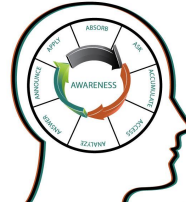




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Develop Your Data Mindset

Module 8 - Progress Monitoring Part 1 - Background Knowledge (Purpose & Graphing)

By Nathan Anderson, Amy Ova, Wendy Oliver, and Derrick Greer

Learning Goals

- Increase knowledge of the purpose of progress monitoring
- Increase knowledge of key elements on a progress monitoring graph
- Increase knowledge of 5 unique data cycles relevant to progress monitoring

SLDS Data Use Standards

- K.1.D Types of Measures: Knows various types and purposes of ASSESSMENTS and other MEASURES
- K.1.E Data Metric: Knows that MEASURES can be broken down into data metrics, which are calculated for ANALYSIS and monitored for changes (p. 7)
- K.2.D Data Context: Knows the circumstances and purposes for which data are collected
- S.4.C Aligned Analysis: Using appropriate technologies, conducts ANALYSIS suitable for the type of data collected, the VARIABLES identified, and the questions or hypotheses posed
- S.6.B Explanation: Explains different data representations and distinguishing features (e.g., histograms, bar charts, contingency tables)
- S.7.A Strategies: Identifies appropriate strategies grounded in evidence to address the needs and goals identified during data ANALYSIS

Teacher Thought

If I monitor the progress of an at-risk student on a weekly basis, I will have a better understanding of whether the student is actually at risk and whether an intervention has had a positive impact on the student.

Introduction

Teacher 1:

There are two things I love about November. Thanksgiving and Fighting Hawks ice hockey!

Teacher 2:

Whoa! Wait just a minute...the two things I love about November are Thanksgiving and Bison football!

Teacher 3:

Wonder if Ryan is a UND or NDSU fan?

Teacher 4:

Knowing Ryan he has watched all the games and worked with the Fighting Hawks and the Bison to practice intervention strategies, so they are better come game time.

Teacher 5:

You know it! That is how they have both made it to so many national championships!

Introduction

Ryan:

I love that we are beginning to think alike about improving student performance. The topic of this PLC meeting is no exception. Although I cannot take credit for our awesome Fighting Hawks OR our awesome Bison, I love that you are thinking about interim assessments as a means to drive intervention strategies. We are going to take our universal screening results one step farther. You have all mastered the universal screening process and have your students placed into three tiers. Next, comes the topic for today's PLC meeting.

Progress Monitoring

Introduction

Ryan:

Progress monitoring is part of the RTI process and is appropriate to begin on a student AFTER the student has been identified as potentially at-risk based on the universal screening assessment and process. Just like with athletes, we monitor student progress, and just like with athletes, we have to learn the fundamentals of our “sport.”

Let’s use our time together today to learn the important fundamentals of progress monitoring. Also, before we start, I thought you might need to be refreshed about the work we did in Module 5 for universal screening. You can click on the links below to access the flyer and other materials from your Data Binder.

Universal Screening flyer: <https://goo.gl/ZgGNr6>

Universal Screening A+ Inquiry graphic organizer: <https://goo.gl/kJ6opX>

Universal Screening table w/ names and data:

<https://drive.google.com/file/d/1mz2uAtWeA9EiGpEPfVceHv68zdM7eO-8/view?usp=sharing>

Introduction

Ryan:

I hope you remembered to bring your Data Binder to this PLC meeting because as you know, we do utilize it *every* meeting. It is like our playbook.

Today we are going to delve into progress monitoring of our students identified as potentially at-risk through the universal screening process we just finished.

Just like our previous meetings, we are going to first review background knowledge we will need for our district's protocol. I have created a Progress Monitoring flyer to assist you. For now, there are multiple choice items that you will complete.

If you recollect from the previous meetings, you will fill in the terms by answering the multiple choice questions. Then you will keep the information in a binder for all of our PLC and Data Team meetings throughout the year. During this activity you will complete your flyer online, but at the end of the module, you will have access to print the document and store it in your physical binder if you'd like.

Activity - 08.01.01

Progress monitoring is part of the RTI process, which fits into North Dakota's Multi-Tier System of Supports (NDMTSS) framework. Progress monitoring is part of which NDMTSS essential component?

- assessment
- data-based decision making
- multi-tier instruction
- infrastructure and support mechanisms

Standard: K.2.D Data Context

Activity - 08.01.02

It is appropriate to begin the progress monitoring process on a student _____

- after the student has been identified as potentially at-risk based on the universal screening assessment
- during an end of unit assessment
- after a student has been identified as proficient on a standardized assessment
- before a student's risk status has been identified on a universal screening assessment

Standard: K.2.D Data Context

Activity - 08.01.03

Progress monitoring is...

- used to assess a student's performance, to quantify his or her rate of improvement or responsiveness to intervention, to adjust the student's instructional program to make it more effective and suited to the student's needs, and to evaluate the effectiveness of the intervention.
- serves the purpose of identifying students who may be at risk for poor learning outcomes so that early intervention can occur. The assessments are usually brief and administered to all students within a grade level.
- a set of standards and materials required of all students in the general education setting, which are often determined by school boards, education departments, or other administrative agencies tasked with overseeing education.
- the extent to which the results of an assessment may be applied to other students.

Standard: K.2.D Data Context

Activity - 08.01.04

Progress monitoring is...

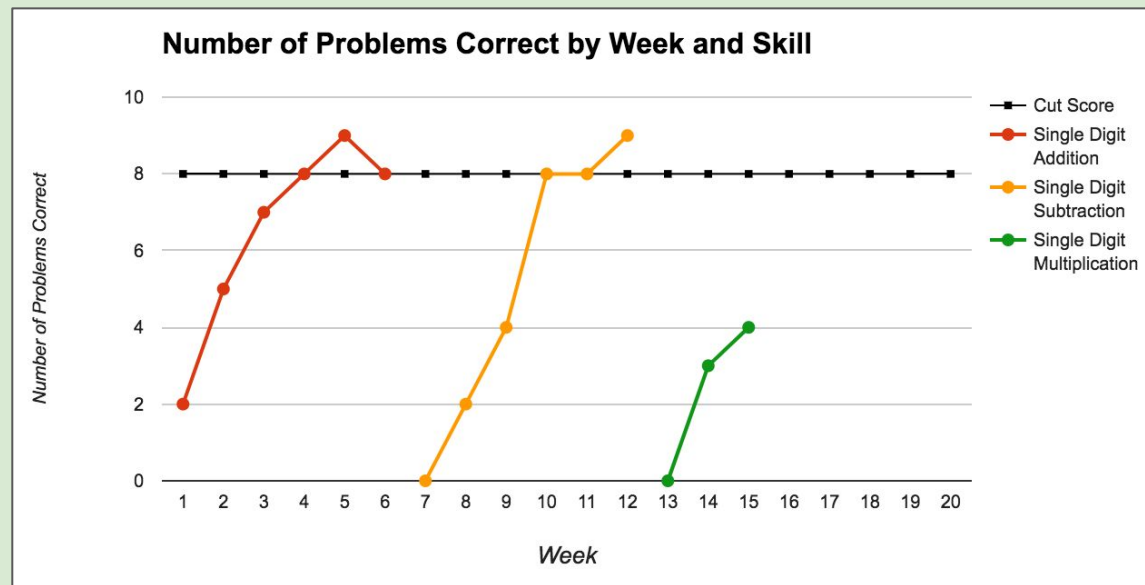
- appropriate for individual students
- implemented for students receiving academic interventions in addition to core instruction
- administered to students identified as being at risk for poor learning outcomes through the universal screening process
- All of the above

Standard: K.2.D Data Context

Activity - 08.01.05

Progress monitoring may be conducted using mastery measures or general outcome measures. A _____ measure is an assessment that determines the mastery of a series of short-term instructional objectives. This type of measure helps answer the question, “Is a student proficient in a specific skill?”

- mastery
- normal
- general outcome
- non-evaluative



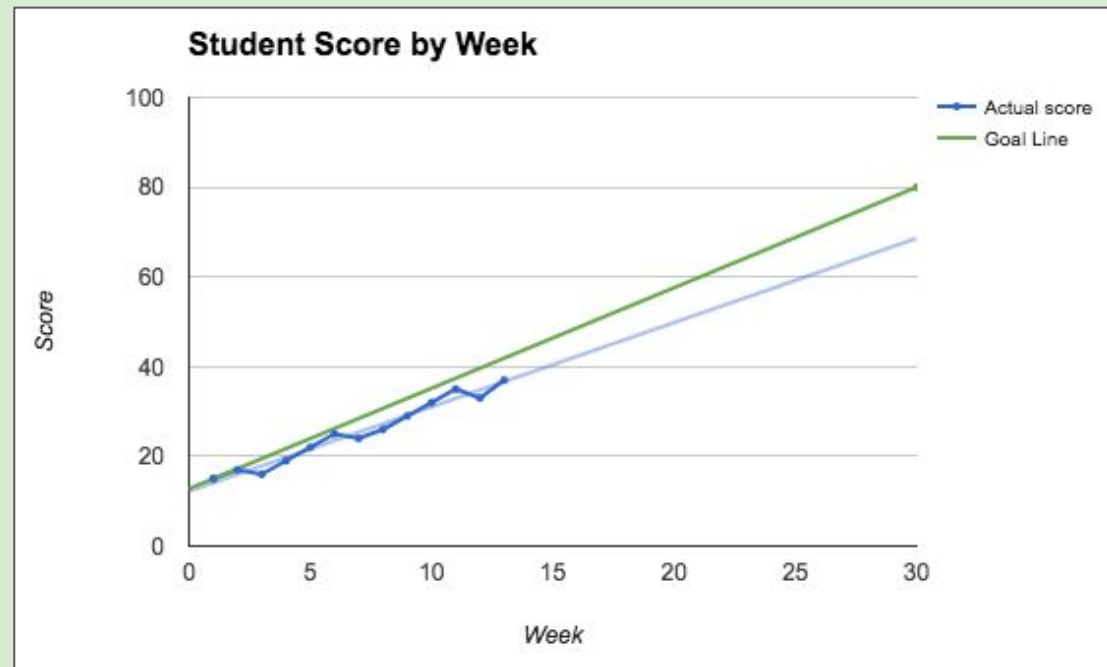
Standard: K.1.D Types of Measures

Activity - 08.01.06

At Great Plains, after a student is identified through universal screening as being potentially at-risk, we typically conduct progress monitoring with a _____ measure. This type of measure is a quick assessment with standardized tools and administration protocol that tracks student growth across time relevant to overall competence in the annual curriculum. It helps answer the question, “Is a student making progress across time?”

- mastery
- normal
- general outcome
- non-evaluative

Standard: K.1.D Types of Measures



Activity - 08.01.07

In order to monitor a student's progress using a General Outcome Measure, you administer quick assessments at regular intervals to the student. These assessments are known as _____.

- probes
- screeners
- summative assessments
- unit tests

Standard: K.1.D Types of Measures

Tutorial

Progress monitoring is part of the RTI process, which fits into the assessment component of North Dakota’s Multi-Tier Systems of Supports framework. It is appropriate to begin the progress monitoring process on a student after the student has been identified as potentially at-risk based on the universal screening assessment.

NDMTSS Essential Components Summary



Essential Component	Definition	Brief Description as it relates to NDMTSS
Assessment	Assessment is the process of collecting, reviewing, and using information to make educational decisions about student learning. The type of information collected is determined by the intended use of the results or type of decision that is needed.	<p>Screening, progress monitoring, and other supporting assessments are used to inform data-based decision making.</p> <p>Four purposes of assessments</p> <ol style="list-style-type: none"> 1. Universal Screening – all students assessed to determine which students may need additional supports – high or low and the effectiveness of the core curriculum 2. Diagnostic – identify skill deficits and inform instructional match at all tiers 3. Progress Monitoring – frequent assessment to determine whether students are making adequate progress toward a specific preset goal 4. Outcome – measures performance of the educational system, e.g. NDSA, ACT
Data-Based Decision Making	Data-based decision making “optimizes the use of data for purposes of informing individual student instruction, identifying strengths and weaknesses in a classroom, and illuminating trends and gaps across a school district” ¹	<p>An ongoing team process that begins with identified questions with clearly established protocols to evaluate and inform decisions and actions at student, classroom, grade level, school, and system levels.</p> <p>Basic steps include:</p> <ul style="list-style-type: none"> • Gathering accurate and reliable data • Correctly interpreting and validating data • Using data to make meaningful instructional changes for students • Establishing and managing increasingly intensive tiers of support • Evaluating the process at all tiers to ensure the system is working

Tutorial

Progress monitoring is used to

- assess a student's performance
- quantify his or her rate of improvement or responsiveness to intervention
- adjust the student's instructional program to make it more effective and suited to the student's needs, and
- evaluate the effectiveness of the intervention.

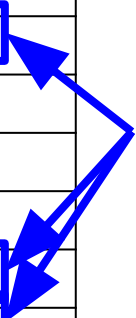
Tutorial

Progress monitoring is

- appropriate for individual students
- implemented for students receiving academic interventions in addition to core instruction, and
- administered to students identified as being at risk for poor learning outcomes through the universal screening process.

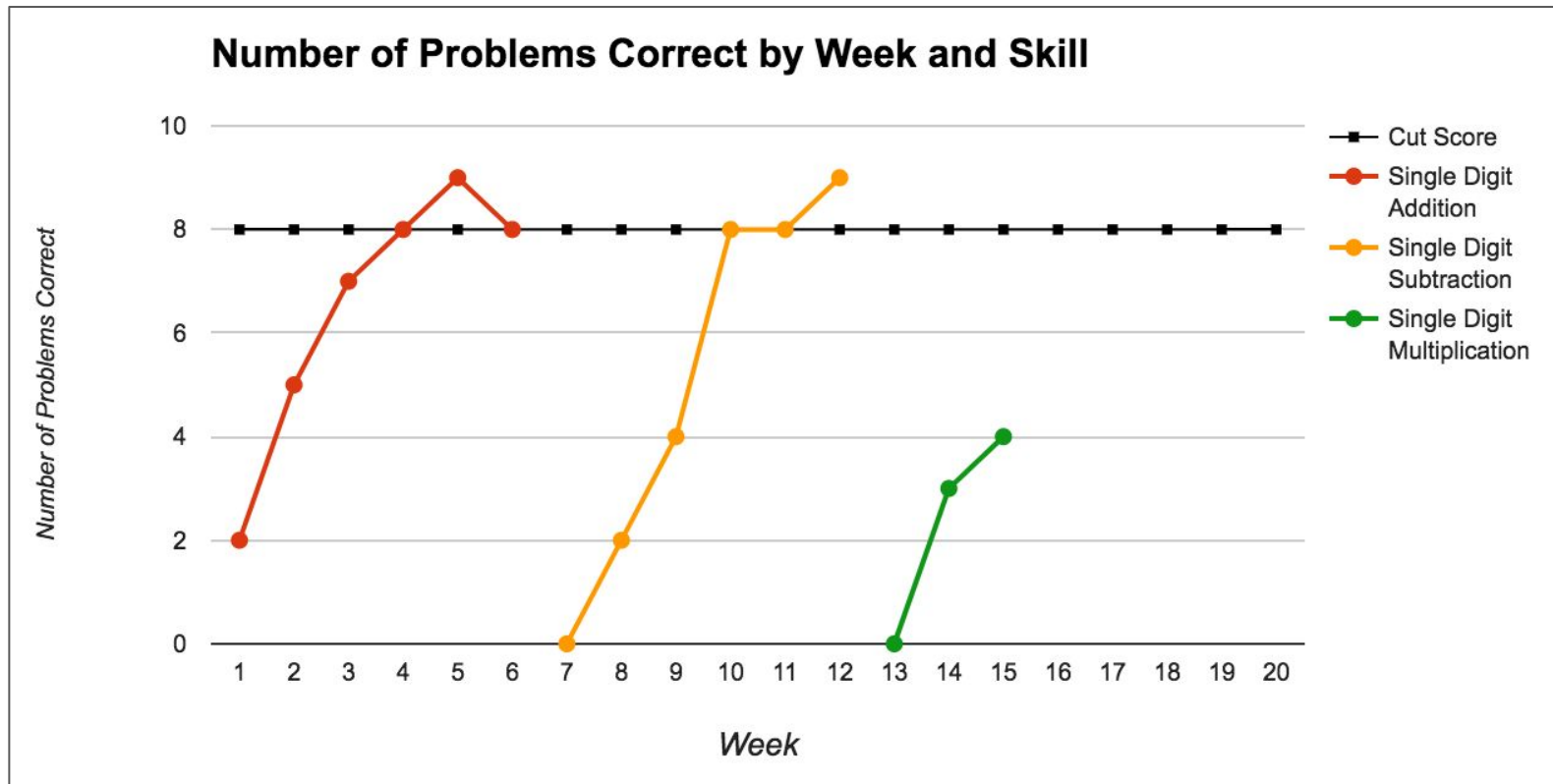
Student Name	Percentile	Prevention level or tier	Potentially at risk (-) or may need enrichment (+)
Anderson, Allen	63	Tier 1	
Collins, Chad	44	Tier 1	
Davidson, Dave	30	Tier 2	-
Fletcher, Fred	68	Tier 1	
Humphries, Hallie	71	Tier 1	
Krueger, Karen	52	Tier 1	
Lund, Lisa	33	Tier 2	-
Matthews, Martin	16	Tier 3	-

Students identified as potentially at risk through universal screening



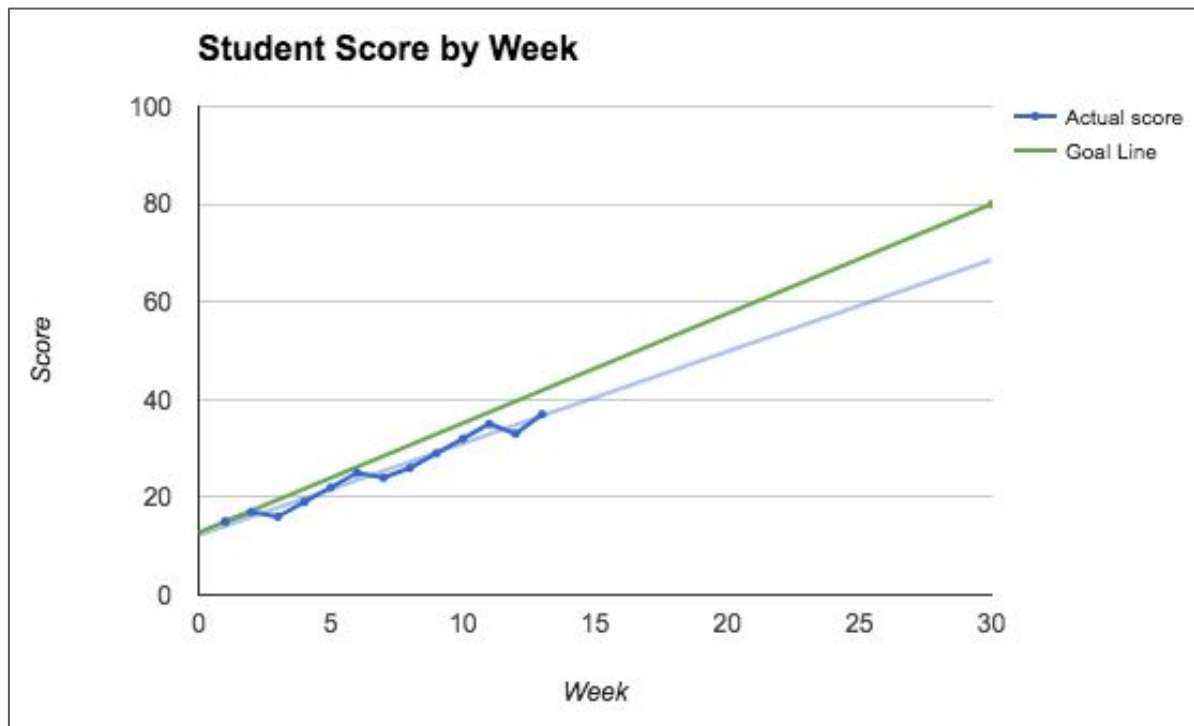
Tutorial

Progress monitoring may be conducted using master measures or general outcome measures. A mastery measure is an assessment that determines the mastery of a series of short-term instructional objectives. This type of measure helps answer the question, “Is a student proficient in a specific skill?”



Tutorial

At Great Plains, after a student is identified through universal screening as being potentially at-risk, we typically conduct progress monitoring with a general outcome measure, which is a quick assessment with standardized tools and administration protocol that tracks student growth across time relevant to overall competence in the annual curriculum. It helps answer the question, “Is a student making progress across time?”



Tutorial

In order to monitor a student's progress using a General Outcome Measure, you administer quick assessments at regular intervals to the student. These assessments are known as probes.

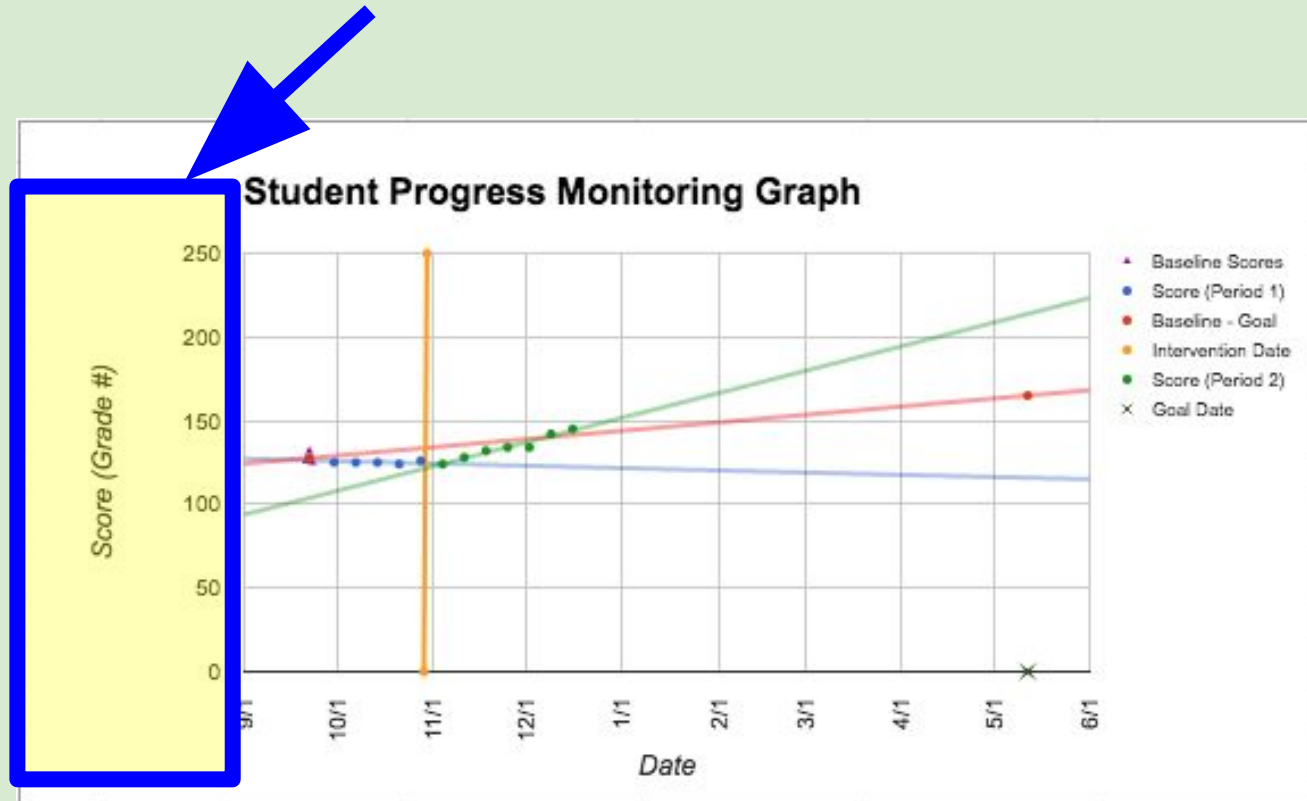
Link to pdf of example probe: <https://goo.gl/EXcnLH>

Activity - 08.01.08

Graphing plays an important role when monitoring your student's progress. Here, we'll address key elements typically included on an General Outcome Measures graph. The _____, otherwise known as the vertical axis, represents probe scores.

- y-axis
- x-axis
- legend
- chart title

Standard: S.6.B
Explanation

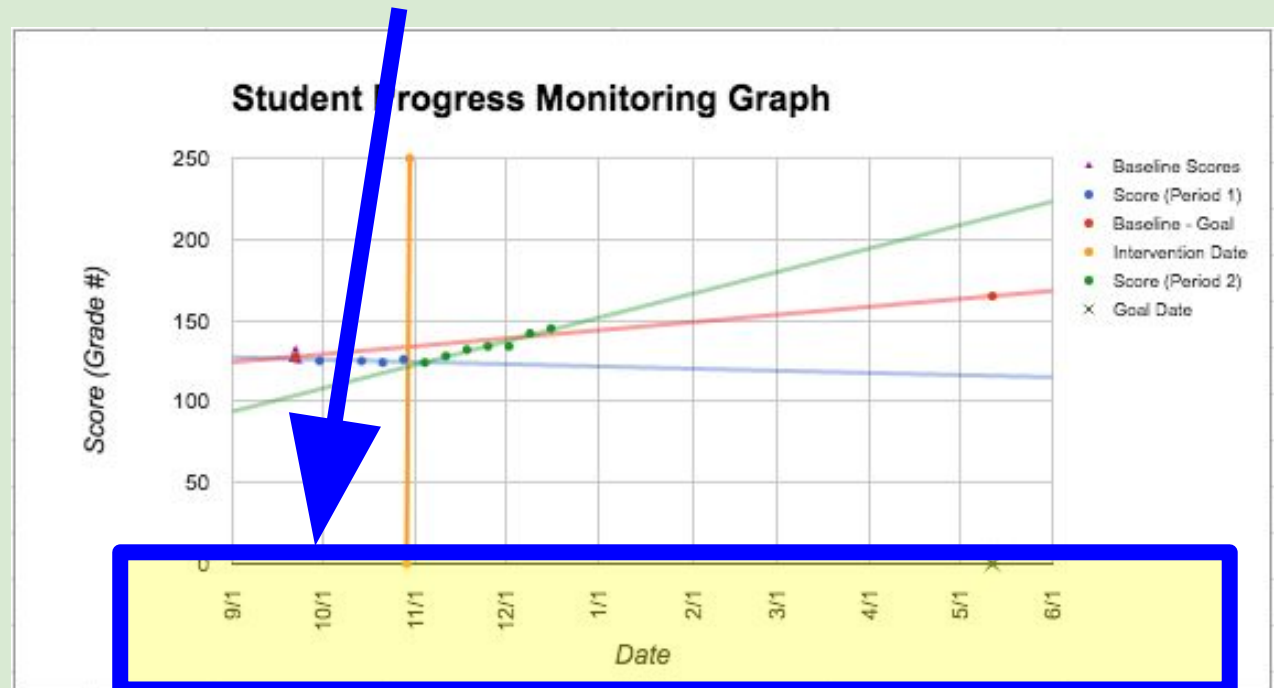


Activity - 08.01.09

The _____, otherwise known as the horizontal axis, represents the date a probe was given or the start date of an intervention.

- y-axis
- x-axis
- legend
- chart title

Standard: S.6.B
Explanation

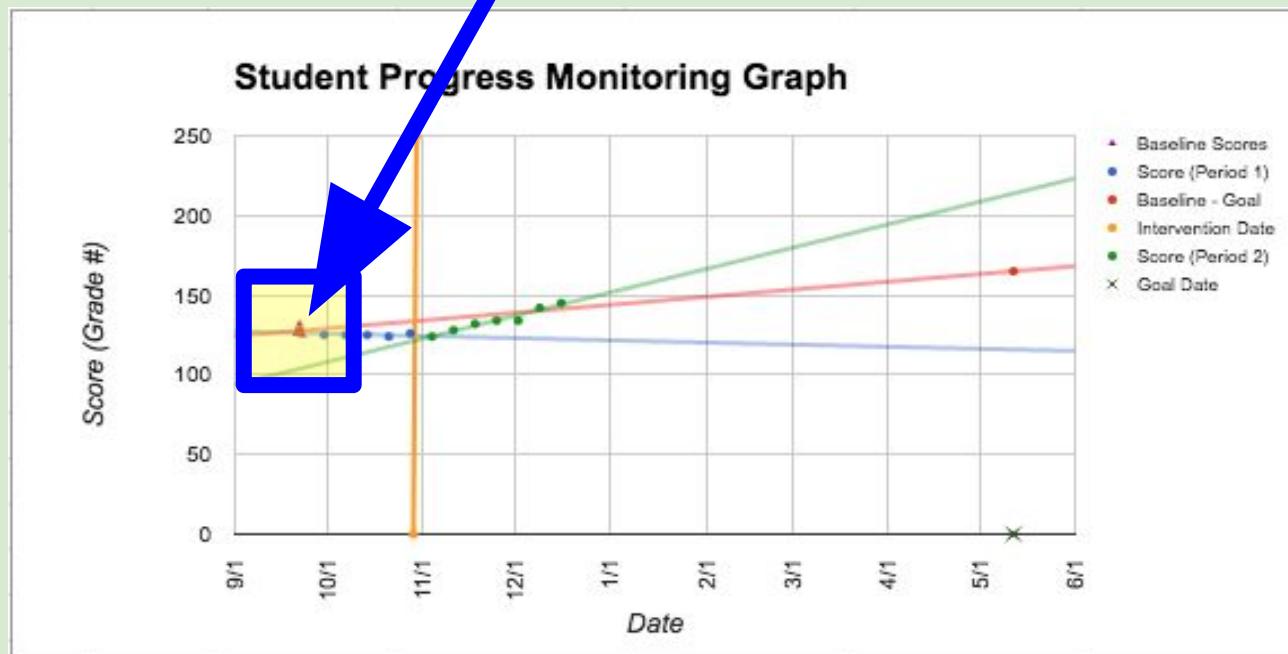


Activity - 08.01.10

The student's _____ value is plotted, which is a measure of performance prior to an intervention. The value is used to monitor the improvement of a student's performance and is calculated as either the median score of the first 3 probes given at the same point in time [or] the mean score of the first 3 probes given at different points in time.

- baseline
- goal
- intervention
- score

Standard: S.6.B
Explanation



Activity - 08.01.11

The mean represents the average of a range of scores. If your student scored 126, 132, and 125, your student's mean score would be _____.

- 128
- 126
- 129
- 130

Standard: K.1.E Data Metric

Activity - 08.01.12

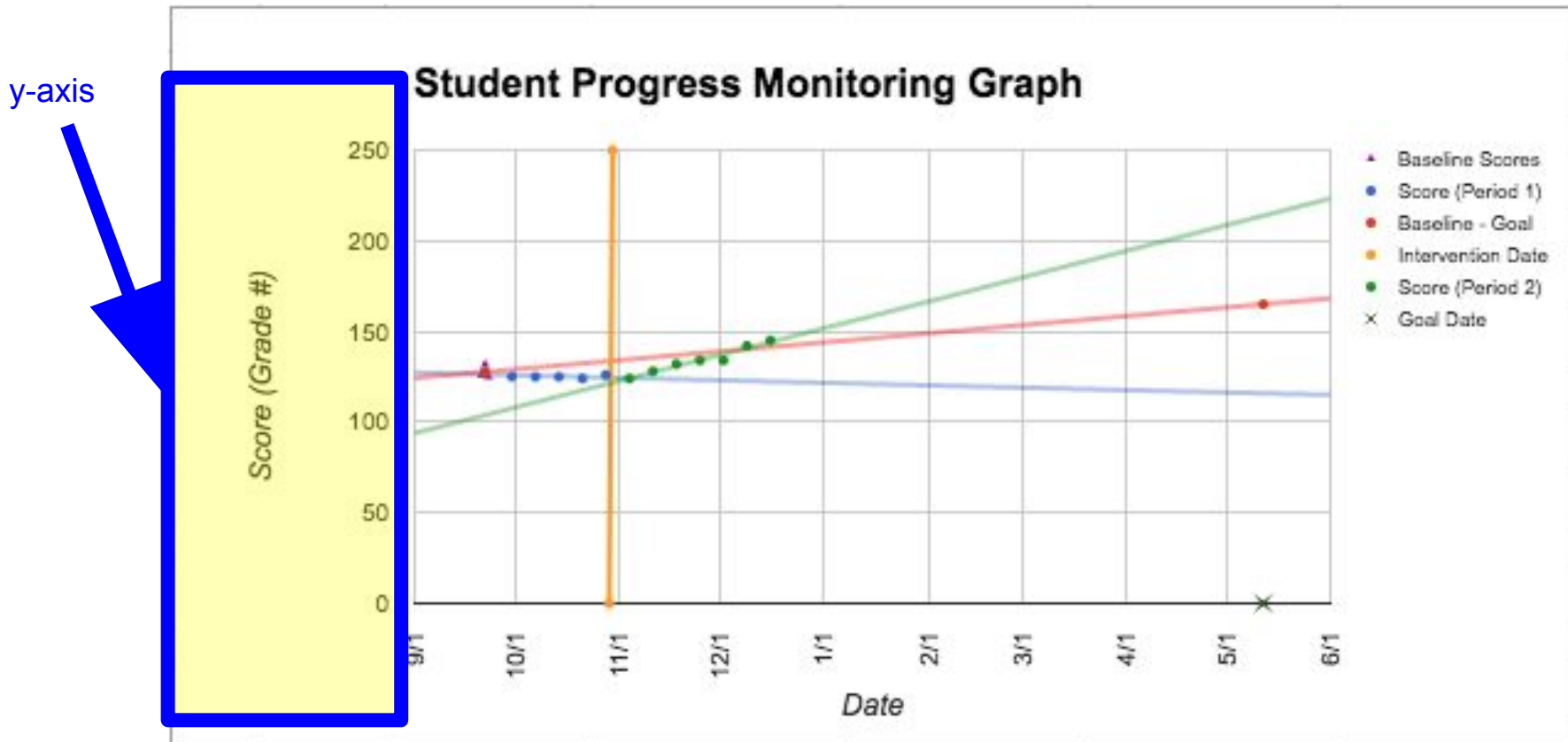
The median represents the midpoint of a range of scores. If your student scored 126, 132, and 125, your student's median score would be _____

- 128
- 126
- 129
- 130

Standard: K.1.E Data Metric

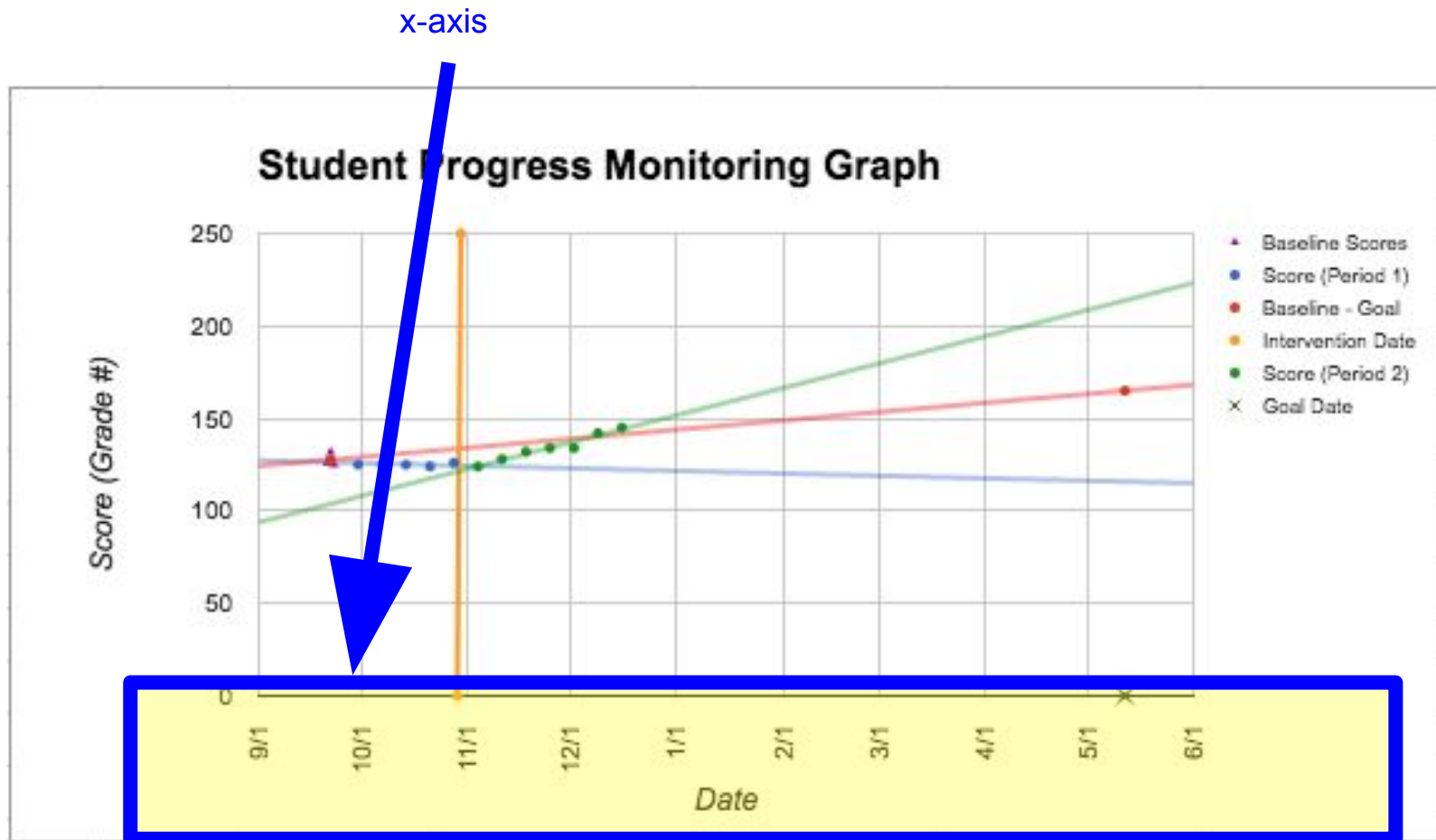
Tutorial

Graphing plays an important role when monitoring your student's progress. Here, we'll address key elements typically included on an General Outcome Measures graph. The **y-axis**, otherwise known as the vertical axis, represents probe scores.



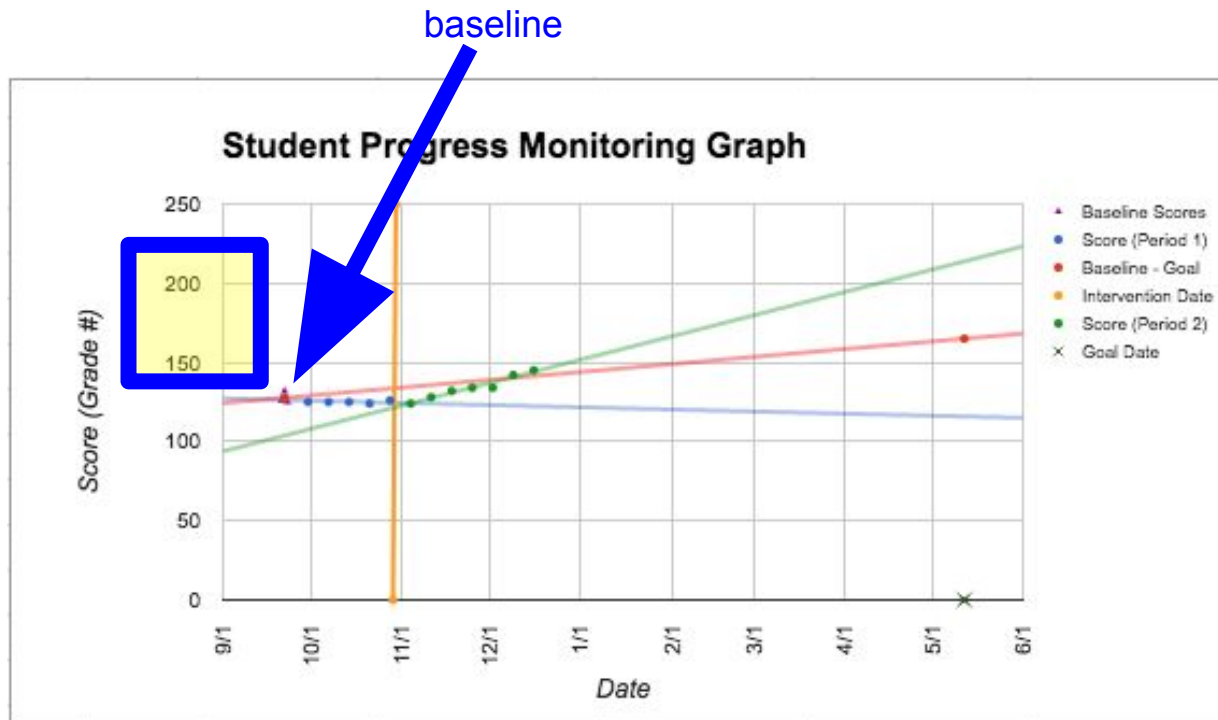
Tutorial

The x-axis, otherwise known as the horizontal axis, represents the date a probe was given or the start date of an intervention.



Tutorial

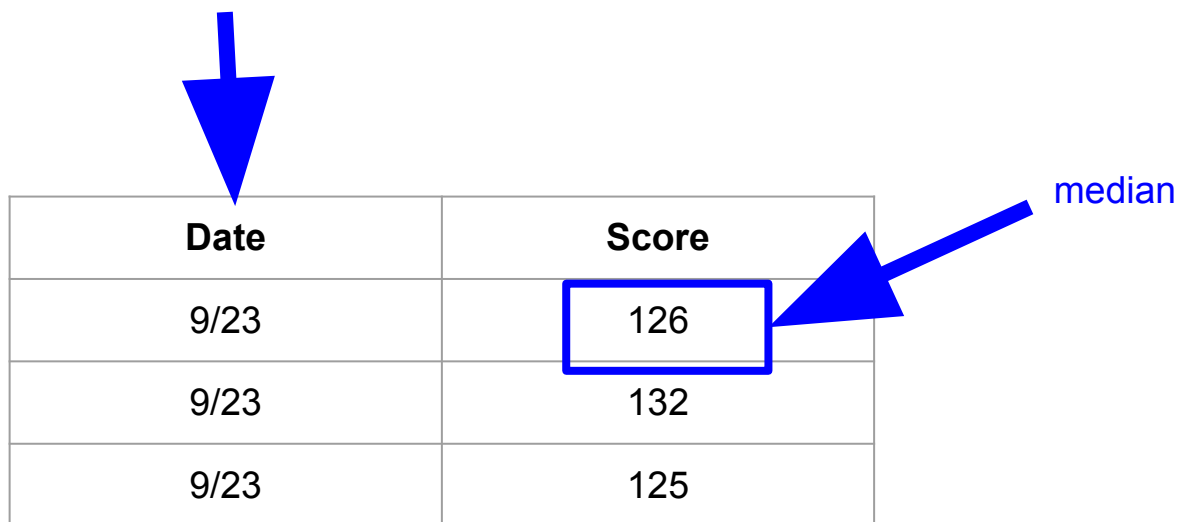
The student's **baseline value** is plotted, which is a measure of performance prior to an intervention. The value is used to monitor the improvement of a student's performance and is calculated as either the median score of the first 3 probes given at the same point in time [or] the mean score of the first 3 probes given at different points in time.



Tutorial

The first method of calculating a student's baseline value is to identify the median score of the first three probes given at the same point in time. The median represents the midpoint of a range of scores when placed in order from lowest to highest. For example, if the first three probes were given to a student on the same day and the scores were 126, 132, and 125, the median score (i.e., the middle score) would be 126; 126, therefore, would be the baseline score.

3 probes administered
on same date



Date	Score
9/23	126
9/23	132
9/23	125

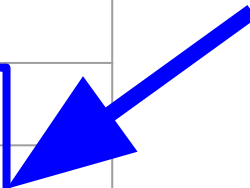
Tutorial

The second option for determining a baseline is to calculate the mean of 3 probes given at different points in time. The mean represents the average of a range of scores. For example if the first three probes were given at different points in time and the scores were 126, 132, and 125, the mean score (that is, the average score) would be 128; 128, therefore would be the baseline. As you can see, the method for calculating the baseline depends on whether the first three probes were given at the same point in time or not at the same point in time.

3 probes administered
on different dates



Date	Score
9/23	126
9/30	132
10/7	125



Mean
 $(126 + 132 + 125) / 3 =$ **128**

Conclusion

Ryan:

I believe we all need a little break before we complete the rest of our Progress Monitoring flyer. Good job on finishing the first part; see you in a few for the finish!

Activity Answers

08.01.01	Assessment
08.01.02	after the student has been identified as potentially at-risk based on the universal screening assessment
08.01.03	used to assess a student's performance, to quantify his or her rate of improvement or responsiveness to intervention, to adjust the student's instructional program to make it more effective and suited to the student's needs, and to evaluate the effectiveness of the intervention.
08.01.04	All of the above
08.01.05	mastery
08.01.06	general outcome
08.01.07	probes
08.01.08	y-axis
08.01.09	x-axis
08.01.10	baseline
08.01.11	128
08.01.12	126

Indicate the extent to which you agree or disagree

	Strongly disagree	Disagree	Agree	Strongly Agree
This module part increased my knowledge of the purpose of progress monitoring				
This module part increased my knowledge of key elements on a progress monitoring graph				

Well Done

You have completed this module part. You can begin the next lesson when you are ready.