

DOINGWHATWORKS



SAMPLE MATERIAL

Steps for Monitoring and Graphing Progress

Tri-Community Elementary School, Pennsylvania

Topic: Response to Intervention in Primary Grade Reading

Practice: Progress Monitoring and Differentiation

To improve student achievement, educators at Tri-Community Elementary School use data to make informed programmatic and instructional decisions. The Pennsylvania Training and Technical Assistance Network (PaTTAN) provides this progress monitoring implementation guide that outlines a seven-step process to collect, analyze, and use student data for instructional decision making.

The first section outlines steps for conducting progress monitoring, including writing goals and objectives, making data collection decisions (e.g., tools and schedule), evaluating and visually representing data, adjusting instruction, and communicating progress. The process begins by setting student goals and expectations based on their current achievement level. Connecting baseline and goals provides an aimline against which teachers can review student performance on regular assessments to determine if they are making satisfactory progress. When necessary, instructional interventions are designed and implemented to improve student progress.

The second section shows how to set up a graph, establish baselines and set goals, draw the aimline, plot student performance, and analyze the data. Directions for determining the line of progress and an example are included.

Students at Tri-Community Elementary School are actively engaged in progress monitoring. They know their target scores, monitor their progress through a graph, and are motivated to reach goals. Teachers encourage students to share their graphed progress monitoring results with school staff and their parents. The graphs help teachers communicate student progress and assessment results to parents during conferences.

The progress monitoring process and graphs are also discussed by Tri-Community's literacy coach in the *Helping Teachers Use Progress Monitoring* video.

Progress Monitoring

for

Informed Instructional Decision-making

For All Students



Progress monitoring is the ongoing process of collecting and analyzing data to determine student progress. It can be used to determine progress on specific skills and general outcomes when compared to grade-level norms for all students in the school population. It can also be used to determine progress on IEPs (annual goals and short-term objectives) for students in special education programs.

The process begins by setting goals for each student, based on where the student is presently functioning (current level of educational performance or baseline level) and expected levels of progress. Connecting the baseline and the goal or target performance provides an aimline. Student performance on regularly administered probes is compared with the aimline to determine if the student is progressing toward the goal. When necessary, instructional interventions are designed and implemented to improve student progress.

The Seven Steps of Progress Monitoring

1. Writing Annual Goals and Objectives
2. Making Data Collection Decisions
3. Determining Data Collection Tools & Schedule
4. Representing the Data Visually
5. Evaluating the Data
6. Making Instructional Adjustments
7. Communicating Progress

1. Writing annual goals and objectives

Teachers must write precise and measurable goals that provide a clear basis for monitoring student progress. The goals estimate what progress can be expected in a set period of time based on where the student is presently performing. Students in special education programs have annual goals and short-term objectives. The annual goals estimate what outcomes can be expected in an academic year based on the student's present level of performance. The objectives provide steps for meeting the goal. Each goal and objective should include:

- The condition under which the behavior is performed,
- The student's name,

- Clearly defined, observable behaviors, and
- The performance criterion (i.e., the number of times the behavior is performed at criterion level, and the frequency of assessment).

2. Making data collection decisions

Data collection serves as a day-to-day guide for making adjustments in instruction, and provides the information needed to determine student progress toward goals and, in the case of students in special education, objectives. Data must be collected often enough to provide for timely intervention and student progress toward the goal. The following questions can guide decisions:

What type of data will be collected?

- Frequency or rate
- Percentage
- Duration
- Latency
- Quality of product or performance
- Level of assistance
- Fluency

Where will data be collected?

- Classroom
- Cafeteria
- Playground
- Job-site

How often will data be collected?

- Daily
- Weekly
- Monthly
- Quarterly

Who will collect data?

- Classroom teacher
- Parent
- Job coach
- Student
- Paraeducator
- Others

3. Determining data collection tools and schedule

Tools must be selected or designed to collect data. A schedule to review the data must be established. The type, location, and frequency of data to be collected, as well as who will collect the data, determine the tools or methods to be used. Commonly used data collection tools/methods include:

- Structured interviews or surveys
- Observations
- Teacher-made tests
- Rubrics
- Assessment checklists
- Rating scales
- Task analytic recording
- Portfolio assessment
- Curriculum-based assessment
- Anecdotal records

4. Representing the data visually

Visual representation of data provides a picture of student progress, and helps to clarify the written word (description of student progress) or list of numbers used to make decisions. Ways to show data visually include:

- Graphs
- Charts
- Checklists

5. Evaluating the data

Data collection provides information used to drive instruction. Collected data must be reviewed regularly and on a predetermined basis.

The data must be evaluated to determine if the student is making progress toward the goals and, in the case of students in special education, objectives, and to determine how well the student is responding to the intervention being implemented.

Decision rules should be applied when analyzing the graph. For example, a decision to intervene should be made if four consecutive data points are below the aimline or four of the last six data points are below the aimline.

6. Making instructional adjustments

When the data patterns indicate the need to intervene, simple instructional interventions should be used. If these adjustments still do not yield results, moderate and

then more intensive interventions should be tried. When instructional interventions do not result in the expected progress being made for students in special education programs, the IEP team should be reconvened to reevaluate the goal and objectives.

Examples of data patterns and suggestions for interventions include:

- If the data patterns show that the student is making adequate or better progress, the program is working, and the teacher should continue the present instructional program.
- If the data patterns show that the student's progress is stalled, and the student can do some, but not all, of the task, the teacher should provide more direct or intensive instruction on difficult steps.
- If the data patterns show that the student's progress is at or near zero, the task is too difficult, so the teacher should teach prerequisite skills.
- If the data patterns show that the student's progress has stalled close to the goal, the teacher should provide increased repetitions and frequent opportunities for practice.
- If the data patterns show that the student's goal has been accomplished, then the instructional program is successful, and the student should move on to a new goal.

7. Communicating progress

Communication about student progress should actively involve the parent and the student. Such communication is a motivational tool for students and strengthens home-school bonds with parents. For students in special education programs, the IEP team determines how progress will be communicated and the method and schedule is noted on the IEP. Progress on IEP goals must be reported at least as frequently as progress is reported for students who do not have disabilities. Ways to keep lines of communication open include:

- Communication books and data logs
- Parent/teacher conferences
- Progress reports and report cards
- Phone calls

How to Create A Graph for Progress Monitoring

Step 1: Set up the graph

- a) Write the student's name on the graph.
- b) Label the vertical axis with the name of the probe or trial (e.g., words correct per minute).
- c) Label the horizontal axis with the testing session or date.
- d) Give the graph a title.

Step 2: Establish baseline

- a) Administer 3 probes or trials.
- b) Select the median (the middle number).
- c) Mark the baseline by placing a dot on the vertical axis.

Step 3: Set the goal (target)

- a) Determine the expected rate of progress (e.g., 2 words per week, 85 percent by June).
- b) Mark the target by placing a dot at the intersection.

Step 4: Draw the aimline

Using a red colored pencil and a ruler, connect the baseline data point with the target data point.

Step 5: Measure and plot student performance

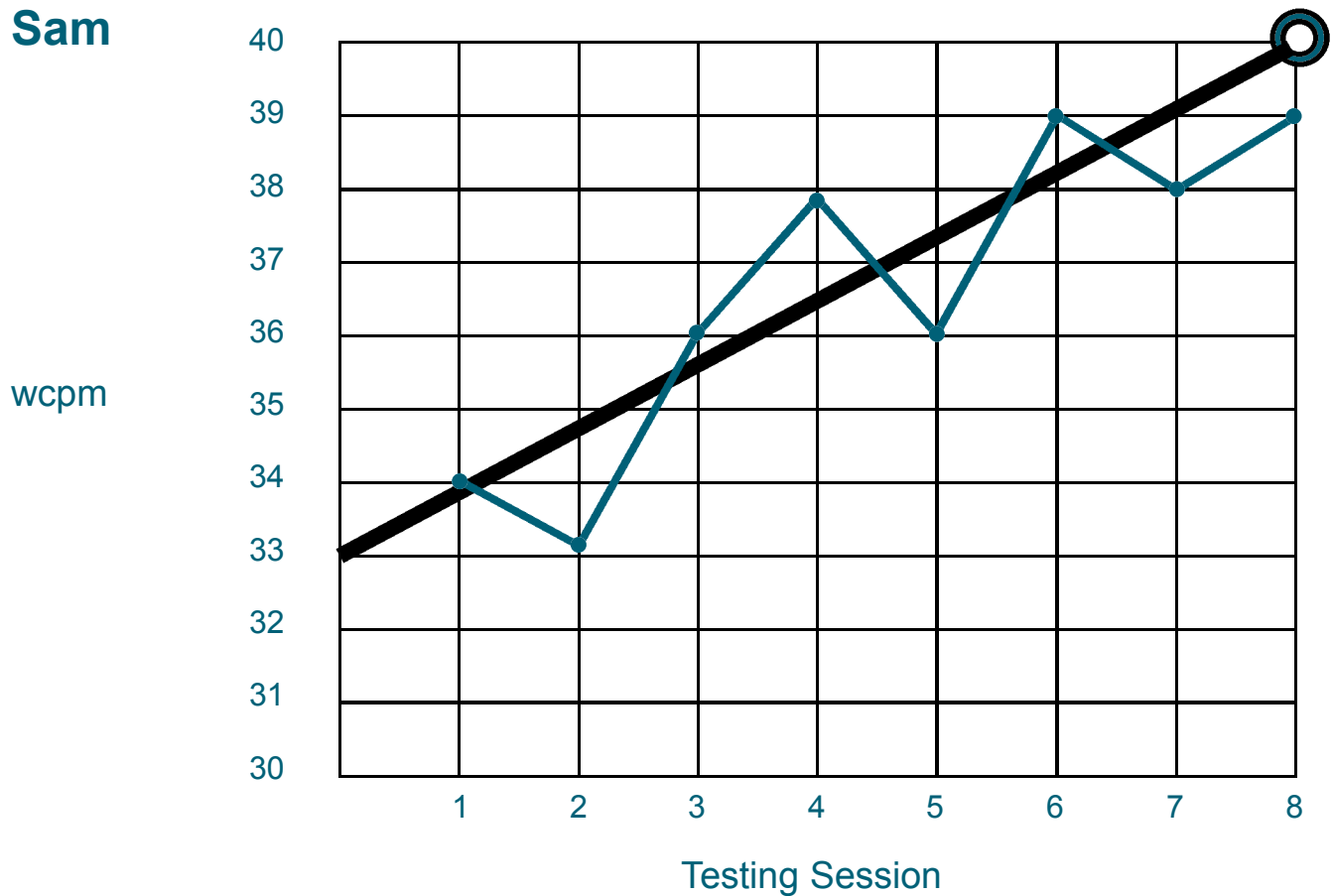
- a) Administer probes or assessments according to predetermined schedule.
- b) Place the data point on the graph.
- c) Connect the data point to the previous point.

Step 6: Analyze student performance

- a) Using a predetermined decision rule, determine whether the student is making adequate progress:
 1. If 4 of the last 6 data points are above the aimline, the student is doing better than expected and it may be necessary to raise the goal.
 2. If 4 of the last 6 data points are below the aimline, the student is not making adequate progress.
 3. If the data points are along the aimline, the student is progressing right on target.
- b) If a change is indicated (as in 1 or 2 above), draw a vertical line to indicate that an intervention has occurred.

Step 7: Continue to measure and record student performance

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How to Determine the Line of Progress (Trend)

1. Divide the data points in half.
2. Draw a short vertical line through the mid-date on each side.
3. Draw a short horizontal line through the mid-rate (median) on each side.
4. Place a point where the short lines intersect.
5. Connect the two points.

