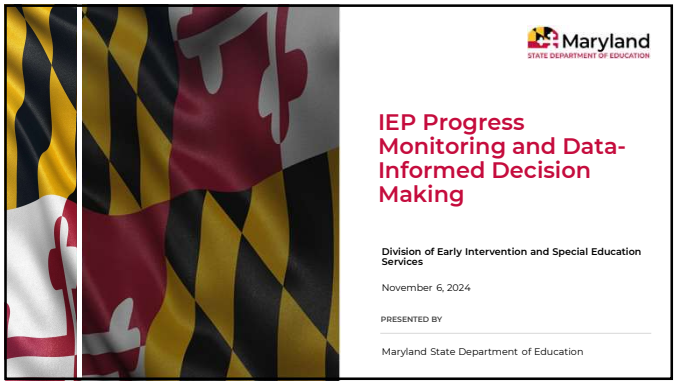

Maryland
STATE DEPARTMENT OF EDUCATION

IEP Progress Monitoring and Data-Informed Decision Making

Division of Early Intervention and Special Education Services

November 6, 2024

PRESENTED BY

Maryland State Department of Education

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Maryland

Intended Outcomes

By the end of the session, participants will be able to:

- Recognize the importance of a robust and accurate data collection system.
- Understand the different types of data and how they are collected.
- Understand the importance of data analysis to inform instruction and progress reporting.
- Utilize sample tools to support data collection.

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Presentation Outline

1. Understanding the "Why" and "How" of Data Collection and Analysis
2. Exploring the Data Collection Process
3. Exploring the Data Analysis Process

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1. Understanding the "Why" and "How" of Data Collection and Analysis
2. Exploring the Data Collection Process
3. Exploring the Data Analysis Process
Understanding the "Why" and "How" of Data Collection and Analysis
Participants will be able to explain the impact of effective, collaborative data-informed decision making on instruction.
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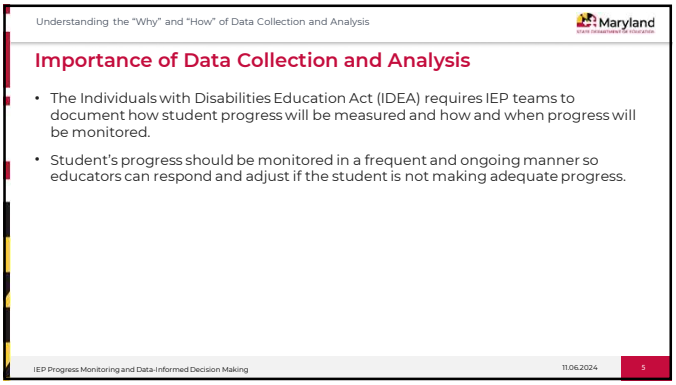
Understanding the "Why" and "How" of Data Collection and Analysis
Maryland
Importance of Data Collection and Analysis
• The Individuals with Disabilities Education Act (IDEA) requires IEP teams to document how student progress will be measured and how and when progress will be monitored.
• Student's progress should be monitored in a frequent and ongoing manner so educators can respond and adjust if the student is not making adequate progress.
IEP Progress Monitoring and Data-Informed Decision Making
11.06.2024
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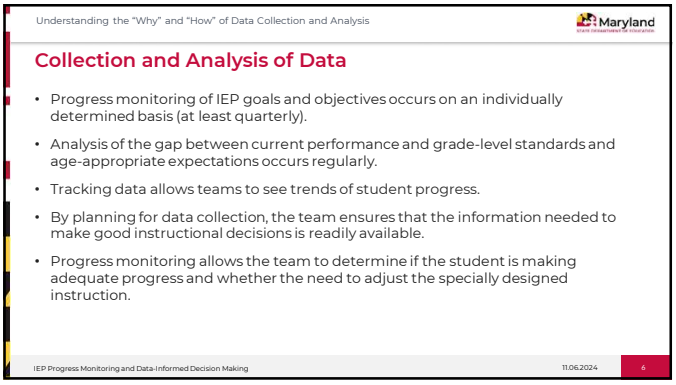
Understanding the "Why" and "How" of Data Collection and Analysis
Maryland
Collection and Analysis of Data
• Progress monitoring of IEP goals and objectives occurs on an individually determined basis (at least quarterly).
• Analysis of the gap between current performance and grade-level standards and age-appropriate expectations occurs regularly.
• Tracking data allows teams to see trends of student progress.
• By planning for data collection, the team ensures that the information needed to make good instructional decisions is readily available.
• Progress monitoring allows the team to determine if the student is making adequate progress and whether the need to adjust the specially designed instruction.
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11.06.2024
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When do we collect and analyze data?

- Effective educators use data collection and analysis when completing the following:
  - IEP progress monitoring
  - IEP amendments and/or revisions
  - Annual IEP Development
  - Development of PLAAFPs
  - Least Restrictive Environment Discussions
  - Evaluation of interventions and supports
  - Determination of next steps as a result of emergency conditions

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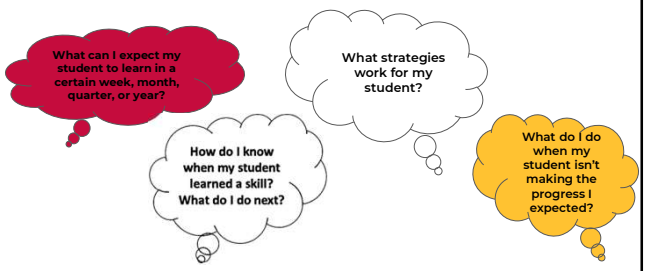
Questions to Consider When Making Data Informed Decisions



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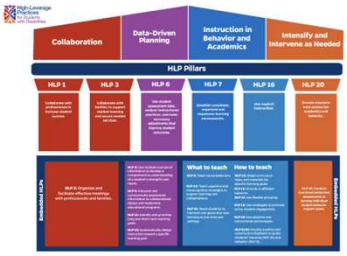
High-Leverage Practices for Students with Disabilities



https://coedar.education.ufl.edu/wp-content/uploads/2024/03/HLP-Pillars-.pdf

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Data-Driven Planning

- Effective educators continuously assess and analyze data from various assessment sources to understand student progress and adjust instructional methods accordingly.
- Utilize both formative and summative assessments to ensure that all students, including those with disabilities, are mastering the material.
- Skilled in interpreting data from formal assessments, which are crucial for identifying students for special education services and developing IEPs .
- The one pillar and four embedded high leverage practices for data-driven planning are:
  - Use student assessment data, analyze instructional practices, and make necessary adjustments that improve student outcomes.
  - Use multiple sources of information to develop a comprehensive understanding of a student's strengths and needs.
  - Interpret and communicate assessment information to collaboratively design and implement educational programs.
  - Identify and prioritize long and short-term learning goals.
  - Systematically design instruction toward a specific learning goal.

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Framing the Data-Informed Decision-Making Thought Process

Defining Data Collection vs. Data Analysis

Data Collection	Data Analysis
• Beginning of data process	• Informs instructional decisions
• Gathering and organizing data related to a question	• More in-depth look at what the data is showing: trends, patterns, etc.
• Informs the data analysis process	• Looks at the impact of changes/interventions
• Is ongoing and may change based on new questions	• Is ongoing as new data is being collected/available

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1. Understanding the "Why" and "How" of Data Collection and Analysis
2. Exploring the Data Collection Process
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Exploring the Data Collection Process

Participants will be able to collect multiple types of student-level data, including trend data to determine rate of progress and data on the implementation and effectiveness of specific interventions and supports.

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Measuring Student Performance on IEP Goals and Objectives

- At the beginning of each school year and after the annual review of a student's IEP, the implementation team should create a progress monitoring schedule.
- Recording of student progress on IEP goals and objectives indicates the following:
  - What will be measured (behavior)
  - How will it be measured (monitoring)
  - What will be measured (number of times per week or per event)
  - Where or when it will be measured (subject or time of day)
  - By whom it will be measured (special education teacher, trained paraprofessional, related service provider)
- If necessary, train staff members involved in collecting student data.

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Data Collection Steps

Step 1: Gather multiple sources of quantitative and qualitative data to establish trends and current performance (academic, social/emotional/behavioral, secondary transition, parent input).

Step 2: Gather data related to the implementation of accommodations, modifications, and supplementary aids and services.

Step 3: Organize and graph data.

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Measuring Student Progress

- Types and direction for student assessment will vary from system to system and school to school.
- The following sources of data allows teams to form and plan their instructional decisions and plan to collect that information:
  - **Formative Assessments** – Methods teachers use to gather information about student understanding during the learning process to make instructional decisions. These methods may include quizzes, written exit tickets, as well as a variety of teacher-made available tools.
  - **Curriculum-Based Assessments** – Often used as universal screening tool and can be used within a multi-tiered system of supports to identify and rate the level of student growth over the school year.
  - **Performance Assessments** – Measures how well students apply their knowledge and skills to authentic problems by producing something such as a project, report, or performance that is scored against a specific criteria.

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Examples of Measures

- **Rubrics** – Based on a set of guidelines for expected behavior or task accomplishment with ratings.
- **Level of Independence** – Recoding indicates level of support needed, often ranging from high support (physical assistance) to medium support (modeling or gesturing), to low support (verbal reminder).
- **Task Analysis** – Based on what skill or task involves the measure of mastery of steps within a task. The actual measure may be a "level of independence" or a yes/no frequency.
- **Latency Recording** – How long it takes for a student to begin a task or behavior. It measures the time that elapses between a prompt or cue to "start" the task.
- **Duration Recording** – Length of time that a student exhibits a behavior.
- **Frequency Recording** – Recording of events (e.g., number of correct responses on an assignment, number of questions answered on topic, number of times leaving class) or time intervals (e.g., number of class periods attended, number of days turned in homework, number of adapted assessments scored 80% or greater).

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Frequency Recording: Event and Interval Data

- Event recording tracks the number of times a specific behavior occurs within a given period.
  - This method is best used for behaviors that have a clear beginning and end.
  - Some examples of behaviors that you may use event recording for are:
    - Task initiation
    - Protests to task demands
    - Inappropriate classroom behaviors
- Interval recording tracks whether or not the specific behavior occurs within a given period.
  - This method involves breaking up the student's day/class period into set time blocks and then the observer indicates "yes" or "no" that the target behavior occurred during that time block.
  - Some examples of behaviors that you may use interval recording for are:
    - Frequently occurring behaviors (elopement, aggression, etc)
    - Task completion

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Data Collection Tools

- Data can be collected on paper data sheets or by utilizing electronic tools (Google Forms, Microsoft Forms, Word Document, Excel Spreadsheet, etc.)
- Examples of data collection tools:
  - Observation records
  - Checklists
  - Rating scales/Surveys
  - Clicker (for counting instances)
  - Individualized student data sheet (specific to their IEP goals and objectives)
  - Frequency chart
- Some goals and objectives may require individualized approaches to progress monitoring, such as such as work samples and other student products, teacher records (such as recordings of assignments completed), student-completed checklists and other self-monitoring data, etc.

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Matching an appropriate data collection tool to the goal

- Appropriate methods of measurement are critical
- Consider measurement options when developing goals
- Select a tool that:
  - Directly measures the behavior stated in the IEP goal
  - Is user-friendly (brief, easy to administer on a regular basis, etc.)
  - Provides valid, reliable data on the academic skill or the behavior
  - Can be successfully used by multiple people (teachers, paraprofessionals, etc.)

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Selecting a Tool

If you are measuring…	You might use…

Occurrence and/or Rate of a behavior	• Data collection sheets
	  • Frequency recording
	  • Interval recording
	  • Time sampling

Accuracy/ Quality of a Skill	• Curriculum-based measures • Probes • Rubrics • Assignments/assessments
Level of Independence	• Rubrics • Task-analysis

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Supports for Effective Data Collection

- Create and choose an easy, user-friendly, uniformed data collection tool- keep it simple and efficient.
- Set aside time for graphing and organizing data.
- Make data collection a shared responsibility among team members. Involve special education teachers, trained paraeducators, parents, or others on how to use the data collection tool.
- If necessary, train members on how to data collect and how to use the tool.
- Keep accurate records of instructional changes, including new or changed SDI (frequency, intensity, duration), accommodations, IEP goals/services, etc.

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Graphing Data

- The team may find it helpful to plot both the expected and actual data points on a graph.
- Graphing expected and actual data points shows the trajectories of the two lines while visually assessing whether the student is making sufficient progress to achieve the objective or goal in the estimated time.
- Remember that it takes at least three data points to show a trend and data collection needs to occur frequently enough to show progress over each quarter of the school year.
- Before analyzing the data, ask the team the following question: Do I have enough data collected to process to analysis?

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1. Understanding the "Why" and "How" of Data Collection and Analysis
2. Exploring the Data Collection Process
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Exploring the Data Analysis Process

Participants will be able to analyze student-level data to make instructional decisions.

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Data Analysis Steps

Step 1: Establish and analyze expected versus actual progress.

Step 2: Determine the impact of instructional changes or other adaptations to program.

Step 3: Determine next steps.

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Analyzing Data and Adjusting

- The purpose of collecting data on student progress is to determine if progress is enough to accelerate the student's rate of learning to achieve IEP goals and objectives.
- It is important to consistently track data so that the team may see trends of student progress.
- Teams should not wait until the end of the marking period to adjust instruction.
- By planning and collecting data, the team ensures that the information needed to make instructional decisions is readily available.
- If student progress is not adequate, the team should make changes to one or more elements of the SDI after examining multiple factors.
- Remember it takes multiple data points to show a trend and data collection needs to occur frequently enough to show progress over each quarter of the school year.

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Structures and Best Practices to Support Data Analysis

- Integrate time as part of team planning or IEP team discussions.
- Consider how technology can be used to increase accuracy of analysis (creating trend lines, filtering student information, etc.) or collaboration (sharing digital data sheets, collaborating via shared documents with other team members, getting information from parents through email, forms, etc.).
- Consider how standard data collection or analysis procedures may support the merging of multiple pieces of data.
- Involve the entire team. Make data collection and analysis a collaborative process. Ensure all relevant data from various service providers (teachers, related service providers, parents, outside sources, etc.) are considered and integrated.
- Merge multiple data sources to gain an overall picture of the student.

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Determining Student Response to General Education Curriculum and SDI

- IEP teams will begin thinking about next steps related to the student's programming. These steps may include:
  - New or revised IEP with updated accommodations, services, or goals.
  - Continuation of an intervention that is having the desired effect on student progress.
  - Continuation of an intervention with increased frequency or intensity to narrow the gap.
  - Discontinuing an intervention that is not having the desired effect on student progress.
  - Changes in the data collection process.
- During this step, teams will summarize and make recommendations with the input of the parent or guardian and student, as appropriate.

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Progress Reports

- Progress reports are not only legally required for students with IEPs, but the serve as documentation on the effectiveness of current SDI for the student and allow for adjustments to be made to better serve the student.
- Common challenges with progress reporting:
  - Unclear goals make them more difficult to monitor
  - When data collection is inconsistent, it can be difficult to determine if a student is making progress or not
  - The data collection method needs to be appropriate for the goal being measured
- Progress codes:
  - Achieved
  - Making sufficient progress to meet goal
  - Newly introduced skill progress not measurable at this time
  - Not making sufficient progress to meet the goal
  - Not yet introduced

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When a Student is "Not Making Sufficient Progress"

- Convene the IEP team to discuss the lack of progress
- There are a number of aspects that should be considered as the IEP team determines the reason(s) for lack of progress. These include, but are not limited to:
  - Implementation of the components of specially designed instruction with fidelity;
  - Appropriateness of the goals;
  - The student's social/emotional needs and behavioral concerns;
  - Student-specific factors, such as health, attendance, etc.;
  - Appropriateness of the instructional program or intervention for the student;
  - Implementation of interventions, instructional techniques, and evidence-based practices with fidelity; and
  - Skills that are needed by staff for consistent implementation with integrity.

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Remember

- IEP data collection and analysis are the following:
  - Individualized
  - Timely and accurate
  - Shared responsibility among IEP team members.
  - Instructional decisions are rooted from data.
  - Multiple data points are required to show trends
  - Data collection needs to occur frequently enough to show progress over each quarter of the school year.

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Engagement Activity

- You are going to read a goal and determine the best method to collect quality data for progress monitoring of the goal.
- You will then be presented with a progress report for the goal and determine if it is a quality progress report. If it is not, what could be done to enhance the progress report?

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Contact Information

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Session Evaluation

Please scan the QR code to complete the evaluation for today's session.

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Individualized Education Program (IEP) Data Collection Sheet Sample

DIRECTIONS

1. Enter the student's name.
2. Write out the goal or objective for the student.
3. Enter the date.
4. To the right of the date, enter the percentage, number of correct responses, number of incorrect responses, prompted response, no response, etc.
5. After data collection, graph the data to analyze and evaluate it effectively.

Students Name:

Goal/Objective:

Date	Percentage	Number of correct responses	Number of incorrect responses	Prompted response	No response	Etc.

Goal/Objective:

Date	Percentage	Number of correct responses	Number of incorrect responses	Prompted response	No response	Etc.

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Progress Monitoring Data Sheet Sample

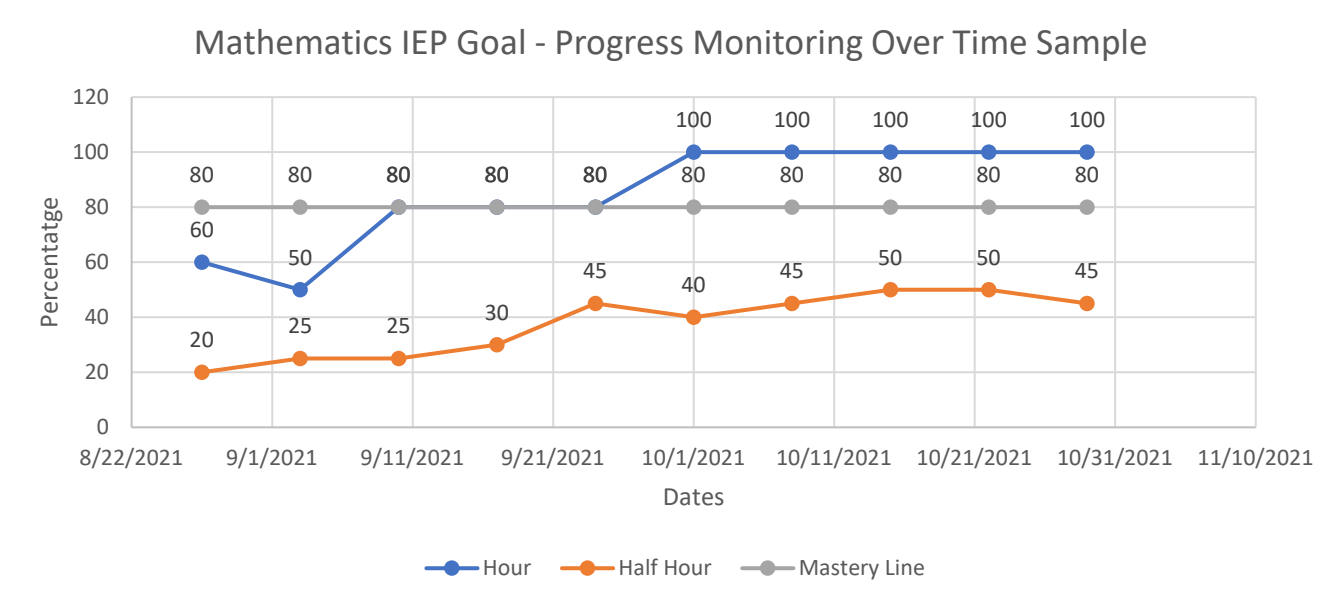
Division of Early Intervention and Special Education Services

Student Info Sample

Student:	
ID #:	
Exceptionality:	
Case Manager:	
School:	
Grade:	
Annual IEP Date:	
Goal and Objectives	

% Data Sample

Date	Hour	Half Hour	Mastery Line	Mastery
8/27/2021	60	20	80	
9/3/2021	50	25	80	
9/10/2021	80	25	80	
9/17/2021	80	30	80	
9/24/2021	80	45	80	
10/1/2021	100	40	80	Target 1 Mastered
10/8/2021	100	45	80	
10/15/2021	100	50	80	
10/22/2021	100	50	80	
10/29/2021	100	45	80	



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% Data Sample

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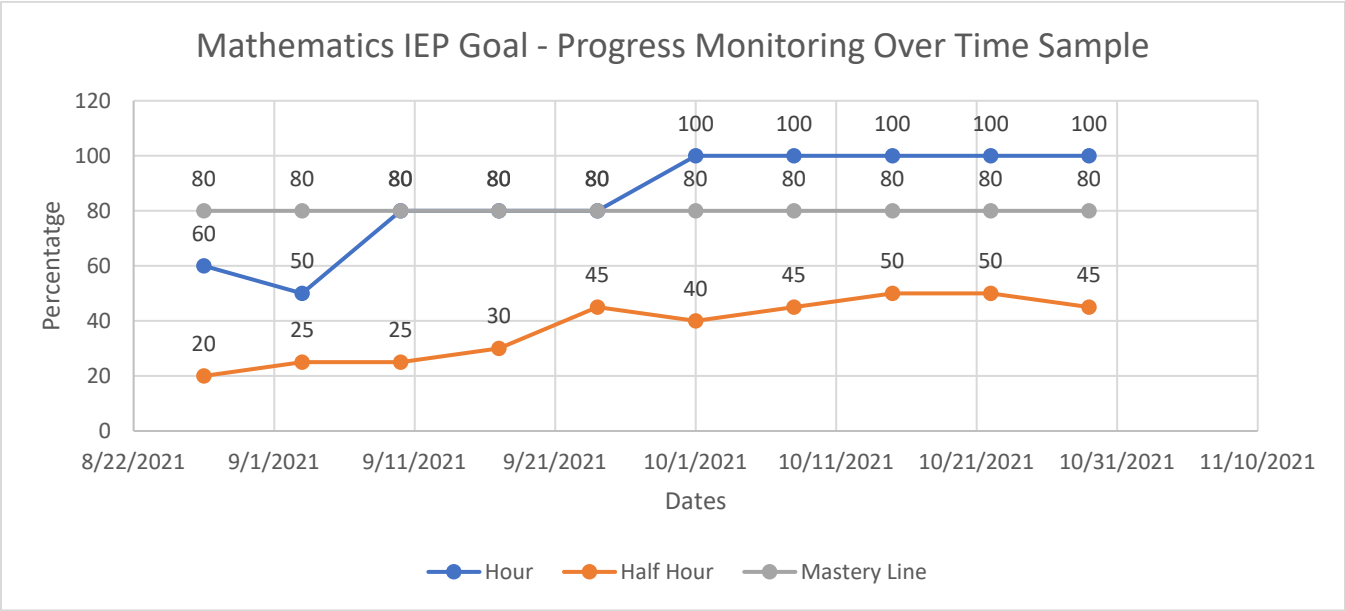
8/27/2021	60	20	80	
9/3/2021	50	25	80	
9/10/2021	80	25	80	
9/17/2021	80	30	80	
9/24/2021	80	45	80	
10/1/2021	100	40	80	Target 1 Mastered
10/8/2021	100	45	80	
10/15/2021	100	50	80	
10/22/2021	100	50	80	
10/29/2021	100	45	80	



Goal Sample

Goal:	Given an analog clock, tell time to the hour and half hour	Mastery Criteria:	80% accuracy, 3x quarterly	Goal Status:	Sufficient Progress	Minimum data points required per quarter:

Social Skills Data Collection Sample

Student Name:

Date of session:

Length of session:

Activity:

Frequency:

"3": Demonstrated every opportunity

"2": Demonstrated most opportunities

"1": Demonstrated a few opportunities

"NA": Not applicable

Objective	Did Not Demonstrate	Demonstrated with prompt	Demonstrated w/o prompt	Frequency
Student will greet group members appropriately.				
Student will participate in activity.				
Student will respond appropriately to other students when addressed.				
Student will say goodbye to group members appropriately.				
Comments:				

Behavior Data Collection Sheet Sample

Aggression	SIB	Unsafe Behaviors	Property Destruction	Physical Noncompliance	Vocal Noncompliance	Bolting	Elopement	Clothing Removal
Head butting; hitting/slapping; kicking grabbing	Biting self	Climbing furniture, climbing on staff, flipping tables	Destroying, swiping, grabbing, or throwing materials	Dropping; falling out of chair, not completing tasks, refusing to comply with demands	Screaming, grunting, or spitting	Leaving designated area of classroom	Leaving the room	Removal of clothing, including shoes and socks

Antecedents:

1. Denied access to items/activity
2. Preferred item taken away
3. Told "no"
4. Instructional demand
5. Non-instructional demand
6. Transition
7. Lack of adult interaction
8. Interaction with peer
9. Wants something done a different way
10. Change in schedule/routine
11. Continued from previous behavior
12. Other (please specify)

PLACE ONE X IN THE APPROPRIATE BOX IF STUDENT ENGAGED IN THAT BEHAVIOR AT ANY TIME THROUGHOUT THE CORRESPONDING TIME INTERVAL.

	Antecedent #	Aggression	SIB	Unsafe Behaviors	P.D.	Physical N.C.	Vocal N.C.	Bolting	Eloping	Clothing Removal	Consequence (What happened directly after the behavior)
8:30 - 8:40											
8:40 - 8:50											
8:50 - 9:00											
9:00 - 9:10											
9:10 - 9:20											
9:20 - 9:30											