5 Simple Steps for Progress Monitoring in Early Childhood Programs

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hatch
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Challenges?

"There is so much **focus on documentation** these days. Many early-learner classroom teachers in ECE **feel overwhelmed**. I think much of this feeling stems from **lack or improper training** in **using tools** put in place to gauge progress or areas of support for both teachers and their students. With all of the new research **how can we ensure** the classroom teacher is effectively equipped to take the new challenges?"

—*Pamela Courtney commenting on Early Childhood Technology Network LinkedIn Group….*

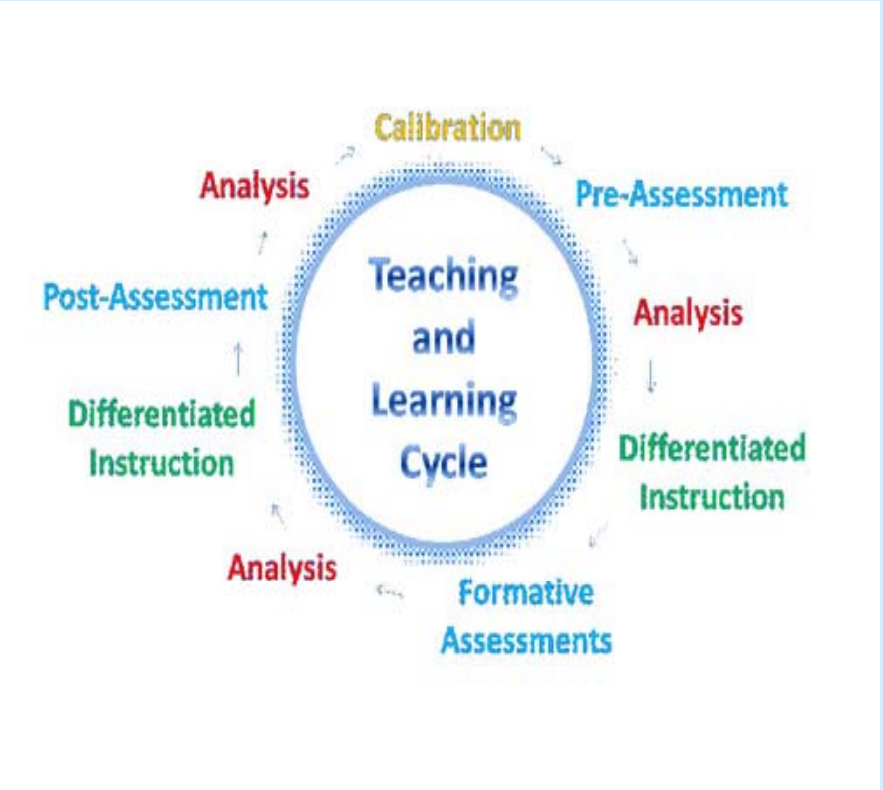
Designing & Following a Roadmap

If you don't know where you're going, any road will get you there.

----Lewis Carroll

What is Progress Monitoring?

- Scientifically-based practice for assessing children's performance and evaluating the effectiveness of instruction
  - **Cyclical**
  - **Targeted**
  - **Standardized**
  - **Individualized**



*Shares components with Response to Intervention (RTI) Models and Curriculum-Based Measurement (CBM) but is NOT diagnosis or determination of classification as special needs/ELL, etc.

What are the benefits of PM?

- The children learn more, the decision making of the teacher improves, and children become more aware and reflective of their own performance…
- When progress monitoring is well implemented the benefits seen can include:
  - Appropriate child **expectations**
  - Accelerated child **learning**
  - **Documentation** of child progress
  - More efficient **communication** with others

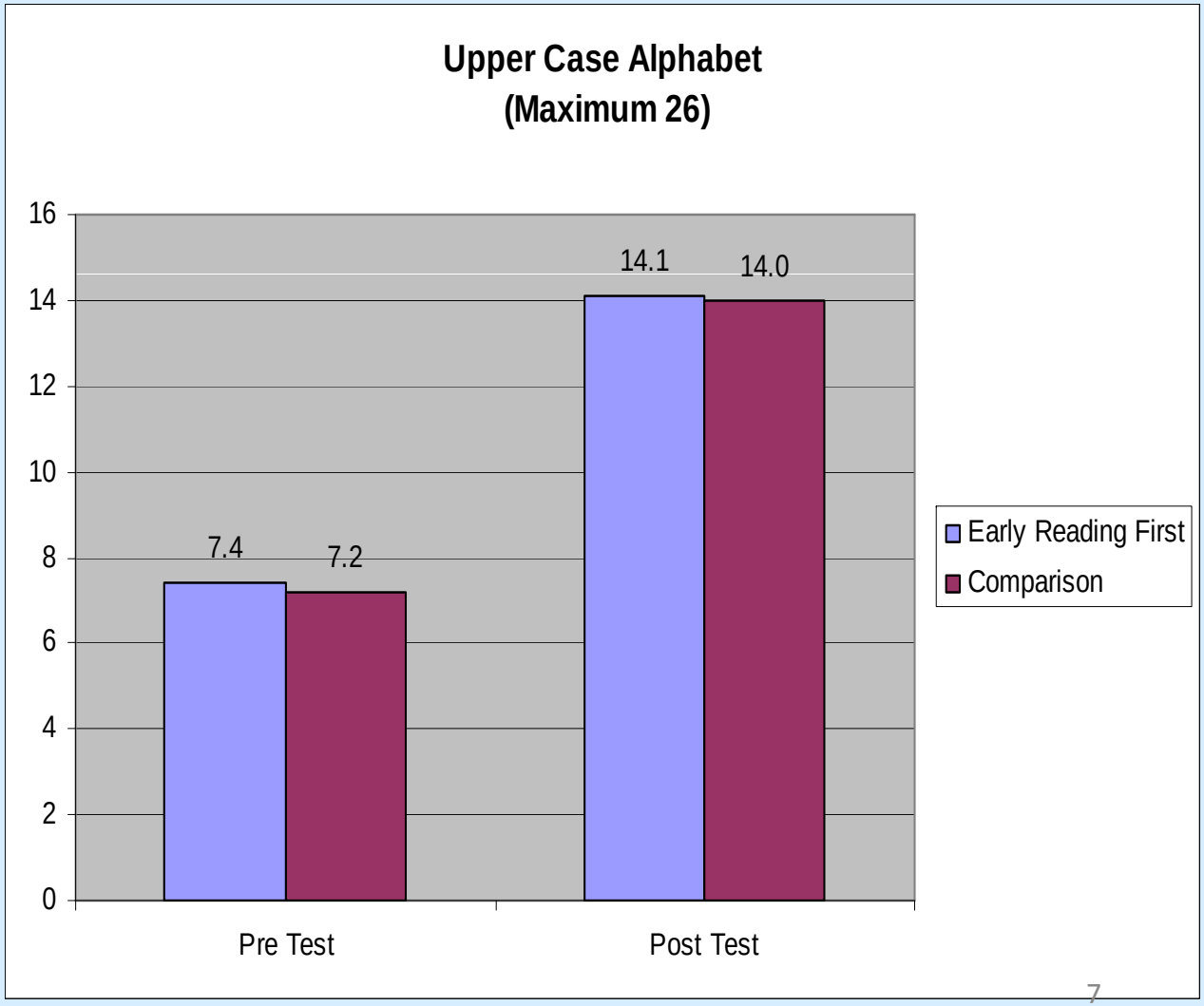
How do we know it works?

- Significantly better on **decoding, fluency, and comprehension** (Fuchs, Deno & Mirkin 1984)
- Significant change in **contextual conventions and contextual language** (McMaster, Wayman, Deno, Espin & Yeo 2010)
- Significant improvement for **quantity discrimination and mixed numeracy** (Olson & Foegen 2009)
- Average gain of 5.75 normal curve equivalent units on **math** assessment-six times the rate of growth over prior school year (Spicuzza & Ysseldyke 1999)

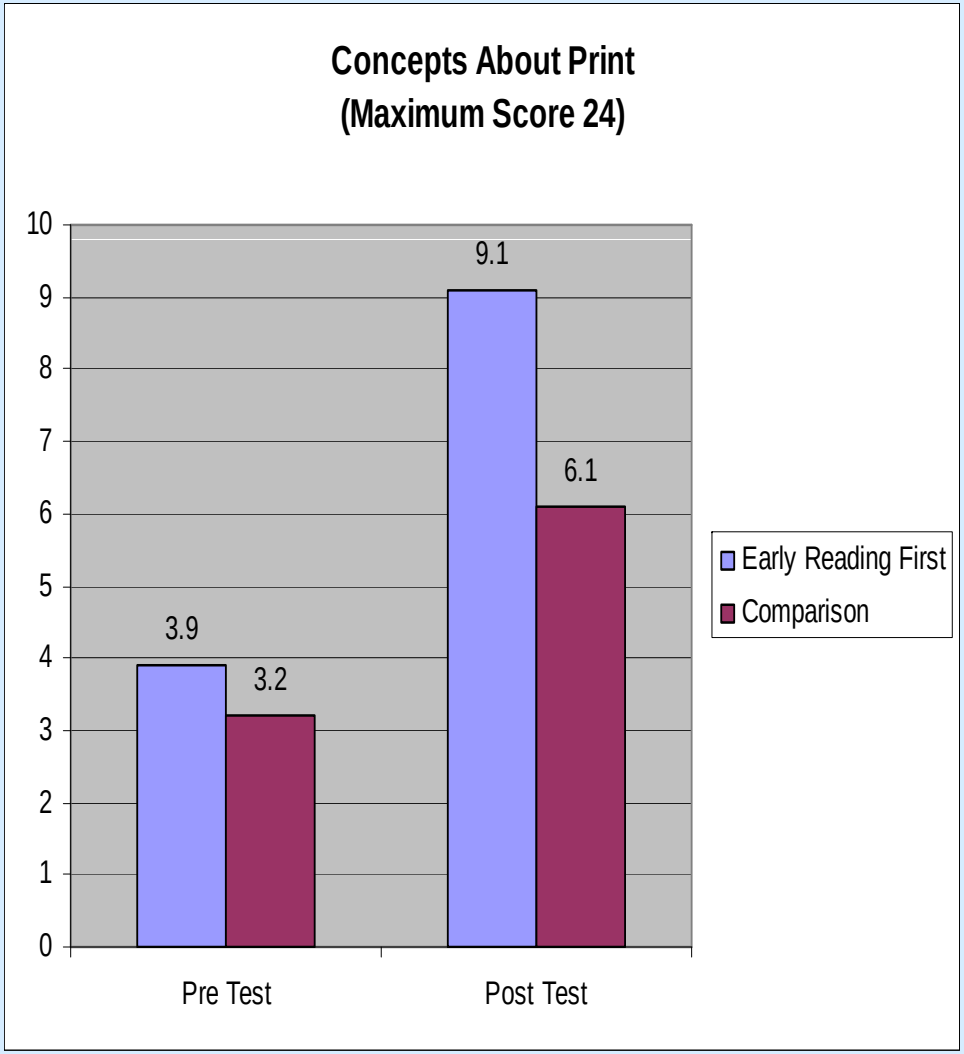
Before Progress Monitoring: The Need

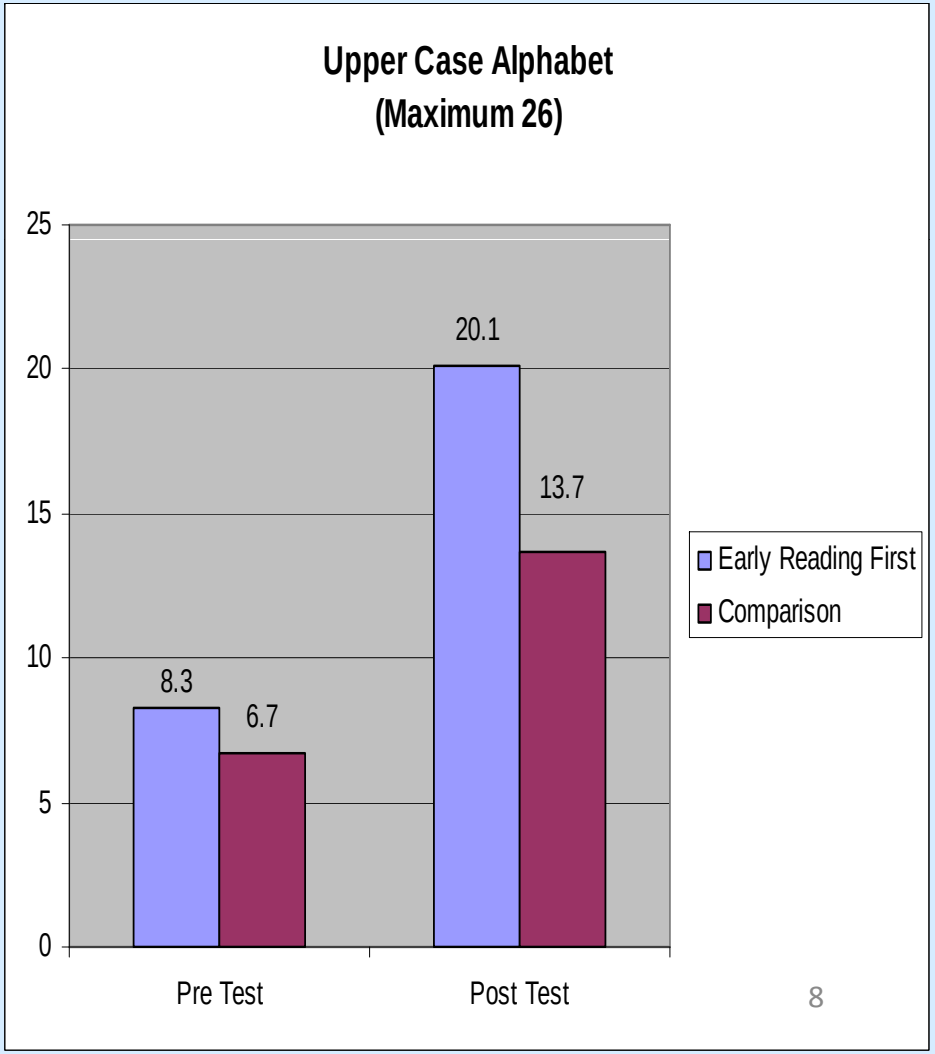
- Matched
- No significant differences

The University of Oklahoma, Sooner T.A.L.K. (Teachers Advocating Literacy to Kids), 2002 Early Reading First Cohort



After Progress Monitoring: The Gains





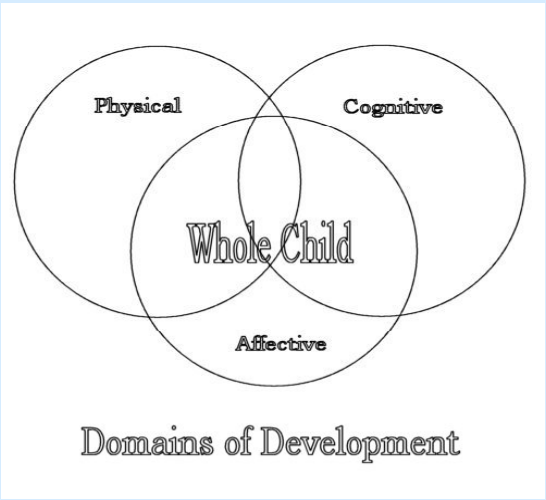
Characteristics of Progress Monitoring

- Based on curriculum or standards
- Highly sensitive to student growth
- Time efficient
- Cost effective

- Produces results that are easy to understand

What Skills/Behaviors?

- Any domain is appropriate
  - Physical
  - Cognitive/Academic
  - Social-Emotional



- Any skill/behavior child needs to increase or decrease to be successful
- Success determined by a variety of sources
  - programs, teachers, parents

Which Children?

- Does not have to be every
  - Child
  - Domain
  - Skill/behavior
- Concentrate on:
  - Children with the most need
  - Domains and skills/behaviors most essential
- Teachers will need support
  - Materials
  - Training
  - Volunteers
  - Time

What tools do I need?

- Something like **Microsoft Office**
  - Word
  - Excel
  - Picture Manager
  - PowerPoint
  - Outlook
- Also useful
  - Digital camera
  - Video recorder
  - Scanner

What are the steps in the PM Cycle?

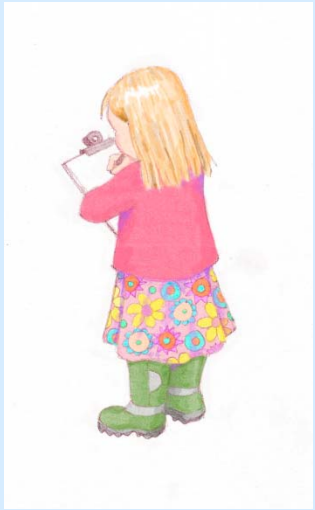
1. **Current** levels of performance determined.
2. **Goals** identified for learning that will take place over time
3. Performance **measured** on a **regular** basis
4. Progress toward meeting the goals measured by **comparing** expected and actual rates of learning
5. Instruction is **adjusted**

1. Ways to Assess Current Learning

- Presence or absence
- Number of times shown
- Number of correct/incorrect responses
- Degree to which shown
- Number of times to correct response
- Amount of assistance needed

✓ Teacher collected

✓ Computer collected



ACE3 CBM SCORE SHEET – UNIT 3 (TABBY TIGER'S DINER) / WEEK 1

Child's Name _____ School _____

Date of Test _____ Examiner _____

Purpose: Track how well the child is learning the vocabulary words and letters you are teaching using DOORS.
Directions: Read the script in the box below. Enter the scores on the left side column.

Song Poster "*I VOTE FOR VEGETABLES*"

L l ____ **F f** ____

correct ____

Tabby Tiger's Treat (Small version)
Page 2-3

Menu ____ Apron ____

Cook ____ Fork ____

Plate ____ Cup ____

correct ____

Tabby Tiger's Treat (Small version)
Page 14-15

Spoon ____ Bone ____

Napkin ____ Sandwich ____

Bread ____ Knife ____

correct ____

Comments:

_____

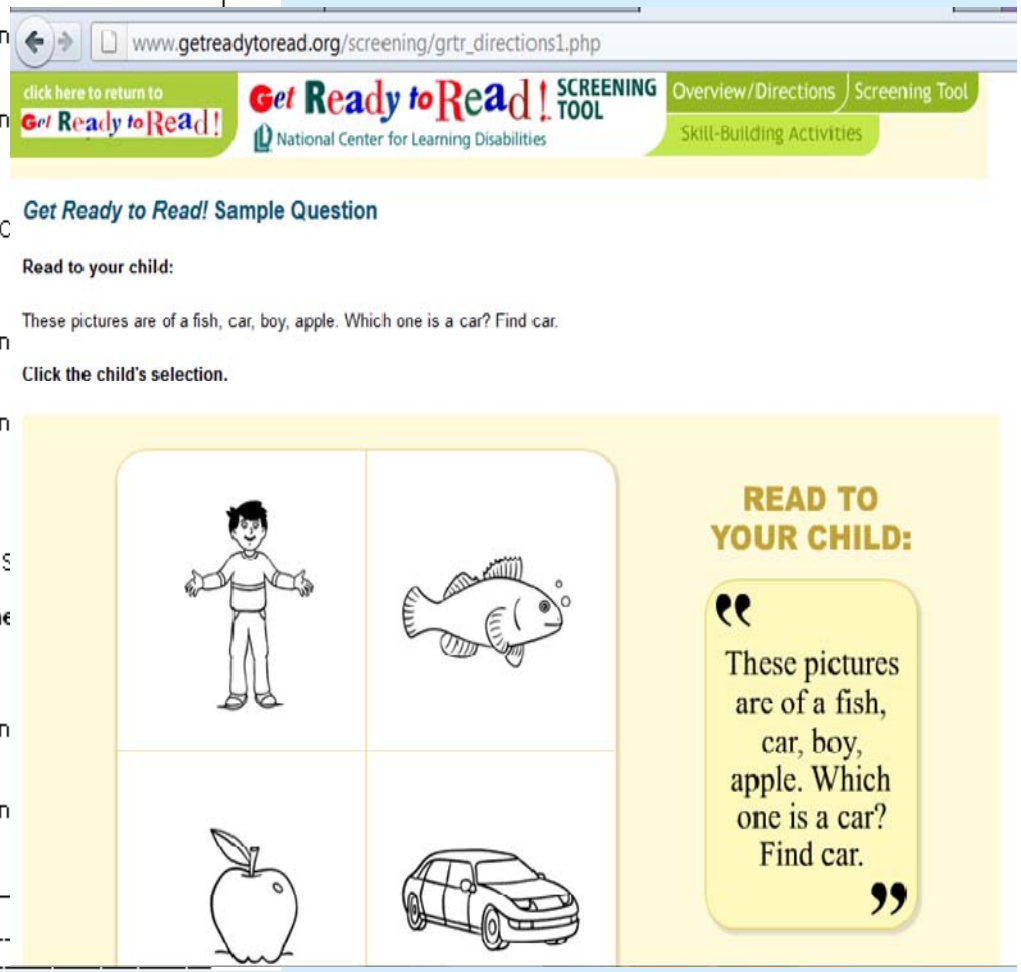
_____

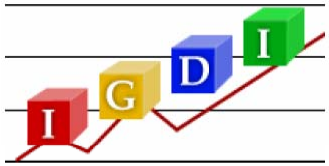
_____

LETTER IDENTIFICATION:
OPEN PAGE 2-3 IN THE SMALL VERSION OF TABBY TIGER'S TREAT
*Say, **"We are going to look through this song poster. Show me the letter L l"**
Say, **"Show me the letter F f"**
SCORE:
1 Point = correct answer or self-correction approximately 3 seconds.
0 Point = incorrect answer.
NA (No Answer) = Asked twice and no an end of three seconds.

SHOW ME (Identification):
OPEN PAGE 2-3 IN THE SMALL VERSIC TIGER'S TREAT
Say, **"Show me** (picture's name)"
SCORE:
1 Point = correct answer or self-correction approximately 3 seconds.
0 Point = incorrect answer.
NA (No Answer) = Asked twice and no an three seconds.

TELL ME (Production):
OPEN PAGE 14-15 IN THE SMALL VERS TABBY TIGER'S TREAT.
*Say, **"We are going to look through the name of the picture I point to"**
*Point to each picture.
SCORE:
1 Point = correct answer or self-correction approximately 3 seconds.
0 Point = incorrect answer.
NA (No Answer) = Asked twice and no an three seconds.





Early Movement Indicator (EMI)

Child Name or #:_____ Assessment Date_____ (MM/DD/YYYY)

Assessment Duration:___ ___
Min Sec

Form: Pop-up or Blocks & Balls Condition Change (see list below):_____

Primary Coder:_____ Assessor:_____

Location (Circle One): Home Center Other (explain in Notes)

Language of Administration: _____

If Reliability, Reliability Coder's Name: _____

Notes: _____

	Transitional Movements	Grounded Locomotion	Vertical Locomotion	Throwing/ Rolling	Catching/ Trapping
Begin 0:00 Sec.	T	GL	VL	TR	CT
1:00 Sec.	T	GL	VL	T	
2:00 Sec.	T	GL	VL	T	

Condition List

ABA/TEACH
Child Psychiatrist
Interpreter

Early Social Indicator (ESI)

Child Name or #:_____ Test Date_____ (MM/DD/YYYY)

Test Duration:___ ___
Min Sec

Form: School House or Tub of Toys Condition Change :_____

Primary Coder:_____ Assessor:_____

Location (Circle One): Home Center Other (explain in Notes)

Language of Administration: _____

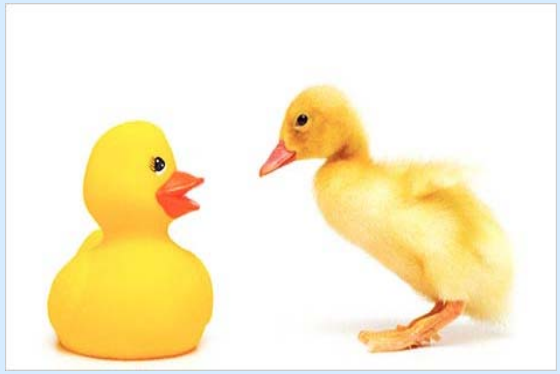
If Reliability, Reliability Coder's Name: _____

Notes: _____

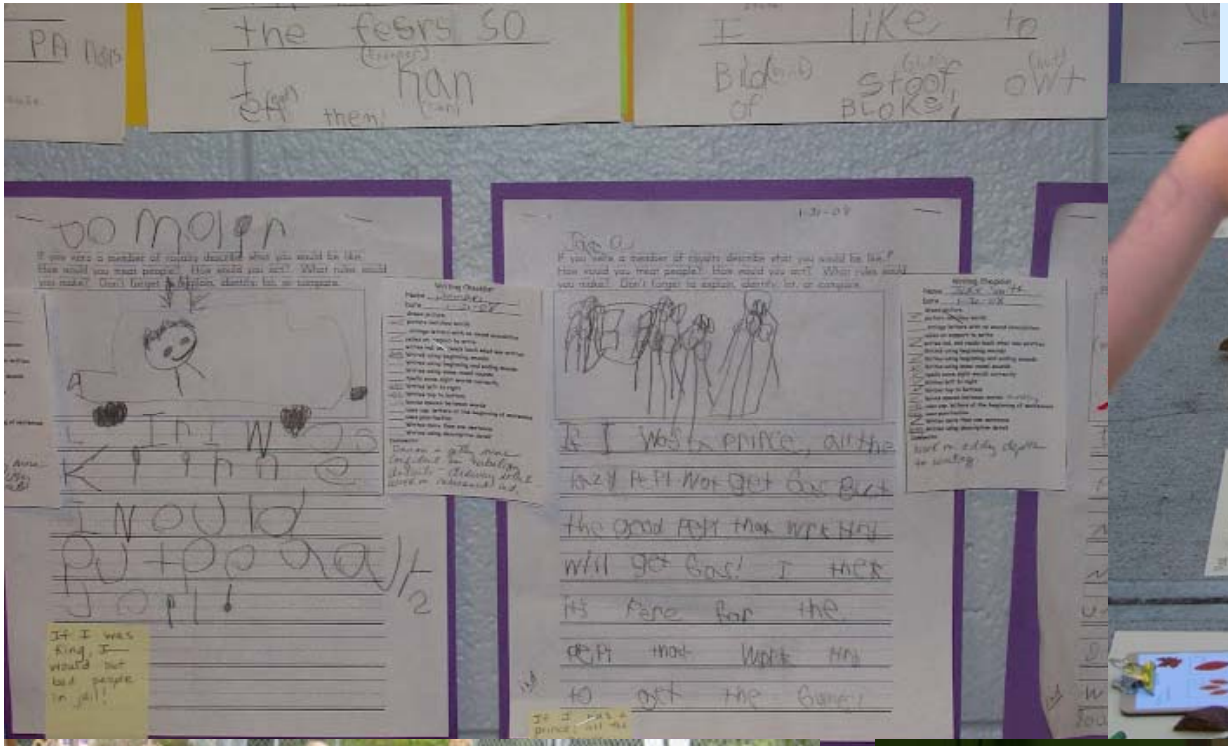
	Positive Behaviors						Negative Behaviors
	Adult		Peer		Non-Directed		
	Verbal	Non-Verbal	Verbal	Non-Verbal	Verbal	Non-Verbal	
Begin 0:00 Sec.	A_V	A_{NV}	P_V	P_{NV}	ND_V	ND_{NV}	N
1:00 Sec.	A_V	A_{NV}	P_V	P_{NV}	ND_V	ND_{NV}	N

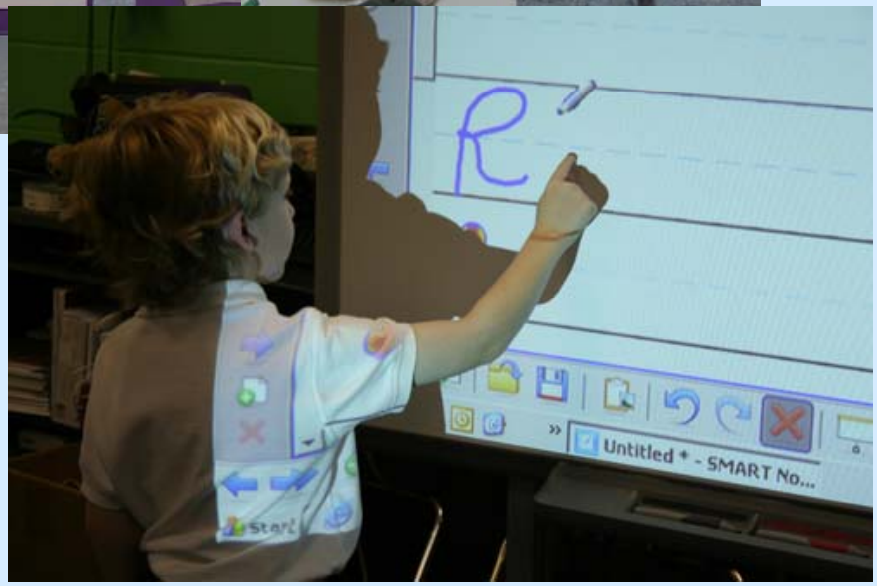
The Context

- In addition, collect some pieces that demonstrate/illustrate the skills/behaviors:
  - Work samples
  - Photographs/Video/Audio
  - Observation notes



- Do this at the beginning, a time or two in the process, and at the end.
- Makes it more authentic, personal, realistic…and aids communication w/ others.


If I was king, I would put bad people in jail!
If I was a prince, all the lazy people would get Gas But the good people that work hard will get Gas! I thank its fare for the people that work hard to get the Gas!

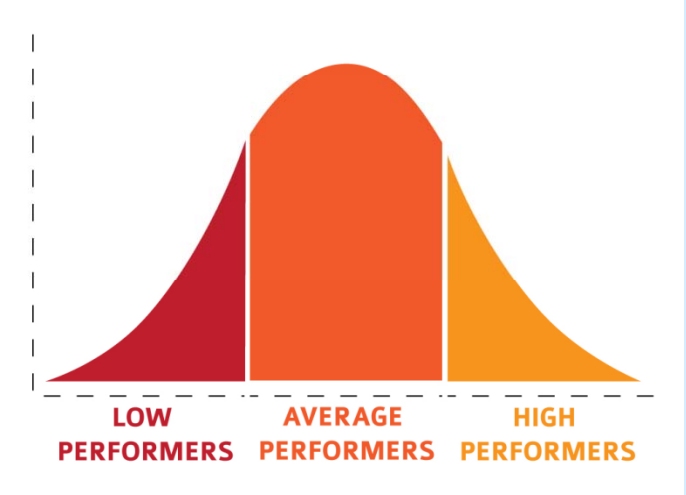

Untitled * - SMART No...

2. **Goals** identified for learning that will take place over time

- Amenable to change/intervention
- Specific
- Discrete
- Measurable
- Attainable (adjustable)

Reference Points for Setting Goals

- "External" expectations
- The children in a program*
- The children in a classroom*
- The individual child



* Program/classroom norming-determining 'typical' performance

Examples……..

- Jane will learn to read.
- Jane will be able to identify by naming half the lowercase letters of the alphabet on individual cards by December 15.

****

- Sam won't bother others.
- Sam will reduce to less than 3 times per day touching other children's belongings/toys by November 1.

3. Performance Measured Regularly

- Depends on goal
  - More fine grained more often needs to be measured
- Depends on time teacher can devote
  - Too often = burdensome = less likely to happen
- But once at beginning and once at end **not** progress monitoring, which is
  - Usually weekly, bi-weekly, monthly

Instruction/Intervention

- Not business-as-usual…..
  - Additional
  - More targeted
  - Different presentation
- Depending on skill level needed, may be delivered by:
  - Teacher
  - Volunteer
  - Tutor
  - Parent
  - Specialist

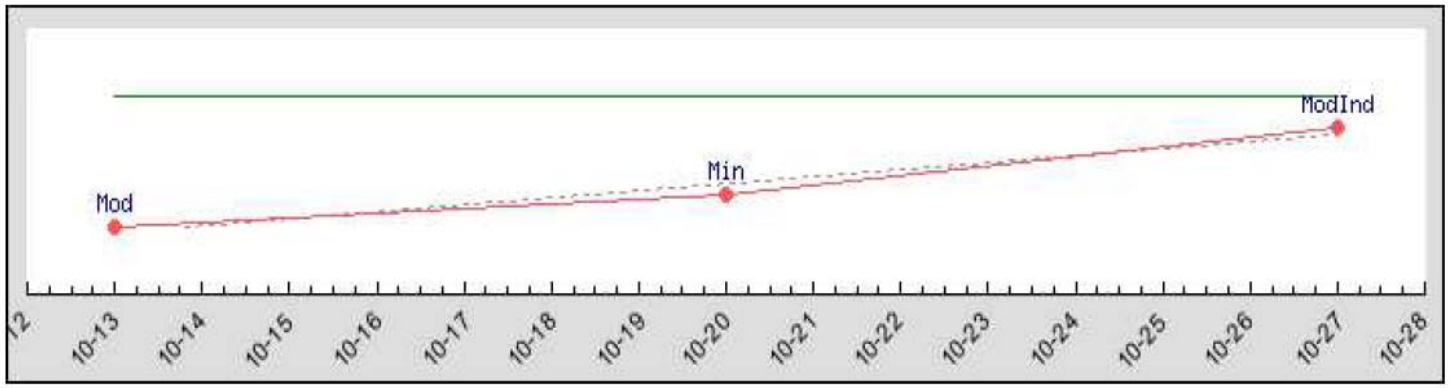
4. Comparing Actual with Expected

- “Aimline” connects the baseline performance to the learning goal.
- Visual reminder of how rapidly individual child is expected to increase.
- Allows teacher to continually compare child’s projected and actual rates of progress.
- So that instruction can be adjusted.

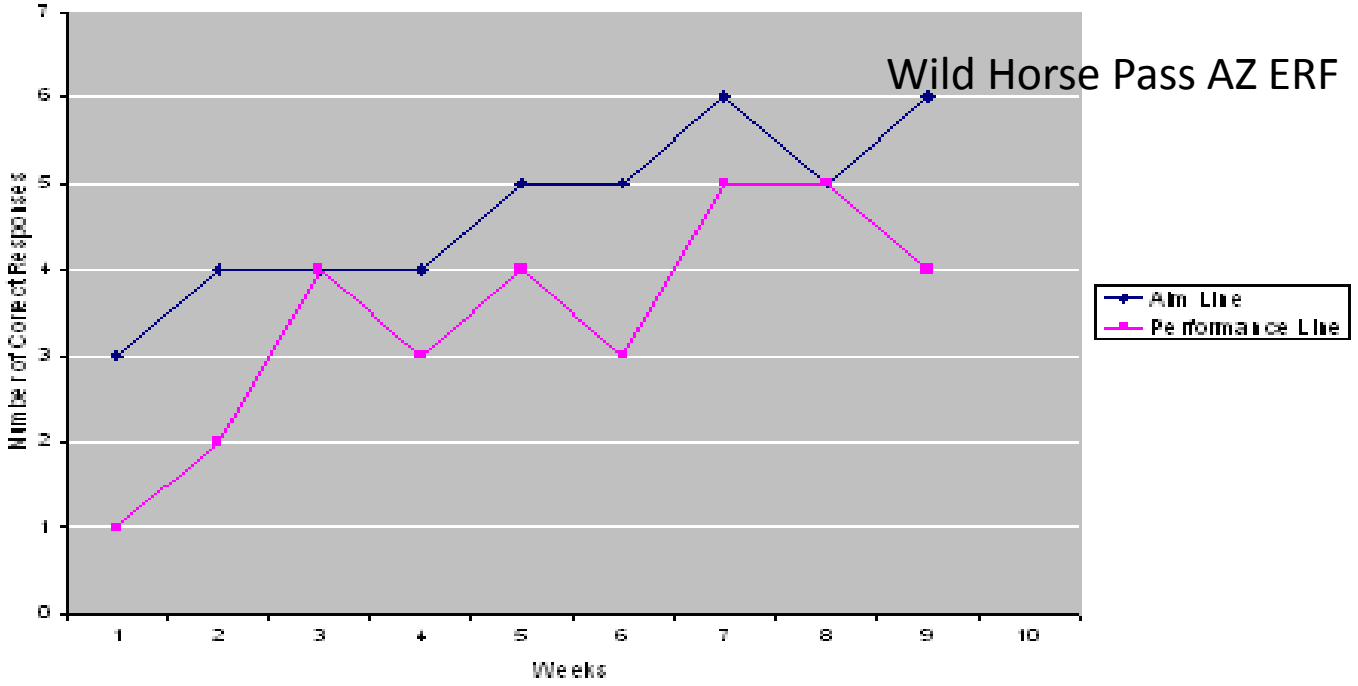
Identify Common Objects

- identify a set of common objects with no assistance - mastery will occur when the data reaches a level of at least 'Independent' on 3 consecutive days.

	10-13-09	10-20-09	10-27-09						
#1	Mod	Min	ModInd						



Wild Horse Pass AZ ERF

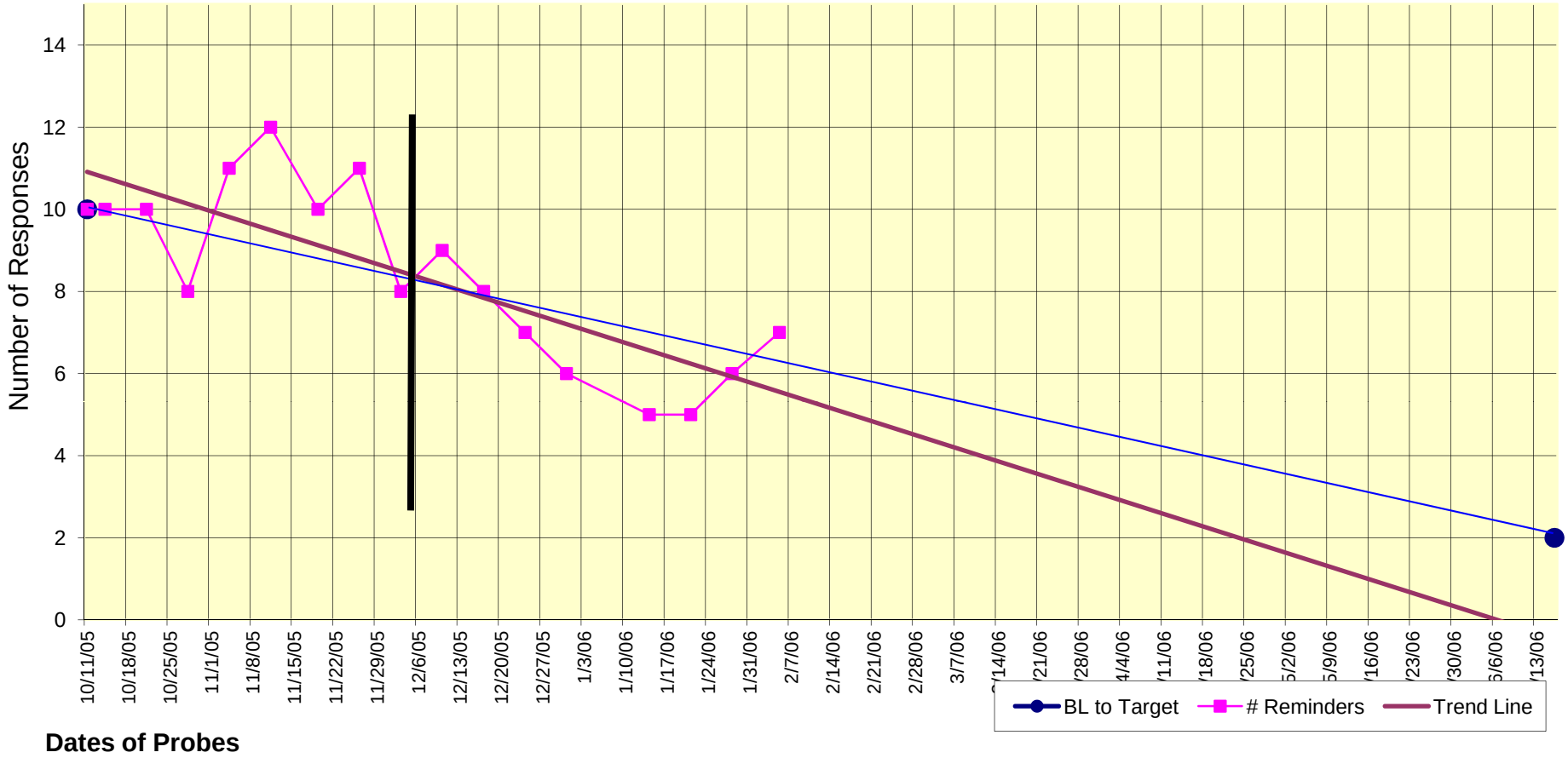


Reduce # of Reminders

Goal: During 15 minute weekly independent math assignments Josh will reduce

Josh David
7
Jan Wright

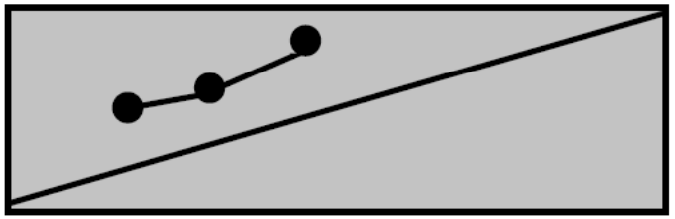
Overbrook MS
Math



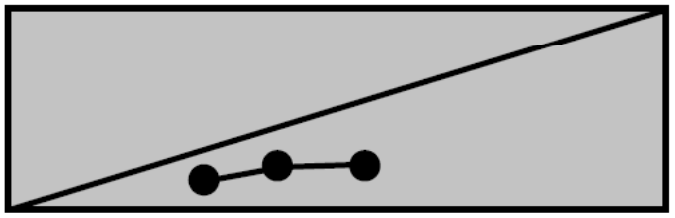
Dates of Probes

5. Adjusting Instruction

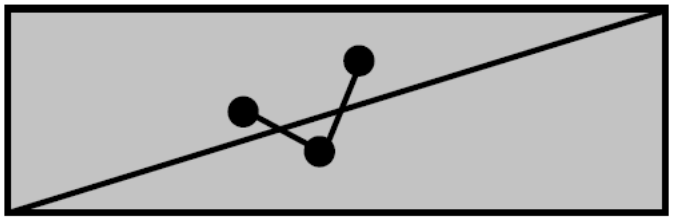
Fig. 3.9: Applying the 3 data-point decision-rule



If 3 successive data points lie above the aimline, the instructor adjusts the aimline upward.



If 3 successive data points lie below the aimline, the instructor changes the instructional intervention to boost learning.



If 3 successive data points lie around the aimline, the instructor makes no changes.

J. Wright

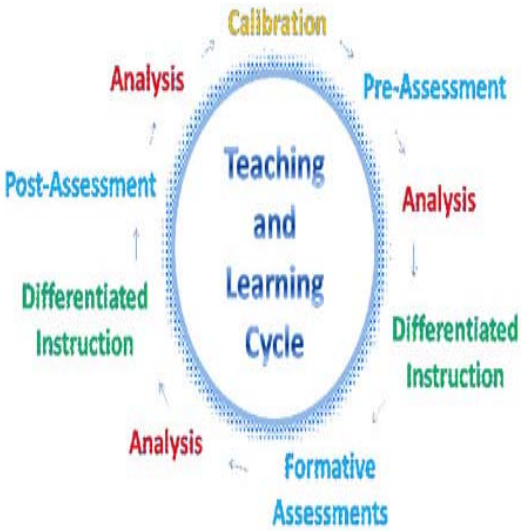


Figure 3.14: Applying the 3 data-point decision rule to Alyssa's chart

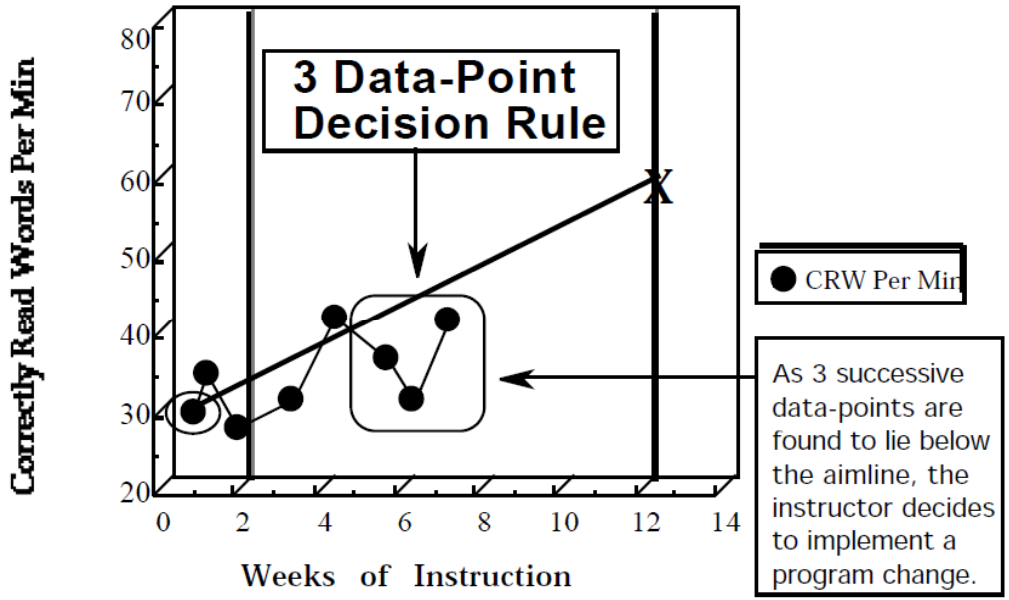


Figure 3.15: Marking a change in Alyssa's educational program

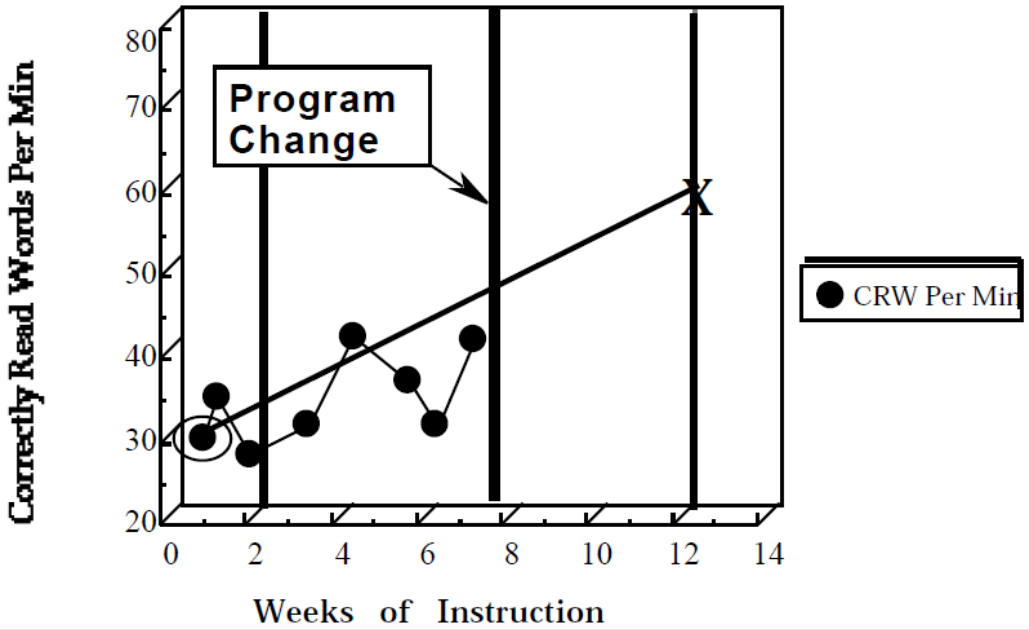
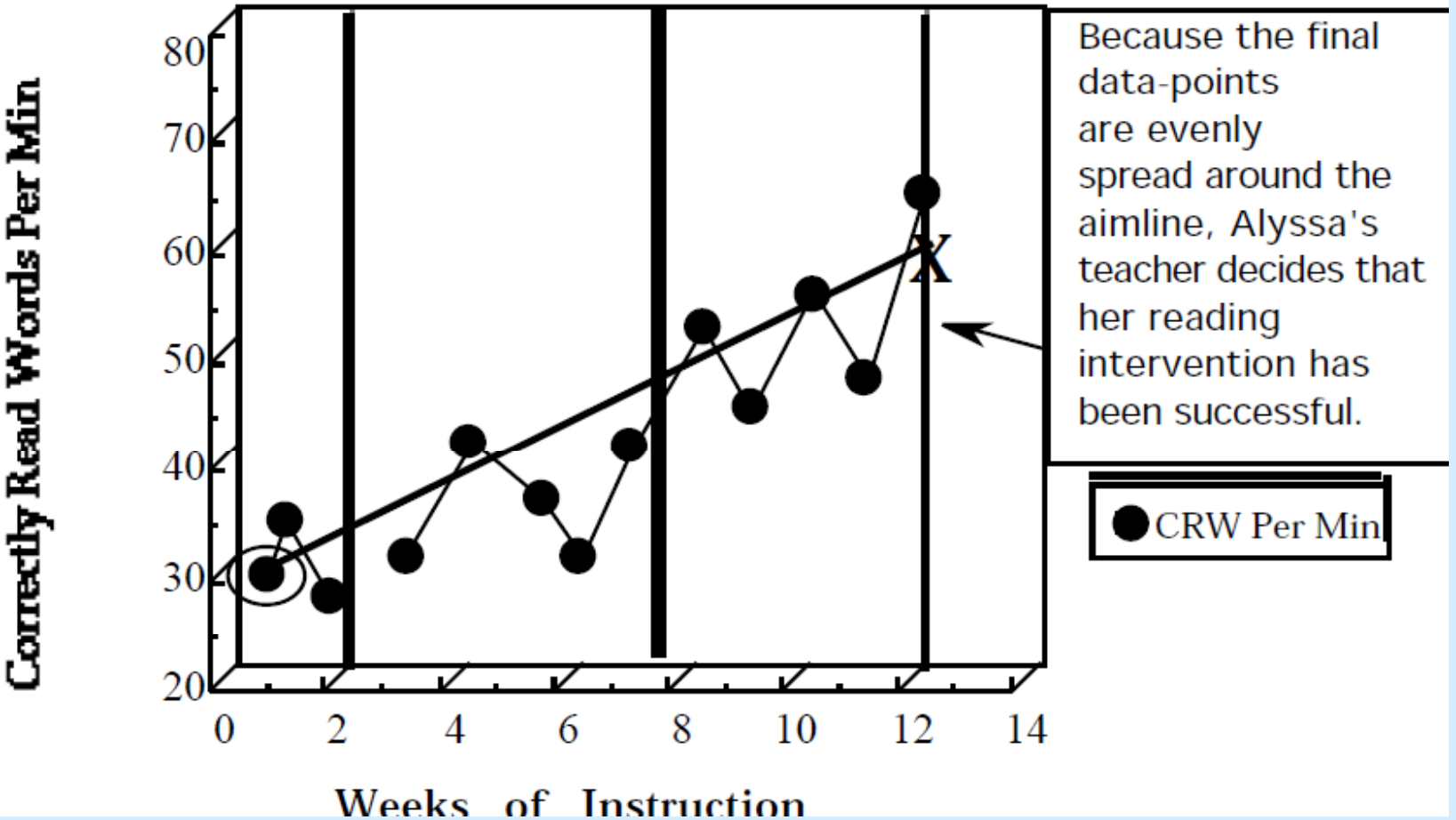
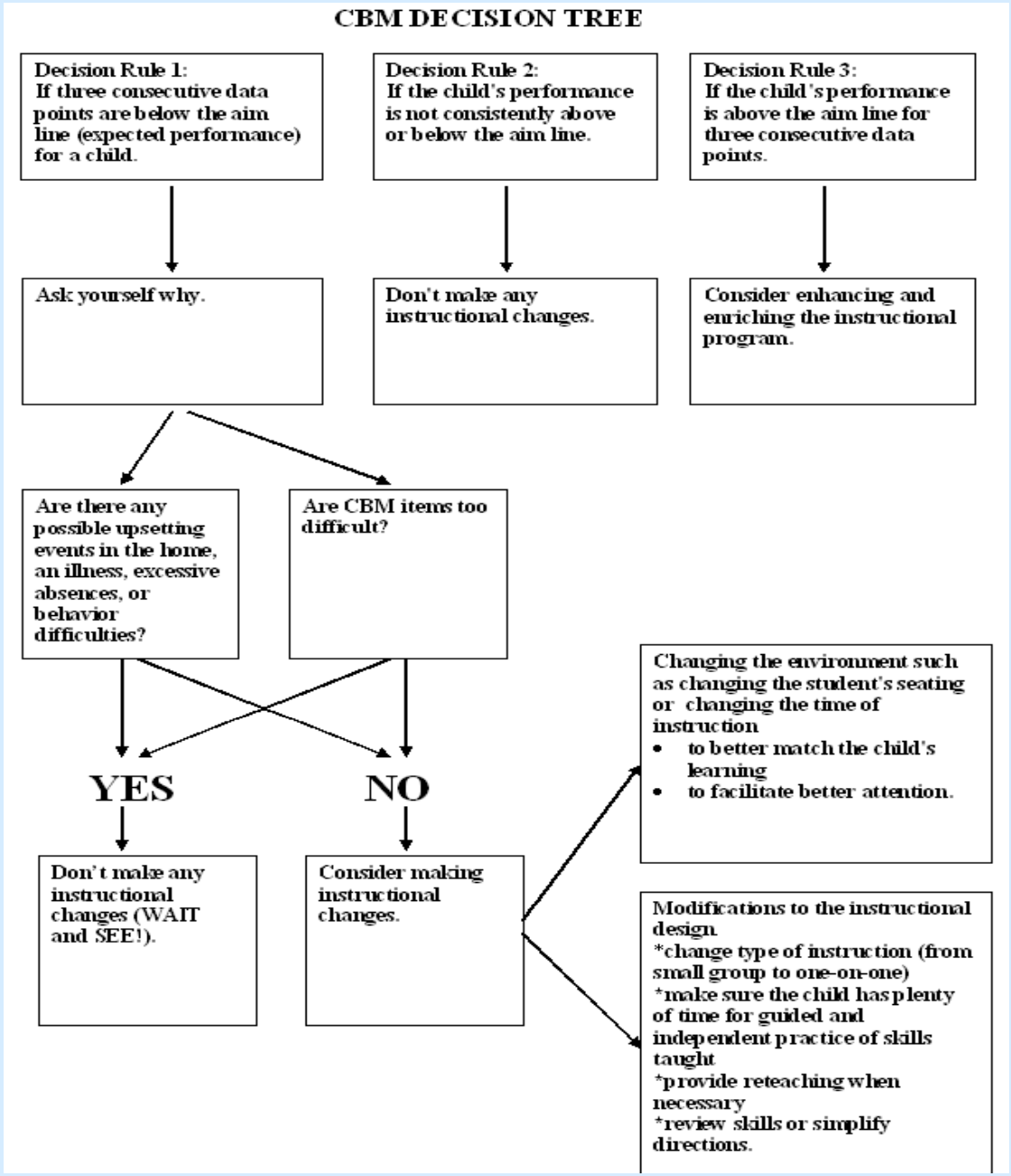


Figure 3.16: Alyssa's completed CBM chart



Wild Horse Pass AZ
ERF



Example: Physical Domain

Trials: Level of Assistance

Objective	Date	1	2	3	4	5	Comments
1. Cut through a piece of paper							
2. Cut on a straight line							
3. Cut out a circle							
4. Cut out a square							

Using Scissors

KEY: I- Independent G/V- Gestural/Verbal Prompt PP-Partial Physical Prompt FP-Full Physical Prompt R-Resistance/Refusal

Determine current levels

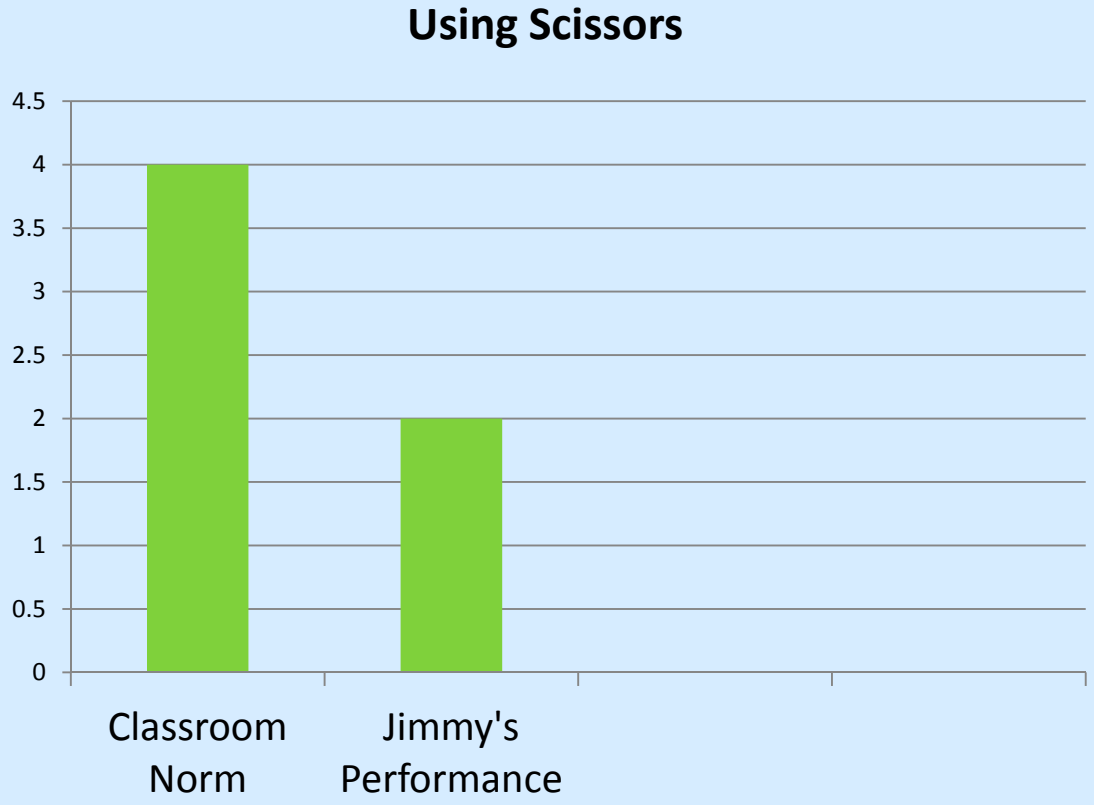
Norming

- Determine/Locate External Expectations
  - 2.5 years: cut through a piece of paper
  - 3.0-3.5 years: cut on a ½" darkened line
  - 3.5-4.0 years: cut out a circle with darkened lines
  - 4.5-5.0 years: cut out a square with darkened lines
- Option: Conduct Program/Class Norming
  - Randomly select normally developing children:
    - Using names in alphabetical order & assign number
    - Deciding how to select (even numbers, odd numbers, every third, etc)
- Measure for all/selected child

A subset of the population.

Analyze Findings

- We see that Jimmy who is 4.7 years old is far below the other children. Jimmy will be the child for whom we focus progress monitoring efforts in this example.



Assigned a number to each level (5 to 1) I- Independent G/V- Gestural/Verbal Prompt PP-Partial Physical Prompt FP-Full Physical Prompt R-Resistance/Refusal

Set Goal & Determine Intervention

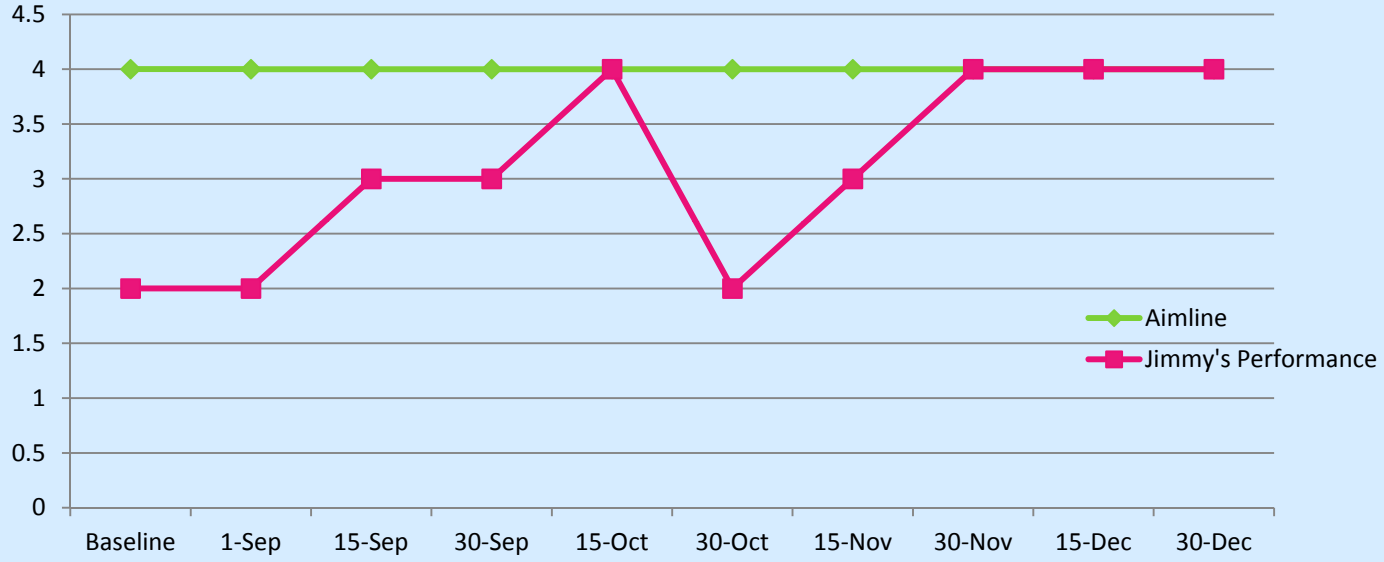
With gestural/verbal prompts, Jimmy will cut out a square by 12/30.

Intervention

- Provide Jimmy with high quality child-scissors.
- Model multiple times. Stay close, next to him.
- Provide him smaller paper samples to make handling easier.
- Have his cutting exercises involve images he finds interesting (Jimmy loves cars!)
- Have him do additional cutting exercises at home.

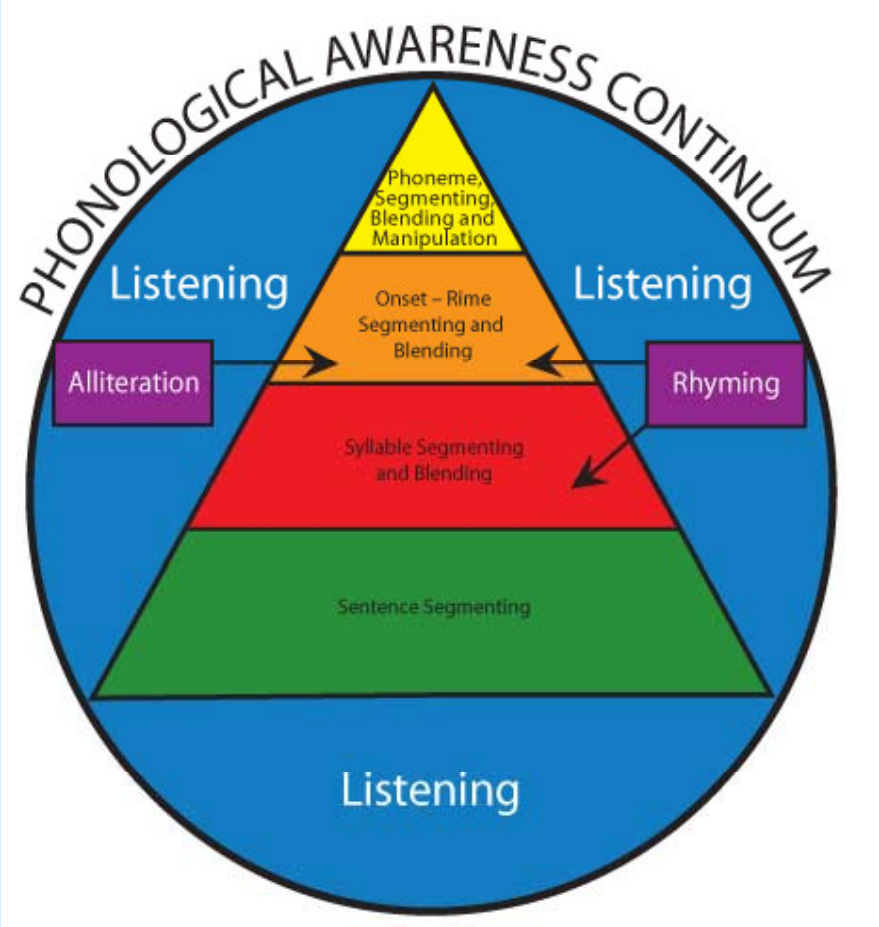
Measure Over Time & Adjust Instruction

- Determine how frequently you will measure
  - For Jimmy we will measure bi-weekly



By 10/15 Jimmy met the goal once but it did not stay consistent. He became frustrated and resistant. Mrs. Brown set up a chart system with stickers he earned when he made progress. Jimmy cut a square on which to place the stickers and these were put in a book for him. This helped Jimmy meet and maintain his goal.

Example: Cognitive/Academic Domain

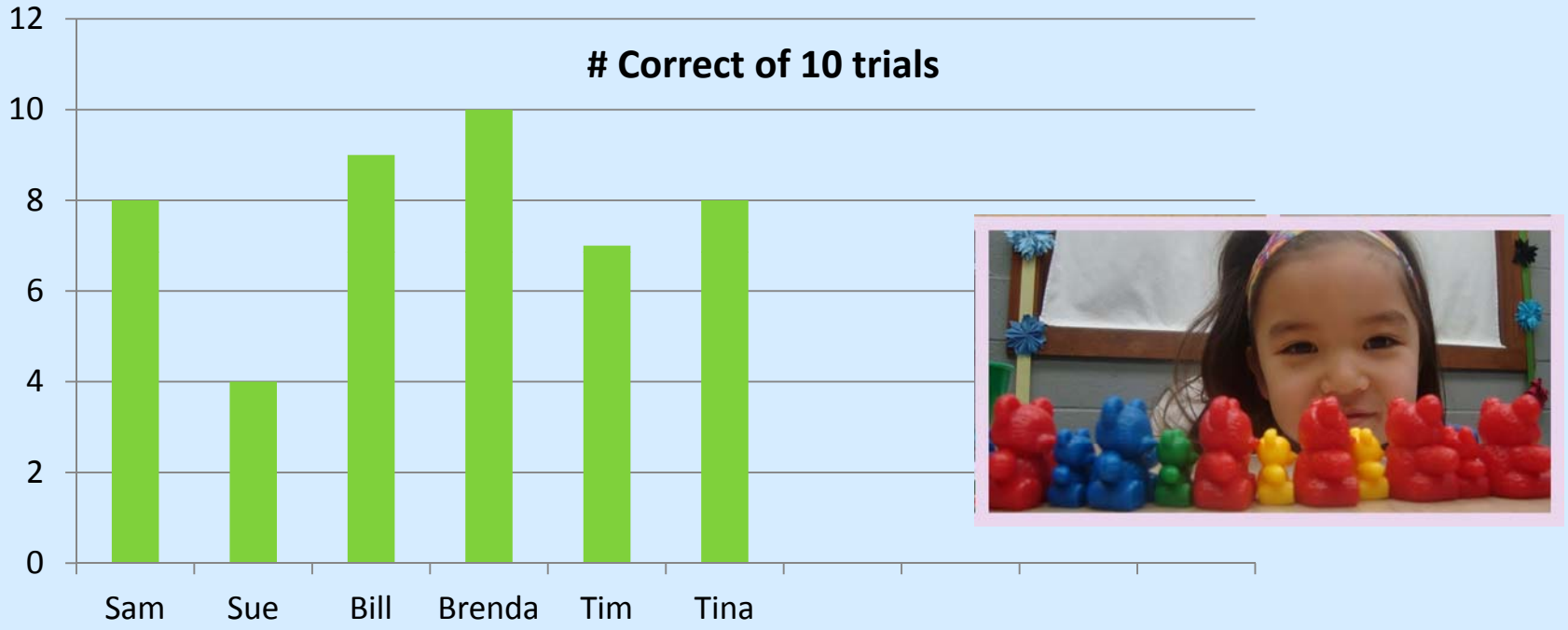


Sentence Segmenting

Date	Sentence	# Markers Used
	Boy runs (sample)	
	Dog barks.	
	Girl jumps.	
	The boys play.	
	Man cooks.	
	I eat.	
	The cat sleeps.	
	My fish swims.	
	He reads books.	
	Baby sleeps.	

Determine current levels

Analyze Findings



We see that several of the children need instruction, which is to be expected, but Sue in particular needs concentrated intervention. Sue will be the child we use for this example.

Set Goal & Determine Intervention

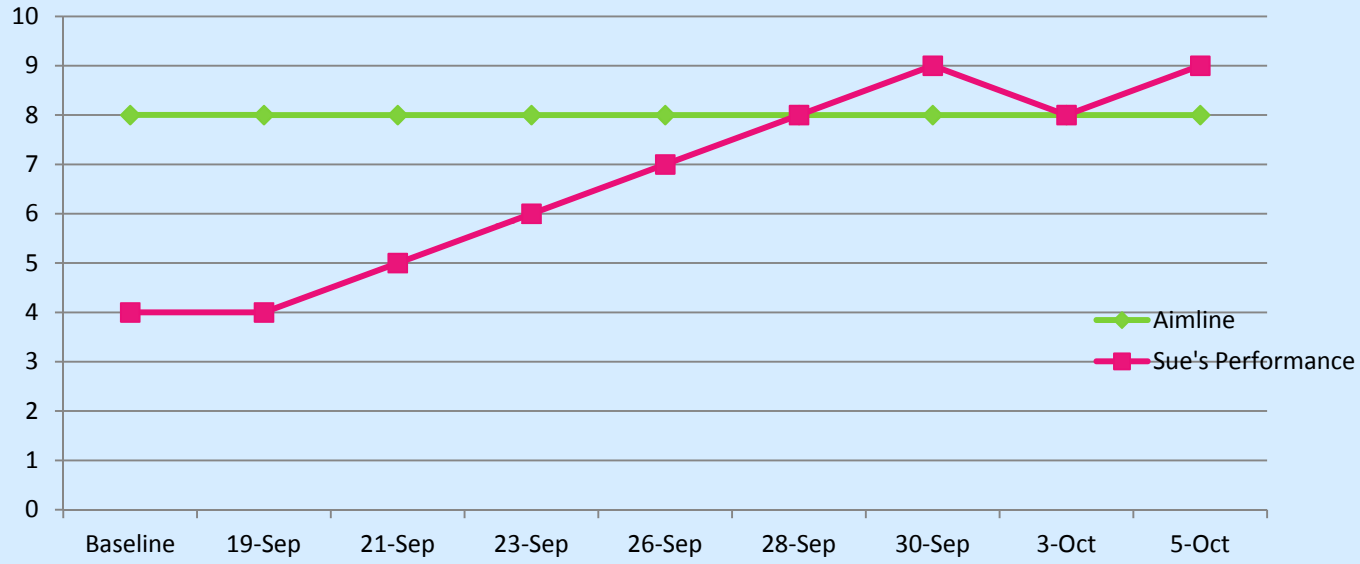
By 11/5 Sue will identify the number of words in two & three sentences with 80% accuracy.

Intervention

- Mrs. Brown has made arrangements with a retired early education teacher to work with Sue 3 times per week in 15 minutes sessions during afternoon center time.
- Together they have put a set of learning activities and games together such as:
  - Clapping
  - Color game (child steps on different color for each word)
  - Word segmenting placemats
  - Sentence cutouts and sentence building
  - Book reads with very short sentences and counters

Measure Over Time & Adjust Instruction

- Determine how frequently you will measure
  - Sue's performance will be measured at the beginning of each session



Sue made very steady progress, meeting and then surpassing the goal. Sue now seems to understand the basic underlying concept. Mrs. Brown will be closely monitoring Sue during regular class activities on this skill to determine if Sue can be successful with longer sentences. She will measure in one month to confirm that Sue is maintaining understanding.

Example: Social-Emotional Domain

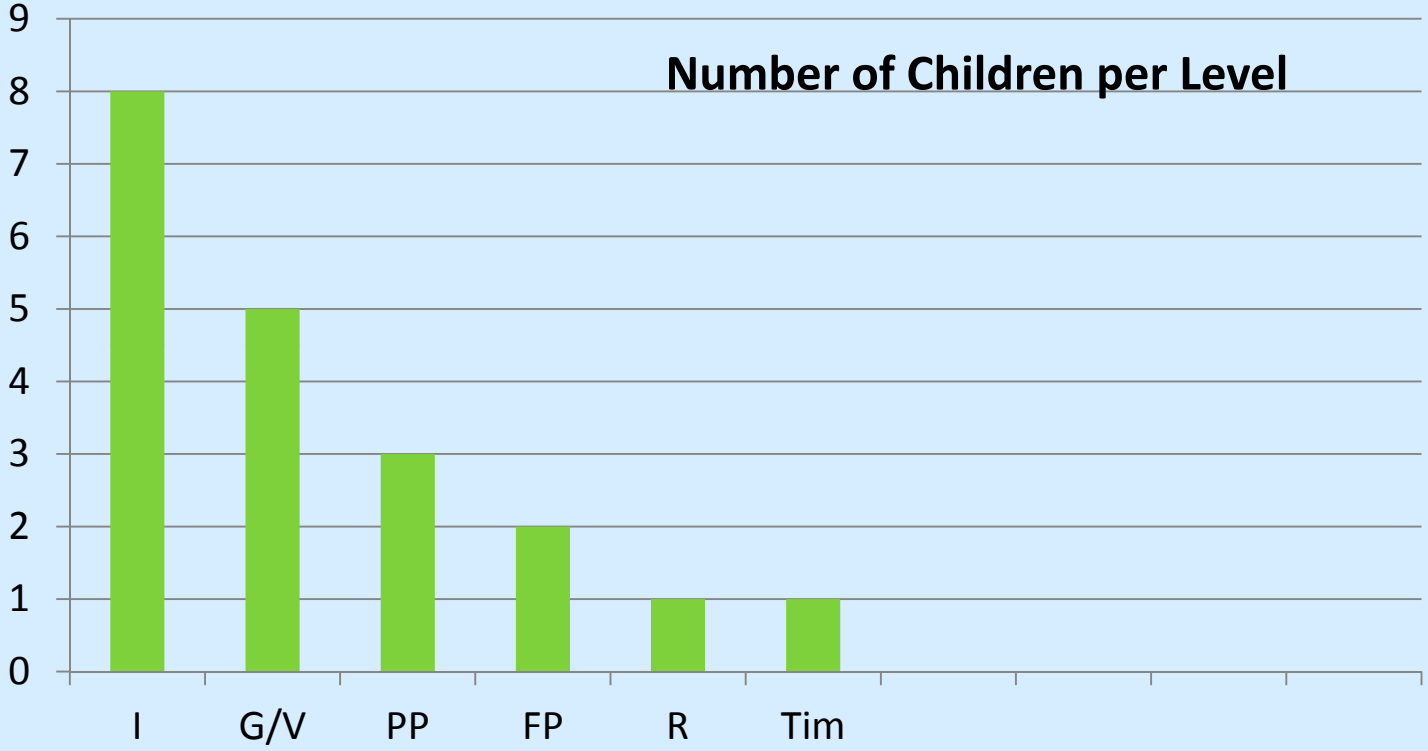
Date	Takes turns & shares	Uses appropriate words & gestures	Stays with the group activity	Follows teacher directions

KEY: I- Independent G/V- Gestural/Verbal Prompt PP-Partial Physical Prompt FP-Full Physical Prompt R-Resistance/Refusal

Social Group Skills

Determine current levels

Analyze Findings



We see a distribution but most children are exhibiting excellent to good social group skills, with the exception of Tim. Mrs. Brown has observed Tim has the most difficulty during open free play, especially outdoors. Tim will be the child we use for this example.

Set Goal & Determine Intervention

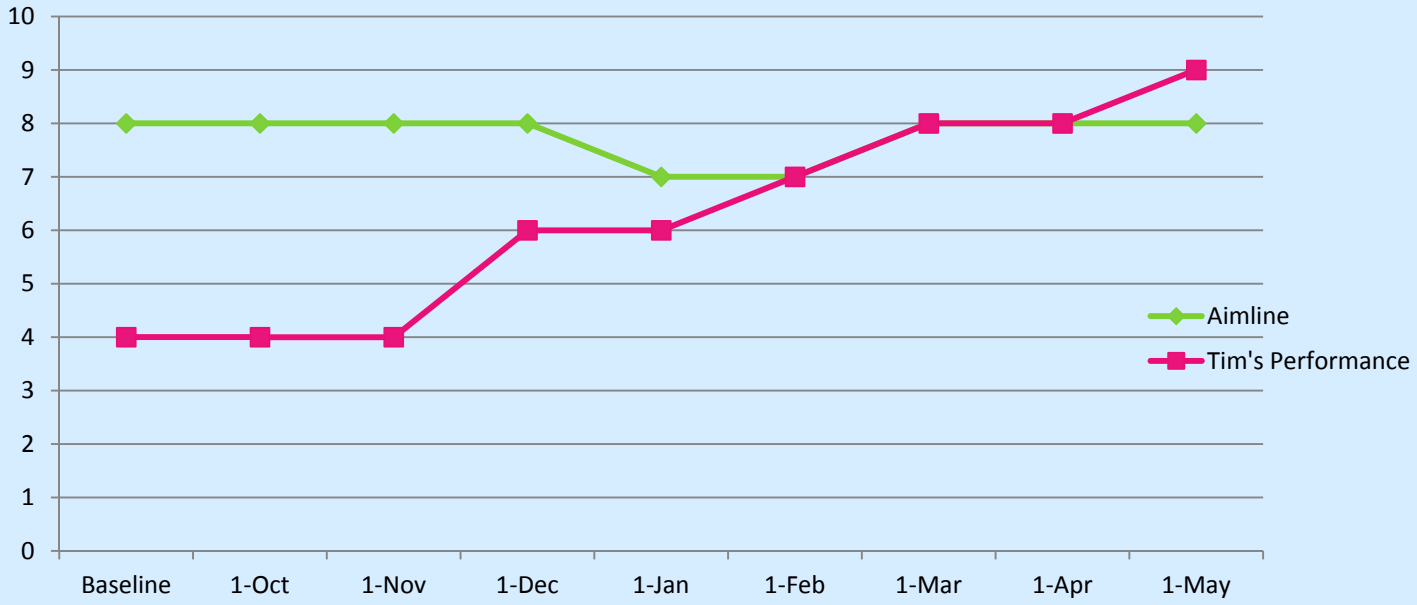
By 5/1 Tim will be at the independent level on the social group skills 80% of the time.

Intervention

- Mrs. Brown has designed a chart for Tim with the categories in child-appropriate language and with symbols. Each time before going outside, Mrs. Brown takes a moment and shows and talks with Tim about expectations. She makes sure that throughout the play period she shares with him how he is doing. She will reduce the number of times she must do this as he improves.
- She has asked Tim's parents to play games at home with him that encourage attention and controlling impulsivity and write notes back to her weekly, such as Simon Says, statues, jumping rope, charades, and treasure map.
- Mrs. Brown uses her video camera to capture positive interactions between Tim and the other children and then once a week spends a few minutes with him showing him the video and discussing the elements that she wants to encourage.

Measure Over Time & Adjust Instruction

- Determine how frequently you will measure
  - Tim's performance will be measured monthly

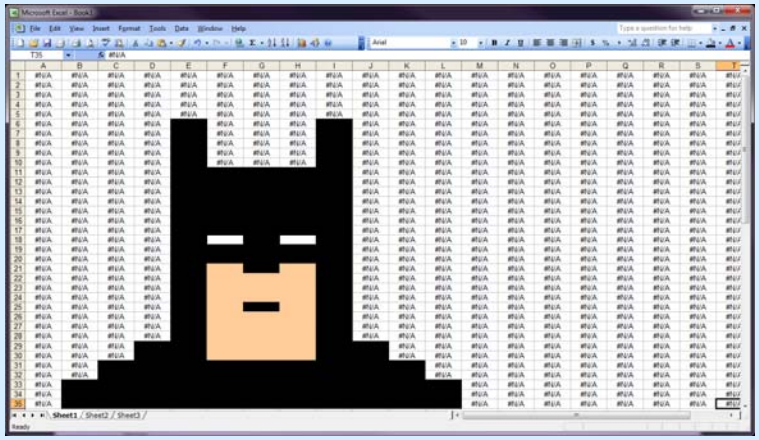


Tim was not making progress, so Mrs. Brown 1) readjusted the expectation for awhile 2) had her assistant take video of times Tim needed full physical prompts and was resistant (so that she could be free to deal with these) and analyzed these with him as well as in contrast to the positive, and 3) paired Tim with a friend who had strong social group skills to do a number of structured activities outdoors. Tim began to make good progress and she set the aimline back at 80%.

Tips to Keep it Up

- Follow the steps…so you don't *end up like Coop!*
- Be conservative in how much data you collect.

- Set up a calendar w/ reminders.
- Use comfortable format for you.

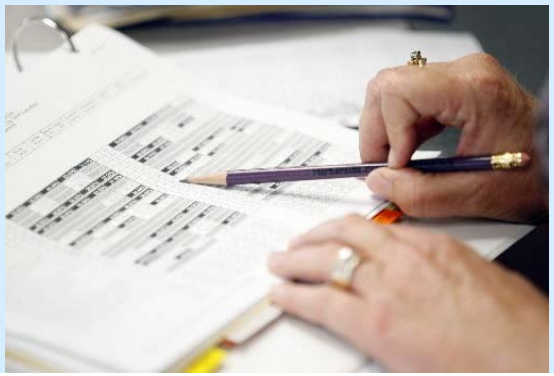


- Share with those who need to know.

Special Call Out to Administrators

Teachers May Need Assistance with:

- Finding and/or designing measures
- Setting goals & developing interventions
- Time to both measure and implement
- Feedback on the process and progress



Summary/Q & A

- Progress monitoring **vital** to effective **instruction**
- Using these **steps** can help ensure your ability to do progress monitoring **easily** & **regularly**.
- Being thoughtful, **intentional**, and focused is the key to success. ***Practice makes perfect***!

<u>Support Sources</u>

- Center for Early Education & Development
- Center for Response to Intervention in Early Childhood
- National Center for Student Progress Monitoring
- Intervention Central

Good places for social connections!

- www.ecetech.net/ & www.hatchearlychildhood/blog
- LinkedIn: Early Childhood Technology Network, Lilla Dale McManis, Hatch Early Childhood
- Twitter: #ecetechchat Weds. nights 9 EST, LillaDaleMcManis@DrLDMcManis, HatchEarlyLearning@hatchearlychild
- Facebook & YouTube: Hatch Early Childhood

Special Announcement!!

http://www.ecetech.net/about/early-childhood-technology-collaborative/

Early Childhood Technology Today Survey 2012

OPEN NOW!!

Early Childhood
Technology Collaborative