

RTI: Progress Monitoring

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CEC April 2006

What Is Progress Monitoring?

Basic features include:

- Assessment occurring on at least a monthly basis (repeated performance sampling)
- Measures with sound reliability and validity
- Typically global measures incorporating multiple skills
- Graphed display of student performance

Sample Progress Monitoring Measures

Letter-Sound Fluency (example of single-skill measure)

Teacher: ***Say the
sound that goes
with each letter.***

Time: 1 minute

<u>p</u>	<u>A</u>	<u>k</u>	<u>u</u>	<u>y</u>
<u>i</u>	<u>t</u>	<u>R</u>	<u>e</u>	<u>w</u>
<u>O</u>	<u>a</u>	<u>s</u>	<u>d</u>	<u>f</u>
<u>v</u>	<u>g</u>	<u>j</u>	<u>S</u>	<u>h</u>
<u>k</u>	<u>m</u>	<u>n</u>	<u>b</u>	<u>V</u>
<u>Y</u>	<u>E</u>	<u>i</u>	<u>c</u>	<u>x</u>
...				

Word Identification Fluency (moving toward multiple-skills measure)

Teacher: ***Read
these words.***

Time: 1 minute.

**two
for
come
because
last
from
...**

Passage Reading Fluency: Correct Words Per Minute

•Read
aloud for 1
min.

•General
Outcomes
Measure

Jason Fry ran home from school. He had to pack his clothes. He was going to the beach. He packed a swimsuit and shorts. He packed tennis shoes and his toys. The Fry family was going to the beach in Florida.

The next morning Jason woke up early. He helped Mom and Dad pack the car, and his sister, Lonnie, helped too. Mom and Dad sat in the front seat. They had maps of the beach. Jason sat in the middle seat with his dog, Ruffie. Lonnie sat in the back and played with her toys.

They had to drive for a long time. Jason looked out the window. He saw farms with animals. Many farms had cows and pigs but some farms had horses. He saw a boy riding a horse. Jason wanted to ride a horse, too. He saw rows of corn growing in the fields. Then Jason saw rows of trees. They were orange trees. He sniffed their yummy smell. Lonnie said she could not wait to taste one. Dad stopped at a fruit market by the side of the road. He bought them each an orange.

Reading Maze Fluency (General Outcomes Measure)

- Every nth word is deleted from a passage and replaced with a blank. Student reads silently and selects correct word from three word choices provided for every blank.

The runner was off to a very exciting start. However, she still had to pace (bicycle herself distance) in order to win the race. (She Hand Win) needed to make sure she had...

Sample Computerized Maze

A SCARY NOISE

Ray lived in Georgia. He was born there and had _____ friends. One day Dad had come home _____ work to say that they would have _____ move far away. Dad worked in _____ factory. The factory had closed and Dad _____ a new job. Dad had found a _____ job and now they had to move.

Ray _____ sad because he did not want _____ leave his school. He did not _____ to leave his friends.

"I am _____, son," said Dad.

"It is OK," _____ Ray with a smile. He did _____ want Dad to feel bad.

They _____ up the car and moved to a _____ state. Their new

Go forward

Sample Measure for Mathematics Computation

Skills-Based Measures: Alternate forms include same number of items representing critical grade-level skills (student allowed standard amount of time to complete each test)

Sheet #1 Computation 4
 Password: ARM
 Name: _____ Date: _____

A $\frac{3}{2} - \frac{2}{7} =$	B $1\frac{6}{9} + 3 =$	C $4\overline{)16}$	D $6\overline{)78}$	E $\begin{array}{r} 875 \\ \times 7 \\ \hline \end{array}$
F $\begin{array}{r} 6 \\ \times 7 \\ \hline \end{array}$	G $\begin{array}{r} 9 \\ \times 0 \\ \hline \end{array}$	H $\begin{array}{r} 244 \\ \times 7 \\ \hline \end{array}$	I $6\overline{)48}$	J $5\overline{)20}$
K $2\overline{)50}$	L $\begin{array}{r} 8144 \\ - 4420 \\ \hline \end{array}$	M $\begin{array}{r} 33 \\ \times 10 \\ \hline \end{array}$	N $\begin{array}{r} 6 \\ \times 0 \\ \hline \end{array}$	O $7\overline{)30}$
P $\begin{array}{r} 95225 \\ + 76268 \\ \hline \end{array}$	Q $8\overline{)32}$	R $\begin{array}{r} 1156 \\ 2824 \\ + 83 \\ \hline \end{array}$	S $7\frac{4}{7} - 2 =$	T $\begin{array}{r} 38 \\ \times 33 \\ \hline \end{array}$
U $\frac{3}{5} + \frac{1}{5} =$	V $\begin{array}{r} 982 \\ - 97 \\ \hline \end{array}$	W $\begin{array}{r} 9 \\ \times 5 \\ \hline \end{array}$	X $\begin{array}{r} 4 \\ \times 1 \\ \hline \end{array}$	Y 756

Sample Measure for Mathematics Concepts and Applications

Skills-Based Measures: One page of a sample three-page mathematics concepts and applications task (24 total problems)

Name: _____ Date: _____ Test 4 Page 1

Column A Applications 4 Column B

(1) Write the letter in each blank.

_____ $\frac{1}{2}$ (A) line segment
 _____ $\leftarrow K \rightarrow L$ (B) line
 _____ $\leftarrow M \rightarrow N$ (C) point
 _____ (D) ray

(2) Look at this numbers:
 356.17
 Which number is in the hundredths place? _____

(3) Solve the problem by estimating the sum or difference to the nearest ten.
 Jeff wheels his wheelchair for 33 hours a week at school and for 28 hours a week in his neighborhood. About how many hours does Jeff spend each week wheeling his wheelchair? _____

(4) Write the number in each blank.
 3 ten thousands, 6 hundreds, 8 ones

 2 thousands, 8 hundreds, 4 tens, 6 ones

(5) Write a number in the blank.
 1 week = _____ days

(6) Vacation Plans for Summit School Students

Use the bar graph to answer the questions.
 The P.T.A. will buy a Summit School T-Shirt for each student who goes to summer school. Each shirt costs \$4.00. How much money will the P.T.A. spend on these T-shirts? \$ _____
 How many students are planning to travel during the summer? _____
 How many fewer students are planning to go to summer school than planning to stay home? _____

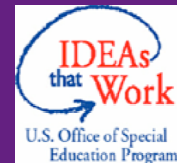
(7) To measure the distance of the bus ride from school to your house you would use
 (A) meters
 (B) centimeters
 (C) kilometers

National Center on Student Progress Monitoring:
<http://www.studentprogress.org>

- Technical Review Committee evaluation of progress monitoring tools
- Technical assistance and dissemination: Summer Institutes, Web library, training materials, presentations

Research Institute on Progress Monitoring:
www.progressmonitoring.org

- Searchable data base of research articles (abstracts and reports)
- Continued research on progress monitoring tools



Progress Monitoring at Multiple Tiers of Prevention/Intervention

Depending on particular practices, RTI typically may be conceptualized in 3-4 tiers:

Tier 1: classroom instruction

Tier 2: more intensive instruction in small groups (and perhaps individualized interventions)

Tier 3: special education services

Progress Monitoring at Multiple Tiers of Prevention/Intervention

Assessment procedures are similar across the multiple tiers but purpose/decisions vary depending on tier

What Is Progress Monitoring at the First Tier?

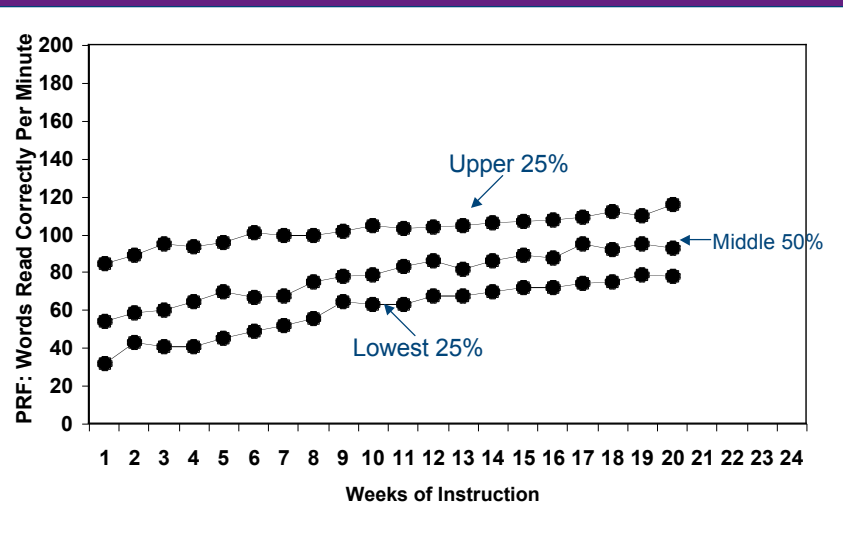
General Education--Classroom Instruction:

- Assess all students periodically to monitor whether they appear to be achieving adequately
 - Teachers may work to create more responsive learning environments, particularly for at-risk students
- Use benchmark system with all students and more frequent progress monitoring only with students failing to reach recommended benchmark

Decision at the First Tier

- Determine which students are not progressing adequately--compared to classmates, benchmarks, local/national norms
 - Teachers may try to create a more responsive learning environment for particularly low-achieving students and continue to monitor progress
 - Nonresponding students receive additional assistance at next tier

Average Level and Rates of Progress for Bottom 25%, Middle 50%, and Upper 25% of Class



Dual Discrepancy:

Identify
students
whose
response to
general
education is
significantly
below class
peers.

CLASS STATISTICS

Teacher: Mrs. Smith
Report through 3/17

Score

Average score	39.5
Standard deviation	12.6
Discrepancy criterion	26.9

Slope

Average slope	+0.98
Standard deviation	0.53
Discrepancy criterion	+0.45

Students identified with dual discrepancy criterion

	<u>Score</u>	<u>Slope</u>
Anthony Jones	19.0	+0.05
Erica Jernigan	18.0	+0.23

What Is Progress Monitoring at the Second Tier?

More intensive instruction for students
at risk--often small-group instruction
focused on students with similar
needs (e.g., 3-6 students):

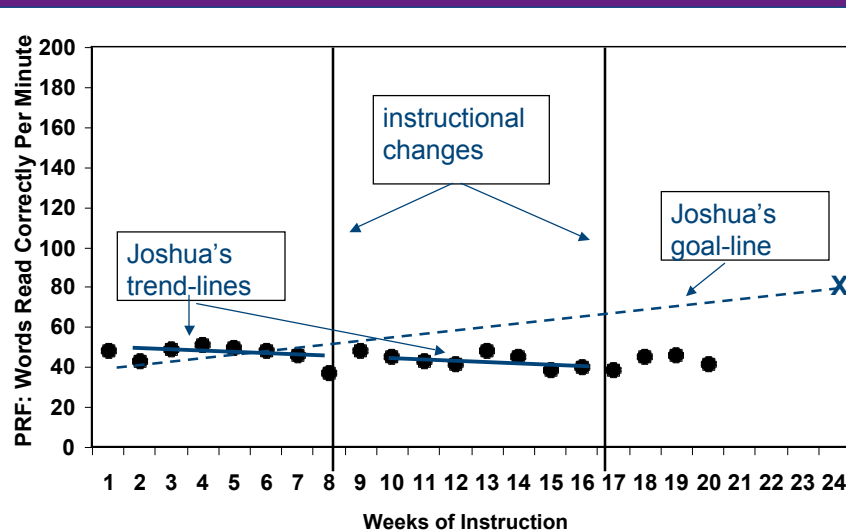
- Assess students frequently to monitor
whether they appear to be responding to
intervention--and closing gap between their
performance and peers' performance

Decisions at the Second Tier

Small-group intervention(s):

- Determine whether students are responding to intervention
 - Student may do well and return to general classroom instruction--frequent monitoring should continue
 - Student may not achieve and receives additional intervention(s)
 - Student remains chronically unresponsive and is in need of more intensive, specialized assistance at next tier

Joshua's Responsiveness to Small-Group Instruction



What Is Progress Monitoring at the Third Tier?

Most intensive instruction--need for special services:

- Assess students once or twice weekly to monitor growth toward long-term goals
- Specialized training for teachers implementing instruction

Decisions at the Third Tier

Special education:

- Data-based decision making--frequent and recursive
 - May use progress monitoring procedures for IEP development and evaluation
 - Use of standard, data-based decision rules to aid teachers in formatively developing an effective program for individual students
 - Develop criteria for exiting special education (and continuing to monitor progress)

Writing Jasmine's Goal: Legally Correct and Educationally Meaningful IEP Goals

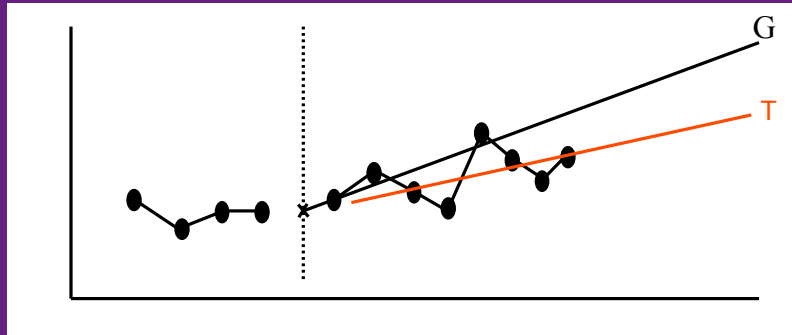
Current Level of Performance

- Given passages sampled randomly from Grade 3 reading curriculum, Jasmine currently reads 50 words correct per minute (i.e., median baseline information).

End-of-Year Goal

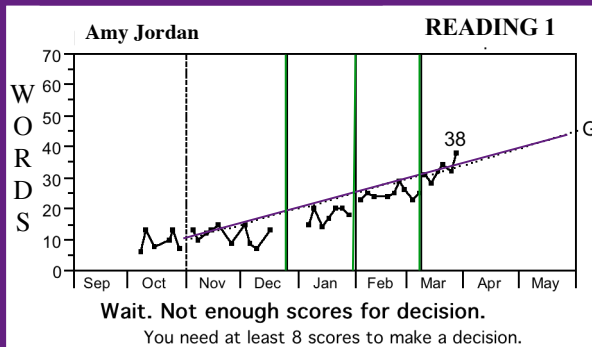
- If teacher calculates a 1.5-word increase across 34 weeks left in school year ($1.5 \times 34 = 51$) and adds it to the current baseline (50), Jasmine's goal will be set at 101 words read correctly per minute: $(1.5 \times 34) + 50 = 101$
- In 34 weeks, when given a grade 3 passage, Jasmine will read aloud 101 words correct in one minute.

Compare Trend of Current Performance to Goal Line (anticipated rate of growth)



Data-based decision is to make an instructional change.

In special education, teachers work to develop more effective programs over time for individuals.



Effects of four instructional programs across the year

Progress Monitoring Research with Students with Mild/Moderate Disabilities

- Over 25 years of research demonstrate that when teachers use progress monitoring for instructional decision making:
 - Students achieve more
 - Teacher decision making improves
 - Students are more aware of their performance

Some Assumptions for RTI Process

- Classroom instruction and interventions are otherwise generally effective
- Nonresponsiveness is described as low performance and lack of progress when other students are thriving
- Resources are adequate (training, personnel, and/or tools, such as computerized/Web-based progress monitoring systems)

Some Challenges We Face

- Probably the most variability in progress monitoring procedures and decision making occurs within Tier 2
 - Determination of need for special services
 - Movement back to typical instruction, which may/may not be effective for particular individuals
- Although RTI has been applied in the area of reading for younger students in an effort to prevent academic failure, application of procedures for older students and for other subjects is not well developed