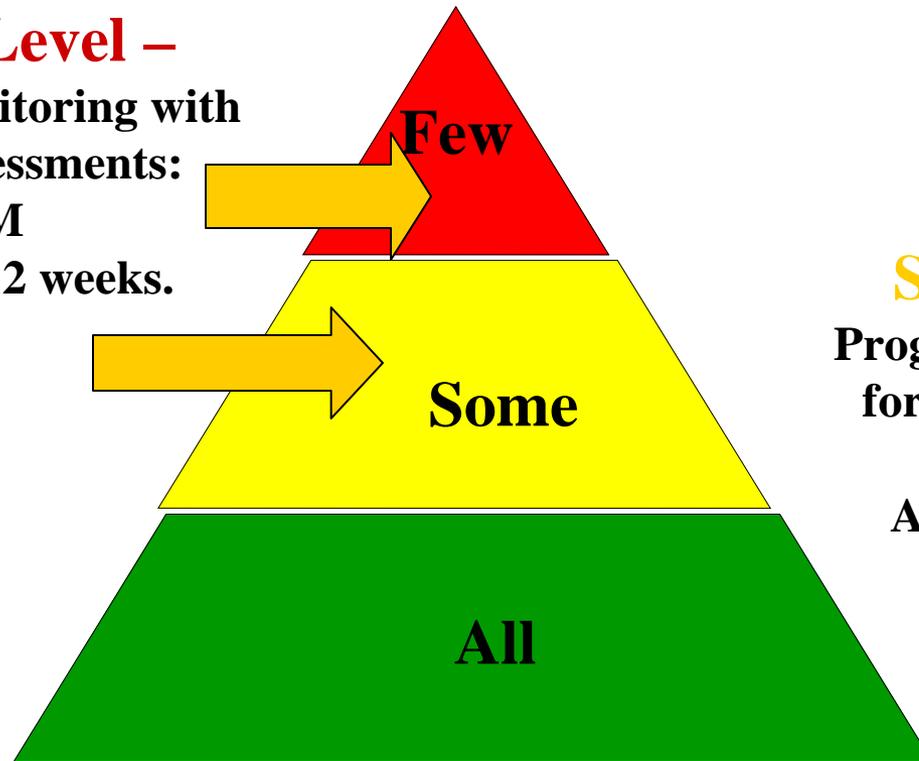


- Handout “Where Are We?” ...School-wide Academic Evaluation
 - Use Fall Screening Data
 - Evaluates School Performance Overall
- Discuss with Team
- Report out
- Note: Keep these handy for Leadership Team practice tomorrow!

Assessments Indicators: How Are We Doing?

Intensive Level –

Progress Monitoring with
formative assessments:
DIBELS, CBM
At least Every 2 weeks.



Strategic Level

Progress Monitoring with
formative assessments:
DIBELS, CBM
At least 1 X per mth.

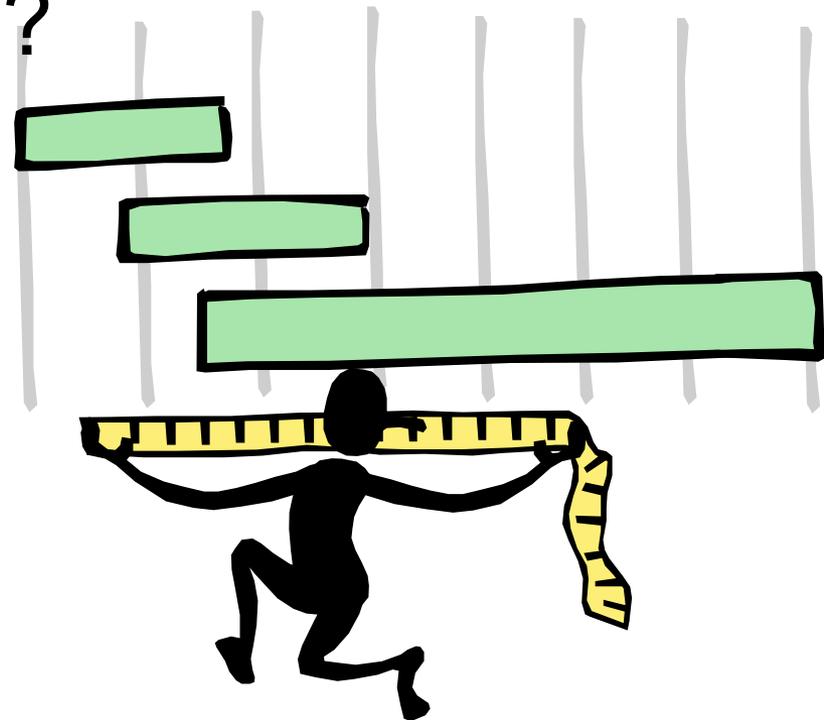
Core Level –

School-wide Screening for Academic and Behavioral At-Risk
“Benchmark Assessment” – 3 X year
Ongoing Program Assessments

Progress Monitoring Assessment

Is intervention accelerating learning so that student is making substantial progress to reach year end goal?

Data-based decisions!



Progress Monitoring is Key to Success



- Monitoring changes in skill acquisition or indicators of the year end goal provides:
 - (a) data to make decisions about student RTI
 - (b) accountability by documenting progress
 - (c) flexibility to modify intervention components
 - (d) motivation to continue until goals are achieved
- The value of the assessment process is its capacity to inform, foster, and document program or intervention effectiveness (Reschly & Grimes, 1995; Witt & Gresham, 1985)

Progress Monitoring Assessment

- PM Assessment must be:
 - Aligned with what is being taught
 - “Sensitive” measures to detect very small change
 - Multiple forms of same assessment for repeated use.
 - Efficient: valid, reliable, quick, easy to administer
- PM Used for Data-based decision making:
 - Is the intervention working?
 - Which students are responding?
 - Which students are not responding?
 - What specific skills that need to be taught or practiced?

Examples of CBM probes
in reading, math, written
expression, and spelling

Reading CBM Example: Maze Fluency

- Student circles correct words for 2.5 minutes.
- Score is number of correct replacements.

THE CAVE TRIP

Mrs. Jones said that Cindy's class [was/ step/ hill] going on a field trip. The [stare/ class/ green] of third graders had never been ~~[he/ on/ so]~~ a field trip before. Cindy was ~~[bed/ went/ very]~~ excited. Mrs. Jones said that the [class/ chair/ peach] was going on a field trip ~~[at/ to/ is]~~ see the caves up in the mountains. [Show/ And/ The] class had been studying about caves [for/ sad/ kill] the last few weeks. Cindy [wet/ and/ ill] her classmates had seen pictures of [shout/ caves/ sing]. Now, they were going to see ~~[a/ are/ or]~~ real cave.

A week later, the students [then/ her/ and] Mrs. Jones climbed onto a bus [four/ that/ dime] would take them to ~~[and/ the/ sat]~~ cave. It was early in the morning ~~[so/ tap/ and]~~ the air was chilly. Mrs. Jones ~~[got/ sat/ had]~~ warned all of the students to [bring/ pillow/ horse] a sweater because the air might [be/ to/ it] chilly in the cave. Cindy was [work/ jump/ very] glad that she had brought her sweater.

[Rain/ Halt/ The] bus driver started the engine and ~~[the/ was/ got]~~ bus began to roll. The bus [rolled/ mother/ girls] along the freeway. Finally the bus [lather/ coffee/ pulled] onto a little country road that [ate/ led/ pear] to the cave.

When the students arrived at the [goat/ math/ cave], all they could [see/ kite/ lot] was a mountain with a big [toys/ trees/ black] hole in the side. A

Spelling CBM Example

- The spelling lists should have different words, include the same number of total letters, and be equivalent in grade level
- For 1st and 2nd grade – 12 words
- For 3rd grade and above – 17 words
- To obtain similar CLS across probes, choose the same number of 3-, 4-, 5-, etc. letter words for each list
- Words are selected across the whole year's spelling curriculum

Writing CBM Example: Written Expression

- Examples of story starters:
 - The best vacation I ever took was...
 - He knew something was different when...
 - When the alarm sounded I...
 - I was walking to school when...
 - It was like a dream come true when I...
 - As I was coming out of the long tunnel, I happened to see...

Figure 36. Practice Number Identification Student Sheet—Page 1

Early Numeracy

Number
Identification:

“ Say the number”

Number Identification, page 1—Student copy

6	26	39	9
16	5	18	8
6	8	4	0
18	30	16	2
18	94	17	22
7	64	47	9
1	34	24	97

Figure 40. Student Copy of Quantity Discrimination

Early Numeracy

Quantity
Discrimination:

“Which number is
bigger?”

Quantity discrimination, page 1—student copy

3	7	8	5	13	16
16	2	13	12	9	0
4	11	8	1	1	11
5	0	2	10	10	9
7	1	8	7	16	2
0	7	1	0	9	1
6	0	9	19	5	1

Password: AIR

Name: _____ Date _____

A $9 \overline{)24}$	B $\begin{array}{r} 52852 \\ + 64708 \\ \hline \end{array}$	C $\begin{array}{r} 9 \\ \times 0 \\ \hline \end{array}$	D $4 \overline{)72}$	E $\begin{array}{r} 8285 \\ 4304 \\ + 90 \\ \hline \end{array}$
F $6 \overline{)30}$	G $\begin{array}{r} 35 \\ \times 74 \\ \hline \end{array}$	H $\begin{array}{r} 4 \\ \times 5 \\ \hline \end{array}$	I $\begin{array}{r} 7 \\ \times 9 \\ \hline \end{array}$	J $\frac{2}{3} - \frac{1}{3} =$
K $\begin{array}{r} 32 \\ \times 23 \\ \hline \end{array}$	L $\begin{array}{r} 8 \\ \times 6 \\ \hline \end{array}$	M $5 \overline{)65}$	N $6 \overline{)30}$	O $3\frac{4}{7} - 1 =$
P $\begin{array}{r} 107 \\ \times 3 \\ \hline \end{array}$	Q $2 \overline{)9}$	R $\begin{array}{r} 416 \\ - 44 \\ \hline \end{array}$	S $\frac{5}{11} + \frac{3}{11} =$	T $\begin{array}{r} 6 \\ \times 2 \\ \hline \end{array}$
U $4\frac{1}{2} + 6 =$	V $\begin{array}{r} 1504 \\ - 1441 \\ \hline \end{array}$	W $9 \overline{)81}$	X $\begin{array}{r} 130 \\ \times 7 \\ \hline \end{array}$	Y $5 \overline{)10}$

Skills-Based CBM: 4th Grade Math skills

- Random numerals within problems
- Random placement of problem types on page

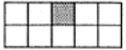
Math CBM Example: Concepts and Applications

Name Ben Date _____ Test 13 Page 2

Column C Applications 2 Column D

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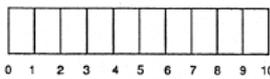
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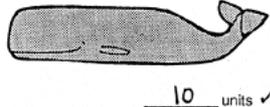
Write the third number. 3 ✓
Write the fifteenth number. 15 ✓
Write the twentieth number. 20 ✓

Name _____ Date _____ Test 13 Page 3

Column E Applications 2 Column F

(15) How long is the whale?





10 units ✓

(16) Favorite Vegetables

Peas	8
Greens	3
Corn	7
Carrots	2

Number of Votes

Write the number in each blank.

How many more votes did corn get than carrots? 2

How many votes did greens get? 3 ✓

How many votes did greens and peas get together? 11 ✓

$\frac{3}{4} = \frac{3 \times 4}{4 \times 4} = \frac{12}{16}$

(17) Write + or - in the blank.

$10 \underline{-} 7 = 3$

(18)

December							
S	M	T	W	T	F	S	Holiday Play
	1	2	3	4	5		
6	7	8	9	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30	31			

Write the letter in the blank.

The holiday play falls on which day of the week?

(A) Monday
(B) Wednesday
(C) Tuesday

Materials for Progress Monitoring

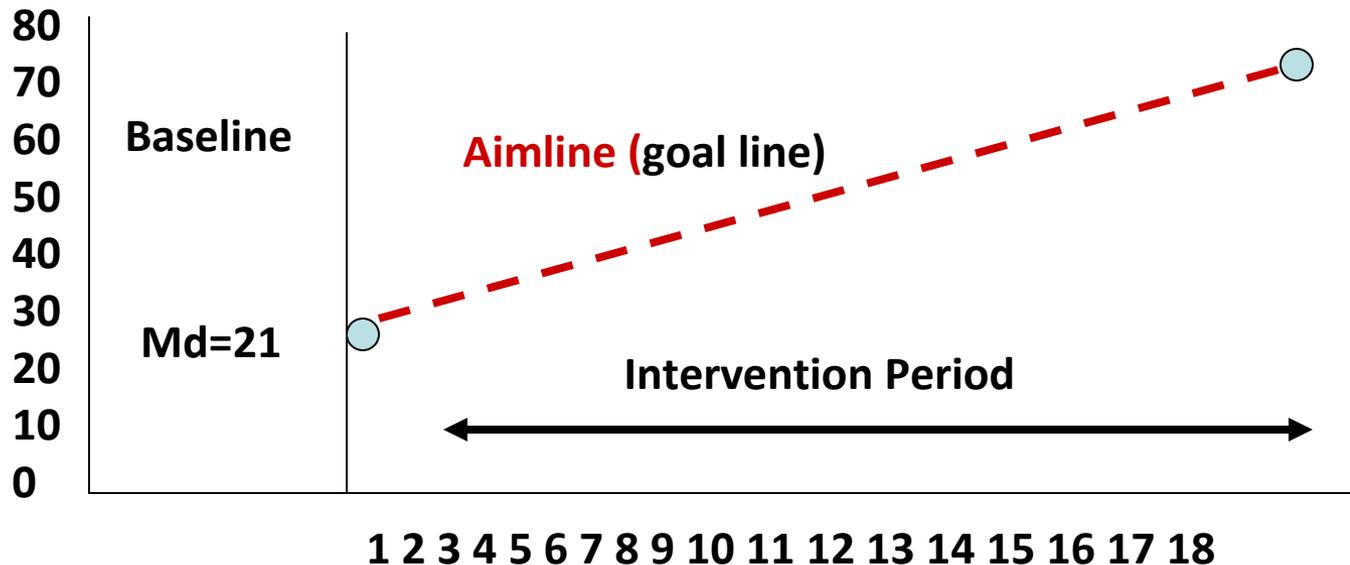
- Data needed to begin:
 - Year-end GOAL to set “aimline”
 - Present Level of Performance (PLOP)
- Ongoing PM data
 - Assessment “probes” at grade level
 - Measure progress towards goal (frequency to be decided locally)
 - Consider intensity of intervention – the more intense, the more frequent the measurement
 - Consider resource availability for consistency
- Student data sheet with graph

Setting the Goal

- Goal = “Expectation”
- 3 ways to set the Goal:
 - Use year-end minimum proficiency “benchmarks” at grade level
 - Calculate the goal using published “rates of improvement” per week
 - Use local norms (but not recommended unless your normative performance is above average)

The “Aimline”

- Shows the expected/predicted rate of learning from your baseline to your goal
- **Goal for Sam:**
- In 18 weeks, when presented with random 2nd grade reading passages, Sam will read aloud at a rate of 73 cwpm for 3 of 5 trials.



Setting Goals With End-of-Year Benchmarking

- End-of-year benchmarking (e.g. DIBELS, Aimsweb, etc. spring benchmark)
 - Identify appropriate grade-level benchmark
 - Mark benchmark on student graph with an X
 - Draw goal line from first three CBM scores to X

Example of Benchmarks: DIBELS

DIBELS Benchmarks K-6 available at www.dibels.org



Grade	Fall	Winter	Spring
1	--	20	40
2	44	68	90
3	77	92	110
4	93	105	118
5	104	115	124
6	109	120	125

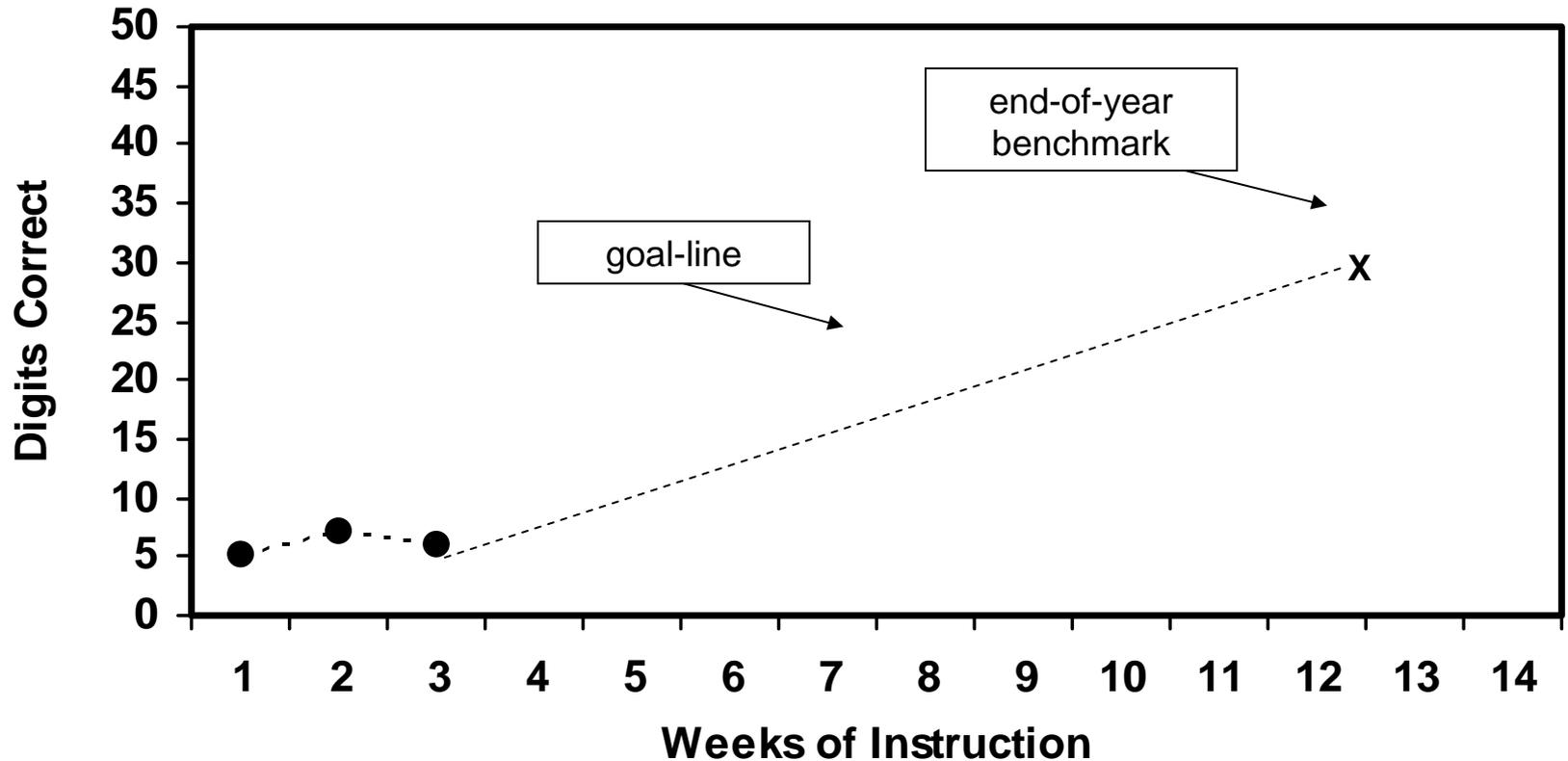
Setting Goals With End-of-Year Benchmarking

From Fuchs, Fuchs, Hintze, & Lembke (2006)

Grade	Reading	Math Computation	Concepts and Applications
K	40 sounds/minute (ISF)	---	---
1	60 words/minute (WIF)	20 digits	20 points
2	75 words/minute (PRF)	20 digits	20 points
3	100 words/minute (PRF)	30 digits	30 points
4	20 replacements/2.5 minutes (Maze)	40 digits	30 points
5	25 replacements/2.5 minutes (Maze)	30 digits	15 points
6	30 replacements/2.5 minutes (Maze)	35 digits	15 points

Setting Goals With End-of-Year Benchmarking

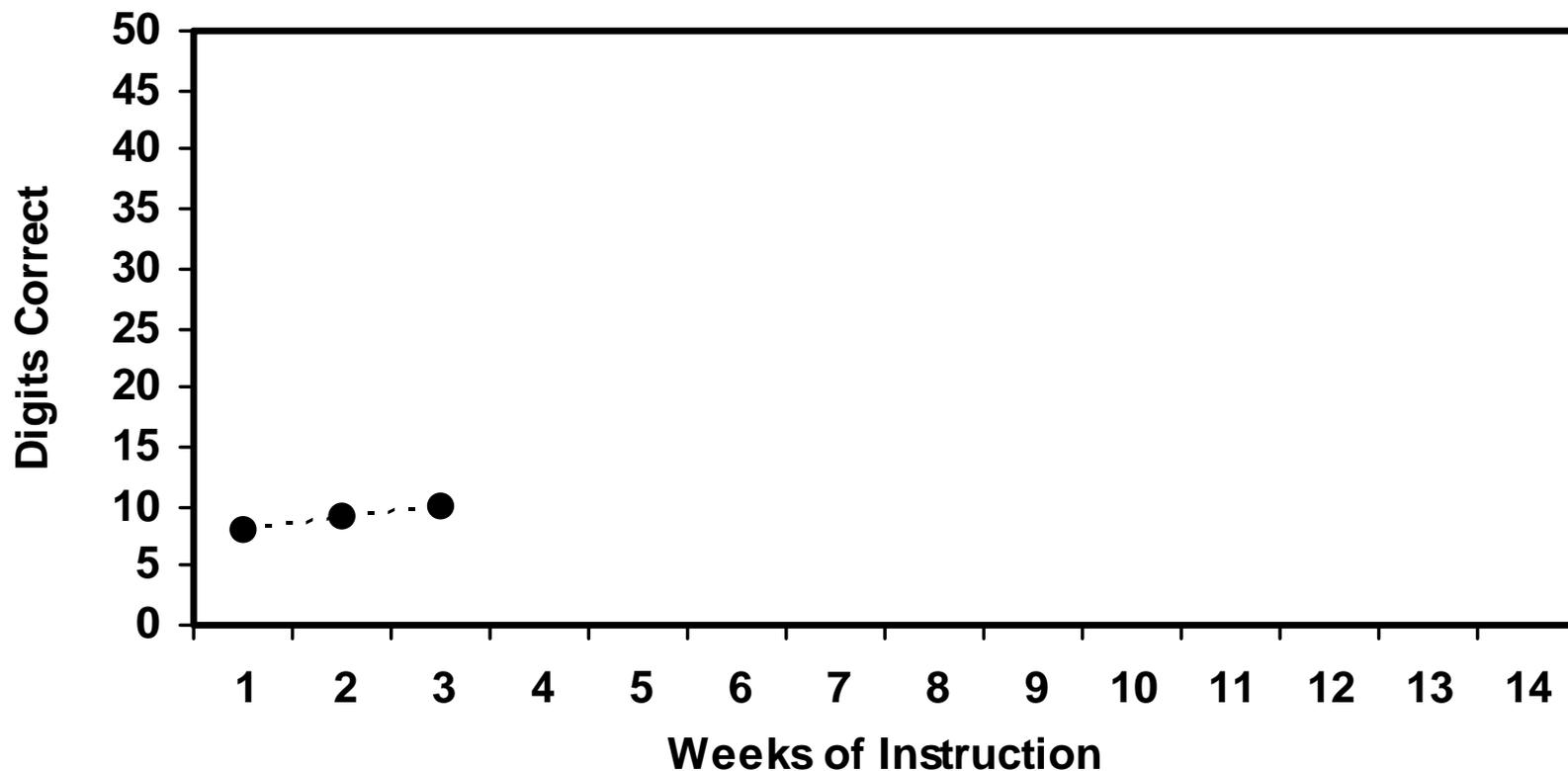
3rd Grade Student: end of year math calculation goal and aimline



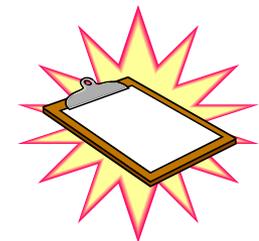
Intervention Goal Statement: By the end of 3rd grade, the learner, when given a 3rd grade CBM math calculation task, will score at least 30 digits correct over 3 weeks.

Your Turn: Setting Goals With End-of-Year Benchmarking

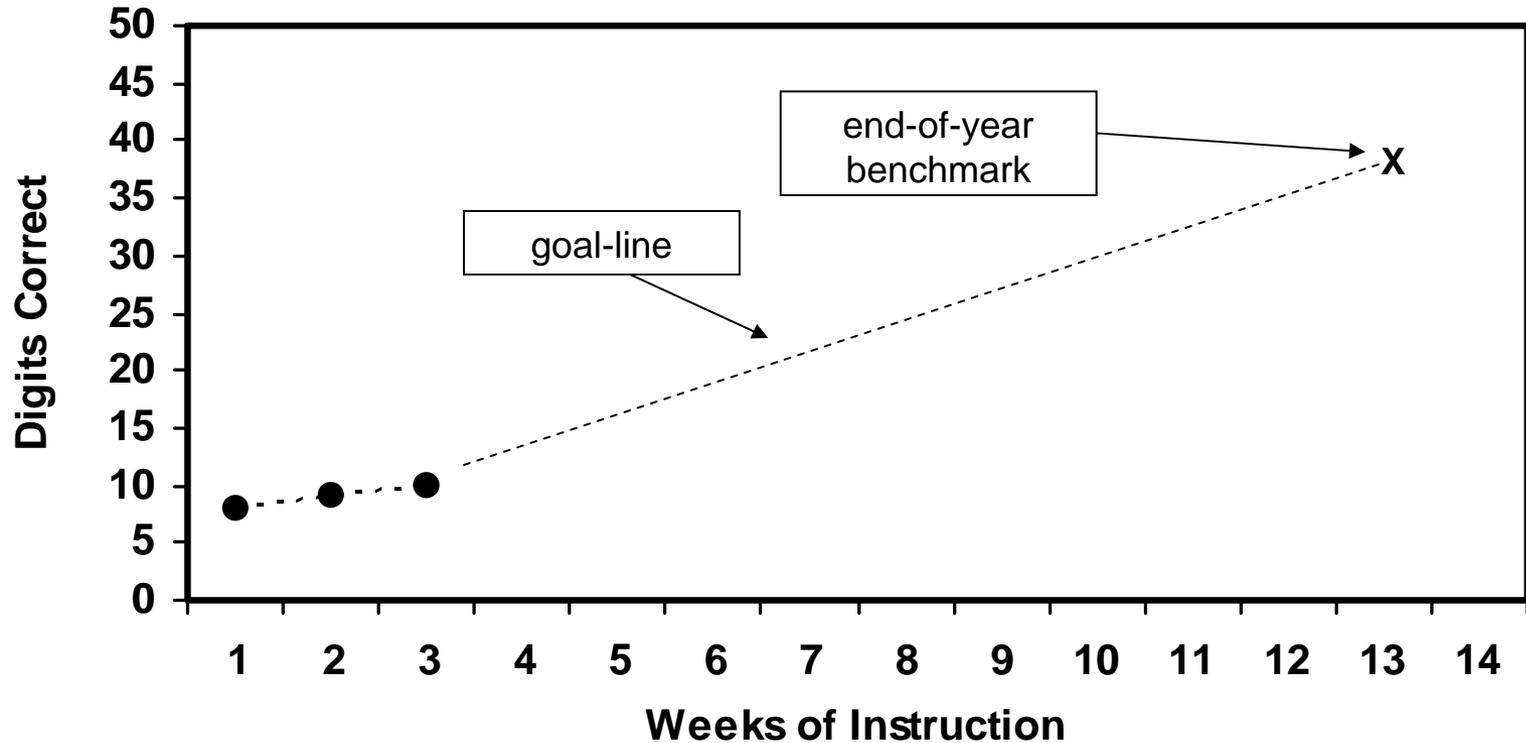
4th grade student: end of year math calculation goal and aimline



Intervention Goal Statement:



Does Your Graph Look Like This?: Setting Goals With End-of-Year Benchmarking

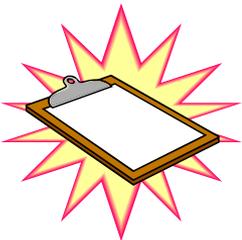


Intervention Goal Statement: By the end of 4th grade, the learner, when given a 4th grade CBM math calculation task, will score at least 40 digits correct over 3 weeks.

Your Turn Again...Set a Goal

- Using the DIBELS Spring Benchmarks:
 - What is the year end goal for ORF for Annie, 1st grade student?
 - How would you write the Intervention Goal Statement?

Intervention Goal Statement:



Setting Goals Using Norms for Weekly Growth

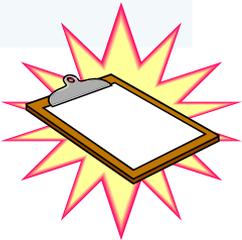
- Use research and evidence-based norms for expected gains per week – AKA
 - weekly “growth rate” (GR)
 - weekly “rate of improvement” (ROI)
- Select grade level ROI
- Calculate #weeks to end of school x ROI
- Add product to student’s present level of performance.

Setting Goals With Norms for Weekly Growth

(Fuchs, Fuchs, Hamlett, Walz, & German (1993))

Grade	ORF Av	ORF Am	ORF R	Maze Am	Maze R
1	2.0	3.0	2.0	n/a	n/a
2	.85-1.5	2.0	1.5	.39	.84
3	.85-1.5	1.5	1.0	.39	.84
4	.85-1.5	1.1	.85	.39	.84
5	0.5 or less	0.8	0.5	.39	.84
6	0.5 or less	.65	0.3	.39	.84

Key: Av = Average; Am = Ambitious; R = Realistic



Setting Goals With National Norms for Weekly Improvement

- EXAMPLE Setting the goal for a 1st grade student
 - National norms for weekly rate of improvement (e.g. ORF)
 - Present Level of Performance (PLOP) = 8.0 cwpm
 - ROI Norm for 1st grade ORF = 2.0
 - # of weeks to end of year = 20
 - Multiply ROI by number of weeks left in year
 $2.0 \times 20 = 40$ (cwpm gain)
 - Add to PLOP
 $40 + 8 = 48$
 - Student's end-of-year goal is 48 cwpm
- Will 48 cwpm by end of year place this student at benchmark?
(Hint: Use the DIBELS Benchmark at grade level to compare)

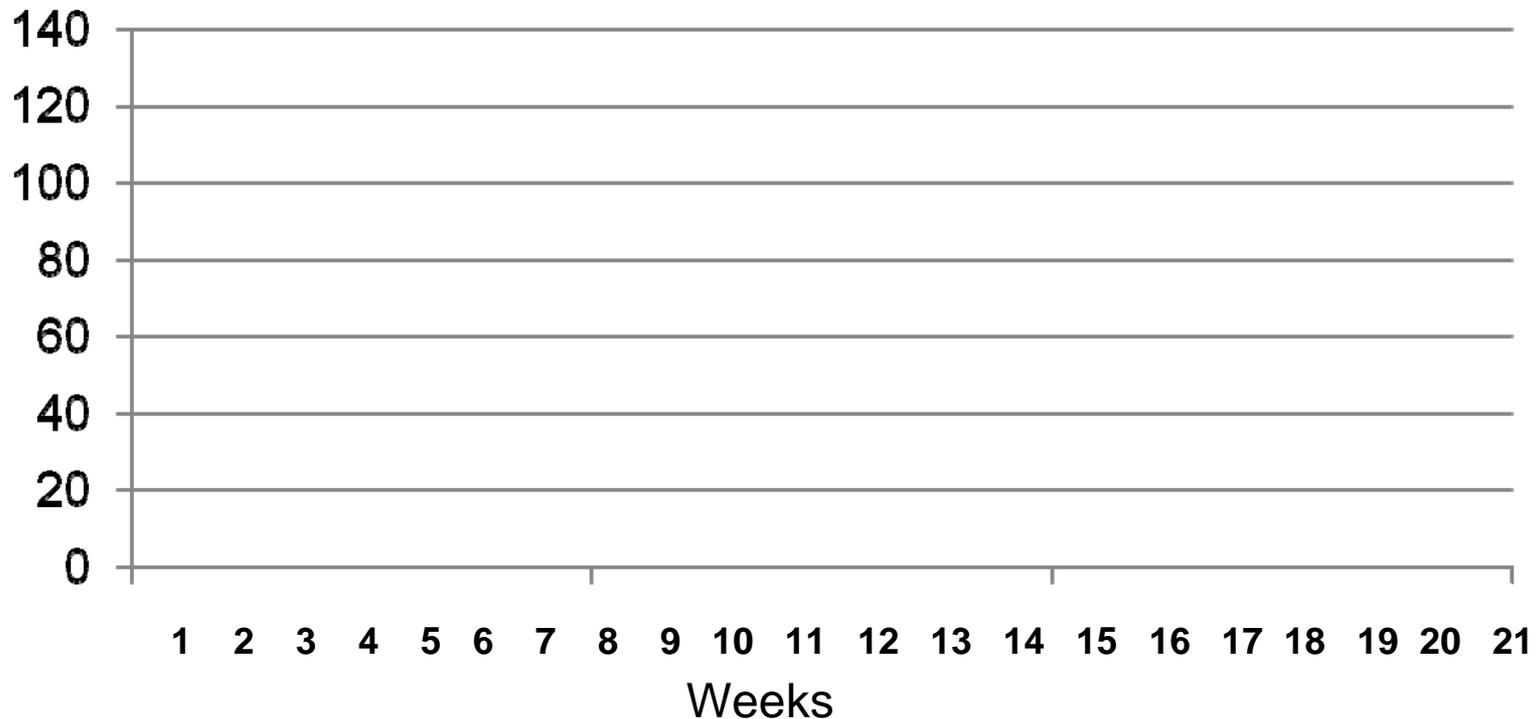
Your Turn: Setting Goals With National Norms for Weekly Improvement

Student in Grade 4

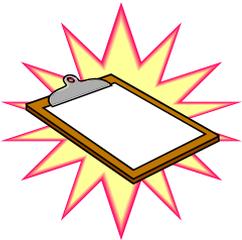
PLOP = 83 cwpm

21 weeks left to end of year

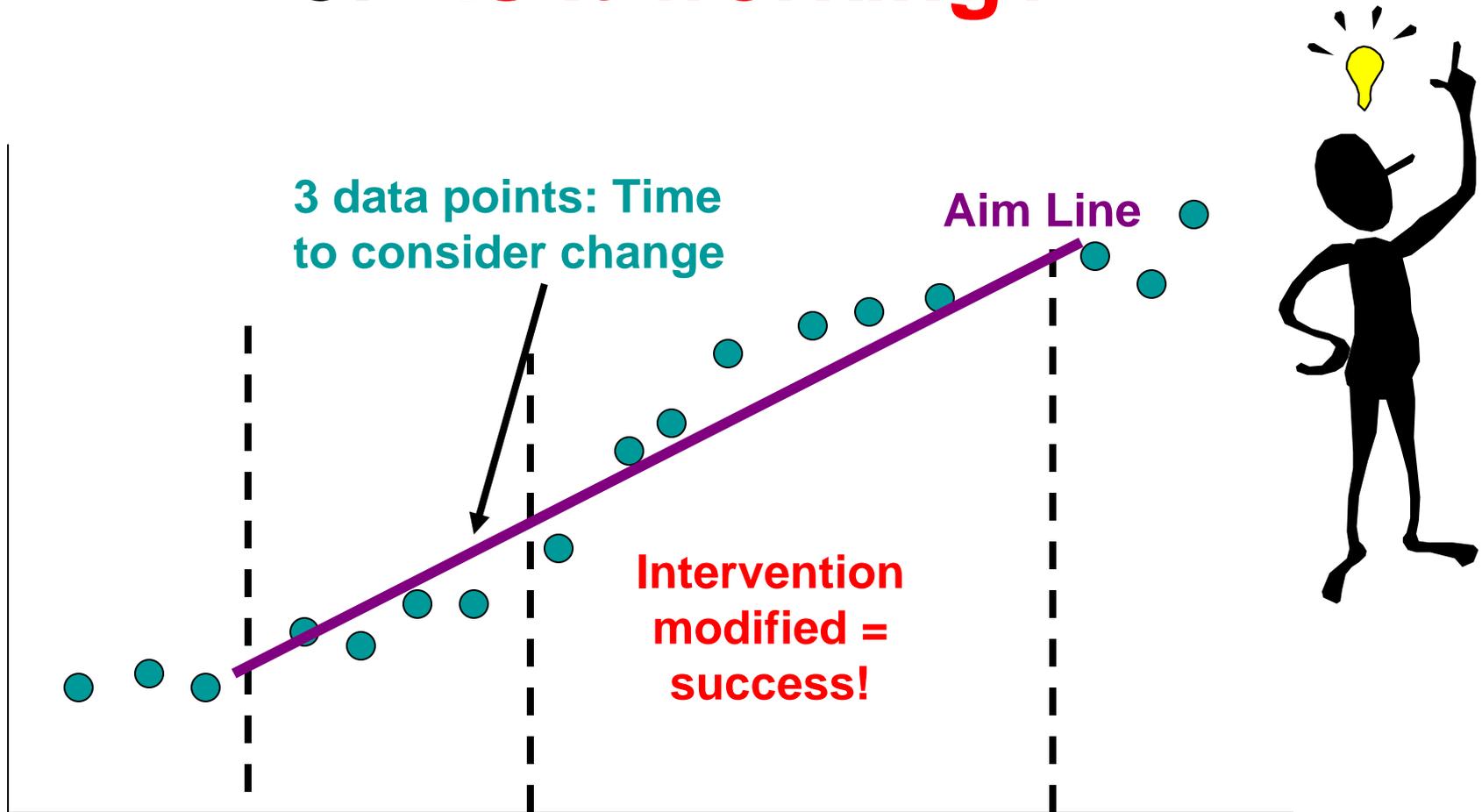
ORF/CWPM



Intervention Goal Statement:



Progress Monitoring = Indicators of “Is it working?”



How Often? By Whom?

- How Often;
 - Local Decision based on resources and other factors
 - Depends on intensity of intervention
 - Recommended *at least*
 - Tier 2 – every 4 weeks (3 weeks preferred)
 - Tier 3 – bi-monthly (every week preferred)
- By Whom:
 - Local Decision based on resources, can be:
 - Instructor
 - Designated data collection person

What is a Data Decision Rule?

- A decision rule is the systematic procedure by which patterns of data are analyzed. This data analysis assists in making a decision about the effectiveness of an intervention.

Why Decision Rules?

- How do you know when to continue or modify an intervention?
- Do you have unlimited time to continue with interventions that are not working?
- Should we know if interventions are working or not?
- Would you like to know which things work and which things don't work for your students?

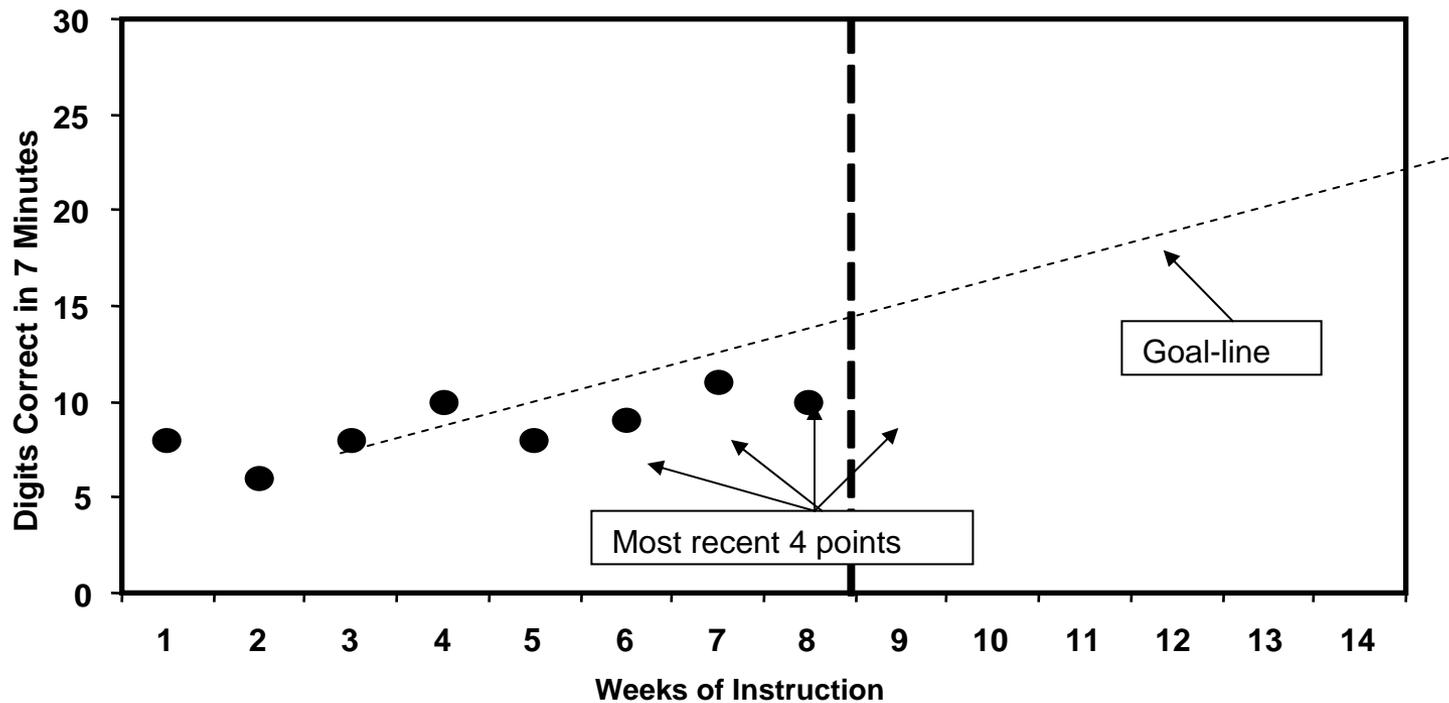
Using PM Data for Decisions

- Various “decision rules” – local decision and based upon the student
 - Some require at least 3 data points, others 4
 - Some say at least 9 weeks in intervention, others say 12
- Decisions based upon student:
 - Performance level (reading = ORF rate)
 - Rate of growth (weekly rate of improvement)

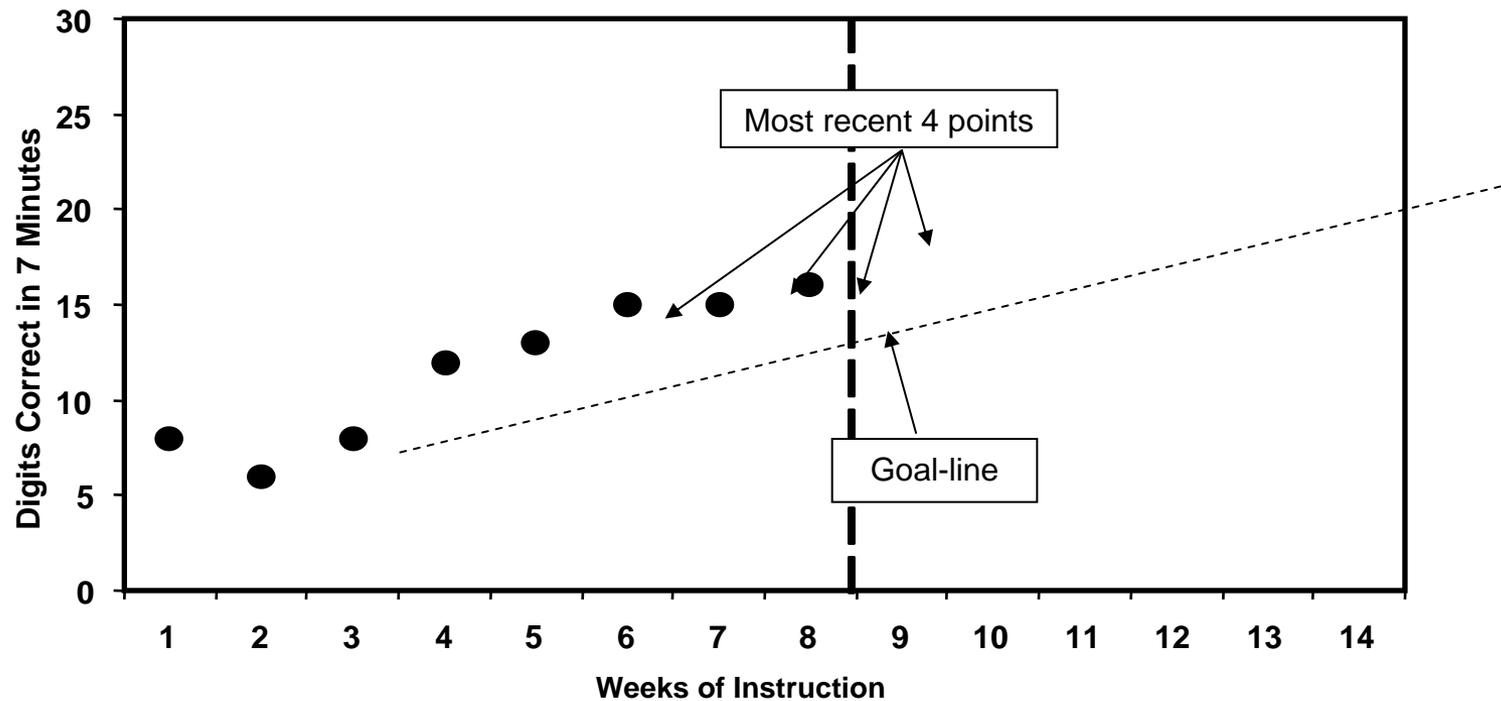
Evaluating Student RTI

- Decisions about student RTI – compare data and graphed PM data to aimline (goal)
 - Poor RTI =
 - Low performance level + low ROI
 - Graphed line = Parallel to flat learning slope (line)
 - Good RTI =
 - Increased performance level + expected ROI
 - Graphed line= learning slope that will meet or intersect the aimline

How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals



How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals

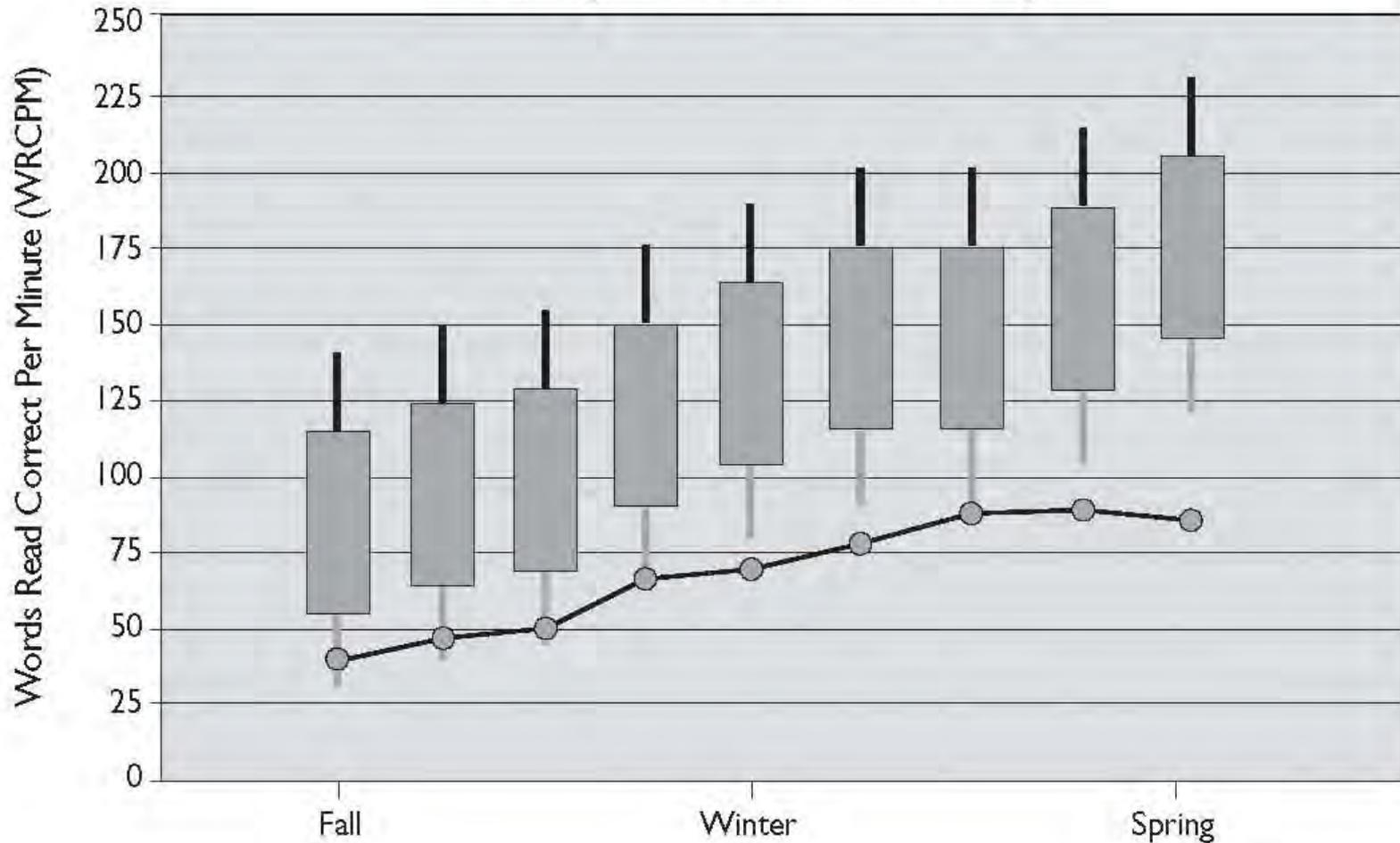


Decisions Based on Student RTI

- **Good RTI – Consider:**
 - Continue in intervention at current levels until learning slope intersects aimline
 - If learning slope is consistently above the aimline, then EXIT from intervention
- **Poor RTI – Consider:**
 - increasing time in the same intervention (“double-dose”)
 - Modifying or adding on to the same intervention, supplementing with a more targeted intervention methods
 - Change to different, more intensive and targeted intervention
 - If already at Tier 3 and Poor RTI, refer for formal evaluation for eligibility/entitlement to Special Education services.

Tier 2: Strategic Monitoring of At-Risk

Hartford School District - Wilson Elementary
Reading - Standard Benchmark Passages



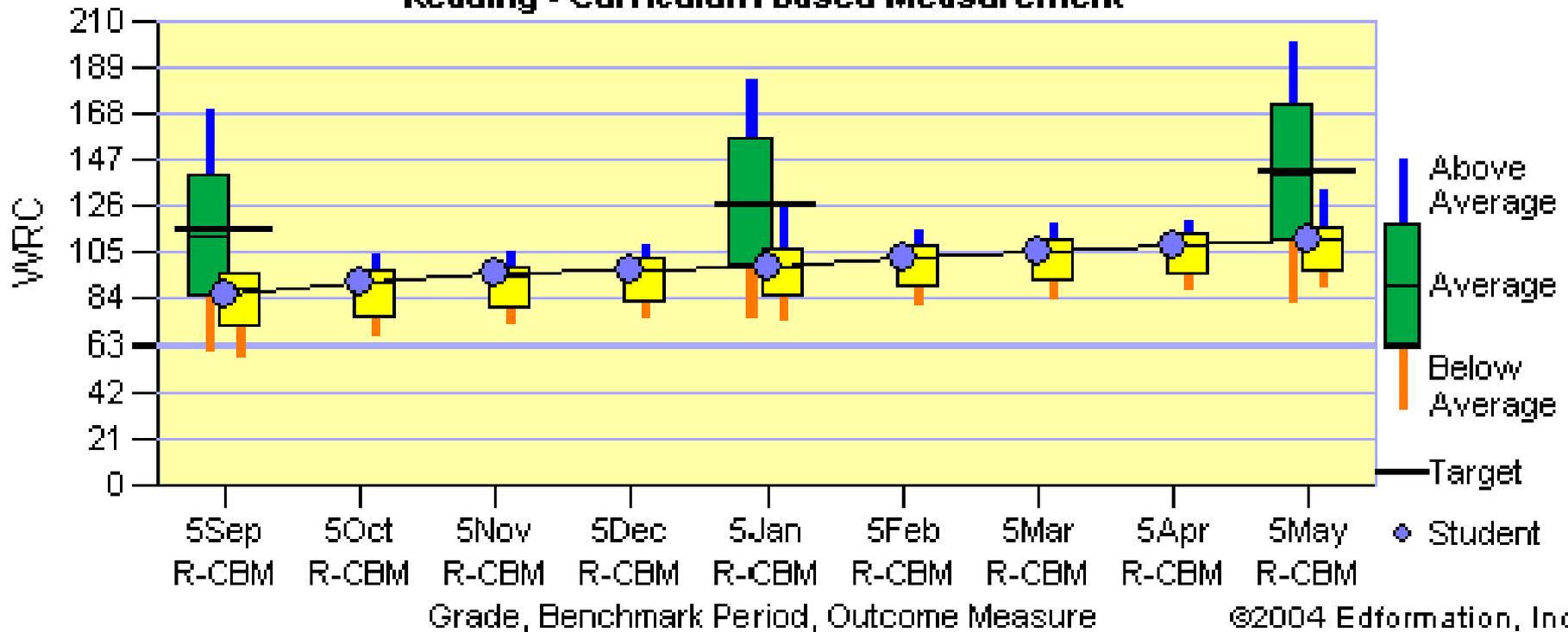
© edformation inc.

Source: Shinn, M.R. (2004). Using AIMSweb to Manage 3-Tier Progress Monitoring Information as a Component of Response to Intervention.

Tier 2: Strategic Monitoring of At-Risk

Source: Shinn, M.R. (2004). Using AIMSweb to Manage 3-Tier Progress Monitoring Information as a Component of RTI

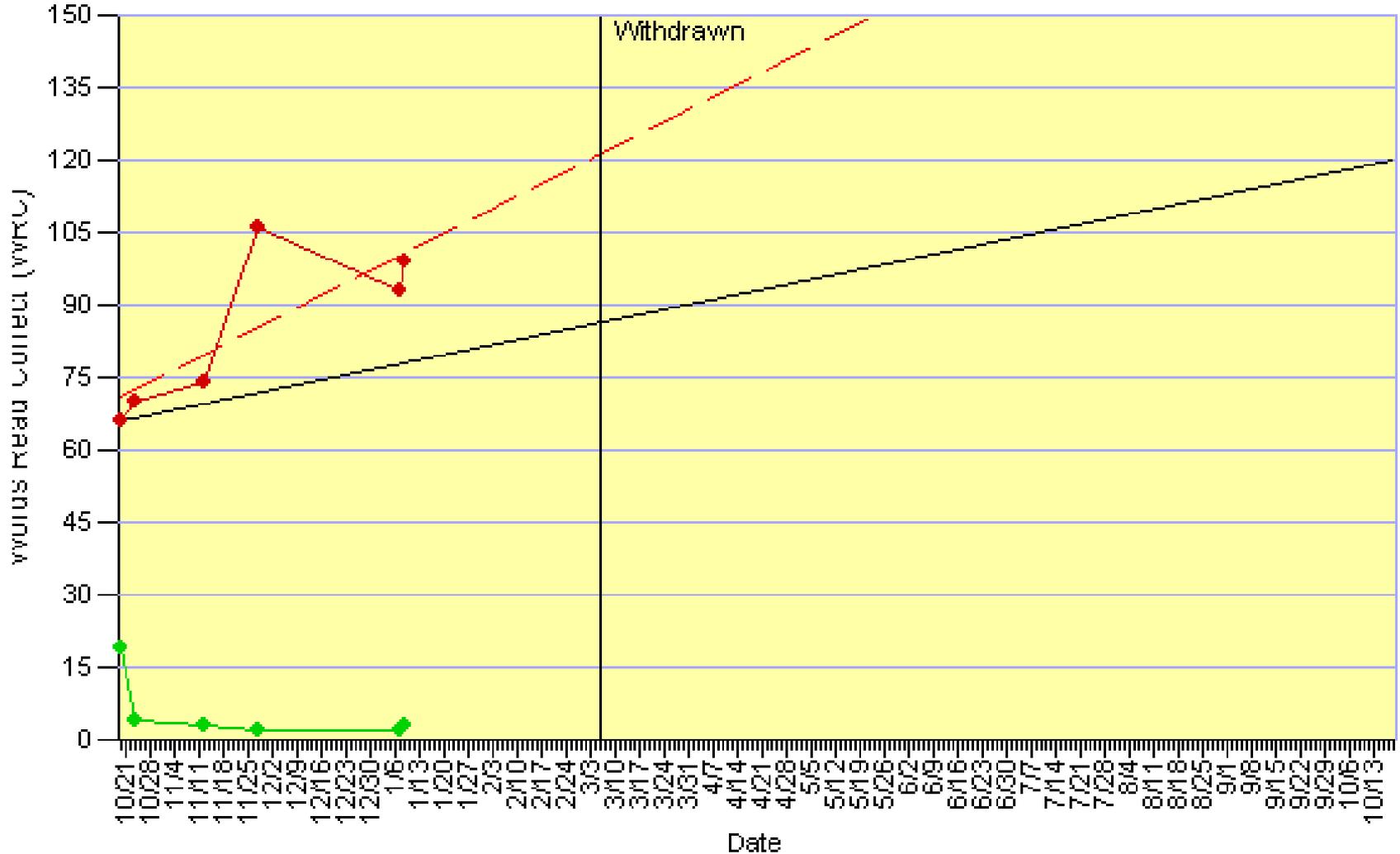
Gordon, Emma (Grade 5) Edformation Educational Averages Reading - Curriculum Based Measurement



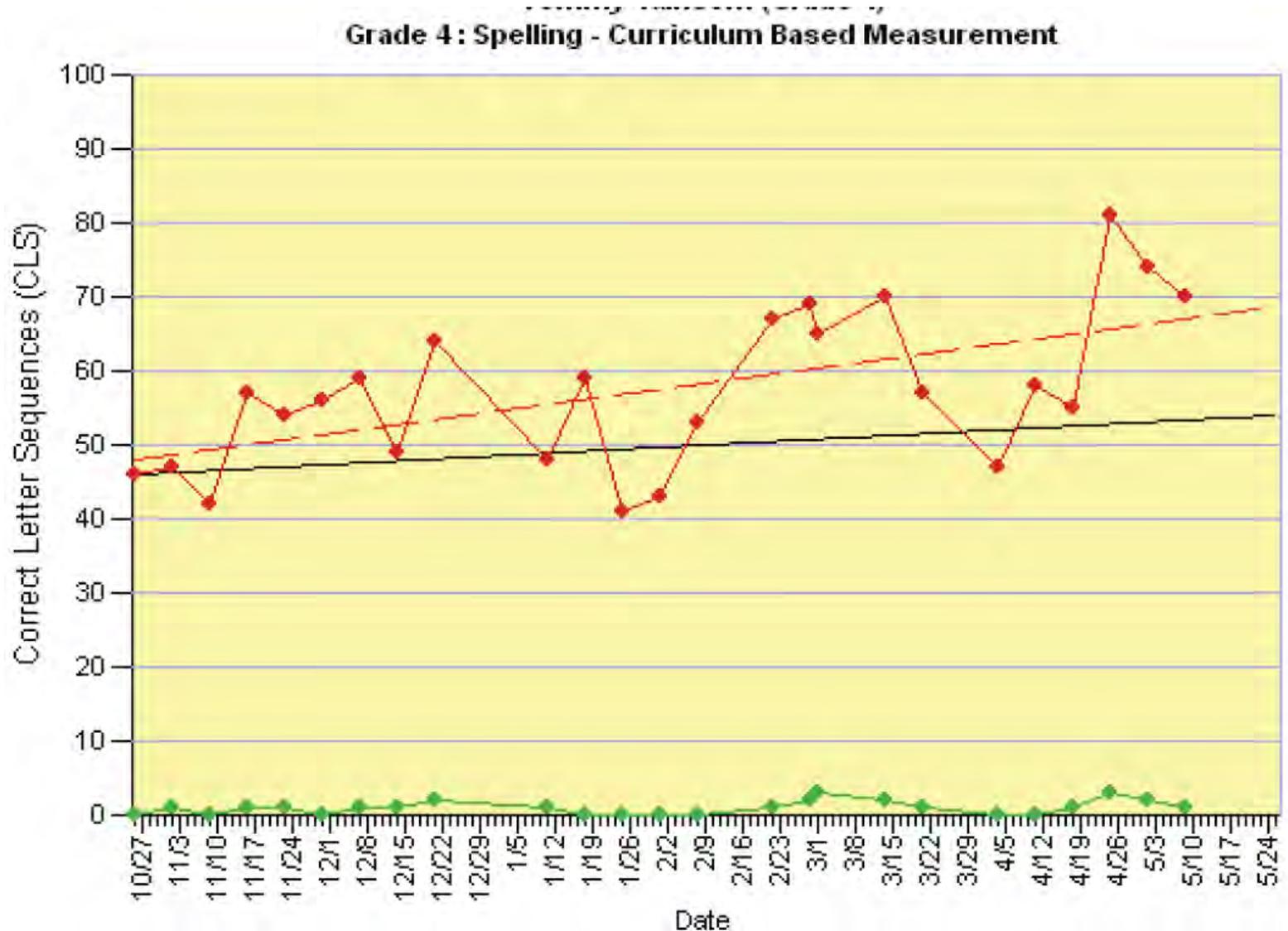
This chart shows that Emma Gordon improved from 85 Words Read Correct (WRC) from grade 5 Passages at the September Benchmark to 90 Words Read Correct (WRC) at the October Benchmark and to 94 Words Read Correct (WRC) at the November Benchmark and to 96 Words Read Correct (WRC) at the December Benchmark and to 98 Words Read Correct (WRC) at the January Benchmark and to 101 Words Read Correct (WRC) at the February Benchmark and to 104 Words Read Correct (WRC) at the March Benchmark and to 107 Words Read Correct (WRC) at the April Benchmark and to 110 Words Read Correct (WRC) at the May Benchmark. The rate of improvement (ROI) from the September Benchmark is 0.8 WRC per week. Currently, Emma Gordon's score is **Average** compared to Edformation Educational Averages.

Tier 3: Frequent Monitoring

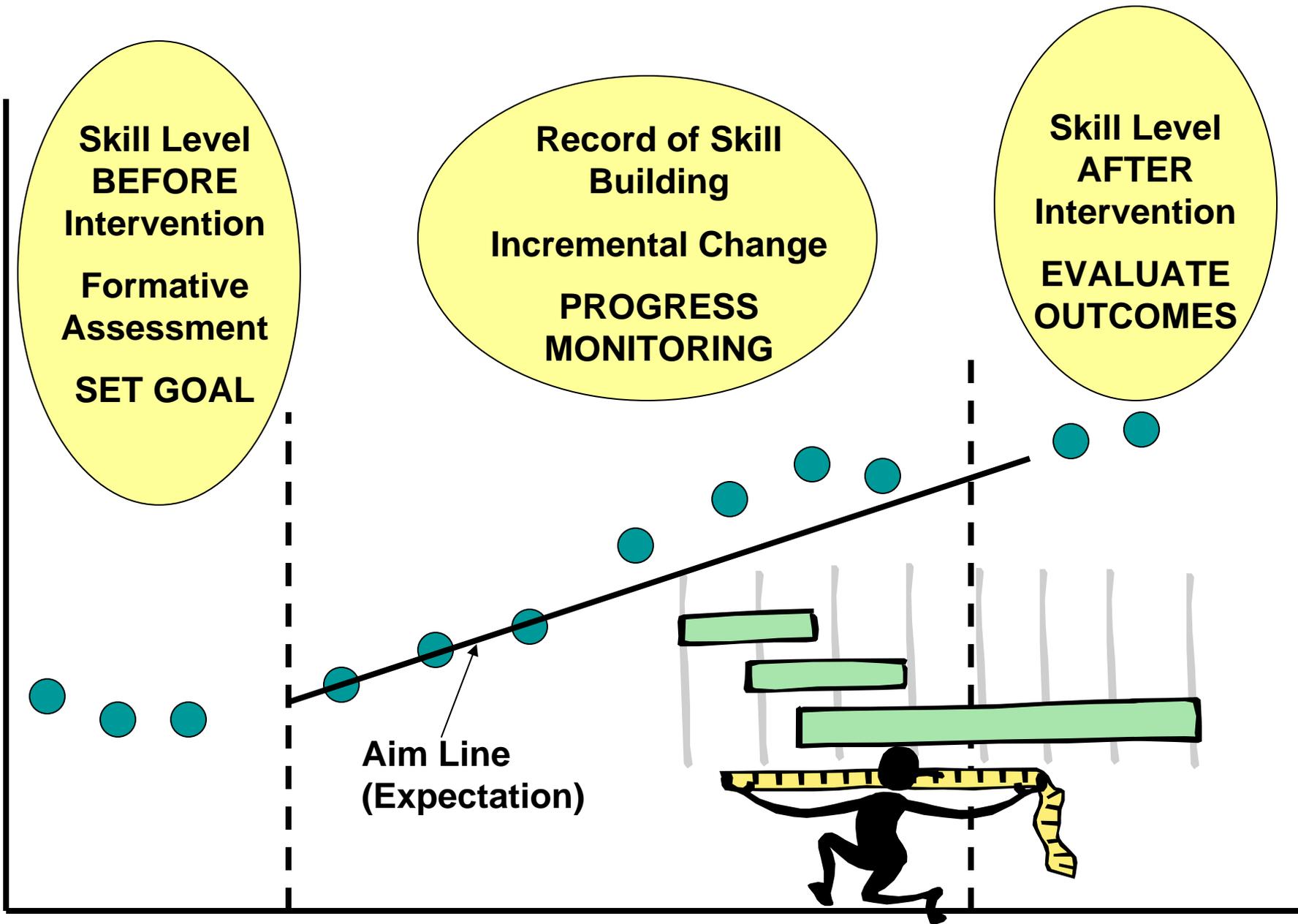
South Lane - Delight Valley Elementary
Hick (Grade 4)
Grade 4: Reading - Standard Progress Monitor Passages



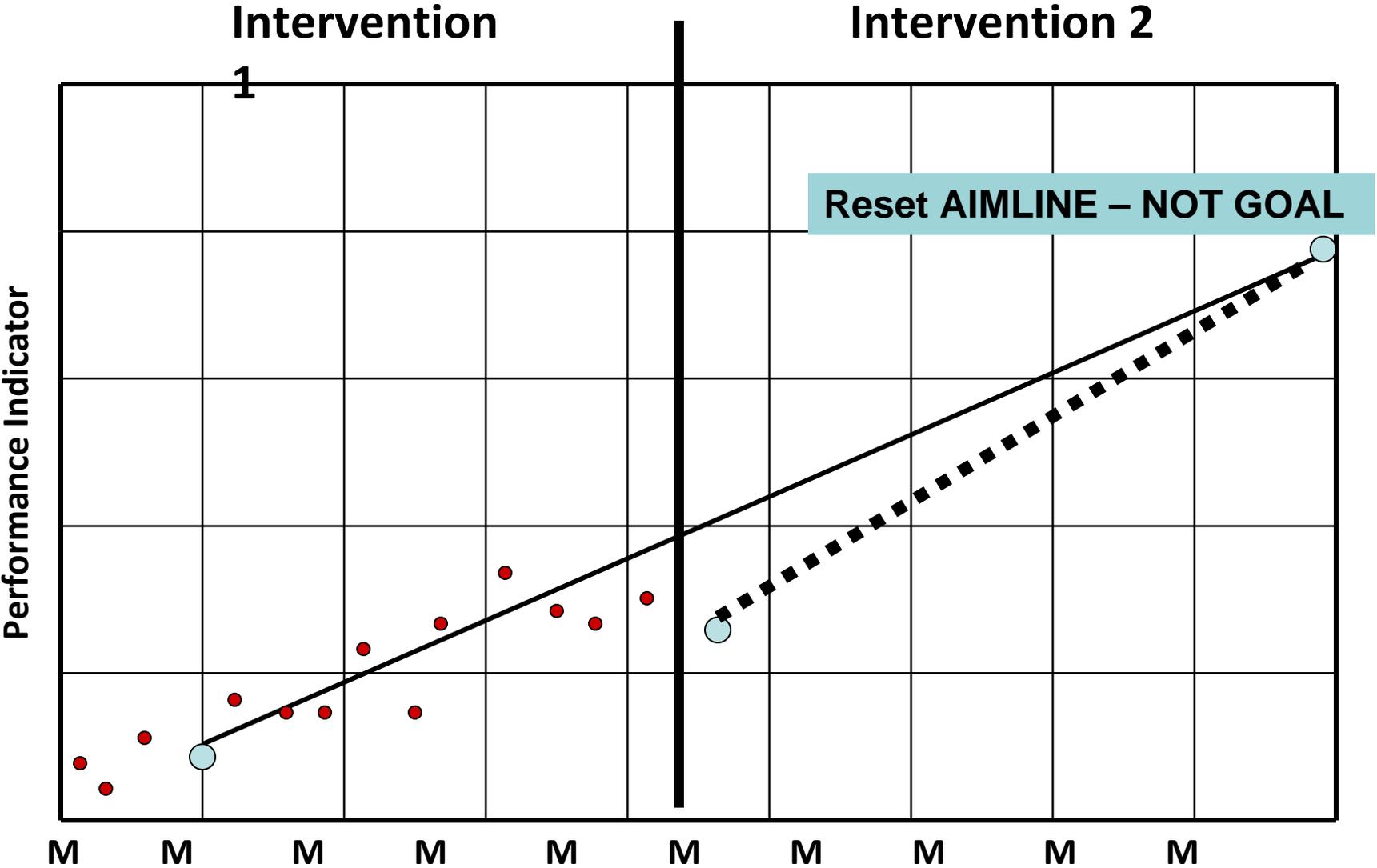
Weekly Monitoring for a Student with Severe Need



Source: Shinn, M.R. (2004). Using AIMSweb to Manage 3-Tier Progress Monitoring Information as a Component of Response to Intervention.



Decision: Change Intervention



RTI Case Study: Josie

Team Decision:

- place in Tier 2 reading group
- administer diagnostic assessment
- target deficit skills

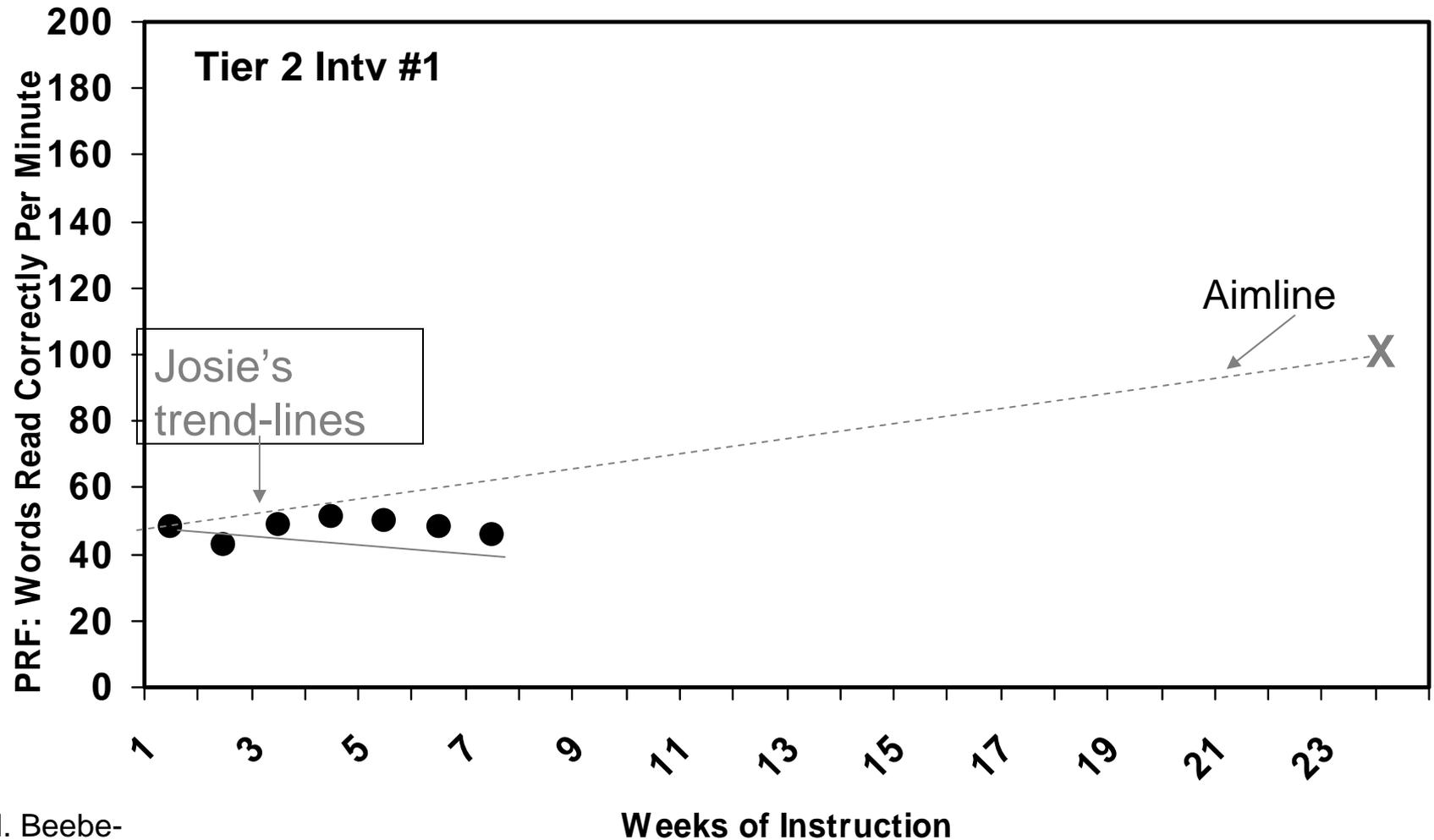
RTI Case Study: Josie

Team Decision:

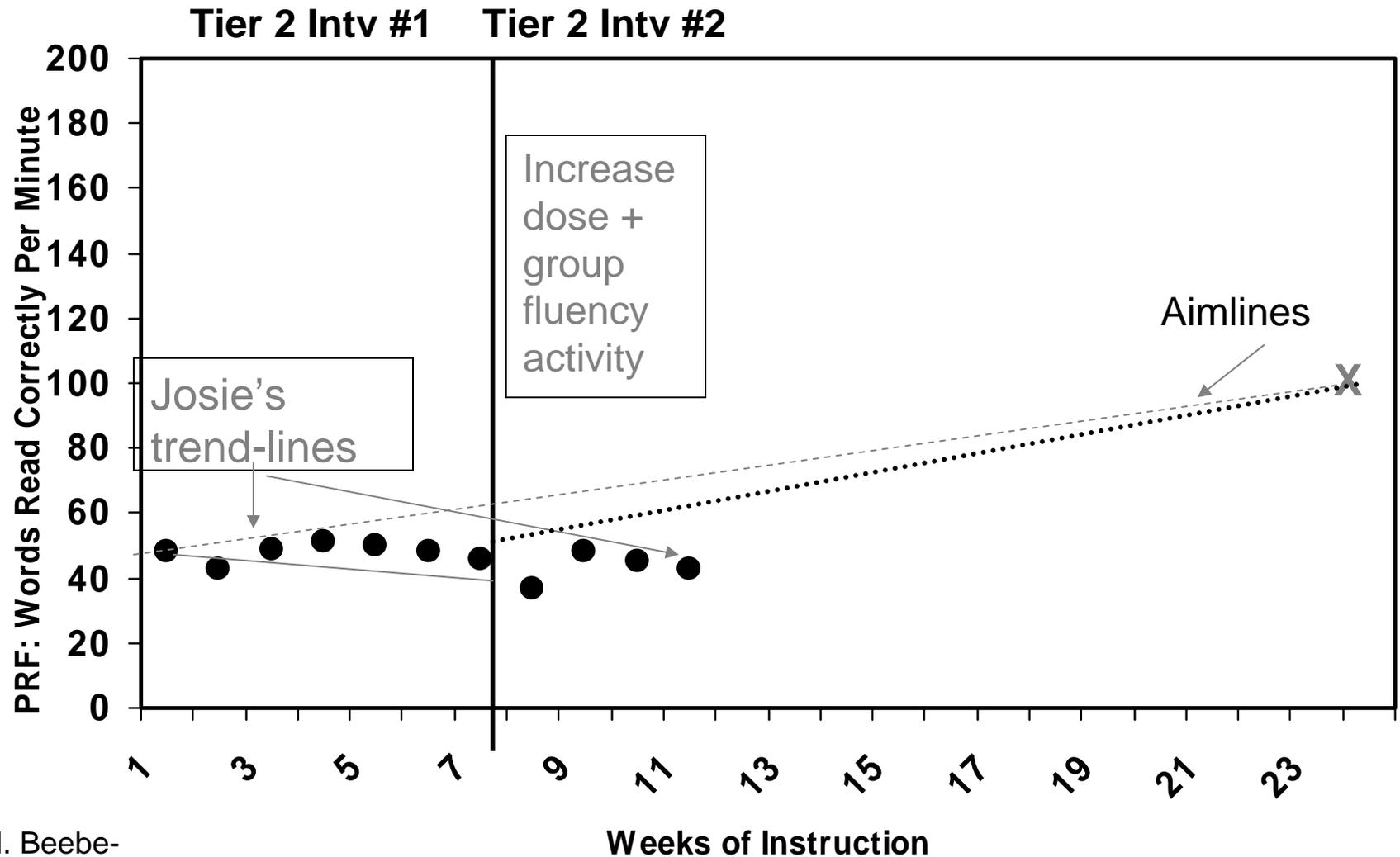
- Tier 2 – Group Reading Intervention:
 - Interventions from Core Program, Houghton Mifflin (evidence-based)
 - Two times per week (Tues/Wed)
 - Fluency checks on Friday
 - Progress Monitoring:
 - ORF probes (during fluency checks) every Friday
- *The team decided to give Josie 8 weeks to respond to this intervention, if she is not making expected gains they will meet and look at the how they need to change the intervention.

Based on the information
provided what would your team
recommend for Josie?

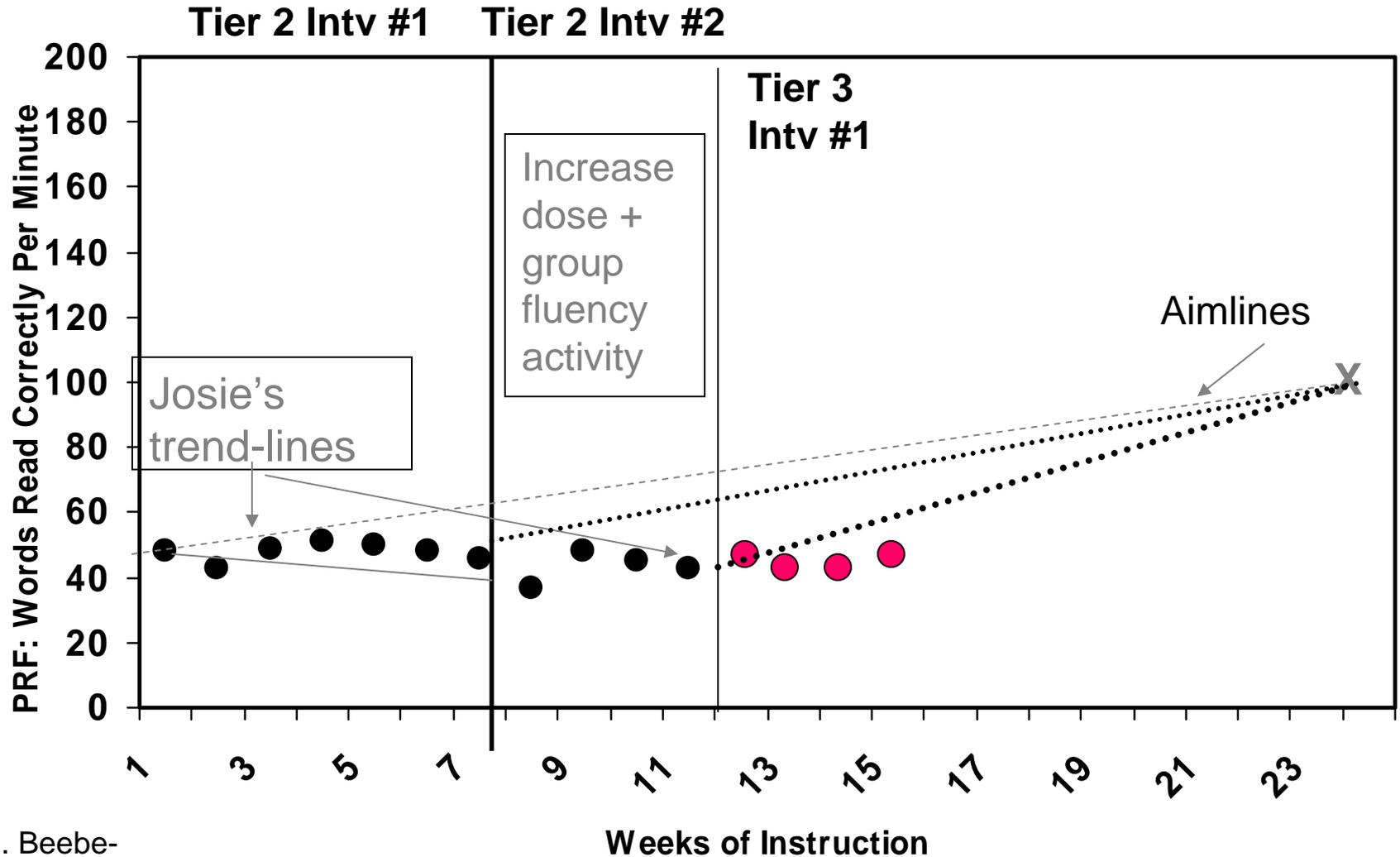
RTI Case Study: Josie



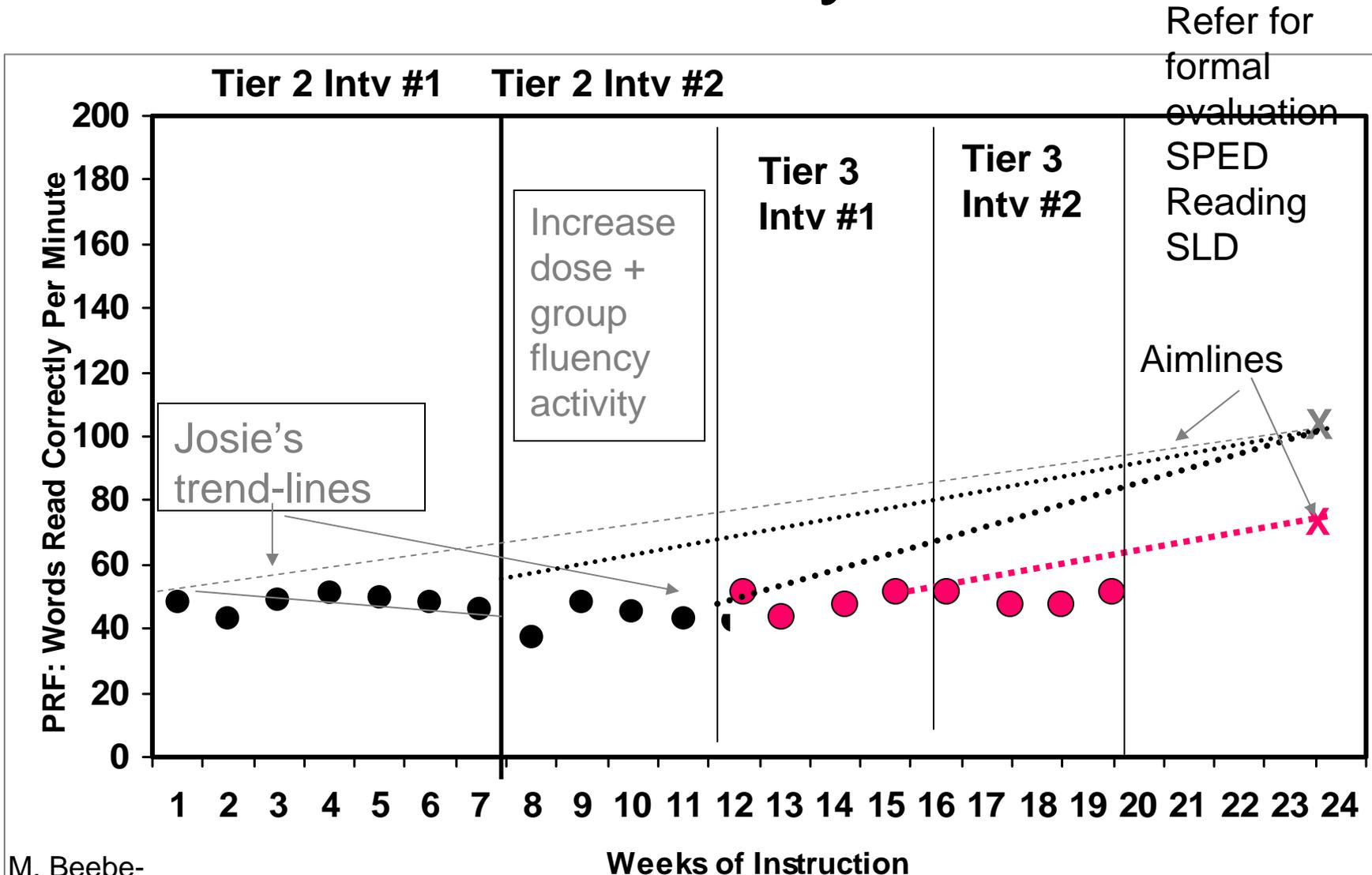
RTI Case Study: Josie



RTI Case Study: Josie



RTI Case Study: Josie



RTI Case Study: Josie

- Formal evaluation for eligibility SPED services as SLD in Reading
 - RTI – documented poor responses to evidence-based reading interventions (Tier 2, 1&2; Tier 3, 1&2) = evidence of SLD
 - Additional evaluation based upon RTI Team decision: what will inform SPED instruction to support Josie's learning? (e.g instructional level; appropriate curriculum Reading Mastery?), environmental supports; RIOT/ICEL)
- Once parent signs consent and assessment schedule, 60 day rule applies
 - HOWEVER.....in the RTI process, it is expected this time period will be greatly reduced BECAUSEyou've documented the process along the way!

Progress Monitoring Frequency

- Once a week-Tier 3
- Bi-monthly – Tier 2 or 3
- Monthly – Tier 2
- Quarterly – all students

- Report progress to parents at least as often as report cards are sent out in regular education classes.

Review Our Learning Objectives

- ✓ Know the types and purpose of assessments essential in RTI framework
- ✓ Know types of screening/benchmark assessments
- ✓ Know how to use screening data at both the school and individual student level.
- ✓ Know types of progress monitoring (PM) assessments
- ✓ Know how to use PM data at the individual student level

Resources: CBM & Data Management Systems

- AIMSWeb
 - K-8 – benchmark and progress monitoring
 - Early Literacy AND Early Numeracy measures
 - Reading (English & Spanish), Math, Spelling, Writing
 - \$1.00/student/year (cost increases with added areas)
- University of Oregon/DIBELS
 - K-6 – benchmark and progress monitoring
 - DIBELS measures
 - \$1.00/student/year
- www.studentprogress.org
- www.edhelper.com
- www.interventioncentral.org/
- Make own data base and reports in Microsoft Excel

M. Beebe-

Frankenberger 2007

