

Utilizing Progress Monitoring Data to Make Decisions for Individualized COVID-19 Recovery Services

Progress monitoring as described in this resource is very helpful for reviewing foundational skills development, such as those taught as part of a student’s measurable annual goals. As such, it may be especially useful when Individualized Education Program (IEP) teams are considering Individualized COVID-19 Recovery Services related to a specific skill or strategy with which a student needs additional support due to the pandemic. However, IEP teams are cautioned to consider the totality of a child’s environmental and social circumstances in determining the need for Individualized COVID-19 Recovery Services. Progress monitoring on foundational skills or strategies alone may not be sufficient to fully determine the need for Individualized COVID-19 Recovery Services. Teams are encouraged to consider [additional data sources](#) and a [broad set of questions](#), as they are applicable, in working through the process of making these determinations.

Analysis of progress monitoring data is one essential component for determining the need for Individualized COVID-19 Recovery Services and how to best provide them. In general, progress monitoring is a process for collecting data to determine the extent to which students are demonstrating progress toward IEP goals. Please see [Data Sources for IEP Teams When Considering Individualized COVID-19 Recovery Services](#) for more information about possible data points. Progress monitoring can also be used to quantify students’ rates of improvement toward goals, to compare the effectiveness of different forms of instruction aligned to these foundational skills, and, importantly, to determine when an instructional change is needed to support students to achieve their goals. The IEP team should consider a student’s regression or lack of effective progress when determining the student’s need for Individualized COVID-19 Recovery Services.

Graphing Student Progress Data

Effective progress monitoring requires teams to: (a) establish a student’s baseline or current performance level on the foundational skill that the student will be learning during the next IEP period, (b) identify an achievement goal that the student needs to reach by the end of the prescribed period, and (c) determine how much progress the student must make across time in order to meet the goal (goal line). The baseline, goal, and goal line can be graphed either electronically or by hand. This process occurs for all IEP goals. The student’s progress is measured on a regular basis using brief, easily-administered probes or assessments. Data are graphed and examined to determine if the student is making enough progress to meet the goal, as shown by the example to the right.

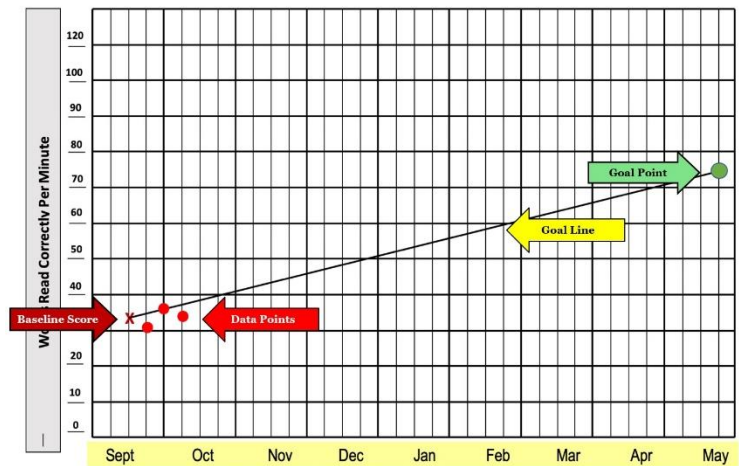


Figure 1 Sample Progress Monitoring Graph

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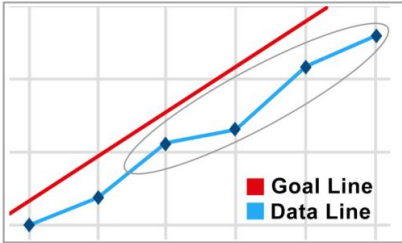
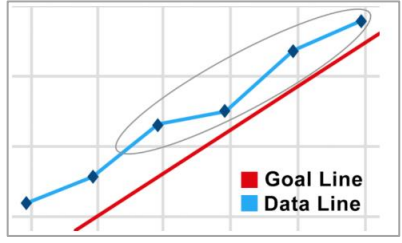
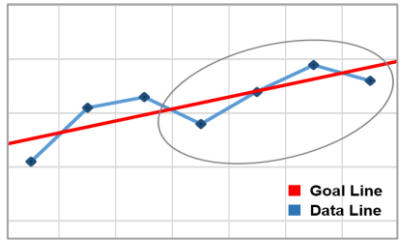
Analyzing Progress Monitoring Data

There is no singular best method for analyzing progress monitoring data. Two of the more commonly-used tools for analyzing data include the *four-point decision rule* and *trend line analysis*. Each of these are explained below:

Four-Point Decision Rule

1. It is recommended that IEP teams collect at least six to nine data points before making any decision. If the teacher is collecting one data point per week, this would mean reviewing data approximately every six weeks.
2. Once the data points are collected, teams can compare the goal line to actual student performance using what is called the Four-Point Decision Rule, illustrated below.

Table 1 Four-Point Decision Rule

Placement of the Last Four Data Points	Instructional Recommendation
<p>Last four data points are below the goal line.</p>  <p>The graph shows a red line representing the goal and a blue line representing the data. The blue line is consistently below the red line for the last four data points, which are circled in grey.</p>	<p>Change Instruction: If the last four data points are below the goal line, this indicates the student is not making sufficient progress and will most likely not meet the end-of-year goal. It is recommended that the team try a different instructional approach after conducting a root cause analysis to help determine why the student has not made sufficient progress.</p>
<p>Last four data points are above the goal line.</p>  <p>The graph shows a red line representing the goal and a blue line representing the data. The blue line is consistently above the red line for the last four data points, which are circled in grey.</p>	<p>Consider Increasing the Goal: If the last four data points are above the goal line, the student has made more progress than expected and will most likely meet the end-of-year goal sooner than expected. The IEP team should consider increasing the goal.</p>
<p>Last four data points are above and below the goal line.</p>  <p>The graph shows a red line representing the goal and a blue line representing the data. The blue line fluctuates around the red line, with two points above and two below, for the last four data points, which are circled in grey.</p>	<p>Continue Current Instruction: If the last four data points are both above and below the goal line, the student is making progress as expected. It is recommended that the team continue with the student's instruction and continue to monitor progress.</p>

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Progress monitoring data can also be used to determine a student's **rate of progress (ROP)** over time, in reference to a common scale or frame of reference. This information can be very useful for comparing rates of growth across targeted time periods as well as setting future goals. The method for doing so involves dividing the number of weeks of instruction by the amount of progress made. For example:

Progress monitoring is in place for a student working on reading fluency skills. Baseline scores indicated the student was reading approximately 40 words per minute with a goal set for the end of the IEP time period. After 9 weeks of instruction the team wants to determine the rate of improvement for the student. Her latest score showed 48 words correct per minute. In order to determine the student's rate of improvement, the team uses the following formula:

$$\begin{aligned} & \mathbf{9 \text{ weeks of instruction resulted in 8 words gained per minute } (48 - 40 = 8)} \\ & \mathbf{9 \text{ weeks of instruction divided by the 8 words gained per minute } (9/8 = 1.13)} \\ & \mathbf{\text{Rate of gain per week} = 1.13 \text{ words per minute gain}} \end{aligned}$$

Trend Line Analysis

The second tool used for analyzing progress monitoring data is a trend line analysis. Although research indicates that trend line analysis is **more reliable for evaluating a student's performance** compared to 3- or 4-point decision rules (Ardoin et al., 2013; Normal & Christ, 2016), it requires more time and expertise unless an electronic progress monitoring system that includes automatic trend line analysis is being used. There are a number of resources on the internet that can help explain the method for creating a trend line with data that have been collected over time. In general, it is recommended (see, for instance, Stecker & Lembke, 2011) that at least 4 weeks of instruction have occurred and at least eight data points have been collected prior to determining the trend of current performance and comparing that to the goal line. Once IEP teams can make comparisons between a student's trend line and goal line, they should consider the following general recommendations:

- If the trend of student progress is steeper than the goal line, then raise the goal.
- If the trend of student progress is **less steep** than the goal line, then **make a teaching change**.

Progress Monitoring Phases Related to Individualized COVID-19 Recovery Services

Progress monitoring data should be utilized as one piece of information to help answer questions and make decisions regarding the need for Individualized COVID-19 Recovery Services.

Using this progress monitoring data, IEP teams should ask:

Given the pre-pandemic trajectory and the actual student performance during the pandemic, what is a reasonable yet ambitious recovery pathway that can help return the student to their pre-pandemic trajectory?

As shown in Figure 2 (Sample Progress Monitoring Data) below, teams should consider progress monitoring data across multiple periods of time:

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- *Pre-Pandemic Trajectory:* Where would this student’s anticipated skill level currently be if COVID-19 had not occurred? **This trajectory is shown in the below graph as the blue line labeled “Pre-COVID-19.”**
- *Actual Student Performance During the Pandemic:* How did this student perform from March 2020 until now? How does the student’s rate of growth before COVID-19 compare to their rate of growth since March 2020? What environmental and social factors might need to be discussed in order to understand these data? **This performance is shown in the below graph as the orange line labeled “Comprehensive Distance Learning” and as the gray line labeled “Hybrid.”**
- *Progress Monitoring the Pathway:* As IEP teams make and agree to Individualized IEP COVID-19 Recovery Services, ongoing progress monitoring can help the IEP team (a) create projected new goals, (b) provide a means for measuring the rate at which the student is progressing toward these new goals by utilizing the recovery services, and (c) determine the need to reconvene and reconsider these services. **This pathway is shown in the below graph as the yellow line labeled “Recovery Services.”**

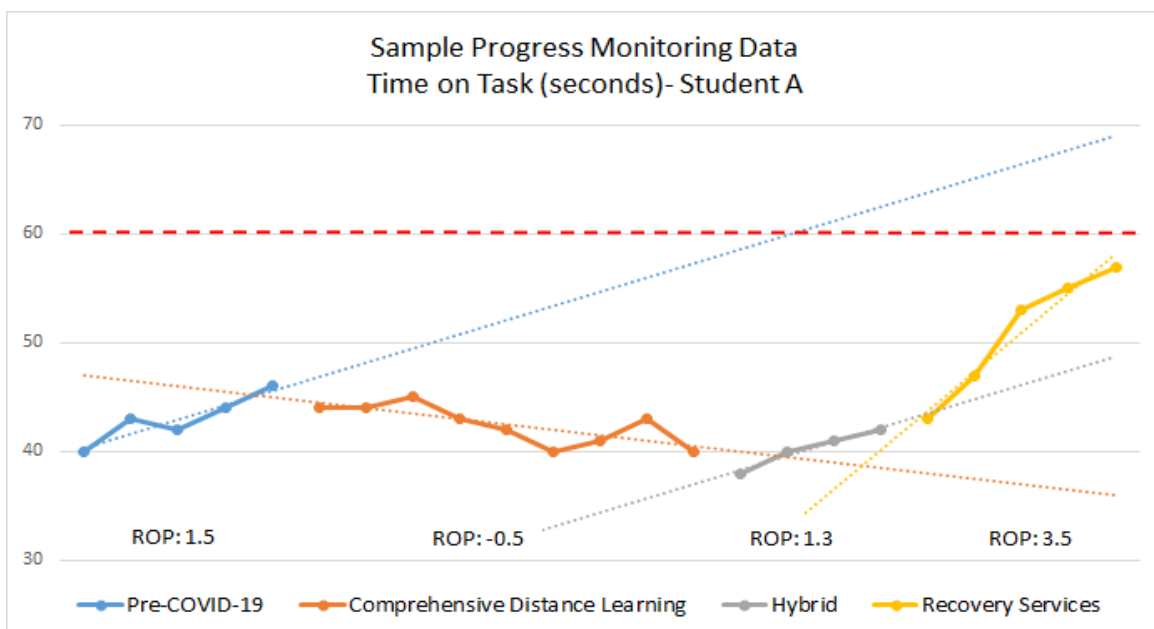


Figure 2 Sample Progress Monitoring Data

Progress Monitoring Resources

To learn more about these progress monitoring methods, please review the following resources:

- National Center on Intensive Intervention (NCII) at American Institute for Research:
 - [Using Academic Progress Monitoring for Individualized Instructional Planning \(DBI1\)](#)
 - [Using Academic Progress Monitoring for Individualized Instructional Planning \(DBI2\)](#)
 - [Overview of Academic Goal Setting Strategies](#)
- IRIS Center: [Progress Monitoring Module](#)
- [RTI Action Network](#)
- [Progress Center: Resources for Educators and Related Service Providers](#)

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References

- Ardoin, S. P., Christ, T. J., Morena, L., Cormier, D. C., & Klingbeil, D. A. (2013). A systematic review and summarization of recommendations and research surrounding curriculum based measurement of oral reading fluency *CBM-R decision rules. *Journal of School Psychology, 51*, 1-18.
- Normal, E. R., & Christ, T. J. (2016). Curriculum-based measurement of reading: Accuracy of recommendations from three-point decision rules. *School Psychology Review, 45*(3), 296-309.
- Stecker, P. M., & Lembke, E. S., (2011). Advanced Applications of CBM in Reading (K-6); Instructional Decision-Making Strategies Manual. National Center on Student Progress Monitoring. U.S. Office of Special Education Programs. Retrieved June 29, 2021 from <https://files.eric.ed.gov/fulltext/ED519250.pdf>
- The Iris Center. (2005, Rev. 2019). *Progress monitoring: Reading*. Retrieved from <https://iris.peabody.vanderbilt.edu/module/pmr/>