Effective Progress Monitoring

Jolly Piersall – Matt Johnson - Alisa Stovall
Indiana Effective and Compliant IEP Resource Center

What is Progress Monitoring?

A scientifically based practice that is used to assess students' academic performance and evaluate the effectiveness of instruction.

Can be implemented with individual students or an entire class.

How does Progress Monitoring Work?

To implement progress monitoring:

- Student's current levels of performance are determined, and goals are identified for learning that will take place over time.
- The student's academic performance is measured on a regular basis (weekly, bi-weekly, or monthly).
- Progress toward meeting the student's goals is measured by comparing expected and actual rates of learning.
- Based on these measurements, teaching is adjusted as needed.

What are the Benefits of Progress Monitoring?

- accelerated learning because students are receiving more appropriate instruction
- more informed instructional decisions
- documentation of student progress for accountability purposes
- more efficient communication with families and other professionals about students' progress
- higher expectations for students by teachers
- fewer Special Education referrals

Different Types of Progress Monitoring

Curriculum-Based Assessment

Find instructional level

Mastery Measurement

Tracks short-term mastery of a series of instructional objectives

Curriculum-Based Measurement

Relies on quick tests with limited skill content

Mastery Measurement

- Most Progress Monitoring is Mastery Measurement

- To implement Mastery Measurement:
  - Determines the sequence of skills in an instructional hierarchy
  - For each skill, develop an assessment or method of measuring progress

4th Grade
Math Computation Curriculum

1. Multi-digit addition with regrouping
2. Multi-digit subtraction with regrouping
3. Multiplication facts, factors to 9
4. Multiply 2-digit numbers by a 1-digit number
5. Multiply 2-digit numbers by a 2-digit number
6. Division facts, divisors to 9
7. Divide 2-digit numbers by a 1-digit number
8. Divide 3-digit numbers by a 1-digit number
9. Add/subtract simple fractions, like denominators
10. Add/subtract whole number and mixed number

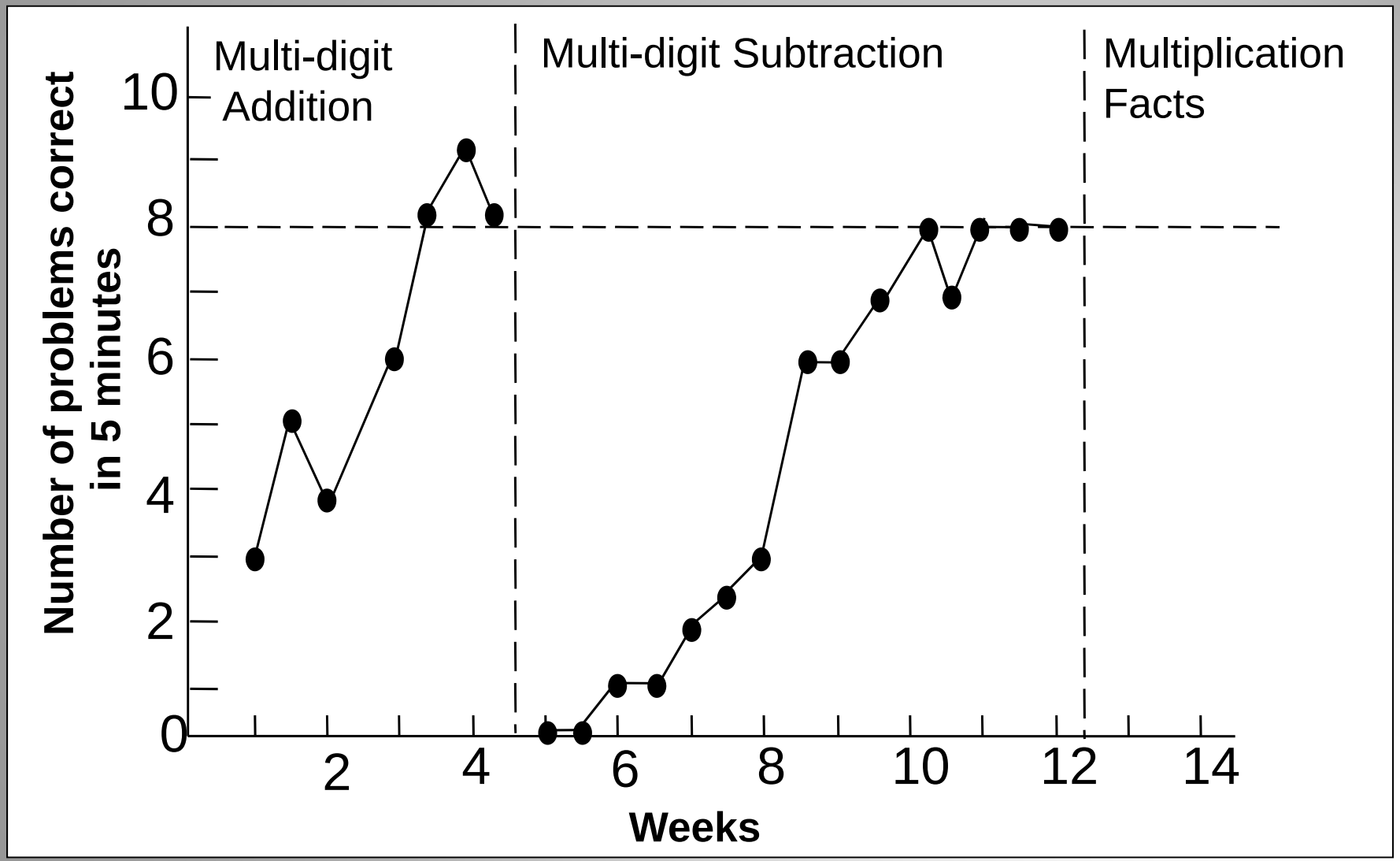
Multi-digit Addition Mastery Test

Name: _____ Date_____

Adding

36521 +63758	53429 +63421	84525 +75632	67842 +53937	57321 +46391
56382 +94742	36422 +57529	34824 +69426	32415 +85439	45321 +86274

Mastery of Multi-digit Addition and Subtraction



Curriculum-Based Measurement

- result of nearly 30 years of research
- used in schools across the country
- demonstrates strong reliability and validity
- used with all children to determine whether they are profiting from typical instruction
- used with failing children to enhance instructional programs

Random numerals within problems

Random placement of problem types on page

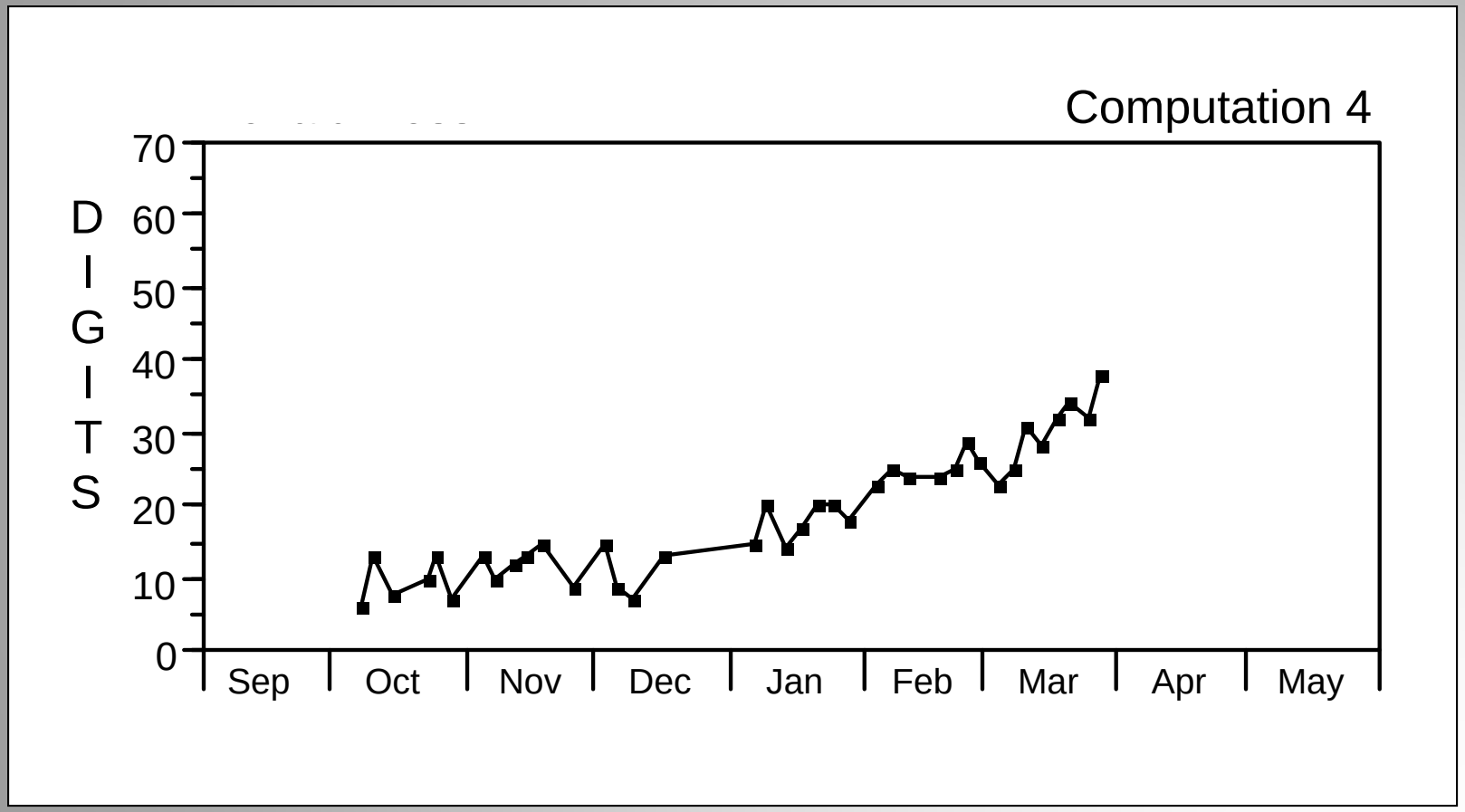
Sheet #1 Computation 4

Password: ARM

Name: _____ Date _____

A $\frac{3}{7} - \frac{2}{7} =$	B $1\frac{6}{7} + 3 =$	C $4\overline{)6}$	D $6\overline{)78}$	E 875×7
F 6×7	G 9×0	H 244×7	I $6\overline{)48}$	J $5\overline{)20}$
K $2\overline{)50}$	L $6144 - 4420$	M 33×10	N 6×0	O $7\overline{)30}$
P $95225 + 75268$	Q $8\overline{)32}$	R $1156 + 2824 + 83$	S $7\frac{4}{7} - 2 =$	T 38×33
U $\frac{3}{5} + \frac{1}{5} =$	V $982 - 97$	W 9×5	X 4×1	Y $7\overline{)56}$

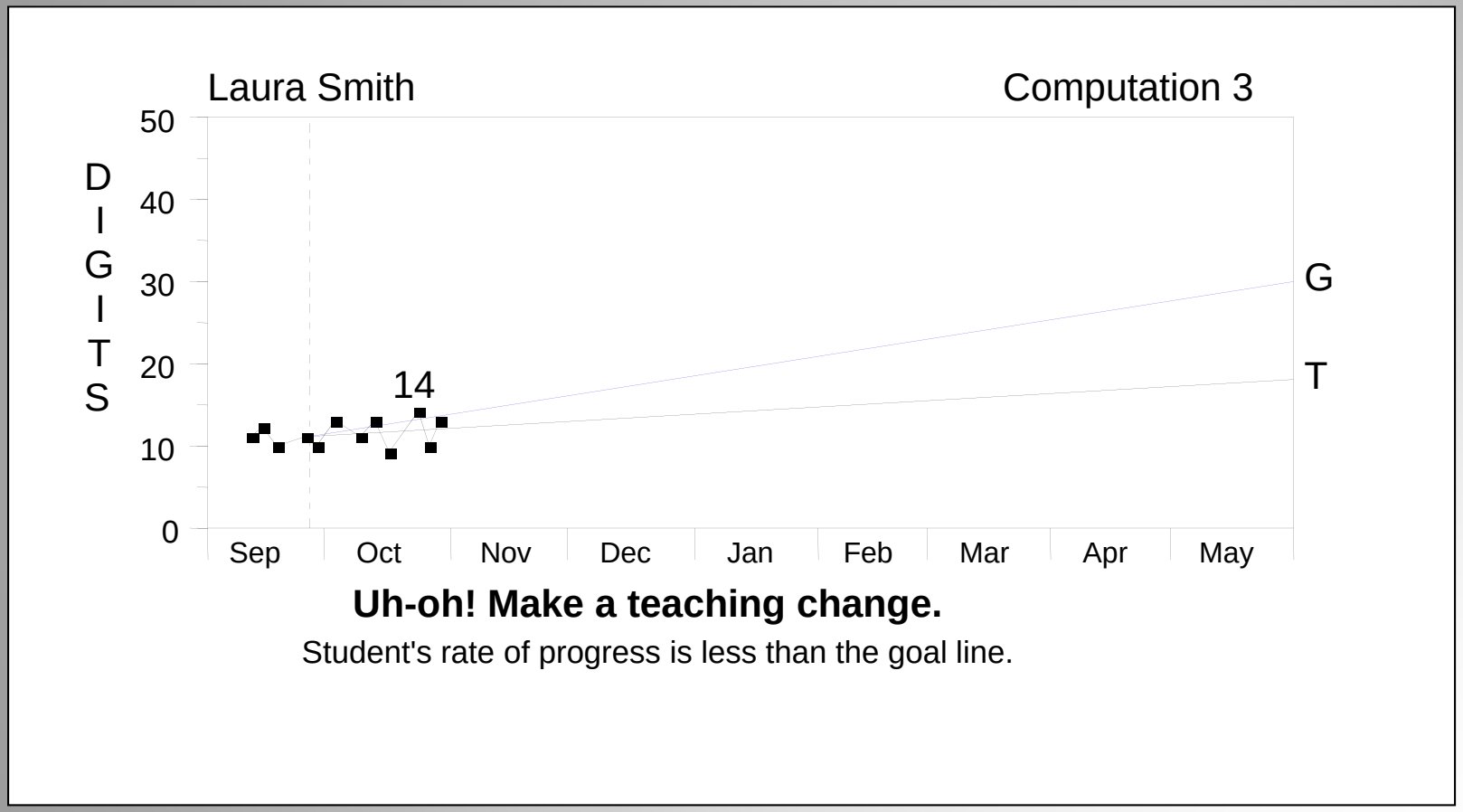
Progress in Digits Correct Across the School Year



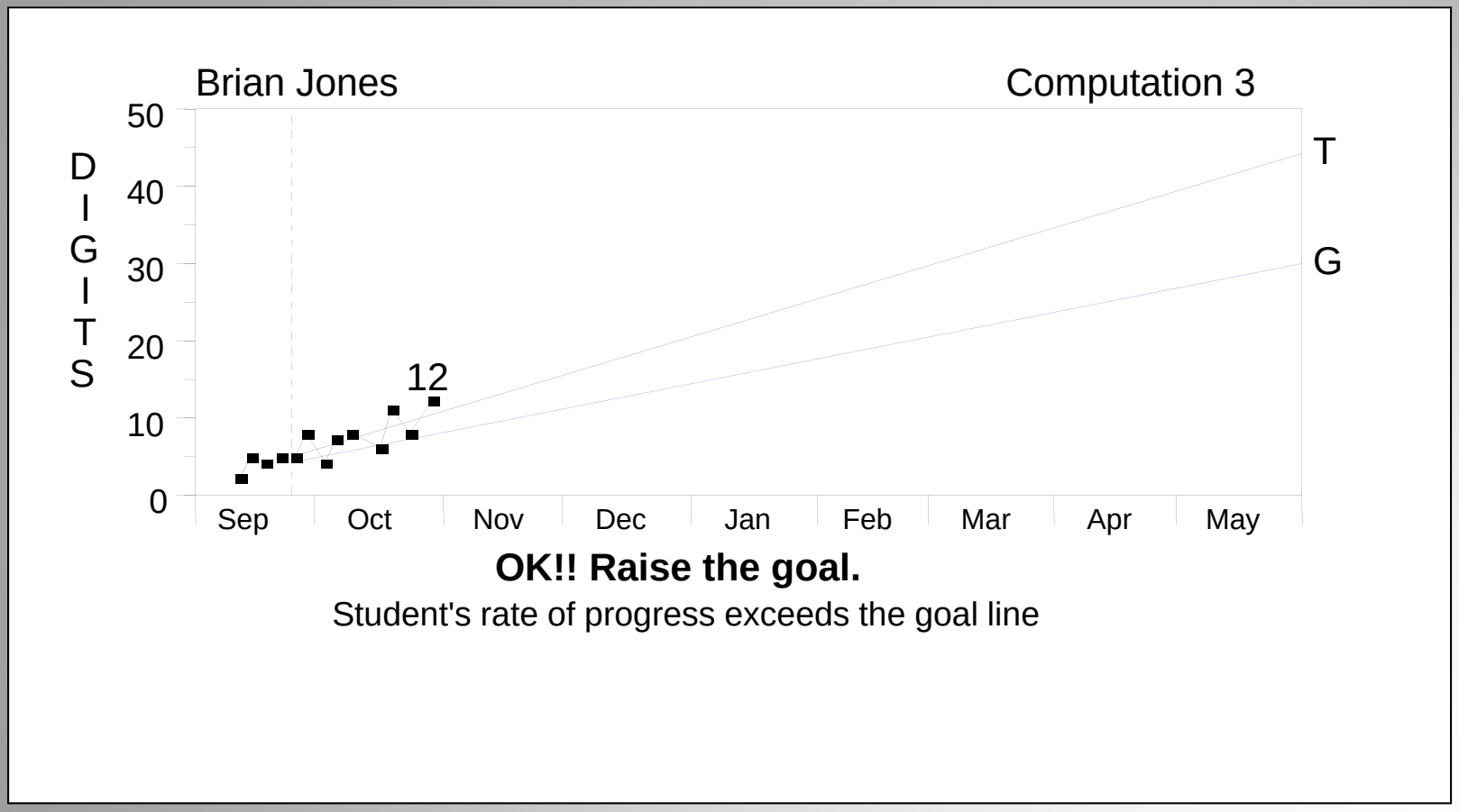
Progress Monitoring is used…

- To identify students at risk who may need additional services
- To help general education teachers plan more effective instruction within their classrooms
- To help special education teachers design more effective instructional programs for students who do not respond to the general education program
- To document student progress for accountability purposes
- To communicate with parents or other professionals about students' progress

Trend line of student data is less steep than goal line: Make a teaching change.



Trend line of student data is steeper than goal line: Raise the goal.



OK!! Raise the goal.

Student's rate of progress exceeds the goal line

Using Data to Strengthen Instructional Planning

- Examination of particular skills student has mastered or not mastered
- Evaluate effects of different instructional interventions for particular student
- Identify specific student strengths and needs

Using Data to Modify Instruction

When student progress is not appropriate, consider instructional variables that can be altered:

- Particular skills targeted for instruction
- Type of instructional procedures used
- Instructional arrangement (teacher-student ratio, peer-mediated instruction)
- Allocation of time for instruction
- Materials used
- Motivational strategies used

Using Data to Develop IEPs

- Data-based decision making process
- Writing appropriate, measurable goals based on individual student needs
- Identify student specific interventions and accommodations
- Improve special education accountability and effectiveness

Progress Monitoring Options

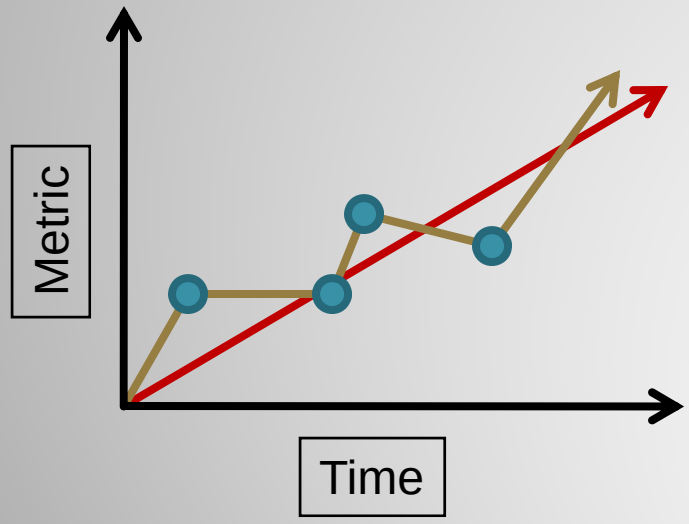
There are four basic choices for progress monitoring:

1. ***Descriptive Documentation*** – the annual goal is aligned to standards. Teachers have the option to add objective or benchmarks of their own design.
   - Teachers record progress in an anecdotal format.
   - There may or may not be data recorded in this documentation.
   - Reliance on data is based on the author of the entry.

Progress Monitoring Options

2. Single Point – the results of the tool used to monitor progress is numeric. The data can be calibrated to serve as the "metric".

– Data collected along with the date can be graphed easily.



Progress Monitoring Options

3. Rubrics – the author of the goal describes criteria for each level of performance.

- The annual goal is aligned to state standards.
- Progress is measured toward annual goal attainment not selected standards.
- In ISTART7 these levels are labeled: Not Evident, Introduced, Emerging, Developing, Ongoing, Demonstrated, and Applied.
- Rubrics are well suited to measure progress of students for more complicated circumstances such as levels of independence, quality of work, and skill generalization.

Progress Monitoring Options

4. Collection of Indicators – measures the attainment of the annual goal based on progress toward the component objectives.

- Teachers select from state standards.
- The elements supporting these standards become objectives.
- Rubrics measure student progress on each element.
- Overall average represents progress toward the annual goal.

Which design will you use?

- Given a sample goal how can you change the goal to fit into each of the four PM methods?
- Let's try one together!

  Martin will demonstrate recall of all addition, subtraction, and multiplication facts at the rate of 20 facts per minute.

Data Collection Methods

Before selecting a method of gathering information:

- Identify the specific skill/behavior to be targeted
- Define this Target Skill/Behavior in observable, measurable terms
- Review Resource (i.e., schedule, staff) to determine what is feasible for the setting

Data Collection Methods

- **Permanent Products**
  - Products that are outcomes of behavior, tangible or environmental outcomes such as completed assignments, attendance, number of books shelved, number of packets assembled, grades
- **Curriculum-based Assessments**
  - Probes of skill mastery
- **Checklists (Skill or Behavioral)**
  - Lists of specific skills or behaviors completed by persons familiar with student

Data Collection Methods

- **Interviews**
  - Involve asking someone information about a subject (targeted behavior)
- **Self-Reporting**
  - Recordkeeping of one's own performance or behavior
- **Observations**
  - Record a sample of the behaviors as they are occurring

Observations-a closer look

Type	Description	When to Use	Pros/Cons	Examples
Event Recording	A tally of frequency of a target behavior.	When target behavior can be easily counted,	Easy to do BUT Not helpful if frequency or duration are too high.	Unassisted self-care, leaves seat, raises hand,
Duration Recording	Length of time engaged in a target behavior.	To determine how long behavior occurs; rate of behavior is too high for event recording	Can provide duration and frequency of behavior BUT Usually need an outside observer,	On task, length of tantrum, sustained eye contact,
Latency Recording	Length of time from request to performance of target behavior.	When behavior has a clear beginning	Tells how long it takes for a behavior to begin BUT need means of recording time and outside observer	Beginning or ending a task, returning to classroom after lunch,
Interval Recording	Records when a target behavior occurs in a given time interval.	Useful for estimating the number of occurrences; for high frequency behaviors	Helps identify patterns of behavior BUT provides an estimate, requires undivided attention	Working on an assignment, swearing,
Scatter Plot	Interval recoding that reveals patterns of behavior and specific time periods.	Useful for looking for patterns across a period of time	Creates a visual display of data BUT May need an outside observer	Appropriate responses across learning tasks, appropriate behavior on playground
ABC charts	Target behavior is recorded along with antecedents and consequences.	Useful for identifying stimuli for targeted behavior, or for non-occurrence of behavior	Provides descriptive information about behavior and environment BUT May require multiple observations to collect enough data	Following directions, argumentative responses, work completion

What method will you use?

Joel will write a grammatically correct paragraph with topic sentence, 3 supporting sentences, and conclusion.

Morgan will clean hands and face upon request.

Sarah will make a minimum of two on-topic contributions in each math remediation session.

What method will you use?

Wayne will access the Teacher Student Online Portal to review his grades and progress weekly.

Blair will acknowledge a staff directive with eye contact within 30 seconds of the request.

Jenny will independently use the city bus system to travel from her home to her job site.

Summarizing Data for Use

- Frequency Recordings
  - Figure the average number of occurrences per minute/hour/day
- Duration Recordings
  - Figure Percentage of total observation time that behavior occurred
- Time Sampling
  - Figure percentage of intervals when behavior occurred. Plot occurrence rate on a graph

Data Reporting

- How much data do we need to reliably report progress?
  - Enough to see trends in behavior whether academic, functional, or social
  - This could depend on the severity of the behavior and intensity of services
- What happens next?
  - Evaluation of the IEP's Effectiveness
  - Intervene if necessary
  - Report findings to all interested parties

Data Reporting - Effectiveness

- This evaluation should be on-going.
  - Goes back to frequency of collection
- Offers the opportunity to further challenge students as he/she approaches his/her goals
- Allows for timely intervention with the student
  - Changes can be made to the student's program before he or she fails

Data Reporting – Review Results

- Data-driven explanations and hypotheses
- Determine the nature of the problem:
  - Student Specific
    - May prompt further evaluation of the student
    - There may be “outside” factors affecting the student
  - Systemic
    - Services, placement, and/or support are not appropriate
    - Staffing or methodology may also be of concern

Data Reporting – Share!

- Always prepare to show the data behind decisions
  - If there are no data, what is the decision being based upon?
- If a change is required, all interested parties should be a part of the decision
  - A case conference may not be needed depending on the proposed changes in the student's program

Resources

- http://www.Interventioncentral.org
- http://www.Studentprogress.org
- http://www.rti4success.org – National Center on Response to Intervention

Resources-Data Collection Forms

- Special Connections: go to Assessment Section/Teacher Tools link http://www.specialconnections.ku.edu/cgi-bin/cgiwrap/specconn/main.php?cat=assessment&section=main

- Dr. Mac's Behavior Management Site: go to Intervention Strategies link http://www.behavioradvisor.com/

- Teaching Children with Autism a resource by Jason M. Wallin: go to Printable Documents/Generic Data Sheets

  http://www.polyxo.com