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Summer Institute
on Student Progress Monitoring

Using CBM for Progress Monitoring in Written Expression and Spelling

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Note About This Presentation

- Although we use progress monitoring measures in this presentation to illustrate methods, we are not recommending or endorsing any specific product.



Progress Monitoring

- Progress monitoring (PM) is conducted frequently and is designed to:
 - Estimate rates of student improvement
 - Identify students who are not demonstrating adequate progress
 - Compare the efficacy of different forms of instruction and design more effective, individualized instructional programs for problem learners



What Is the Difference Between Traditional Assessments and PM?

- Traditional assessments:
 - Lengthy tests
 - Not administered on a regular basis
 - Teachers do not receive immediate feedback
 - Student scores are based on national scores and averages and a teacher's classroom may differ tremendously from the national student sample



What Is the Difference Between Traditional Assessments and PM?

- Curriculum-Based Measurement (CBM) is one type of PM:
 - CBM provides an easy and quick method to gathering student progress
 - Teachers can analyze student scores and adjust student goals and instructional programs
 - Student data can be compared to teacher's classroom or school district data



Curriculum-Based Assessment

- CBM:
 - Measurement materials aligned with school curriculum
 - Measurement is frequent
 - Assessment information is used to formulate instructional decisions
- CBM is one type of curriculum-based assessment



Difference Between CBM and CBA

- Each CBM test is an alternate form of equivalent difficulty
 - CBA requires teachers to design own assessment procedures
- CBM is highly prescriptive and standardized



Basics of CBM

- Monitors student progress across entire school year
- Meaningful, accurate results can help quantify short- and long-term student gains
- Probes are brief and easy to administer
- Teachers quickly determine whether an intervention is helping a student



Basics of CBM

- CBM probes available in:
 - Reading
 - Math
 - Written Expression
 - Spelling



Steps for Conducting CBM

- Step 1: How to Place Students in a Written Expression or Spelling CBM Task for Progress Monitoring
- Step 2: How to Identify the Level for Material for Monitoring Progress
- Step 3: How to Administer and Score Written Expression and Spelling CBM Probes



Steps for Conducting CBM

- Step 4: How to Graph Scores
- Step 5: How to Set Ambitious Goals
- Step 6: How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals
- Step 7: How to Use the CBM Database Qualitatively to Describe Students' Strengths and Weaknesses



Step 1: How to Place Students in a Written Expression or Spelling CBM Task for Progress Monitoring

- Decide which task or grade level of material is developmentally appropriate
- To monitor spelling progress, use Spelling CBM in Grades 1–6
- To monitor writing fluency, use Written Expression CBM in Grades 1–12 (as soon as students can write sentences)
- Spelling CBM and Written Expression CBM can be used concurrently



Step 2: How to Identify the Level of Material for Monitoring Progress

- For Written Expression:
 - Prompts should be simple in sentence structure and tap age-appropriate background knowledge of students
 - Prompts should represent experiences of a wide range of school-age students



Step 2: How to Identify the Level of Material for Monitoring Progress

- For Spelling:
 - Word lists come from grade-level word lists
 - If a student earns less than half of the total possible letter sequences, a Spelling CBM probe from the next lower grade should be administered
 - Once the appropriate Spelling CBM grade level is determined, students should use the same grade-level words lists for the entire year



Step 3: How to Administer and Score Written Expression CBM

- Administered to entire class at one time
- Students presented with a story starter
- Students are given time to formulate their writing
- Students write for a set amount of time
- Teacher scores Written Expression CBM probes after administration is complete



Step 3: How to Administer and Score Written Expression CBM

- Narrative writing story starters:
 - Familiar theme should be used
 - Starters should always end in mid-sentence
 - Starter is written at top of student CBM probe



Step 3: 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 ...
- One day I went to school but nobody was there except me ...



Step 3: How to Administer and Score Written Expression CBM

- Administration:
 - Story starter read aloud to the class
 - Students given 30 seconds to think about their writing
 - Clarify whether students can draw or write notes
 - Story starter is reread aloud to the class
 - Students write for 3, 5, or 7 minutes (depending upon grade level)



Step 3: How to Administer and Score Written Expression CBM

Grade Level	Time
Mid-elementary	3 minutes
Late-elementary	5 minutes
Middle school	7 minutes
High school	7 minutes



Step 3: How to Administer and Score Written Expression CBM

- Several ways to score Written Expression CBM
 - Words written
 - Total words spelled correctly
 - Correct Word Sequences (CWS)
 - Correct minus Incorrect Word Sequences (CIWS)
- Teachers can use a combination of scoring methods
 - Should remain consistent throughout the entire school year



Step 3: How to Administer and Score Written Expression CBM

- Words written:
 - Calculate the total number of words written
 - Correct spelling, word usage, capitalization, and punctuation are ignored



Step 3: How to Administer and Score Written Expression CBM

The cave was very dark and I try to close my eyes, so I couldn't see anything, but that didn't help. Than I hear some one breathing. I try to stream, but nother came out. The breathing became close and close to me, and the worst Part was that I couldn't see athing. At first I thought meslef that I an Just emaging stuff.



Step 3: How to Administer and Score Written Expression CBM

I was on my way home from school and I saw my friend and we rurd bilk to my hous. Bot she had to go to the bath room at the palk. So we played a little bit and we whant to the store and bot some goodes.



Step 3: How to Administer and Score Written Expression CBM

I was on my way home from school and I saw my friend and we rurd bilk to my hous. Bot she had to go to the bath room at the palk. So we played a little bit and we whant to the store and bot some goodes.



Step 3: How to Administer and Score Written Expression CBM

- Words spelled correctly:
 - Calculate the total number of words spelled correctly
 - Any correctly spelled English word is counted as correct
 - Proper usage, capitalization, and punctuation are ignored



Step 3: How to Administer and Score Written Expression CBM

The cave was very dark and I try to close my eyes, so I couldn't see anything, but that didn't help. Than I hear some one breathing. I try to stream, but nother came out. The breathing became close and close to me, and the worst Part was that I couldn't see athing. At first I thought meslef that I an Just emaging stuff.



Step 3: How to Administer and Score Written Expression CBM

One day we were playing outside the school and ... my friend, Jazzy, fell off the jungle gym. We thought that she would have been hurt but she wasn't really. All she got were a couple of scratches on her knees and elbows, and some cuts. So she went inside to clean them up and get bandages. After she did that we started to play some more. We did a monkey bar contest and played tag. Soon we got bored, so me and Jazzy went to the back yard where all the trees are. We were going to climb our favorite tree.



Step 3: How to Administer and Score Written Expression CBM

One day we were playing outside the school and ... my friend, Jazzy, fell off the jungle gym. We thought that she would have been hurt but she wasn't really. All she got were a couple of scratches on her knees and elbows, and some cuts. So she went inside to clean them up and get bandages. After she did that we started to play some more. We did a monkey bar contest and played tag. Soon we got bored, so me and Jazzy went to the back yard where all the trees are. We were going to climb our favorite tree.



Step 3: How to Administer and Score Written Expression CBM

- **Correct Word Sequences (CWS):**
 - Calculate the number of correct word sequences
 - Teacher must read entire sample before scoring



Step 3: How to Administer and Score Written Expression CBM

- **Correct Word Sequences (CWS):**
 - Vertical line placed where a sentence should end
 - Judgment calls may have to be made about where sentences end: Make decision rules and stick to them when scoring.
 - Incorrect words are underlined
 - Incorrect words are: words spelled incorrectly, grammatically incorrect words, and words used incorrectly



Step 3: How to Administer and Score Written Expression CBM

- **Correct Word Sequences (CWS):**
 - CWS is any two adjacent, correctly spelled words acceptable within the context of the sample to a native English speaker.
 - The two words must be syntactically and semantically correct
 - Acceptable word sequence: “the car”
 - Unacceptable word sequence: “car eyebrow”



Step 3: How to Administer and Score Written Expression CBM

- Correct Word Sequences (CWS):
 - Carat method
 - Below two words if it represents an incorrect word sequence
 - “car v eyebrow”
 - Incorrect carats placed between:
 - Any two underlined words
 - An underlined word and a non-underlined word
 - Between an underlined or un-capitalized word and line at beginning of a sentence
 - Between an underlined word and punctuation at end of a sentence



Step 3: How to Administer and Score Written Expression CBM

- Correct Word Sequences (CWS):
 - Carat method
 - Above two words if it represents a CWS
 - “the^car”
 - Correct carats placed between:
 - Any two non-underlined words
 - Between a non-underlined word and the line at the beginning of a sentence
 - Between a non-underlined word and the correct punctuation at the end of a sentence



Step 3: How to Administer and Score Written Expression CBM

- Correct Word Sequences (CWS):
 - Carat method

| ^ Joe ^ went ^ to ^ the ^ store ^ . |

(The CWS for this sentence is 6.)

| ^ Joe ^ went ^ to ∨ he ∨ store ∨ ○ |

(The CWS for this sentence is 3.)



Step 3: How to Administer and Score Written Expression CBM

The cave was very dark and I try to close my eyes, so I couldn't see anything, but that didn't help. | Then I hear some one breathing. | I try to stream, but nother came out. | The breathing became close and close to me, and the worst Part was that I couldn't see athing. | At first I thought meself that I an Just emaging stuff.

Step 3: How to Administer and Score Written Expression CBM

One day, we were playing outside the school and ... I Shrunk a Person olmost Steped on me But I Ran to fast ten Bjorn Nodest me. I seid Can You help me with Everthing he sied Yes! Ov course I sead Ya!



Step 3: How to Administer and Score Written Expression CBM

One day, we were playing outside the school and ... I
Shrunk | a Person almost Steped on me But
I Ran to fast | ten Bjorn Nodest me . | I seid
Can You help me with Everthing | he sied
Yes ! | Ov course I sead Ya !

Step 3: How to Administer and Score Written Expression CBM

- Fourth-grade student with disabilities, fall

Write a story that begins with:

I was walking down the street and found a key in front of
a big gold door. I took the key, opened the door and....

and found a big gold key
and I like to keep the key
but my mom want late me
keep the so. I say I to rent the
key out my window and last
morning I seen. That



Step 3: How to Administer and Score Written Expression CBM

- Correct minus Incorrect Word Sequences (CIWS):
 - Marking the text is exactly the same as CWS
 - Calculate the number of incorrect word sequences and subtract from the number of CWS



Step 3: How to Administer and Score Written Expression CBM

The cave was very dark and I try to close my eyes, so I couldn't see anything, but that didn't help. Then I hear some one breathing. I try to stream, but no one came out. The breathing became close and close to me, and the worst part was that I couldn't see anything. At first I thought myself that I was just imagining stuff.

Step 3: How to Administer and Score Written Expression CBM

It was a dark and stormy night ... Phil was watching a scary movie with his friends Bill and Pete. It was about a man-eating ghost named Fred who came to people on dark and stormy nights and ate them. Phil was really scared. he want to turn off the movie but didn't have to. All of a sudden the TV shut down. Then it turned on again and a clon was coming out of the TV he had a large nose and razor sharp teeth.



Step 3: How to Administer and Score Written Expression CBM

It was a dark and stormy night... ^Phil^ was
^watchng^ a^ scary^ movie^ with^ his^ friends
^Bill^ and^ Pete^ . | ^It^ was^ about^ a^ man-
^eating^ ghost^ nameed^ Fred^ who^ came
^to^ people^ on^ dark^ and^ stormy^ nights
^and^ ate^ them^ . | ^Phil^ was^ really
^scared^ . | he^ want^ to^ turn^ off^ the^ movie
^but^ didn't^ have^ to^ . | ^All^ of^ a^ sudden
^the^ TV^ shut^ down^ . | ^Then^ it^ turned
^on^ again^ and^ a^ clon^ was^ coming^ out
^of^ the^ TV^ . | he^ had^ a^ large^ nose^ and
^razor^ sharp^ teeth^ .

Step 3: How to Administer and Score Written Expression CBM

I was watching TV when I heard a knock at the door and ... I told him to go a way i'm watching TV Then he knock at the door agan so I went to see who it was it was a cute girl selling cookes and I ask how munch there are and she said I need about 3.50 Thats when it relised it was no girl selling cookes it was a 8 story tall locknes monster I said go away monster I ant got no 3.50 After all that I went to the lake to go fishing on my boate. When I was out on the water I had a big fish on my powls then it came up and then is said I need about 3.50 I said go away monster I work hard for my money

Step 3: How to Administer and Score Written Expression CBM

I was watching TV when I heard a knock at the door and ... I told him to go away
i'm watching TV | Then he knock at the
door again so I went to see who it was |
it was a cute girl selling cookies and I ask
how much there are and she said I need
about 3.50 | That's when it relised it was
no girl selling cookies | it was a 8 story tall
locknes monster | I said go away monster |
I want got no 3.50 | After all that I went to
the lake to go fishing on my boate. | When
I was out on the water I had a big fish on
my powls | then it came up and then is
said I need about 3.50 | I said go away
monster I work hard for my money

Step 3: How to Administer and Score Spelling CBM

- Can be administered to the entire group or individually
- Students orally presented with a list of words
- Students write the spelling words
- 2 minute time-limit
- Teacher scores Spelling CBM probes after administration is complete



Step 3: How to Administer and Score Spelling CBM

- Random lists of words need to be generated
- Word lists can come from any source
 - Words should come from same source and sample grade-level words taught in students' spelling program
- Lists of words each are generated from the master list for each Spelling CBM administration



Step 3: How to Administer and Score Spelling CBM

- Administration for Grades 1–3:
 - Teacher says a word, uses it in a sentence, then says the word again.
 - Students given 10 seconds to write the word next to the correct number of their Spelling probe.
 - There is a 2 minute time for student responses.
 - For example: “Number 1, cat. The cat has whiskers. Cat.”



Step 3: How to Administer and Score Spelling CBM

Spelling CBM	
Name: _____	Date: _____
1.	_____
2.	_____
3.	_____
4.	_____
5.	_____
6.	_____
7.	_____
8.	_____
9.	_____
10.	_____
11.	_____
12.	_____
13.	_____
14.	_____
15.	_____
16.	_____
17.	_____
18.	_____
19.	_____
20.	_____



Step 3: How to Administer and Score Spelling CBM

- One way to score Spelling CBM:
 - Correct letter sequences (LS)
 - Every pair of letters that appear together correctly is marked with a carat
 - If the first letter is correct, a carat is placed before that letter
 - If the last letter is correct, a carat is placed after that letter



Step 3: How to Administer and Score Spelling CBM

- One way to score Spelling CBM:
 - Correct letter sequences (LS)
 - The maximum number of correct letter sequences is always the number of letters in the word plus 1
 - maximum LS for “apple” = 6
 - maximum LS for “trouble” = 8



Step 3: How to Administer and Score Spelling CBM

- Let's look at the word "direct."
- $\text{d}^{\wedge}\text{i}^{\wedge}\text{r}^{\wedge}\text{e}^{\wedge}\text{c}^{\wedge}\text{t}^{\wedge}$
 - 7 LS
- $\text{d}^{\wedge}\text{i}^{\wedge}\text{r}^{\wedge}\text{e}^{\wedge}\text{k}^{\wedge}\text{t}^{\wedge}$
 - 5 LS
- $\text{d}^{\wedge}\text{r}^{\wedge}\text{a}^{\wedge}\text{k}^{\wedge}\text{t}^{\wedge}$
 - 2 LS



Step 3: How to Administer and Score Spelling CBM

■ c [^] o [^] l [^] e [^] j [^] e [^]	college	5 LS
■ t [^] e [^] c [^] h [^] e	teach	3 LS
■ m [^] e [^] e [^] n [^]	mean	3 LS
■ w [^] o [^] o [^] d [^]	would	3 LS
■ r [^] e	area	1 LS
■ a [^] t [^] e [^] n [^] s [^] u [^] n [^]	attention	5 LS
■ i [^] n [^] t [^] e [^] r [^] s	interest	5 LS
■ a [^] w [^] a [^] r [^] t [^] z	awards	4 LS
■ c [^] o [^] m [^] i [^] t [^] y	committee	5 LS
■ c [^] e [^] n [^] s	sense	2 LS



Step 3: How to Administer and Score Spelling CBM

Word	Student Spelling	LS
said	s i a d	/5
word	w o r d	/5
other	u d r	/6
her	h e r	/4
look	l o o k	/5
should	s h u d	/7
find	f i n d	/5
did	d i d	/4
part	p o t	/5
little	l i t t i l e	/7
live	l i v e	/5
very	v e r y	/5
name	n a m e	/5
think	s h i c k	/6
through	f h o w	/8
mean	m e n	/5
tell	t e l	/5
want	w o t	/5
around	r a n d	/7



Step 3: How to Administer and Score Spelling CBM

Word	Student Spelling	LS
said	^s i a d^	2 /5
word	^w^o^r^d^	5 /5
other	u d r^	1 /6
her	^h^e^r^	4 /4
look	^l^o^o^k^	5 /5
should	^s^h u d^	3 /7
find	^f^i^a^n^d^	5 /5
did	^d^i^d^	4 /4
part	^p o t^	2 /5
little	^l^i^t^t i l^e^	6 /7
live	^l^i^v^e^	5 /5
very	^v^e^r^y^	5 /5
name	^n^a^m^e^	5 /5
think	s h^i c k^	2 /6
through	f h o w	0 /8
mean	^m^e n^	2 /5
tell	^t^e^l	3 /5
want	^w o t^	2 /5
around	r a n^d^	2 /7



Step 3: How to Administer and Score Spelling CBM

Word	Student Spelling	LS
small	s m a l l	/6
airplane	a i r p l a c e	/9
duck	d u c k	/5
white	w h i t e	/6
color	c o r e	/6
barn	b r n e	/5
truck	t r u c k	/6
cold	c o u l d	/5
surprise	s p r i s e	/9
money	m u n e	/6
water	w e r t e r	/6
toy	t o y	/4
am	i m	/3
nothing	n u n t i n g	/8
fox	f o x	/4
tomorrow	t o o w m r o	/9
never	n e v e r	/6
farm	f o r m	/5
kitten	c i t i n	/7
took	t o o k	/5
please	p l e a s e	/7



Step 3: How to Administer and Score Spelling CBM

Word	Student Spelling	LS
small	^s^m^a^l^l^	6 /6
airplane	^a^i^r^p^l^a^c^e^	7 /9
duck	^d^u^c^k^	5 /5
white	^w^h^i^t^e^	6 /6
color	^c^o^r^e	3 /6
barn	^b^r^n^e	2 /5
truck	^t^r^u^c^k^	6 /6
cold	^c^o^u^l^d^	4 /5
surprise	^s^p^r^i^s^e^	6 /9
money	^m^u^n^e	2 /6
water	^w^e^r^t^e^r^	4 /6
toy	^t^o^y^	4 /4
am	i m^	1 /3
nothing	^n^u^n^t^i^n^g^	4 /8
fox	^f^o^x^	4 /4
tomorrow	^t^o^o^w^m^r^o	3 /9
never	^n^e^v^e^r^	6 /6
farm	^f^o^r^m^	3 /5
kitten	c i^t^i^n^	2 /7
took	^t^o^o^k^	5 /5
please	^p^l^e^a^s^e^	7 /7



Step 4: How to Graph Scores

- Once CBM data has been collected, it's time to graph student scores
- Graphs provide teachers with a straightforward way of:
 - Reviewing student progress
 - Monitoring appropriateness of student goals
 - Judging adequacy of student progress
 - Comparing and contrasting successful and unsuccessful instructional aspects



Step 4: How to Graph Scores

- Teachers can make decisions about short- and long-term progress
- CBM graphs help teachers set ambitious, but realistic goals
- CBM graphs provide teachers with actual data to help revise and improve student instructional programs



Step 4: How to Graph Scores

- Two options for creating CBM graphs:
 - Create own students graphs using graph paper and pencil
 - Create graphs using computer software (such as Microsoft Excel)
- Writing CBM:
 - CWS (Grades 1–4)
 - CIWS (Grades 5–12)
- Spelling CBM:
 - LS

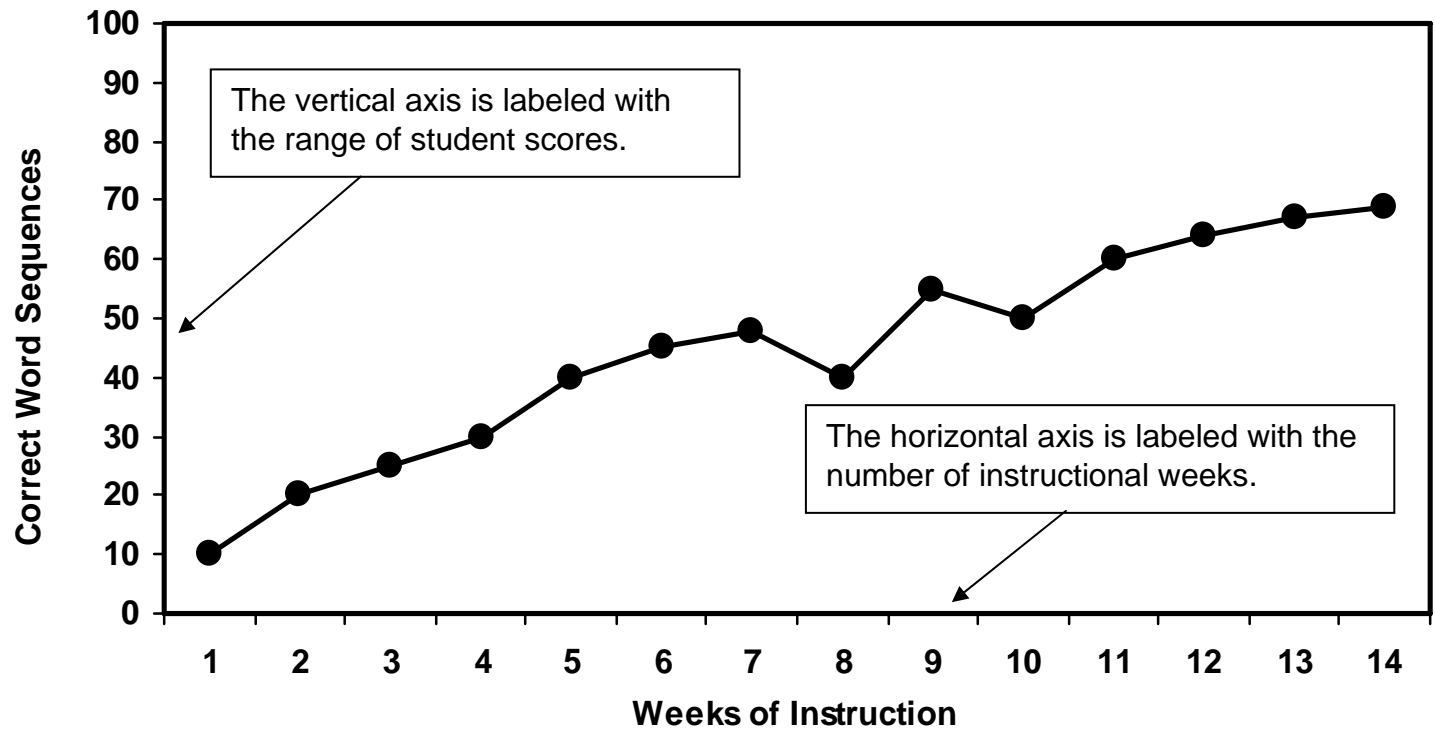


Step 4: How to Graph Scores

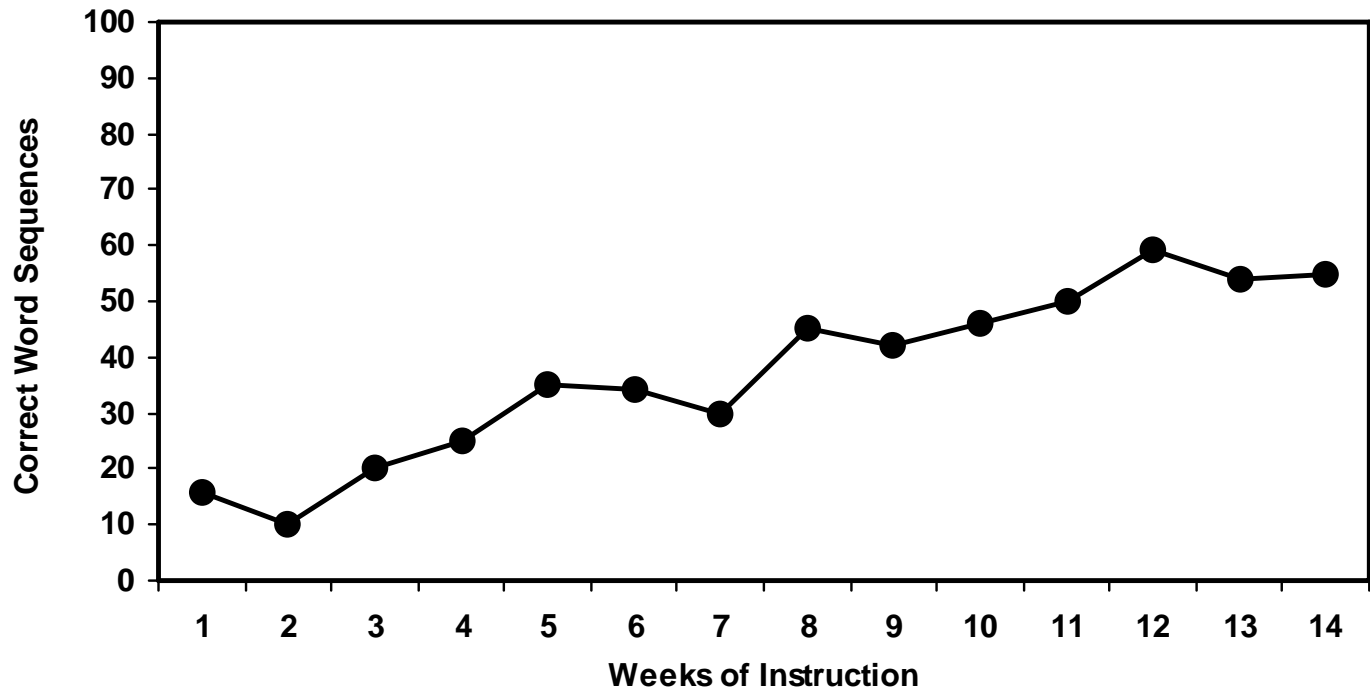
- Creating graphs is easy
- Teachers create a student graph for each individual student for interpretation
- Teachers should create a master graph
 - Vertical axis: range of scores of all students in the class
 - Horizontal axis: number of weeks of instruction
- Master graph serves as a template



Step 4: How to Graph Scores



Step 4: How to Graph Scores



Step 5: How to Set Ambitious Goals

- End-of-year performance goals
- Three options:
 - End-of-year benchmarking
 - Intra-individual framework
 - Norms



Step 5: Option #1

- Option #1: End-of-year benchmarking
 - Identify end-of-year benchmark
 - Mark as an “X” on the graph at the date marking the end of the year
 - Goal-line is drawn between median of first three CBM scores and end-of-year performance goal



Step 5: Option #1

Grade	Benchmark
1st Written Expression	Use school or district norms
1st Spelling	60 LS or 12 words
2nd Written Expression	Use school or district norms
2nd Spelling	79 LS or 12 words
3rd Written Expression	Use school or district norms
3rd Spelling	80 LS or 12 words
4th Written Expression	Use school or district norms
4th Spelling	80 LS or 12 words
5th Written Expression	Use school or district norms
5th Spelling	85 LS or 12 words
6th Written Expression	Use school or district norms
6th Spelling	85 LS or 12 words



Step 5: Option #2

- Option #2: Intra-individual framework
 - Identify weekly rate of improvement using at least 8 CBM scores
 - Multiply baseline by 1.5
 - Multiply product by the number of weeks until end of school year
 - Add to student's baseline score
 - This is the end-of-year performance goal



Step 5: Option #2

- Option #2: Intra-individual framework
 - First 8 scores: **25**, 22, 27, 30, 32, **28**, 29, 24
 - Difference between: $28 - 25 = 3$
 - Divide difference by $8 - 1$ weeks: $3 \div 7 = 0.43$
 - Multiply by 1.5: $0.43 \times 1.5 = 0.65$
 - Multiply by # weeks left in year (if 14);
 - $0.65 \times 14 = 9.1$
 - Add the product to the first median:
 - $9.1 + 25 = 34.1$
 - 34 is the end-of-year performance goal



Step 5: Option #3

- Option #3: Norms
 - Average rate of weekly increase can determine end-of-year performance goal
 - Weekly growth estimates for spelling and written expression (Deno & Mirkin, 1985)
 - Use School or District slopes instead when possible

Spelling (correct letter sequences)				Written Expression (correct words)			
Reasonable		Ambitious		Reasonable		Ambitious	
Grades 1–3	Grades 4–6	Grades 1–3	Grades 4–6	Grades 1–3	Grades 4–6	Grades 1–3	Grades 4–6
1.5	.5	2.0	1.5	1.0	.5	2.0	1.5

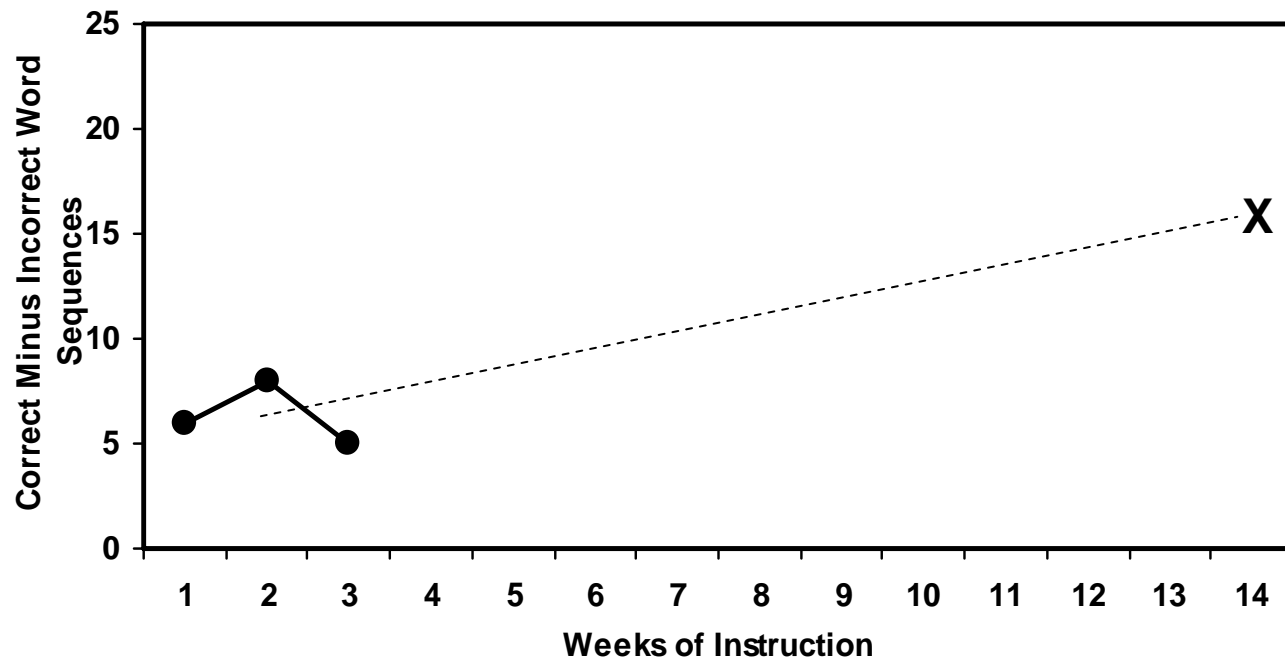
Step 5: How to Set Ambitious Goals

- Option #3 Example: Norms
 - Median score from probes is 50
 - Based on district norms, average slope is 0.80
 - Multiply average slope by # of weeks left in school year: $0.80 \times 16 = 12.8$
 - Add to baseline score: $50 + 12.8 = 62.8$
 - 63 is end-of-year performance goal

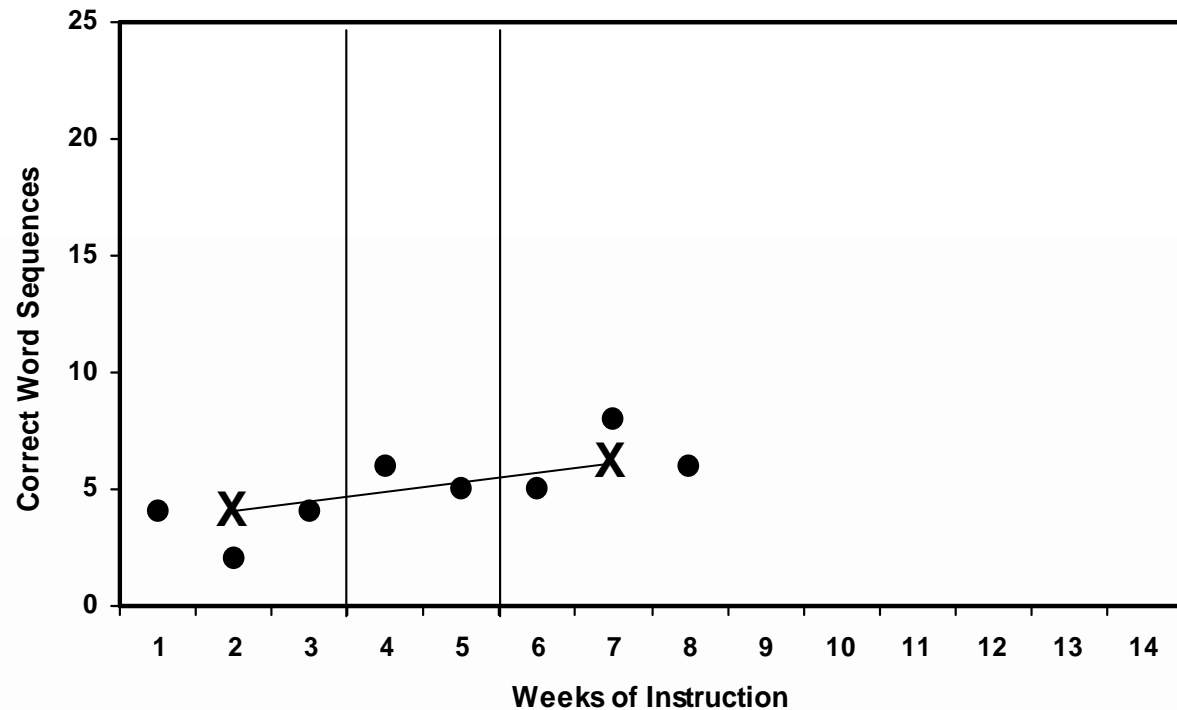


Step 5: How to Set Ambitious Goals

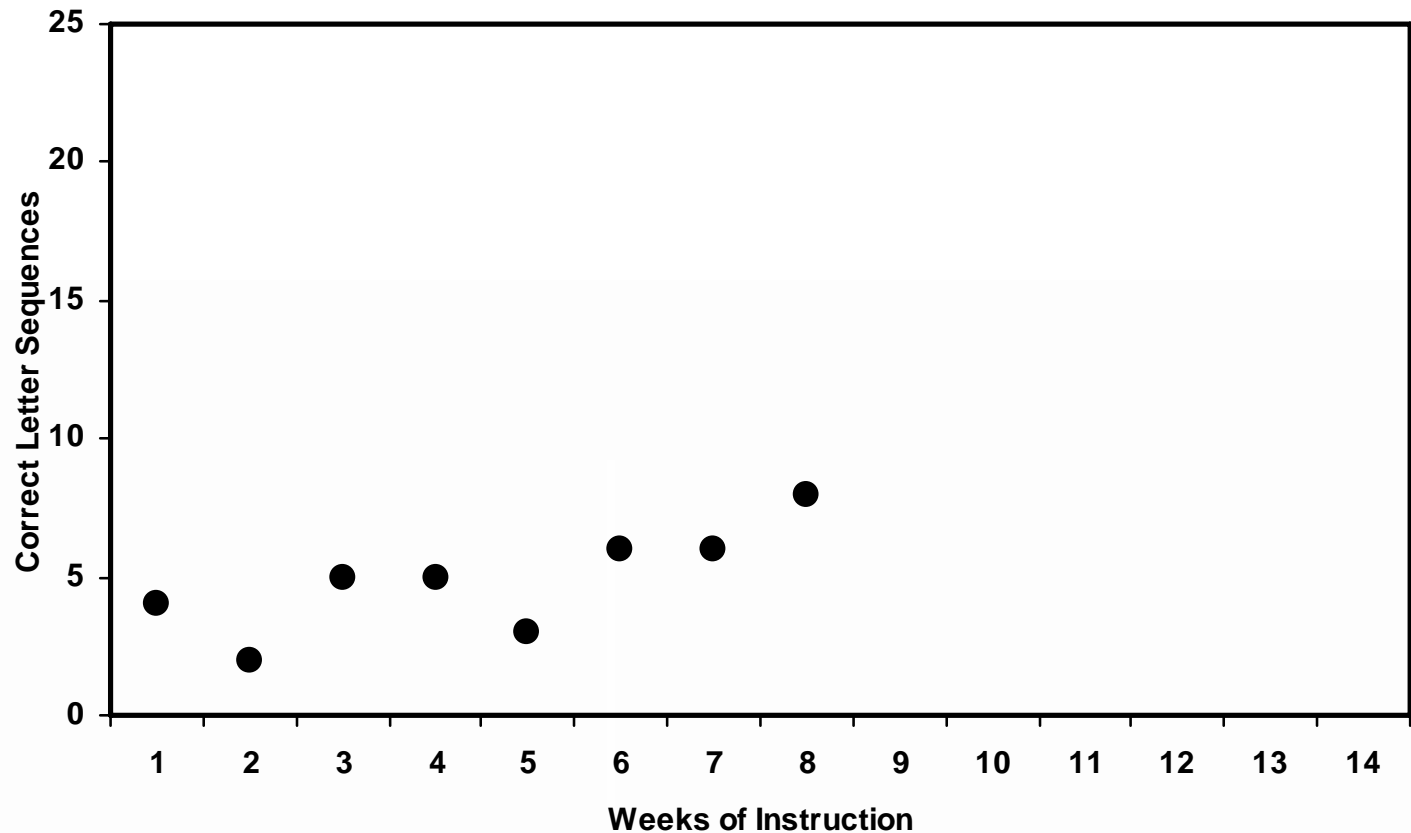
Drawing the Goal and Goal-Line



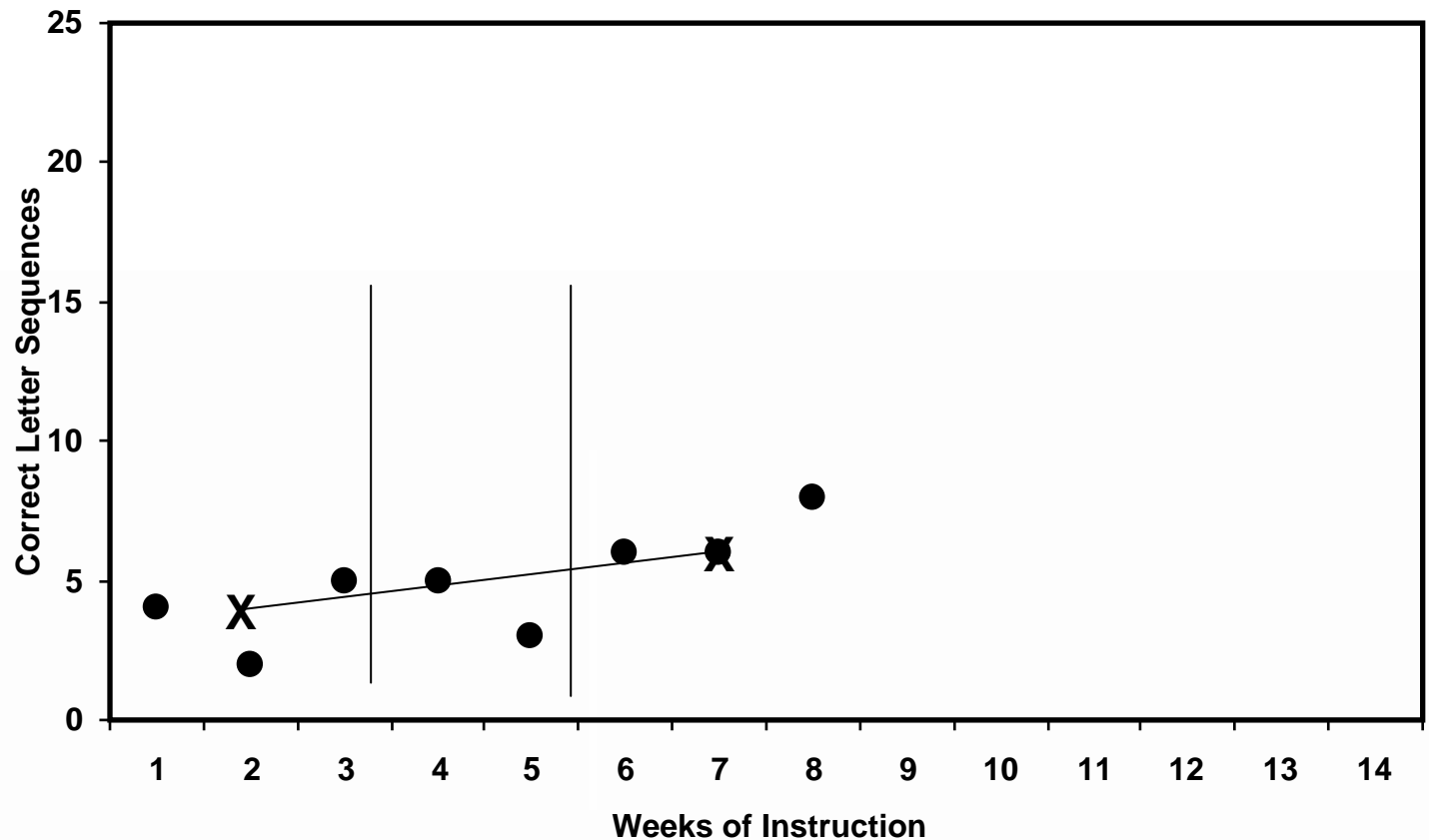
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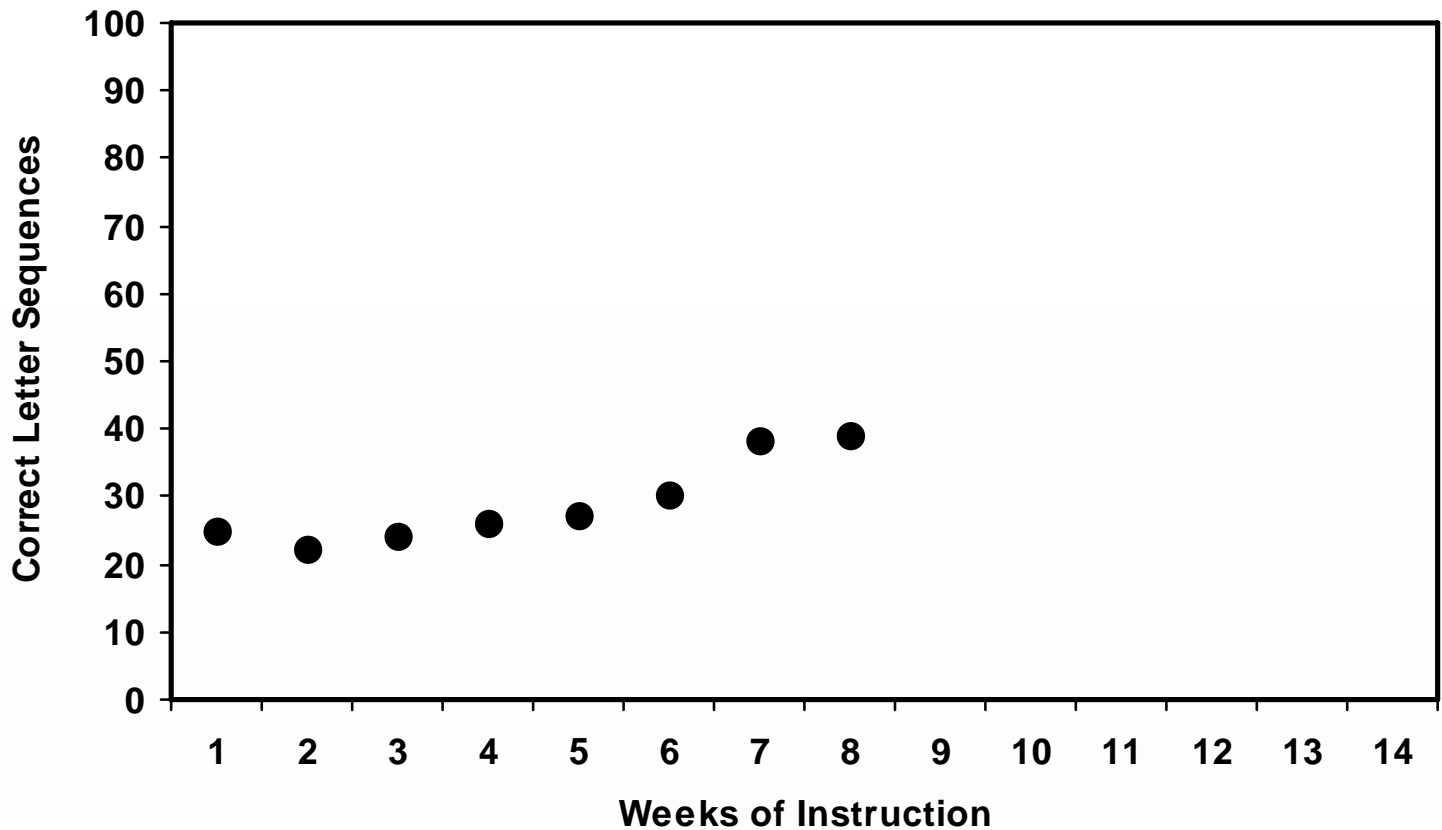
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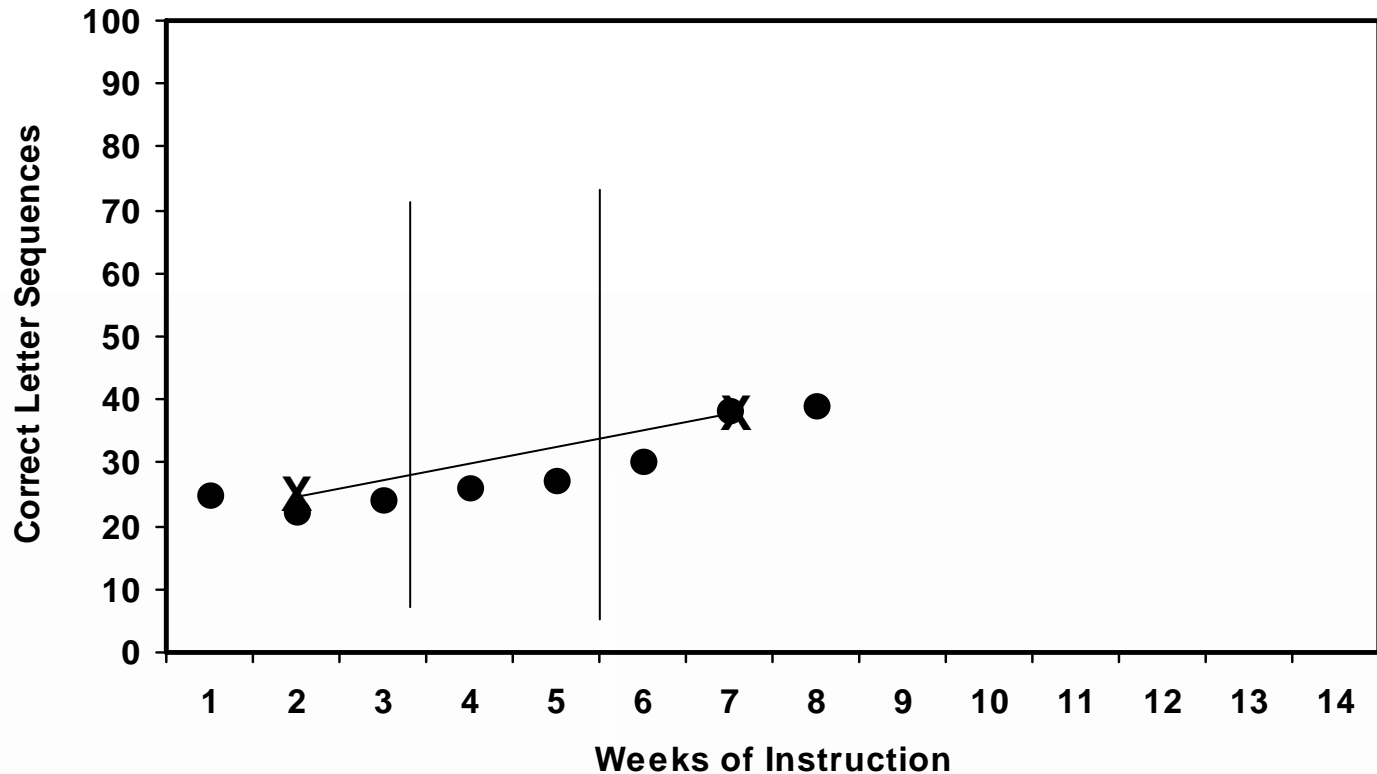
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Step 6: How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals



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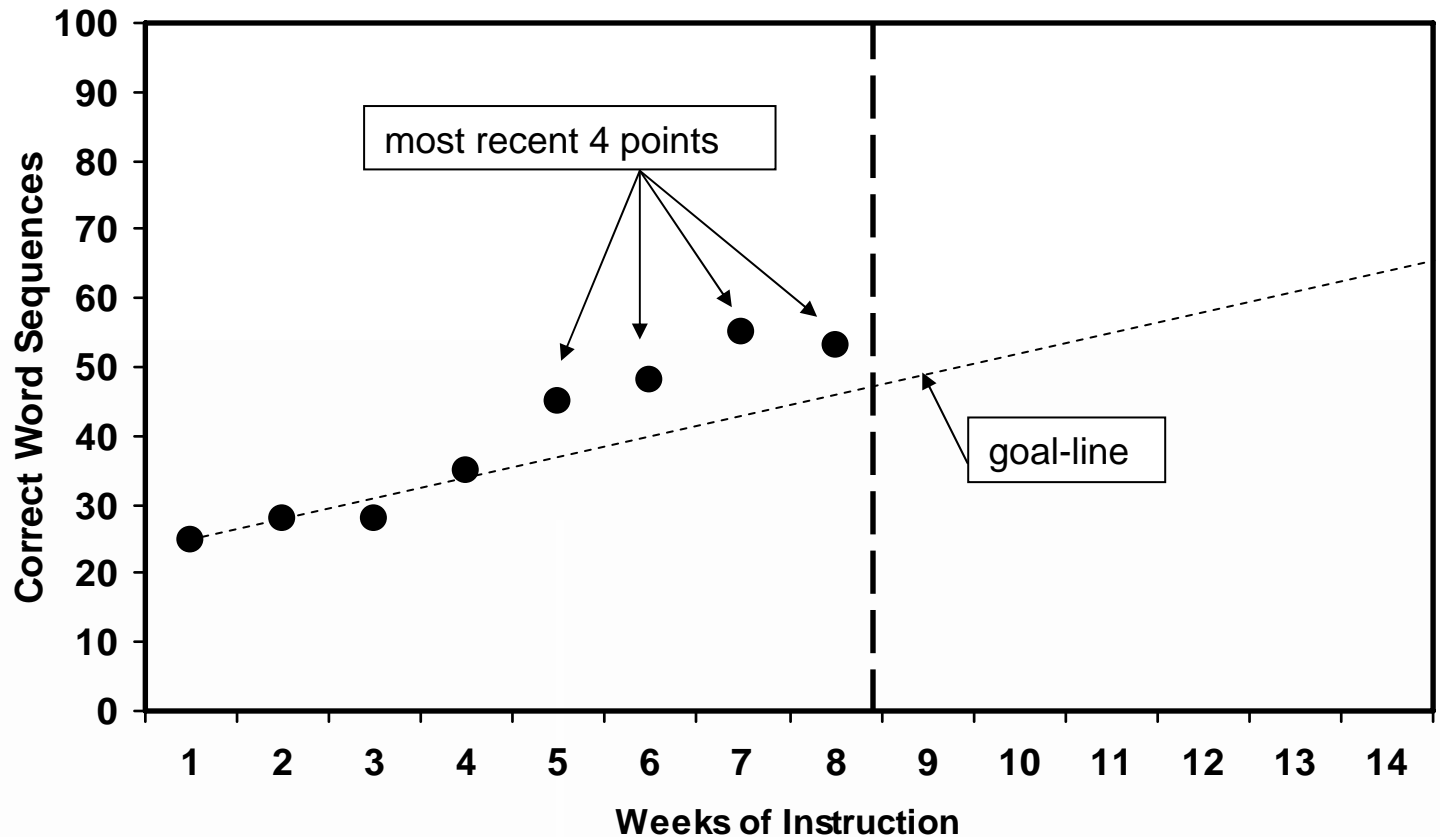


Step 6: How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals

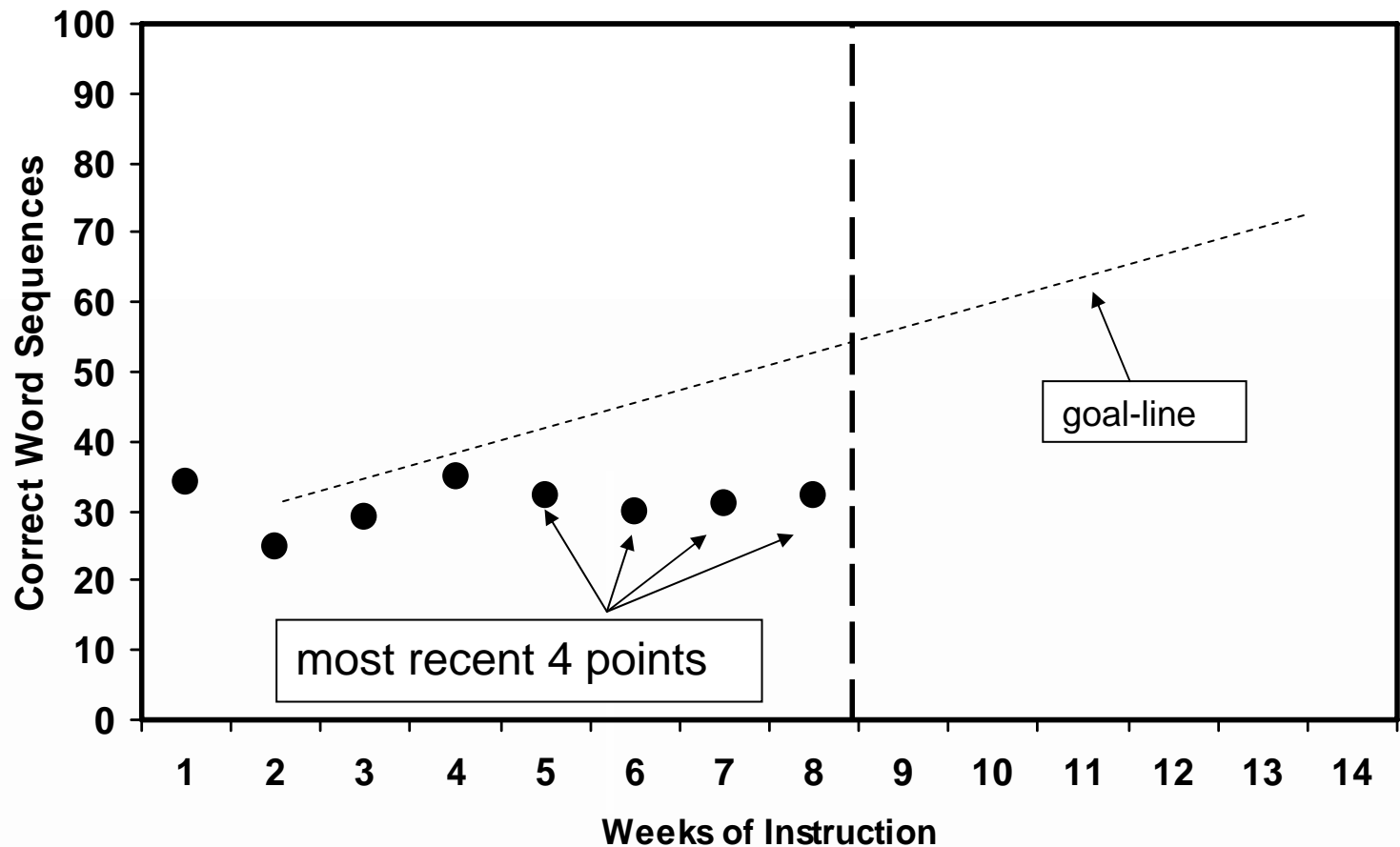
- CBM can be used to improve scope and usefulness of program evaluation decisions and to develop instructional plans that enhance student achievement
 - Decision rules based on most recent 4 consecutive scores
 - Decision rules based on trend-line



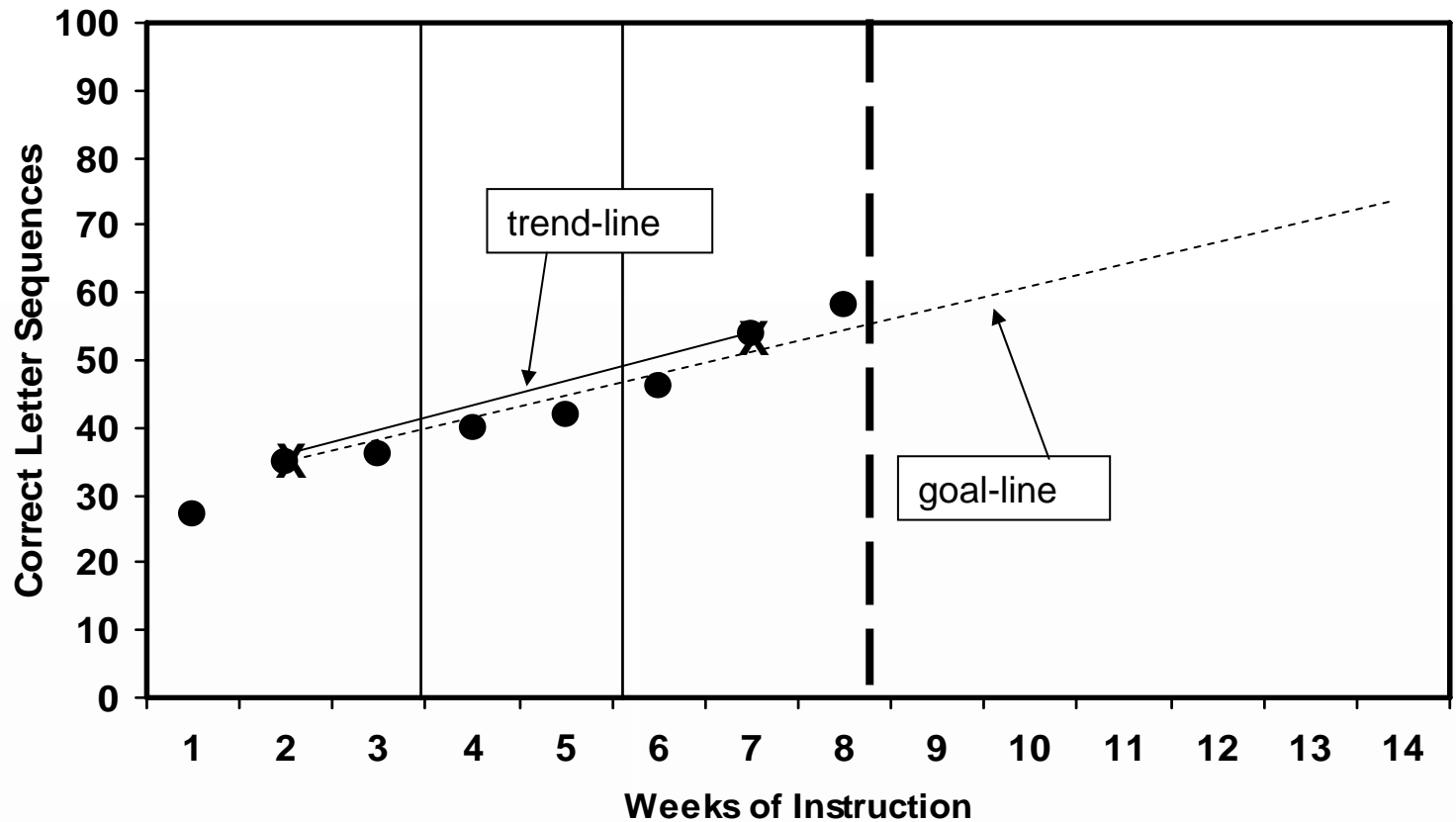
Step 6: How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals



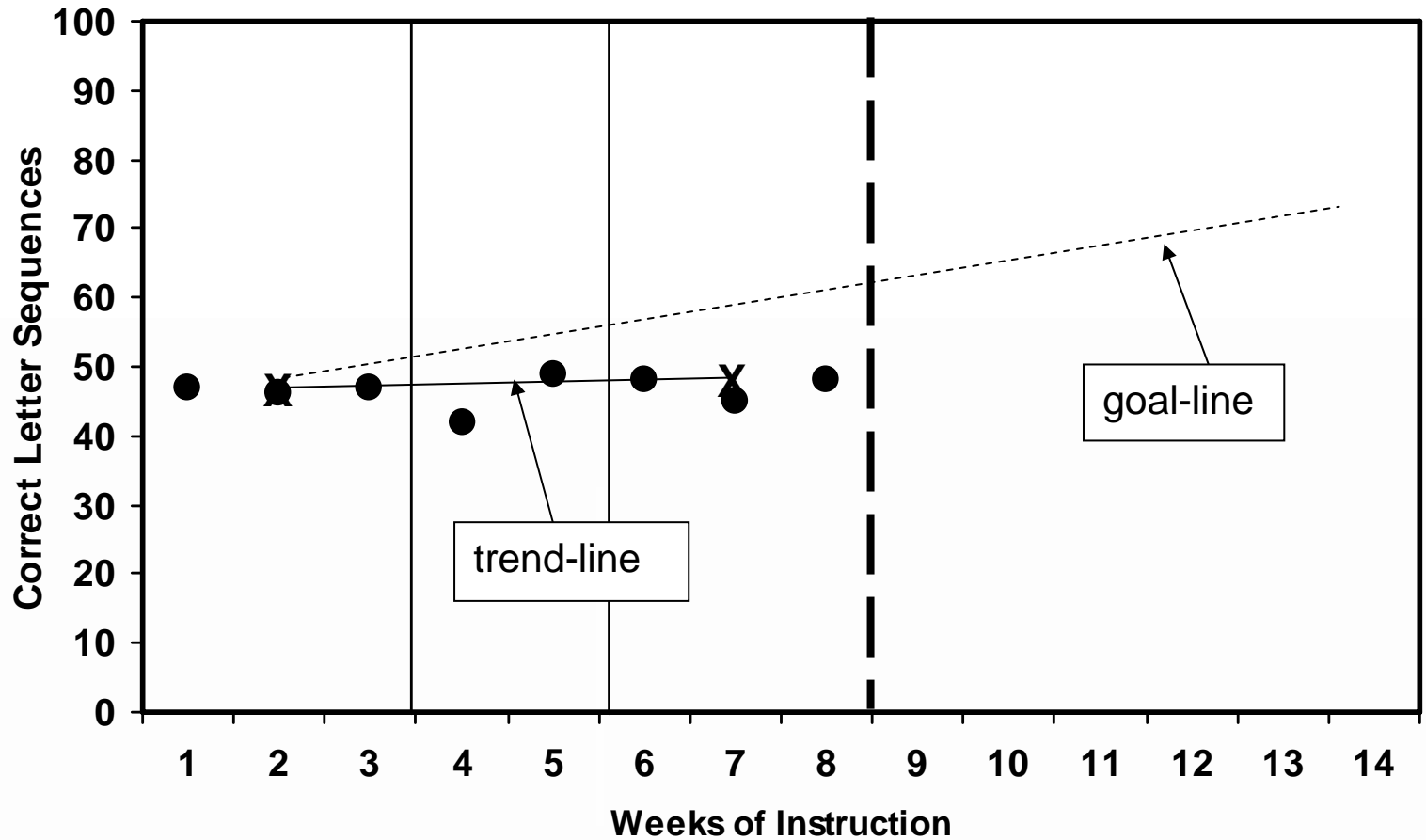
Step 6: How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals



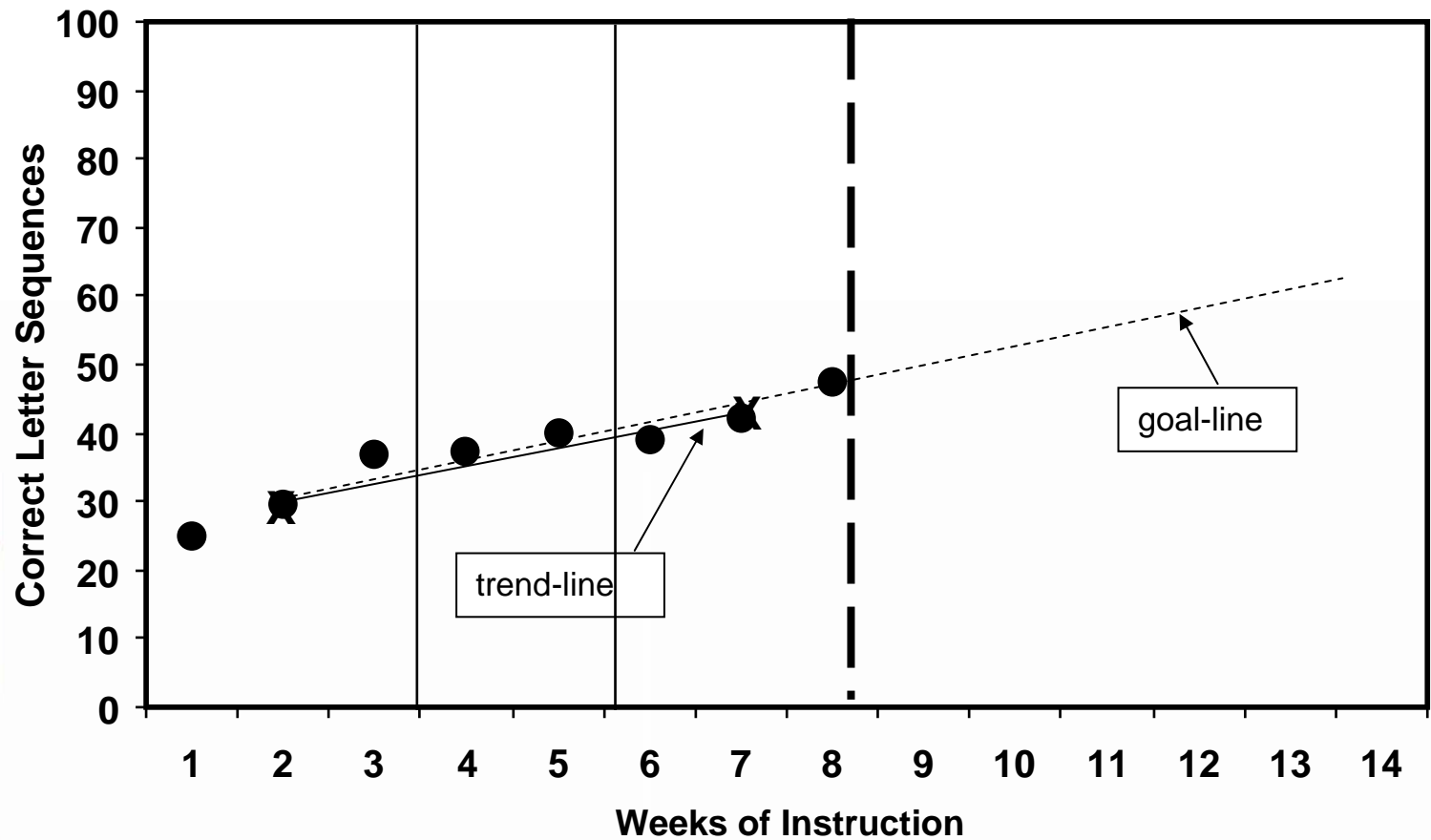
Step 6: How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals



Step 6: How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals



Step 6: How to Apply Decision Rules to Graphed Scores to Know When to Revise Programs and Increase Goals



Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

■ Written Expression CBM

Story-Idea	Organization-Cohesion	Conventions-Mechanics
<p>5</p> <ul style="list-style-type: none">-includes characters-delineates a plot-contains original ideas-contains some detail-word choice-contains descriptors (adverbs and adjectives) and colorful, infrequently used, and/or some long words	<p>5</p> <ul style="list-style-type: none">-overall story is organized into a beginning, middle, and an end-events are linked and cohesive-sentences are linked, often containing some transitions to help with organization (finally, then, next, etc.)	<p>5</p> <ul style="list-style-type: none">-sentence structure generally is accurate-spelling does not hinder readability-sometimes contains dialogue-handwriting is legible-punctuation does not effect readability too much-word usage generally is correct (s,v,o/homophone /s-v agreement)

Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

■ Written Expression CBM

Story-Idea	Organization-Cohesion	Conventions-Mechanics
<p style="text-align: center;">4</p> <ul style="list-style-type: none">-includes characters, but they are not original, often coming from movies-delineates a plot, although it is not as clear as 5-contains some original ideas but is it fairly predictable-contains some detail-includes descriptors (adverbs and adjectives)-words choice: contains some descriptors (adverbs and adjectives) and some colorful, infrequently used, and/or long words	<p style="text-align: center;">4</p> <ul style="list-style-type: none">-story has somewhat of a beginning, middle, and an end-events appear somewhat random, but some organization exists-sample may contain some transitions to help with organization (finally, then, next, etc.)-story often contains too many events, disrupting cohesion	<p style="text-align: center;">4</p> <ul style="list-style-type: none">-sentence structure generally is accurate but not as good as 5-spelling does not hinder readability too much-sometimes contains dialogue-handwriting is legible-punctuation does not effect readability too much-word usage generally is correct (s,v,o/homophone/s-v agreement)

Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

■ Written Expression CBM

Story-Idea	Organization-Cohesion	Conventions-Mechanics
<p>3</p> <ul style="list-style-type: none">-characters are predictable and undeveloped-plot is somewhat haphazard-may or may not contain original ideas-lacks detail-word choice is somewhat predictable only sometimes contains descriptors (adverbs and adjectives)	<p>3</p> <ul style="list-style-type: none">-somewhat of a plot exists but story may still lack a beginning, middle, or an end-events are somewhat random-often lacks transitions-sometimes lacks referents	<p>3</p> <ul style="list-style-type: none">-sentence structure has a few problems-spelling is somewhat of a problem-may use dialogue but does not punctuate it correctly-handwriting is legible-punctuation is fair-problems sometimes occur with word usage (s,v,o/homophone/s-v agreement)

Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

■ Written Expression CBM

Story-Idea	Organization-Cohesion	Conventions-Mechanics
<p>2</p> <ul style="list-style-type: none">-includes few if any characters-plot is not developed or apparent-contains virtually no original ideas-detail is significantly absent-events are very predictable-word choice is predictable, lacking descriptors (adverbs and adjectives)	<p>2</p> <ul style="list-style-type: none">-plot lacks organization into a beginning, middle and an end-events are random, lacking in cohesion-lacks transitions-often lacks referents	<p>2</p> <ul style="list-style-type: none">-sentence structure makes story difficult to read-spelling makes it difficult to read-may use dialogue but does not punctuate it correctly-handwriting is not very legible-punctuation is inconsistent and problematic-word usage is problematic (s,v,o/homophone/s-v agreement)

Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

■ Written Expression CBM

Story-Idea	Organization-Cohesion	Conventions-Mechanics
<p>1</p> <ul style="list-style-type: none">-includes few if any characters-plot is non-existent-contains no original ideas-detail is significantly absent-events are few and predictable-lacks descriptors (adverbs and adjectives)	<p>1</p> <ul style="list-style-type: none">-plot is virtually nonexistent-events are few and random-lacks transitions-lacks referents	<p>1</p> <ul style="list-style-type: none">-sentence structure is problematic-spelling makes it extremely difficult to read-handwriting is illegible, making it extremely difficult to decode-punctuation is virtually nonexistent-word usage is problematic



Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

- **Written Expression CBM**
 - Rank Story Idea (1-5)
 - Rank Organization and Cohesion (1-5)
 - Rank Conventions and Mechanics (1-5)

It was a dark and stormy night ... Phil was watching a scary movie with his friends Bill and Pete. It was about a man-eating ghost named Fred who came to people on dark and stormy nights and ate them. Phil was really scared. he want to turn off the movie but didn't have to. All of a sudden the TV shut down. Then it turned on again and a clon was coming out of the TV he had a large nose and razor sharp teeth.

Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

- **Written Expression CBM**
 - Rank Story Idea (1-5)
 - Rank Organization and Cohesion (1-5)
 - Rank Conventions and Mechanics (1-5)

I was watching TV when I heard a knock at the door and ... I told him to go a way i'm watching TV Then he knock at the door agan so I went to see who it was it was a cute girl selling cookies and I ask how much there are and she said I need about 3.50 Thats when it relised it was no girl selling cookies it was a 8 story tall locknes monster I said go away monster I ant got no 3.50 After all that I went to the lake to go fishing on my boate. When I was out on the water I had a big fish on my powls then it came up and then is said I need about 3.50 I said go away monster I work hard for my money

Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

- Spelling CBM
 - Consonants and vowels
 - Does student consistently identify beginning and end of words?
 - Does student recognize and write short vowel sounds?
 - Does student write vowels followed by the letter r? (farm rather than frm, her rather than hr)



Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

■ Spelling CBM

– Pairs of consonants

- Does student recognize and write both sounded consonants? (fast, hold)
- Does student correctly spell blends? (grate, black)
- Does student recognize and write digraphs? (teach, show)
- Does student correctly write double letters in two-syllable with short vowels? (rabbit, happy)



Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

■ Spelling CBM

– Silent letters

- Does student write silent letters correctly? (know, clim**b**)

– Long vowels

- Does student correctly write long vowel sounds:
 - with a final e (late**e**)
 - with vowel teams (re**a**d, ma**i**n)
 - with a y (part**y**)



Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

- Spelling CBM
 - Multisyllabic words
 - Does student include vowel in each syllable?
 - Does student follow rules for adding suffixes to root words? (beautiful rather than beautyful)



Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

- **Spelling CBM**
 - Consonants and vowels
 - Pairs of consonants
 - Silent letters
 - Long vowels
 - Multisyllabic words

Word	Student Spelling	LS
said	si a d	
word	w o r d	
other	u d r	
her	h e r	
look	l o o k	
should	s h u d	
find	f i n d	
did	d i d	
part	p o t	
little	l i t t i l e	
live	l i v e	
very	v e r y	
name	n a m e	
think	s h i c k	
through	f h o w	
mean	m e n	
tell	t e l	
want	w o t	
around	r a n d	



Step 7: How to Use the CBM Database Qualitatively to Describe Student Strengths and Weaknesses

- **Spelling CBM**
 - Consonants and vowels
 - Pairs of consonants
 - Silent letters
 - Long vowels
 - Multisyllabic words

Word	Student Spelling	LS
small	s m a l l	
airplane	a i r p l a c e	
duck	d u c k	
white	w h i t e	
color	c o r e	
barn	b r n e	
truck	t r u c k	
cold	c o u l d	
surprise	s p r i s e	
money	m u n e	
water	w e r t e r	
toy	t o y	
am	i m	
nothing	n u n t i n g	
fox	f o x	
tomorrow	t o o w m r o	
never	n e v e r	
farm	f o r m	
kitten	c i t i n	
took	t o o k	
please	p l e a s e	



How to Use the CBM Database to Accomplish Teacher and School Accountability and for Formulating Policy Directed at Improving Student Outcomes

- “No Child Left Behind” requires all schools to show Adequate Yearly Progress (AYP) towards proficiency goal
- Schools must determine measure(s) for AYP evaluation and the criterion for deeming an individual student “proficient”
- CBM can be used to fulfill the AYP evaluation in written expression and spelling



How to Use the CBM Database to Accomplish Teacher and School Accountability and for Formulating Policy Directed at Improving Student Outcomes

- **Using Written Expression or Spelling CBM:**
 - Schools can assess students to identify number of initial students who meet benchmarks (initial proficiency)
 - The discrepancy between initial proficiency and universal proficiency is calculated



How to Use the CBM Database to Accomplish Teacher and School Accountability and for Formulating Policy Directed at Improving Student Outcomes

- **Using Written Expression or Spelling CBM:**
 - The discrepancy is divided by the number of years before the 2013-2014 deadline
 - Provides the number of additional students who must meet benchmarks each year

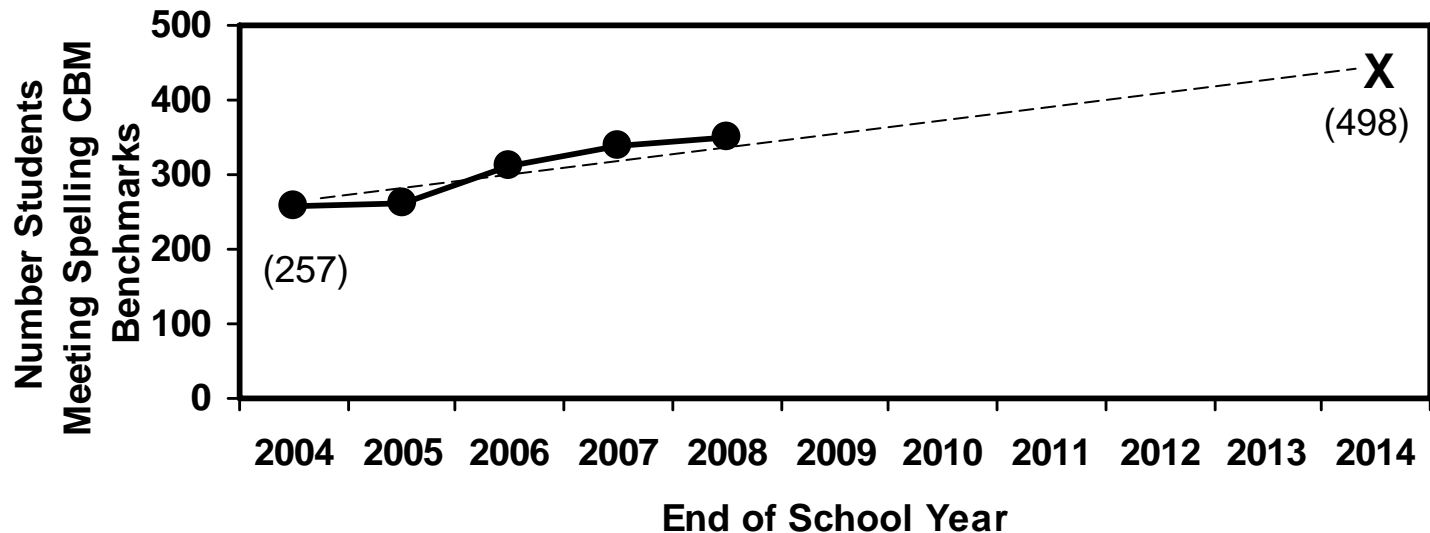


How to Use the CBM Database to Accomplish Teacher and School Accountability and for Formulating Policy Directed at Improving Student Outcomes

- Advantages of using CBM for AYP:
 - Measures are simple and easy to administer
 - Training is quick and reliable
 - Entire student body can be measured efficiently and frequently
 - Routine testing allows schools to track progress during school year

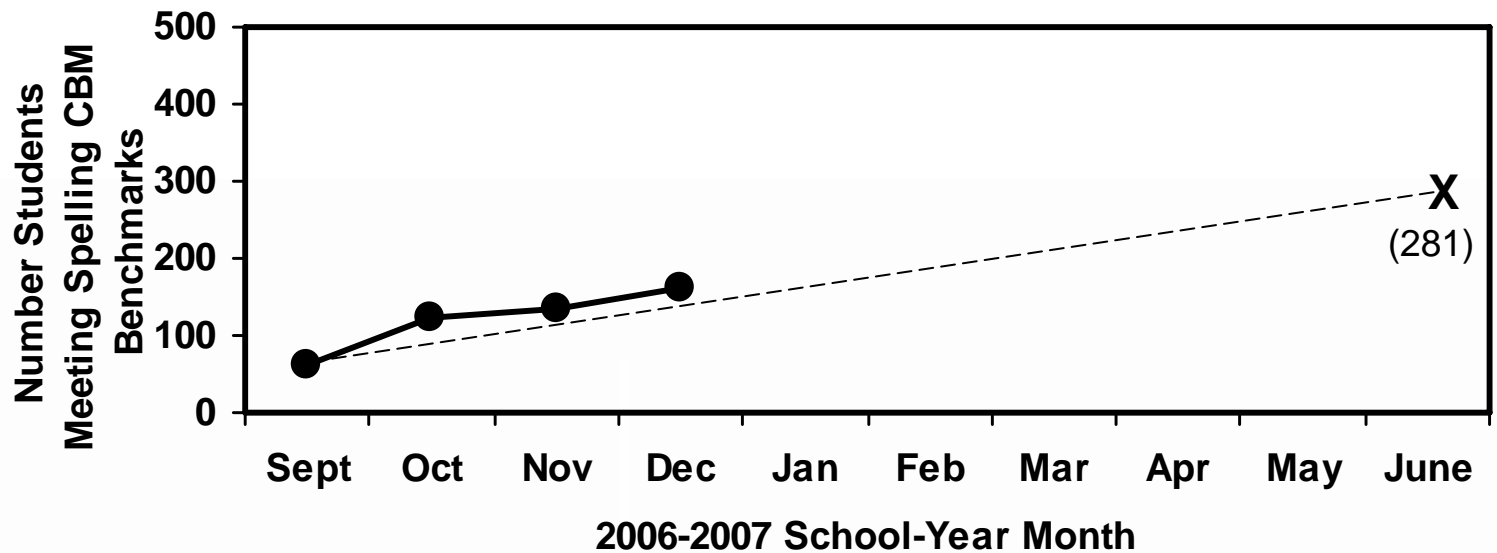


How to Use the CBM Database to Accomplish Teacher and School Accountability and for Formulating Policy Directed at Improving Student Outcomes



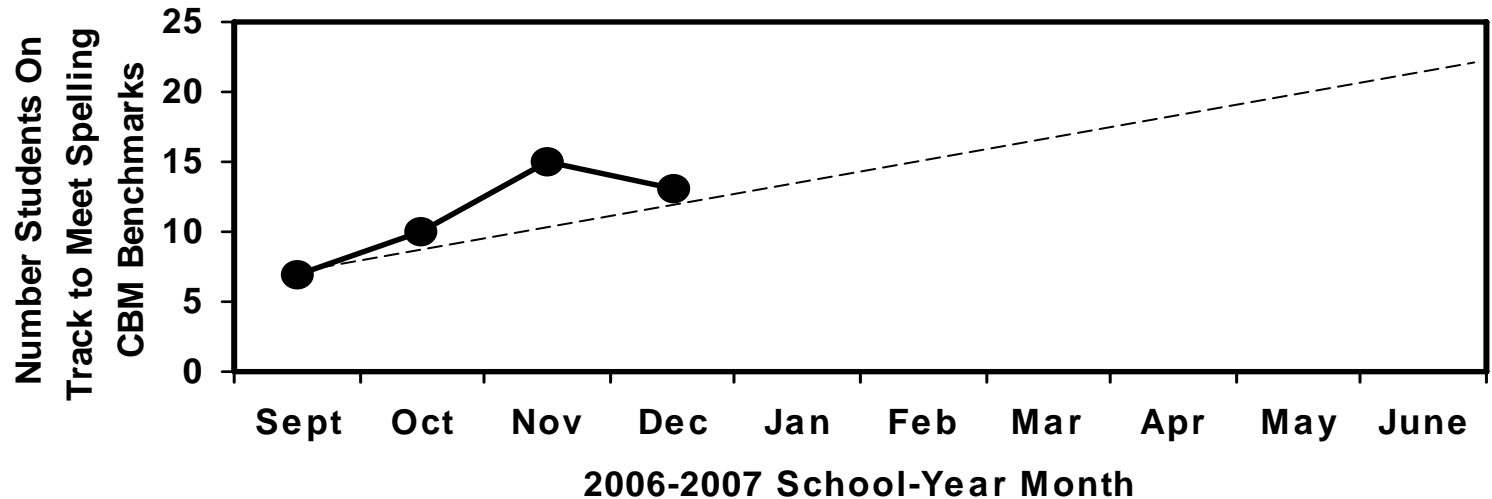
How to Use the Accountability CBM Database to Accomplish Teacher and School and for Formulating Policy Directed at Improving Student Outcomes

School Progress



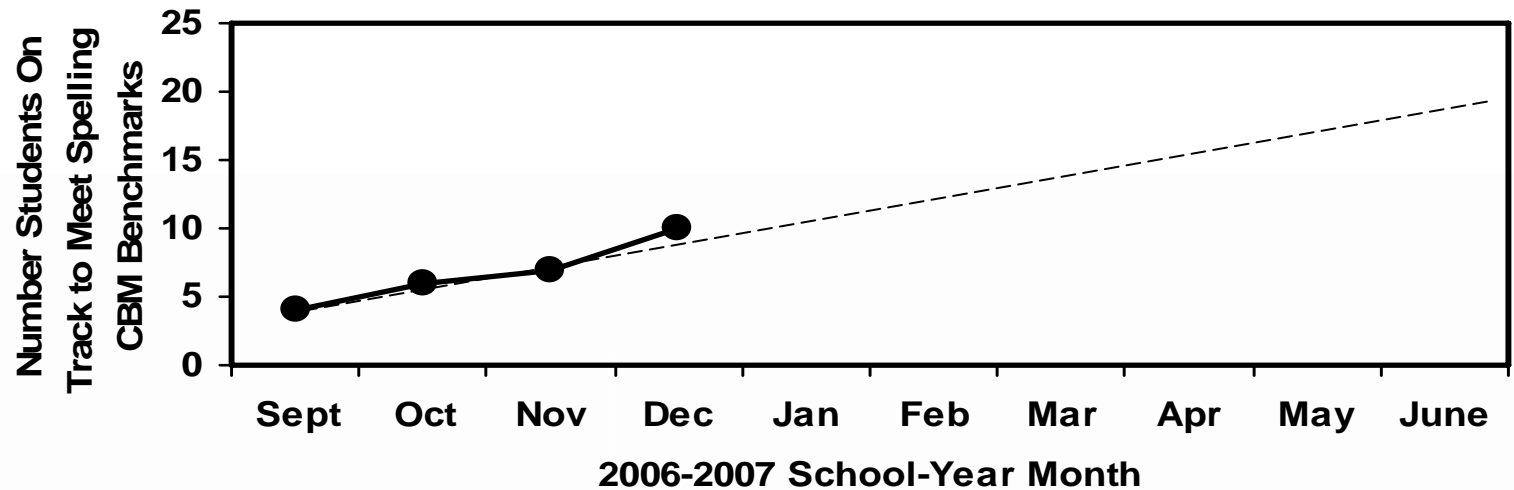
How to Use the CBM Database to Accomplish Teacher and School Accountability and for Formulating Policy Directed at Improving Student Outcomes

Individual Teacher Progress



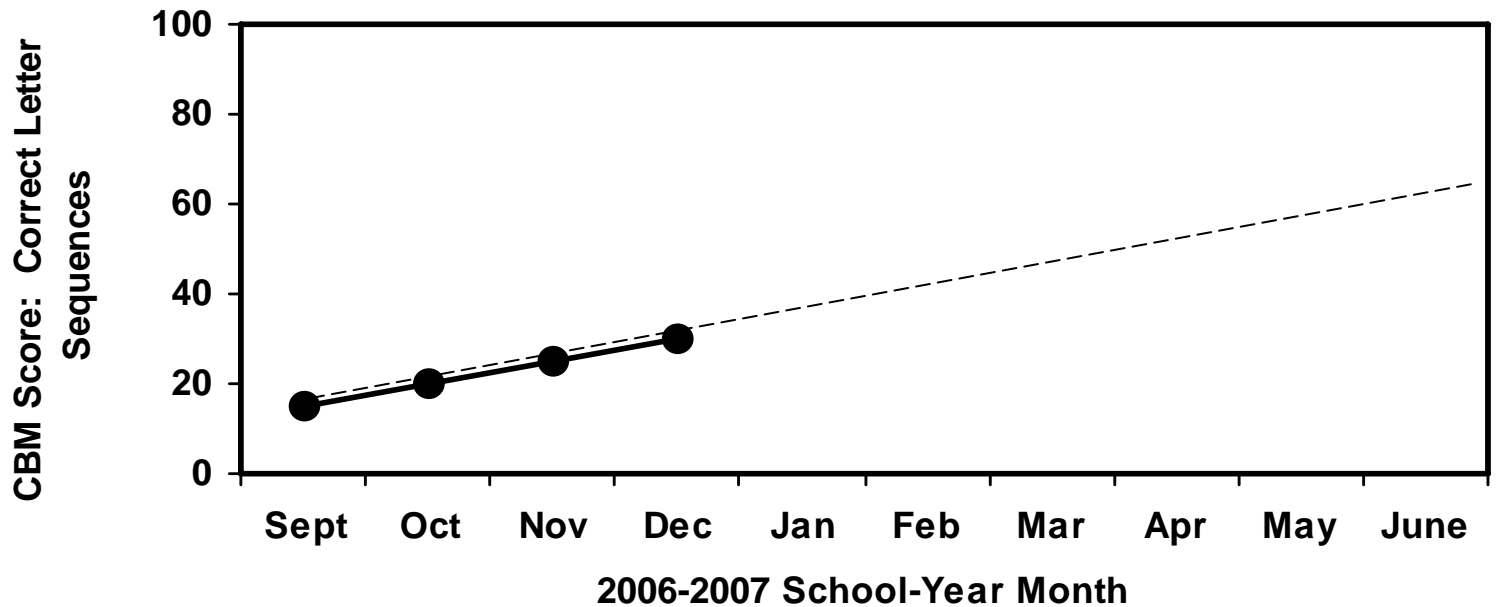
How to Use the CBM Database to Accomplish Teacher and School Accountability and for Formulating Policy Directed at Improving Student Outcomes

School's Special Education Progress



How to Use the CBM Database to Accomplish Teacher and School Accountability and for Formulating Policy Directed at Improving Student Outcomes

Individual Student Progress



How to Incorporate Decision-Making Frameworks to Enhance General Educator Planning

Instruction Plan Sheet

Teacher: Ms. Rannells

Student: Gunnar Watkins

Academic Area: Spelling

Date	Instructional Procedures			Arrangement		Time		Materials		Motivational Strategies
	Focus or Skill	Time Line	Teaching Strategies	Who	Ratio	Days per Week	Minutes	Level	Description	
11/2	a. sight word spelling	11/2 to end of school year	drill and practice: write words 10 times each	student	independent	3	5	2	sets of 10 words from spelling text - Level B	80% or better on Friday's test = 30 min free time
	b. sight word spelling	11/2 to end of school year	application: use words in sentences	student	independent	3	5	2		
	c. sight word spelling	11/2 to end of school year	drill and practice: spell each word from memory 3 times	student	independent	3	5	2		
1/10	vowel + r	1/10 to 2/15	a. introduce rule	student	individually	5	5	2	word lists first across then within categories	points during peer activities totaled for free time
	final e	1/10 to 2/15	b. guide sheet Work Sheet for practice in applying rule	student	individually	5	5			
			c. game practice	peer	1:1	5	5			
			d. drill practice - dictated word (test-like condition)	peer	1:1	5	5			

How to Use Progress Monitoring to Identify Non-Responders Within a Responsiveness-to-Intervention Framework to Identify Disability

- **Traditional Assessment**
 - Discrepancies between intelligence and achievement tests
- **Responsiveness-to-Intervention (RTI)**
 - Non-responsiveness to effective instruction
 - Special education only considered when dual discrepancy – student performs below level demonstrated by classroom peers and demonstrates learning rate substantially below classmates



How to Use Progress Monitoring to Identify Non-Responders Within a Responsiveness-to-Intervention Framework to Identify Disability

- If a lower-performing student is learning at a rate similar to other students, then no additional intervention is warranted
- If a lower-performing student is not demonstrating growth (when other students are thriving), then alternative instructional methods must be tested



How to Use Progress Monitoring to Identify Non-Responders Within a Responsiveness-to-Intervention Framework to Identify Disability

- Basics of RTI
 - Primary prevention (Tier 1)
 - Effective instruction in general education setting
 - Students suspected of being at-risk are identified using norm-referenced or CBM test
 - At-risk students assessed using progress monitoring
 - At-risk students unresponsive to research-based treatment move to small-group tutoring (Tier 2)



How to Use Progress Monitoring to Identify Non-Responders Within a Responsiveness-to-Intervention Framework to Identify Disability

■ Basics of RTI

– Secondary prevention (Tier 2)

- Responsiveness-to-treatment determined based on amount of progress realized during Tier 2
- Students responsive to Tier 2 return to general education setting
- Students unresponsive to Tier 2 considered for tertiary prevention (Tier 3)

– Tertiary prevention (Tier 3)

- Special education services



How to Use Progress Monitoring to Identify Non-Responders Within a Responsiveness-to-Intervention Framework to Identify Disability

- CBM is a promising tool for identifying treatment responsiveness
 - CBM models student growth
 - CBM evaluates treatment effects
 - CBM informs instructional programming



Case Study #1: Black Lake Elementary

- CBM used to monitor AYP
- 400 students in school
 - 2002-2003: 120 students met benchmarks
 - 2003-2004: 145 students met benchmarks
 - 2004-2005: 170 students met benchmarks
 - 2005-2006: 190 students met benchmarks
- $400 - 190 = 210$ (210 is discrepancy between 2005-2006 proficiency and universal proficiency)



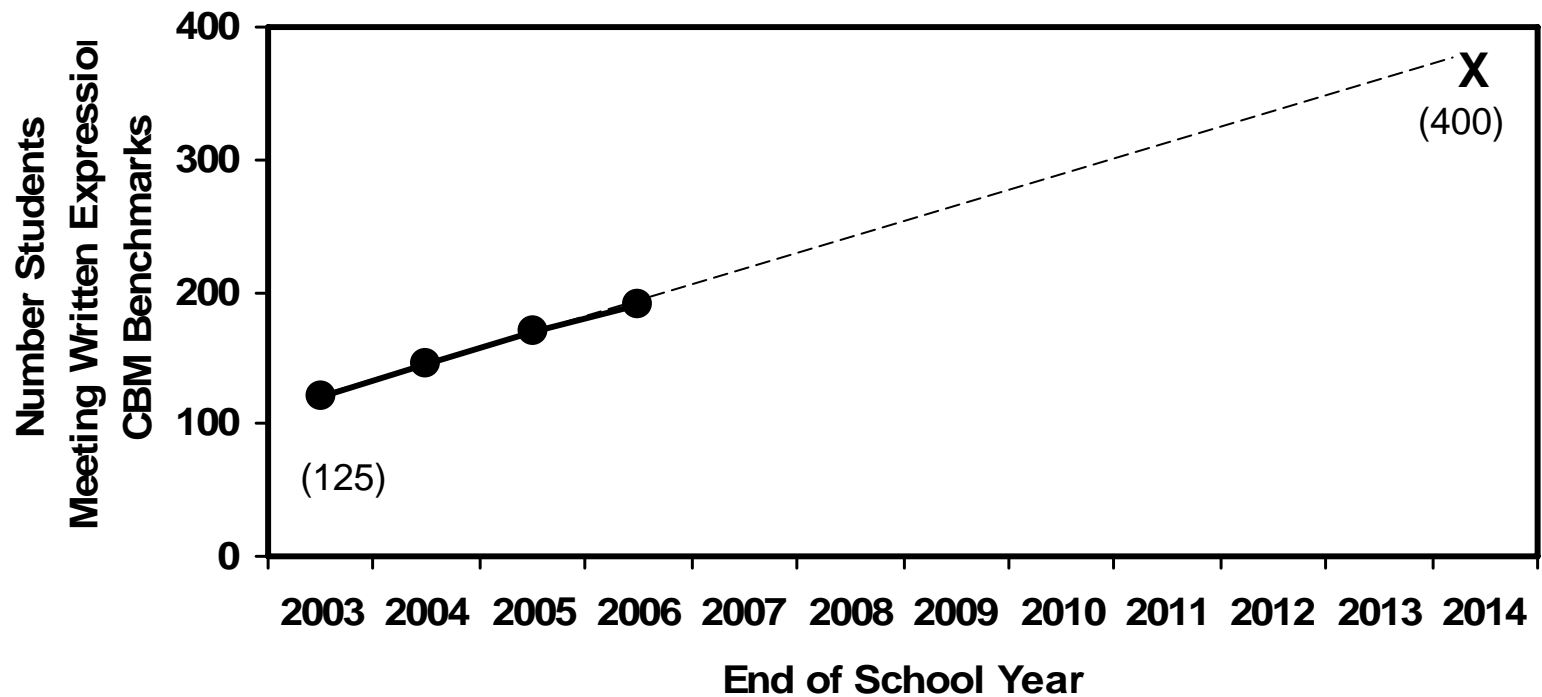
Case Study #1: Black Lake Elementary

- To determine number of students who must meet benchmarks each year, divide the discrepancy by the number of years until 2013-2014 deadline: $210 \div 8 = 26.25$
- Approximately 26 students need to meet CBM benchmarks each year in order for school to demonstrate AYP



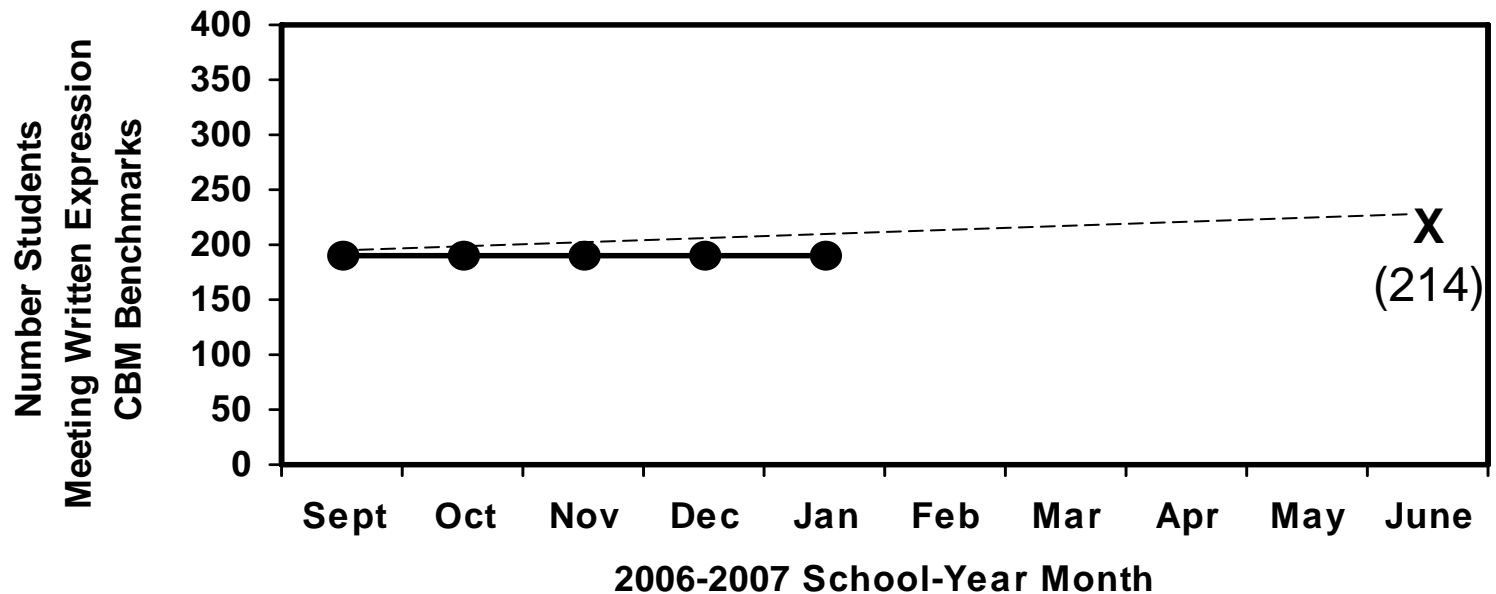
Case Study #1: Black Lake Elementary

All School Performance



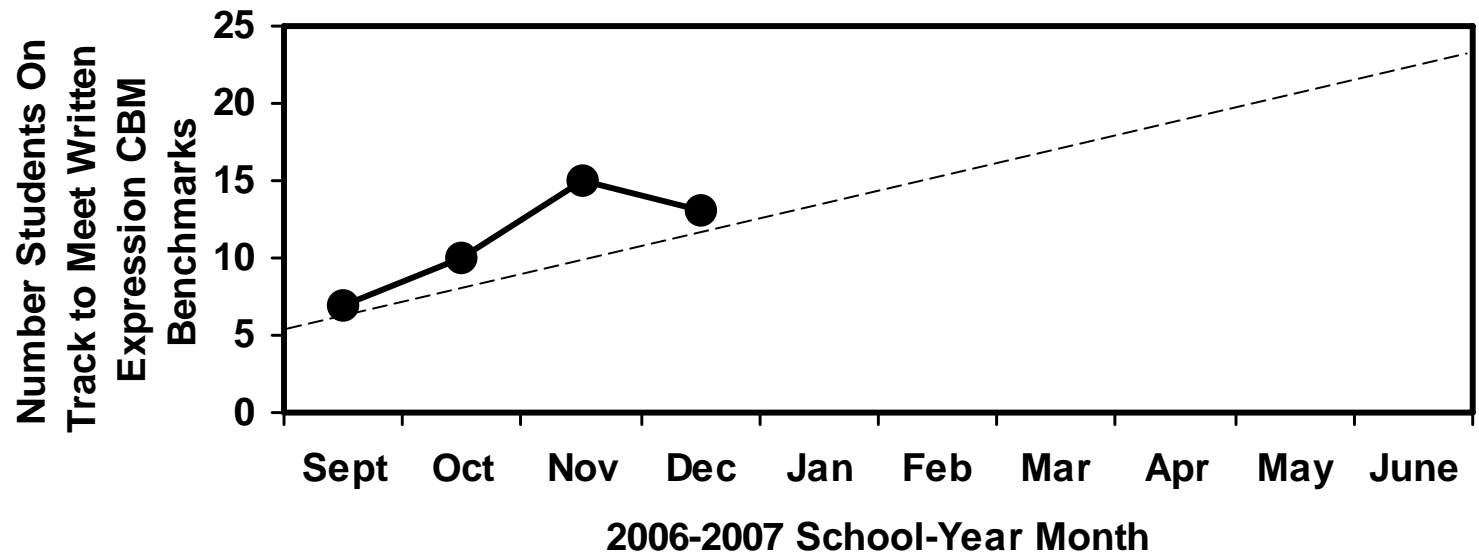
Case Study #1: Black Lake Elementary

All School Performance



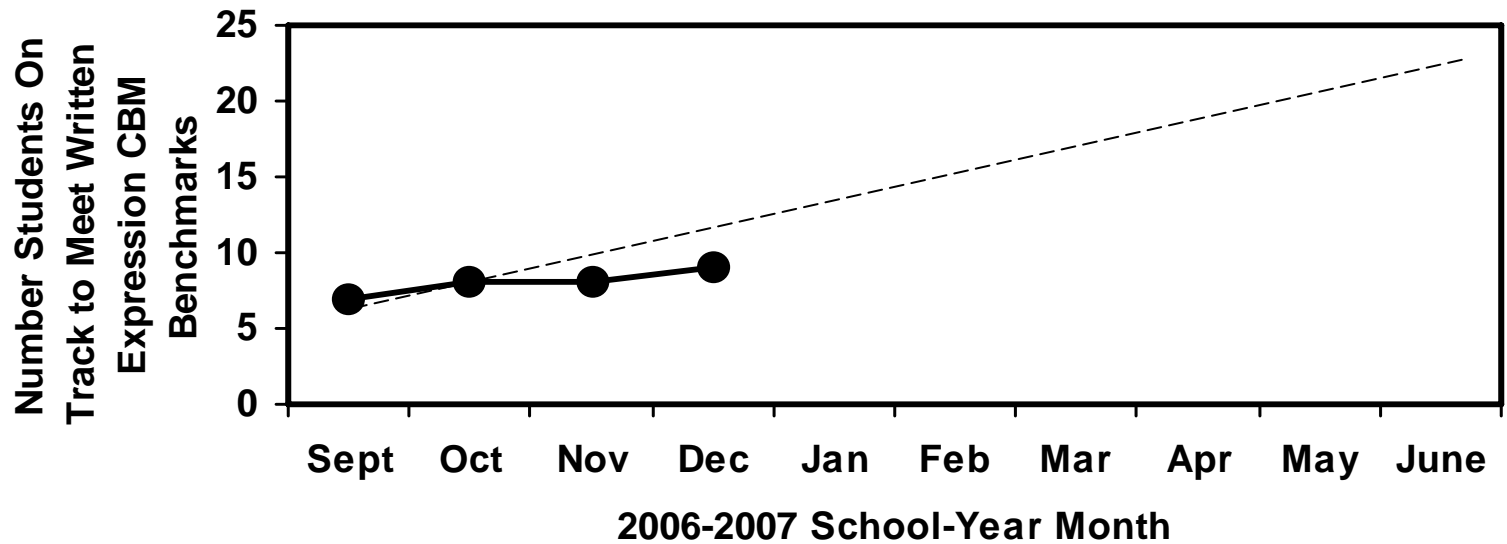
Case Study #1: Black Lake Elementary

Mrs. Ansari's Class



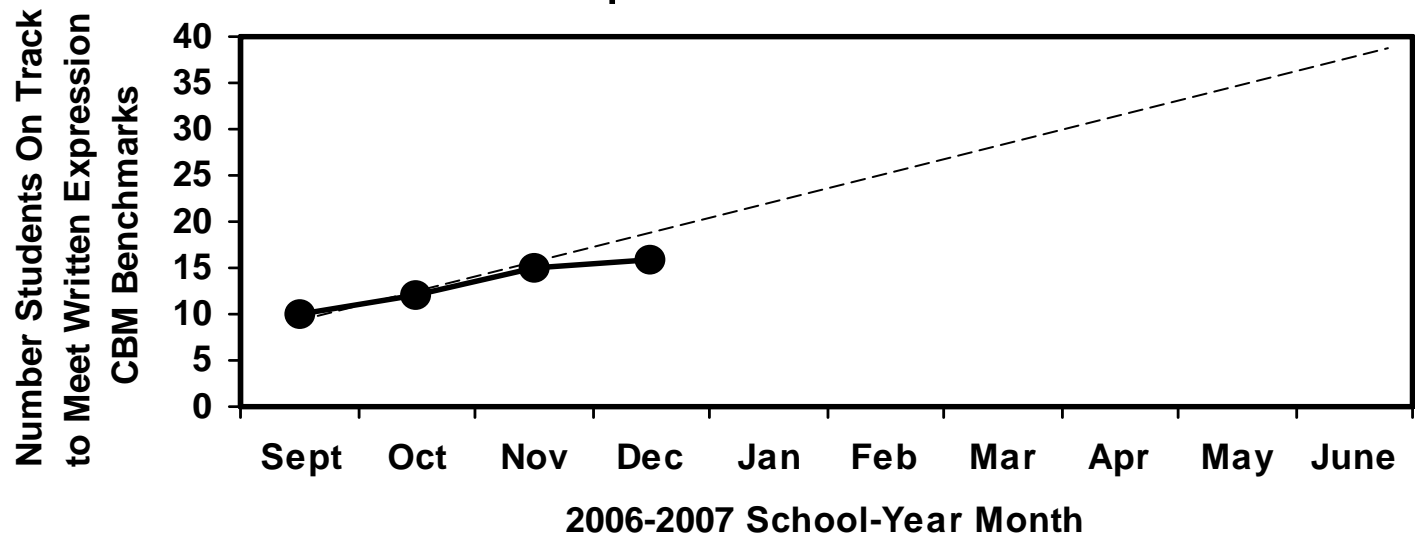
Case Study #1: Black Lake Elementary

Mr. Bloom's Class



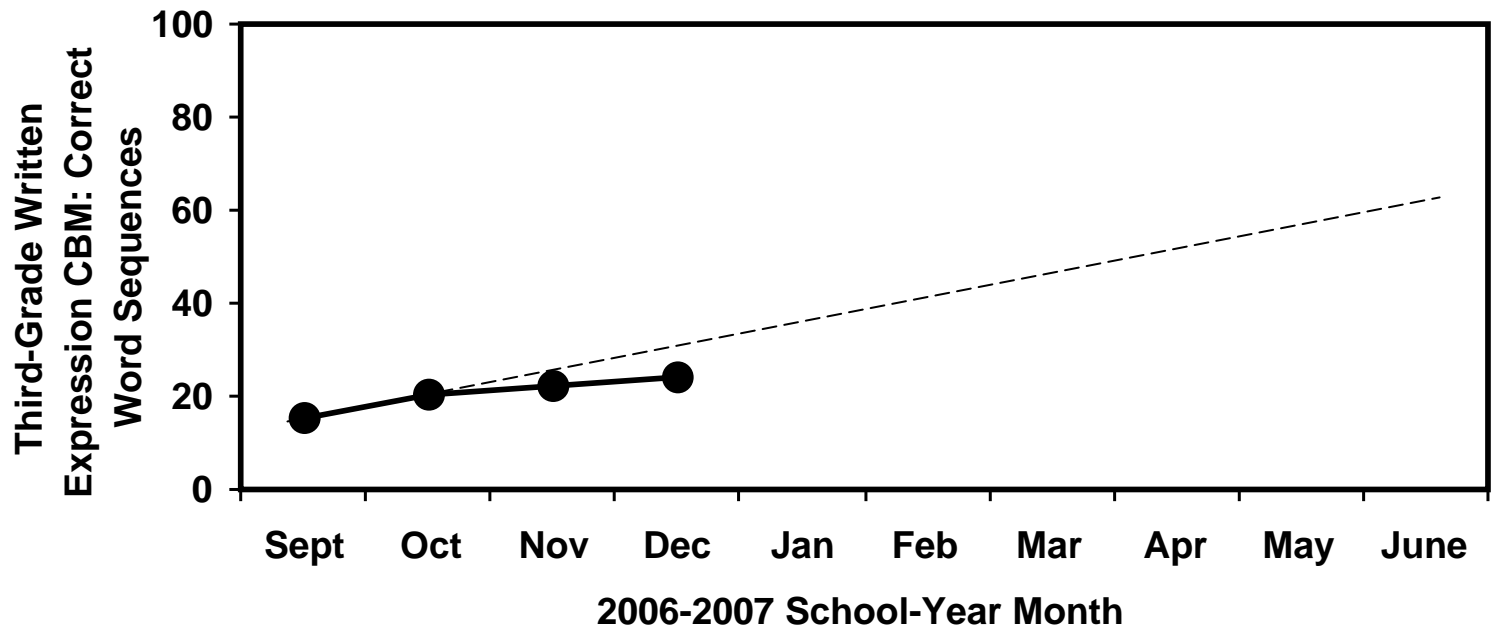
Case Study #1: Black Lake Elementary

School's Special Education Students

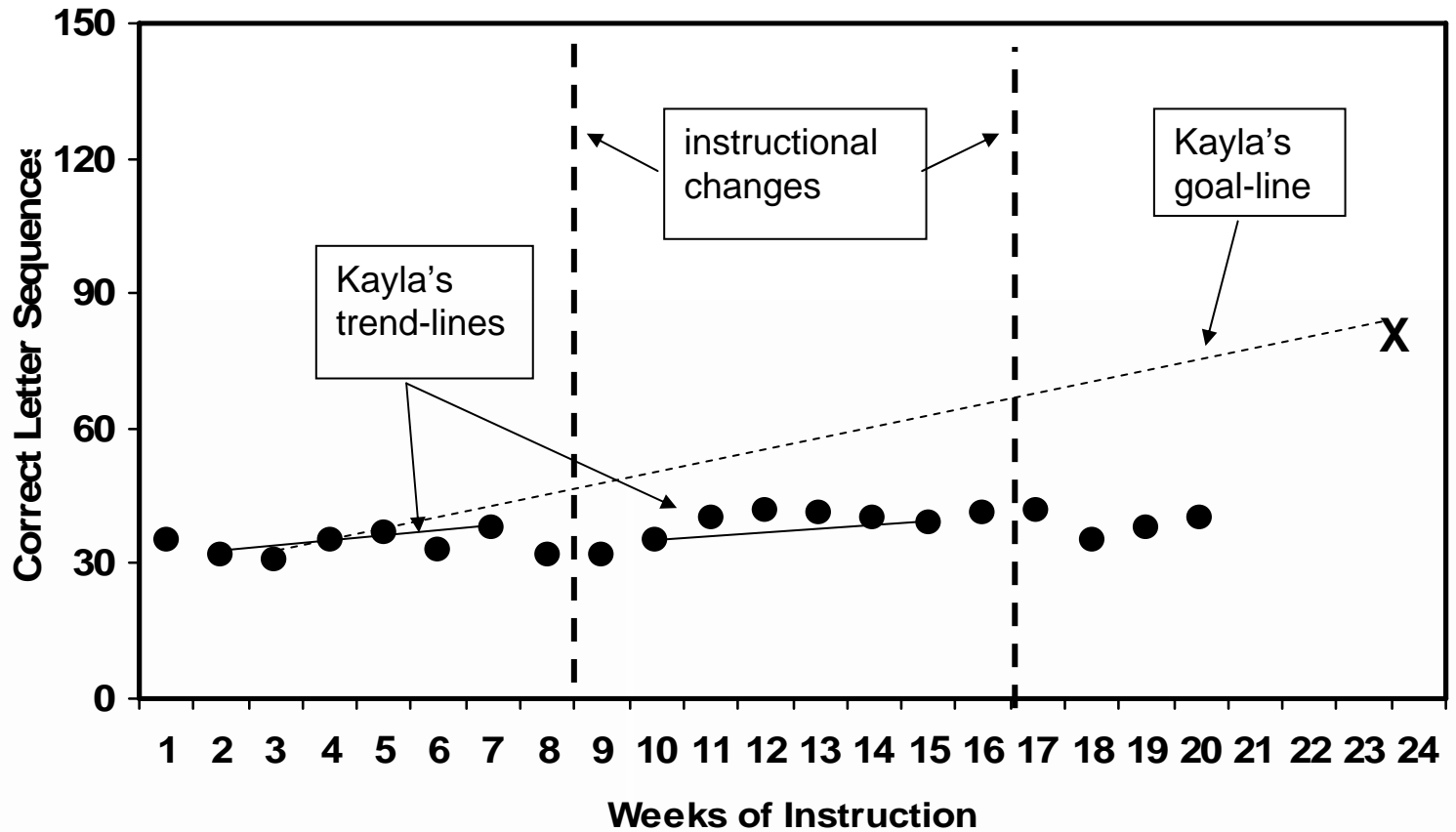


Case Study #1: Black Lake Elementary

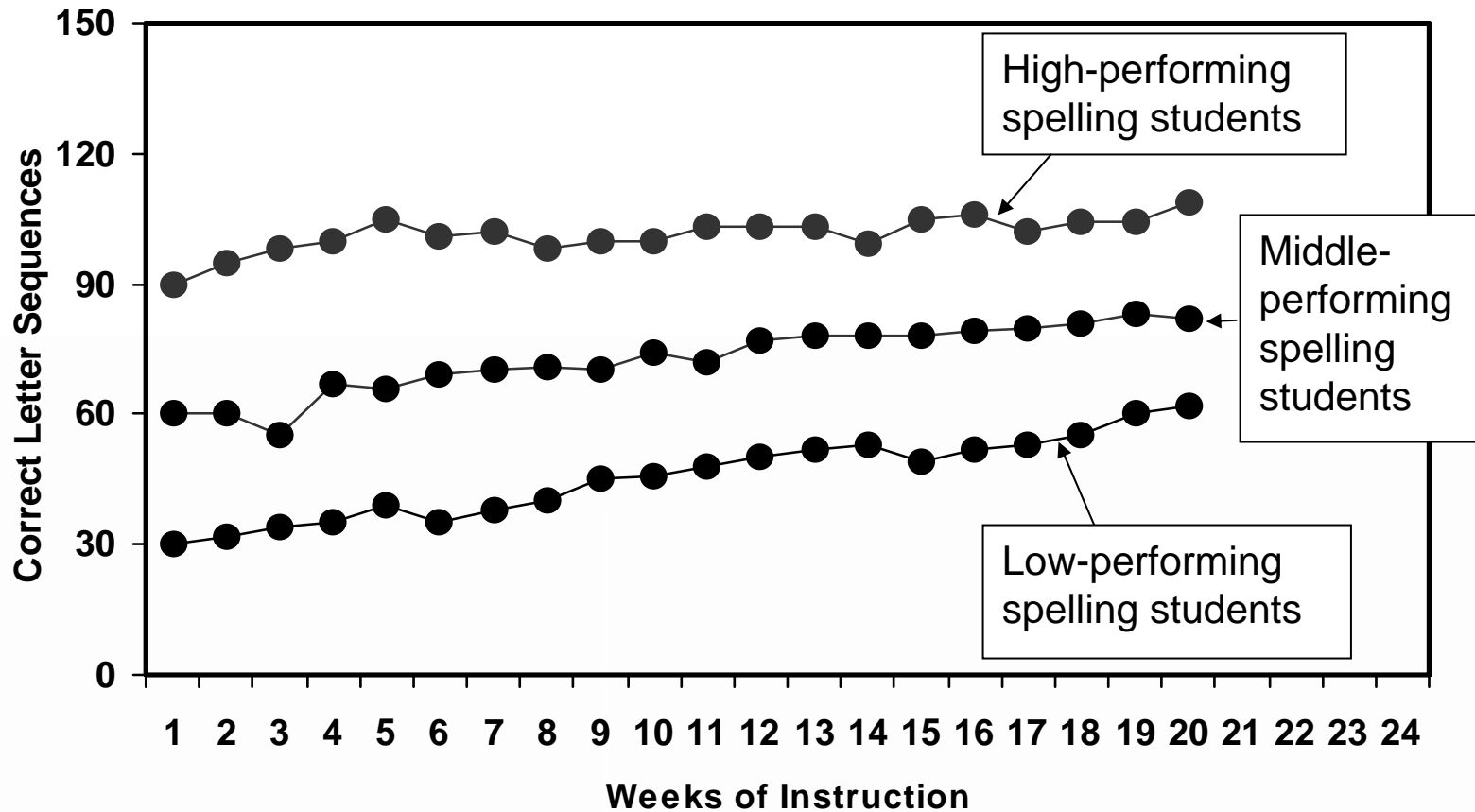
Individual Student Progress: Ashton



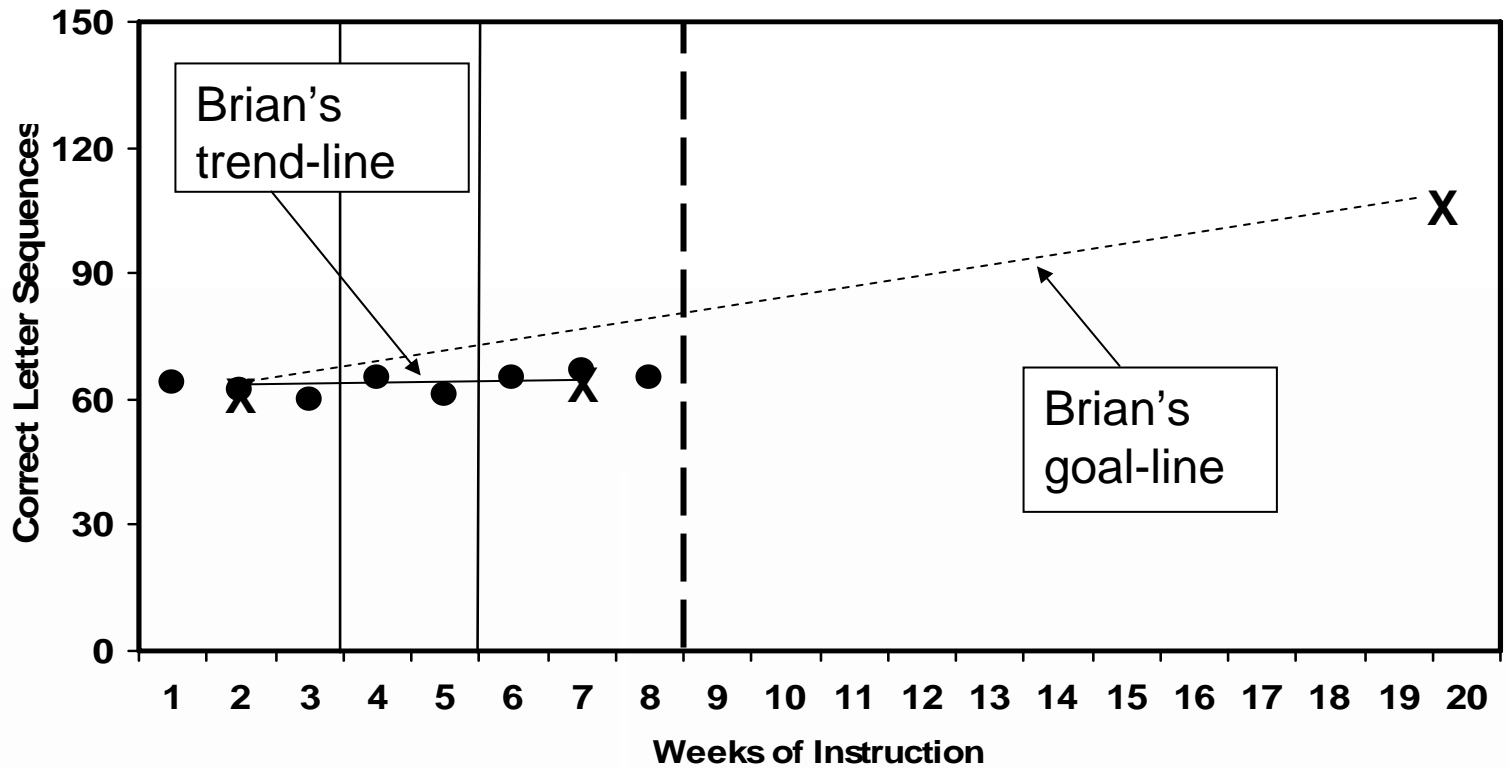
Case Study #2: Kayla



Case Study #2: Kayla



Case Study #3: Brian



Case Study #3: Brian

Name: Brian	Date: November 8	LS
1. ^a^l a n	(along)	2
2. ^g^o s	(goose)	2
3. ^s^e^a c	(search)	3
4. ^b^e^n^t^	(bent)	5
5. k i k^	(quick)	1
6. ^s^t^o^p d^	(stopped)	5
7. ^t r^o n^	(thrown)	3
8. ^v^i^s a t n	(visiting)	3
9. ^y u^r^s^e f^	(yourself)	5
10. ^e^ng o i	(enjoy)	2
11. ^c^h a r e	(cherry)	2
12. ^r^o^l	(role)	3
13. ^e r^l e	(early)	2
14. ^m^i^l c n	(milking)	3
15. ^s^t^a t^	(start)	4
16. ^m^o^p t	(mopped)	3
17. ^n^u^m^b r^	(number)	5
18. g^r^e	(agree)	2
19. ^f o w t^	(fault)	2
20. ^g^r^e t^	(greet)	4



CBM Resources

- Appendix A of materials packet
- Appendix A in manual

