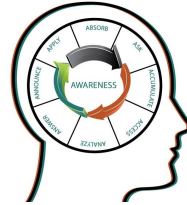




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Develop Your Data Mindset

Module 1 - Introduction to Course and Theme, Need for Data Training, Data Types, and Methods of Inquiry
Part 3 - Introduction to the Need for Data Use Training

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

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Learning Goals

- Increase awareness of need for data use training

SLDS Data Use Standards

- B.3.D Prioritization: Prioritizes time to analyze and use data

Introduction

Welcome to Develop Your Data Mindset: Essentials of Educational Data Use.

Think of this course as if it is structured a bit like a funnel. The broad and roundational modules at the beginning flow into more narrow and specific modules as you move through the curriculum.

In module 1, you will be introduced to common data types in educational settings, such as demographic, student learning, perception, school process, and behavior data. We'll also touch on assessment, evaluation, and research as methods of disciplined inquiry that require the use of data. Most, perhaps all, data use purposes in educational settings could be classified as one or more of these inquiry methods.

In module 2, we'll narrow into an overview of knowledge, skills, and professional behaviors as standards required to be an effective data user for assessment, evaluation, or research purposes. We'll also operationalize key standards by synthesizing them using the A+ Inquiry framework.

Introduction

In module 3, the focus narrows into specific school initiatives that require data utilization for various assessment and evaluation purposes. Questions guiding data use processes aligned with these initiatives are also highlighted.

In module 4, we narrow further into a focus on the use of student learning data by creating an assessment calendar representing different types of student learning data for various formative and summative purposes.

Each remaining module narrows further into the application of A+ Inquiry to navigate a specific data use scenario identified in the assessment calendar. Although we end up only using student learning data in the later modules, the inquiry skills we practice for specific assessment purposes in this course will be transferable to assessment, evaluation, or research process requiring the use of perception, school process, behavior, and other data types addressed earlier in the curriculum.

Teacher Thought

If I know the purposes of data, then I will be a more effective user of the different types of data we collect.

Welcome Letter from Principal Carter

Dear Teacher,

As you embark on your tenth year teaching for Great Plains School District, I'd like to remind you that out of 33 continuous improvement accreditation indicators representing quality schools (1=best, 33=worst), external reviewers ranked North Dakota 33rd on the following indicator in each of the past two years: Professional and support staff are trained in the evaluation, interpretation, and use of data.

Also, out of 53 survey items representing key elements of quality schools, educators throughout North Dakota and across the United States ranked the following item 53rd last year: Our school ensures all staff members are trained in the evaluation, interpretation, and use of data.

That being said, our Data Coach will be assisting throughout the year. Mr. Ryan Kelly, whose welcome letter I have forwarded, will be coming by your classroom today to review some of your data from last year. Please make sure he has signed off on this before going to lunch.

Welcome Letter from Principal Carter cont.

This afternoon he will be leading in-service, and throughout the year he will be involved in your professional learning community.

Regards,

Principal Mary Carter

Welcome Letter from Principal Carter cont.

This afternoon he will be leading in-service, and throughout the year he will be involved in your professional learning community.

Regards,

Principal Mary Carter

Welcome Letter from Data Coach Ryan Kelly cont.

Hello to you all as we embark on this next adventure here at Great Plains,

I am happy to be working with you as an instructional coach again this year. I know when you see me walking down the hall or popping in to join you at your PLC grade level meetings, you might think to yourself, “Oh...great. Now what do I have to do?” I agree that in the last few years it seems like all we do is add, add, and then add some more. First it was PLCs, then it was NDMTSS/RTI, and last year it was AdvancED for our school improvement process. Meetings, meetings, meetings! Data, data, data! I heard you then and I want you to know I hear you now.

After much contemplation and visiting with “Mr./Mrs....”, I have a new attitude this year and I daresay, so does the entire administration. There I go using the *new* word again, but stay with me for a bit more.

Welcome Letter from Data Coach Ryan Kelly cont.

We aren't going to add anything new this year. Yes. You heard that right, no new initiatives coming to a hallway or a PLC meeting near you. We, instead, are going to refine and redefine the initiatives we already have in place with the main goal of seeing they aren't in fact separate but, when done well with a common understanding, work together to create an environment where we truly can all work smarter instead of harder.

My ah-ha moment came when I pondered the question, "Why are some people natural data users and why are other people data frustrated?" This is not a simple question, not at all, but I did come to a simple answer. Some people are natural data users because they inherently possess the knowledge and understand the inquiry process needed for effective data utilization. They just "get it." Other folks are not natural data users because they don't just know what they are supposed to do when told to "use your data." Therefore, they become data frustrated. They were never taught and it wasn't modeled by those of us who might be natural data users. The *"I do, we do, we do, you do"* cycle of teaching and learning was absent. Great Plains has to go back now and learn foundational knowledge, skills, and professional behaviors needed to become natural and effective data users.

Welcome Letter from Data Coach Ryan Kelly cont.

With this, we all get a new and clean slate. It's no one's fault if they don't know how unless they have been first taught how. We plan to provide the *how* this year. I think we have all agreed on the *why* in our last few years of school improvement. The *why* is always the kids. ALWAYS. We all went into this noble profession of education because we love kids. We want to see kids grow and we want to be a part of that growth. PLCs, NDMTSS/RTI, and AdvancED are the vehicles to ensure we are growing all kids to their fullest potential. The big caveat is we have to implement them with fidelity. We have to take the new knowledge and skills we will gain throughout this year and change ourselves. That means, we grow ourselves at the same time as growing our students.

My own personal goal is when you see me walking down the hallway or popping in to your PLC grade level meeting, you feel excitement and motivation because you are moving from frustration to utilization.

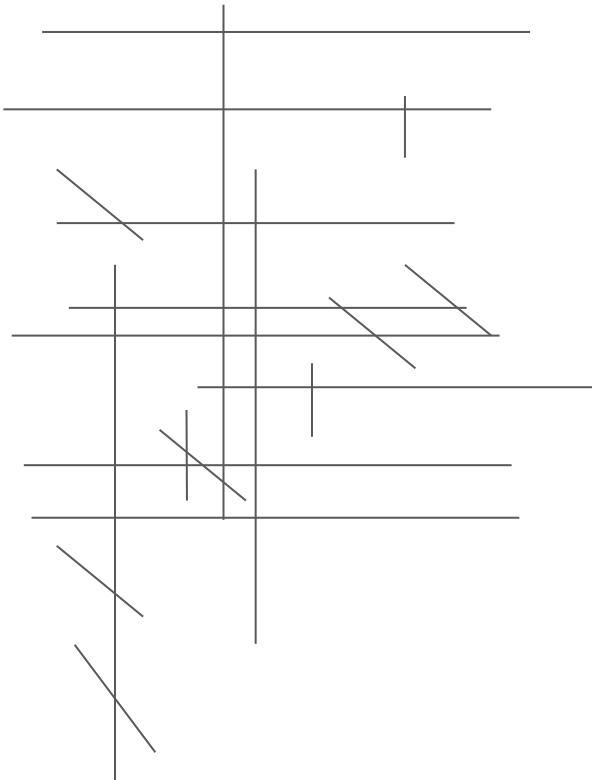
Here's to another great year at Great Plains!

Mr. Ryan Kelly, Data Coach

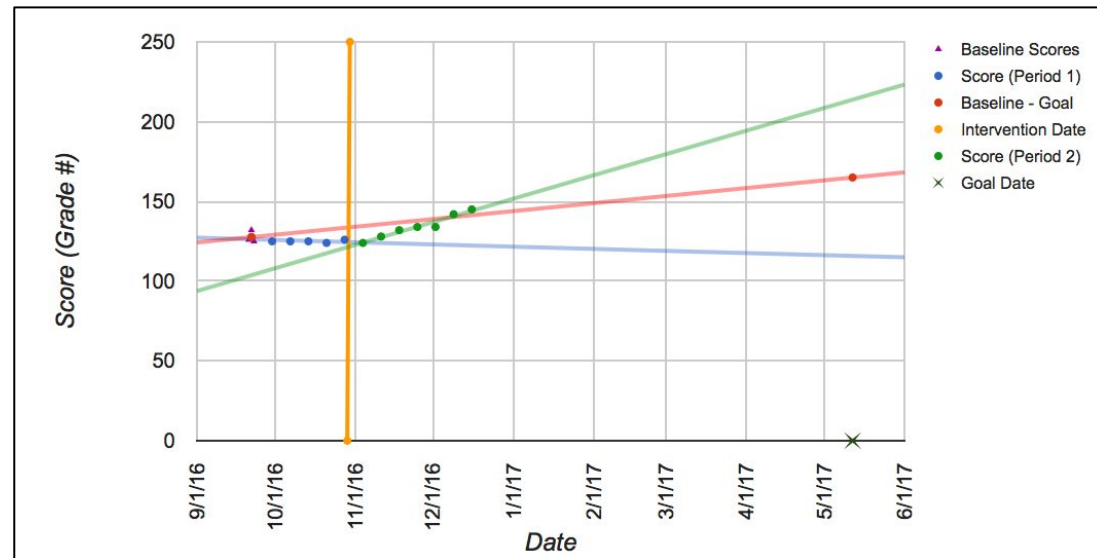
Purpose of Data

Just like when assembling the pieces of the chair and bookshelf it does very little good to begin analyzing data before you know the intended purpose.

Just like this stuff...



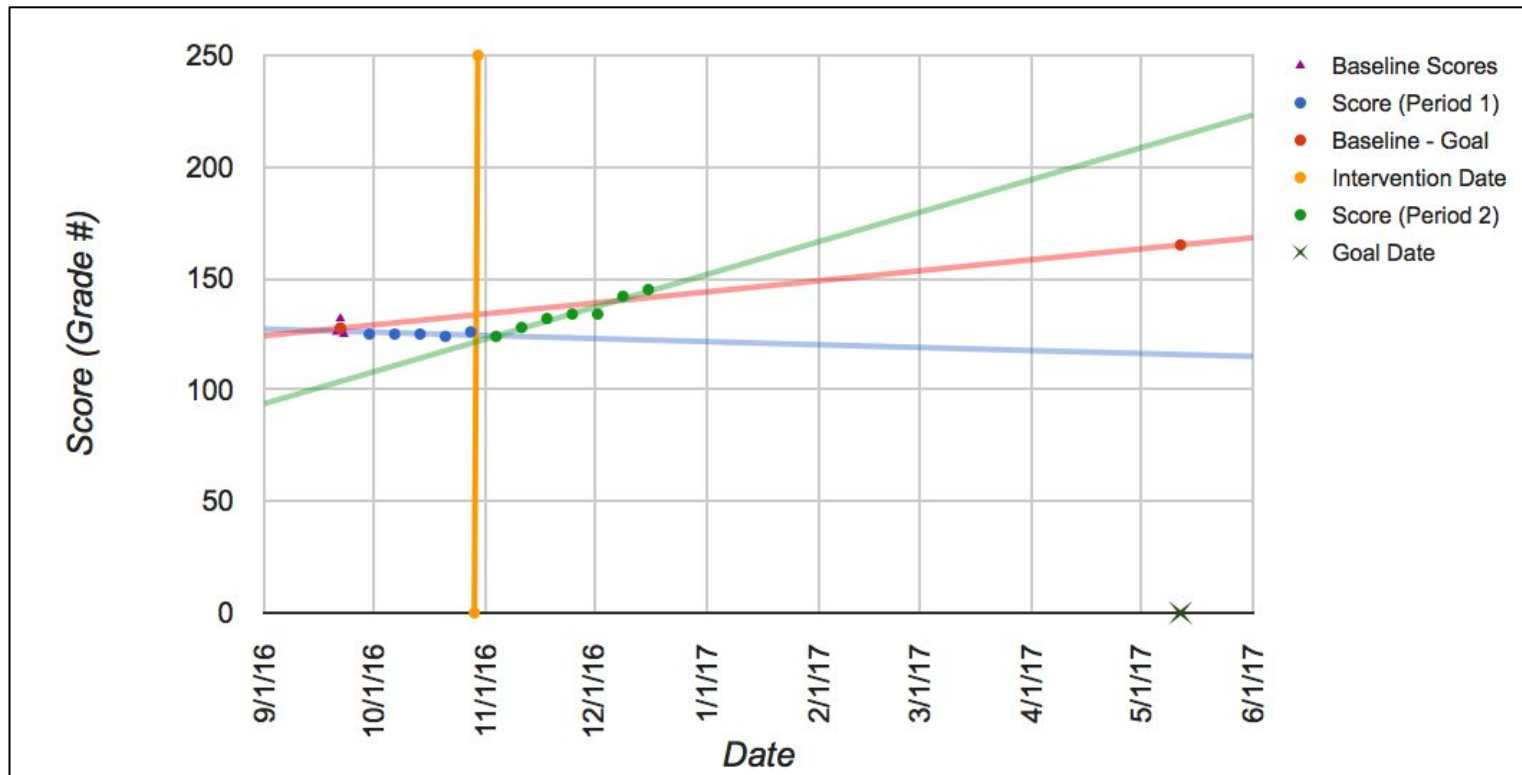
Data has a specific purpose too.



Purpose of Data Example

Let's review some of your student data from last year.

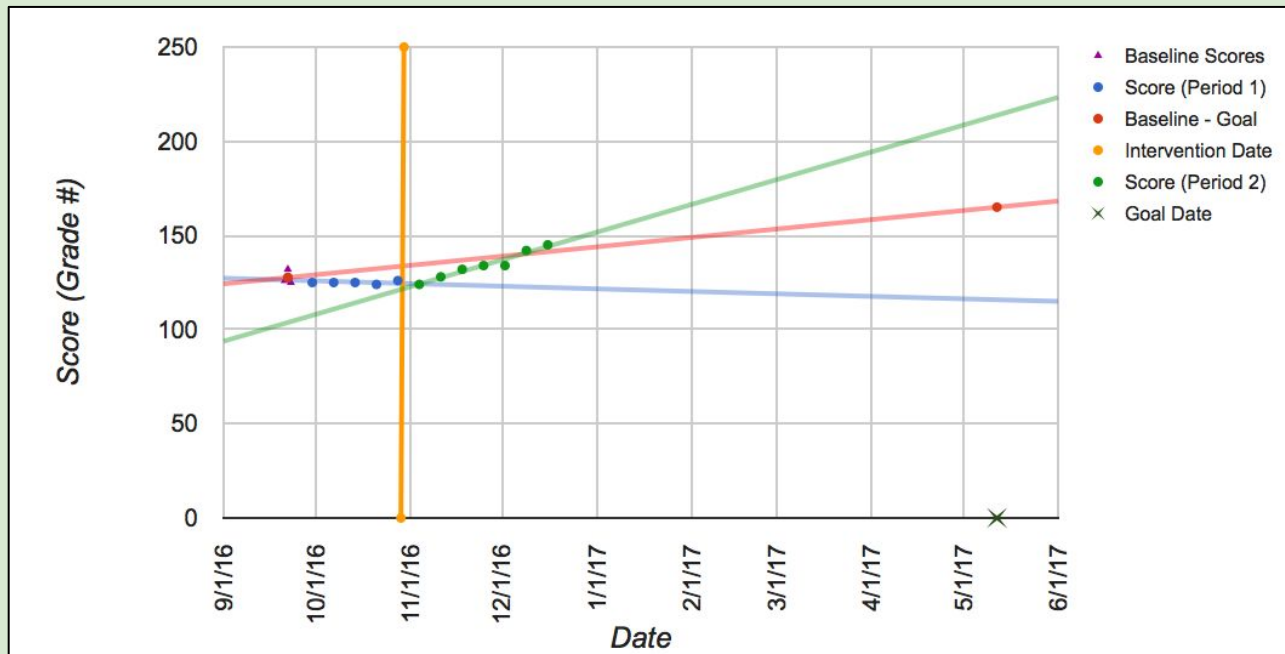
What could you do with data from this chart?



Activity

What is the purpose of using data in this chart?

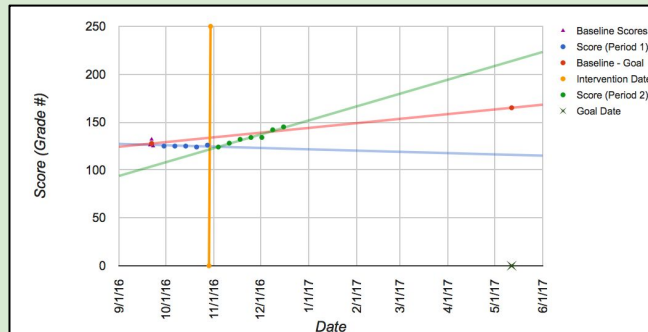
- Universal Screening
- Diagnostic Assessment
- Progress Monitoring
- Process Evaluation



Activity Answer

What is the purpose of using data in this chart?

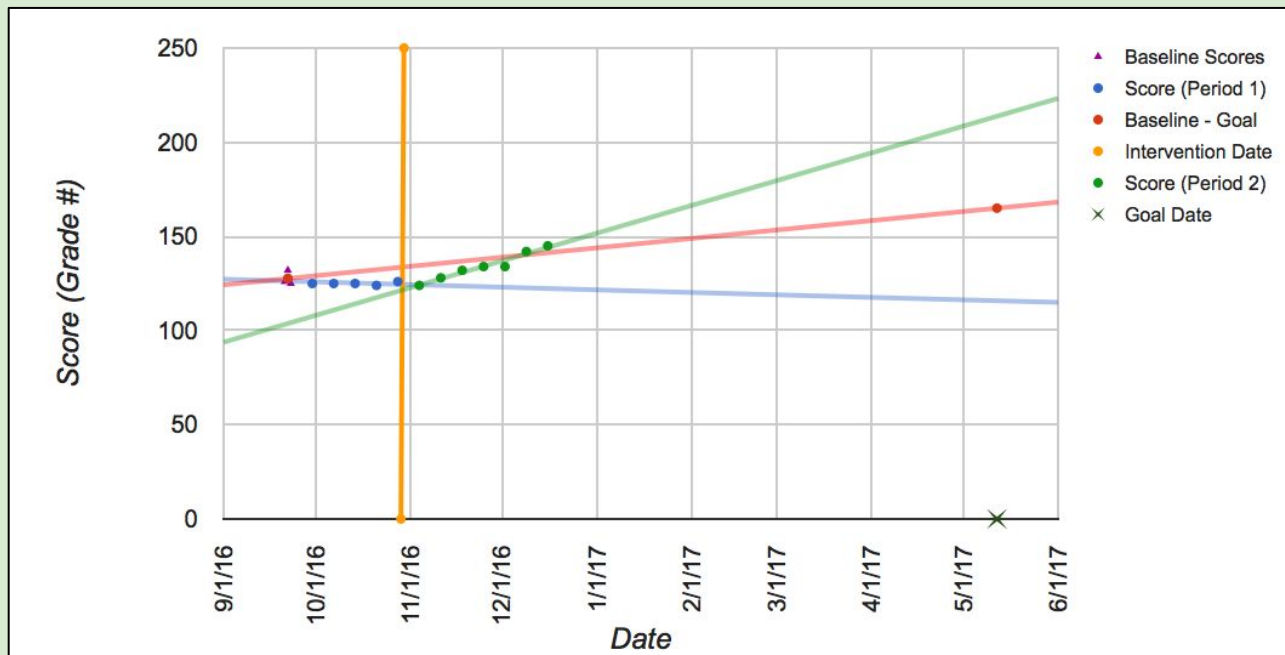
- Universal Screening
 - Universal screening is the first step to identify students who are at risk. It is not examining the impact of a specific intervention.
- Diagnostic Assessment
 - Diagnostic assessment is used to identify a student's strengths, weaknesses, knowledge and skills.
- Progress Monitoring
 - Progress monitoring is used to evaluate the effectiveness of an intervention on an individual student. This allows us to determine whether the intervention is effective and to make decisions, such as whether to continue, discontinue, or adjust the intervention or to modify the student's end of year goal.
- Process Evaluation
 - Process evaluation is actually examining how a program is being implemented. In this graphic we are examining the impact of one particular intervention.



Activity

Will you plan to use the intervention that began shortly before 11/1 again based on this data?

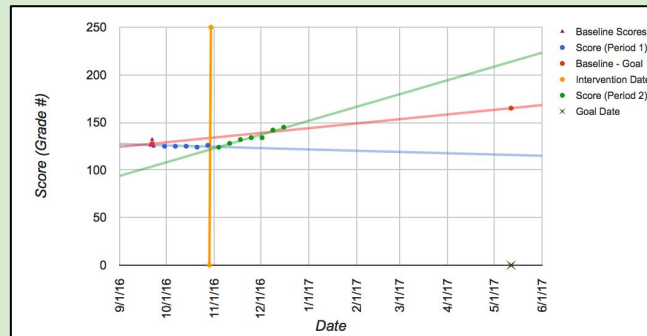
- Yes
- No
- Not Sure



Activity Answer

Will you plan to use the intervention that began shortly before 11/1 again based on this data?

- Yes
- No
- Not Sure



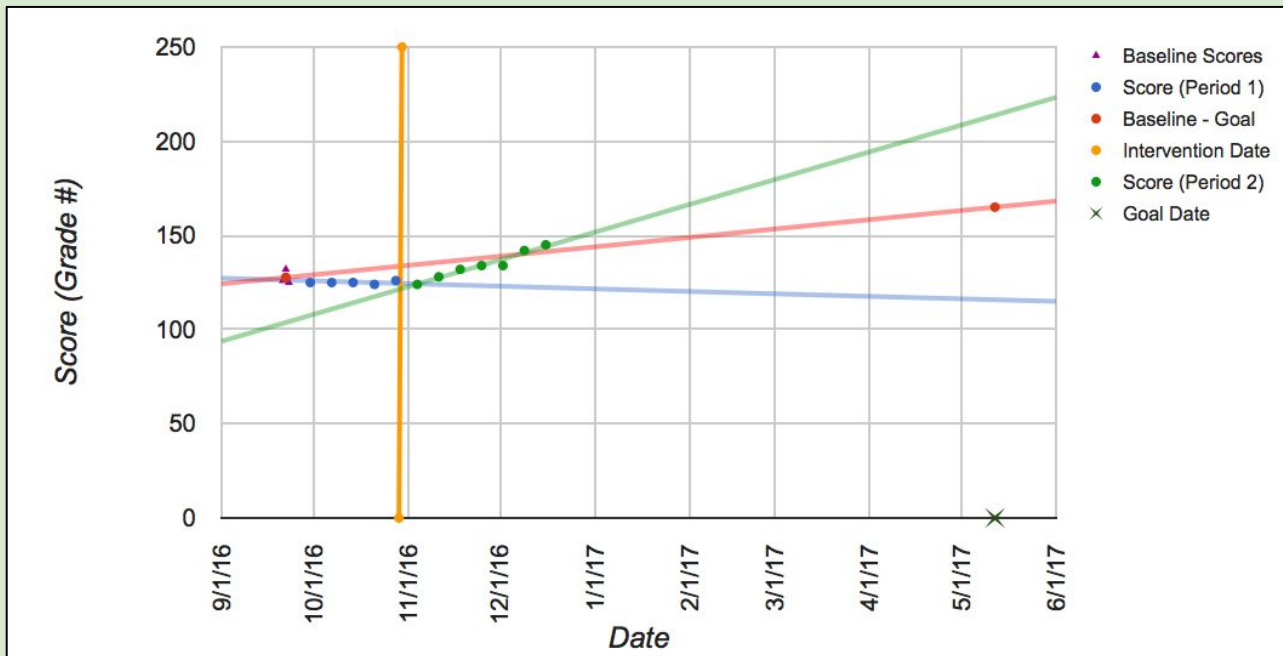
Progress monitoring is used to evaluate the effectiveness of an intervention on an individual student. This allows us to determine whether the intervention is effective and to make decisions, such as whether to continue, discontinue, or adjust the intervention to modify the student's end-of-year goal.

Actually, all of the answer choices could be correct. In reality you need more information to decide if you should use the same intervention again. For example, would you be using it with the same student?

Activity

The intervention that was assigned shortly before 11/1 appears to have a positive impact on the student

- True
- False



Activity Answer

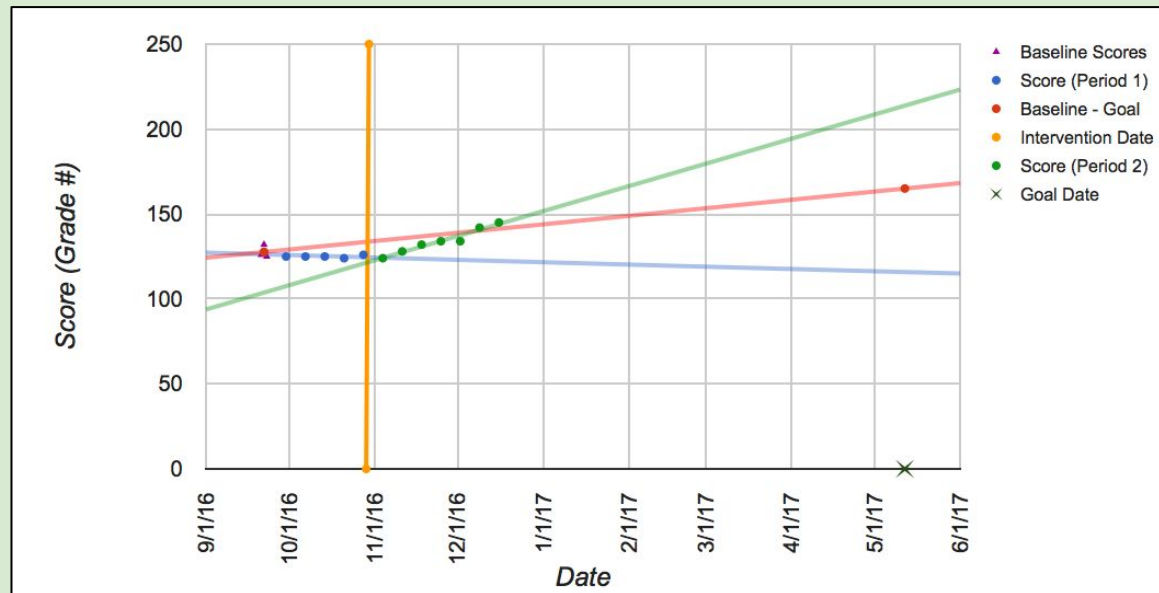
The intervention that was assigned shortly before 11/1 appears to have a positive impact on the student

- True

- Well done. In this scenario the slope of the trend line for the Period 2 scores (green) is greater than the slope of the baseline to goal trend line (red). This indicates that assuming this student's progress continues at this rate, they will meet/exceed their target goal (red dot) by the target goal end date.

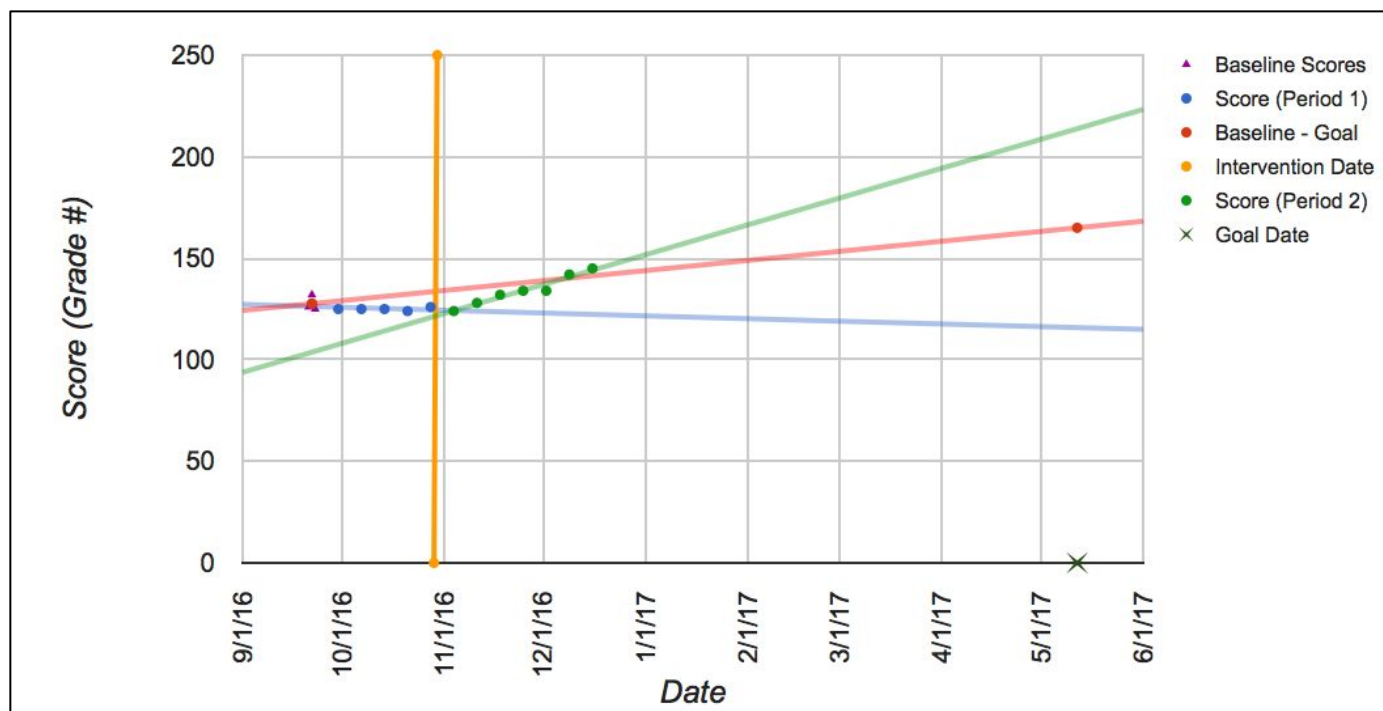
- False

- Look closely at the student's scores post-intervention.

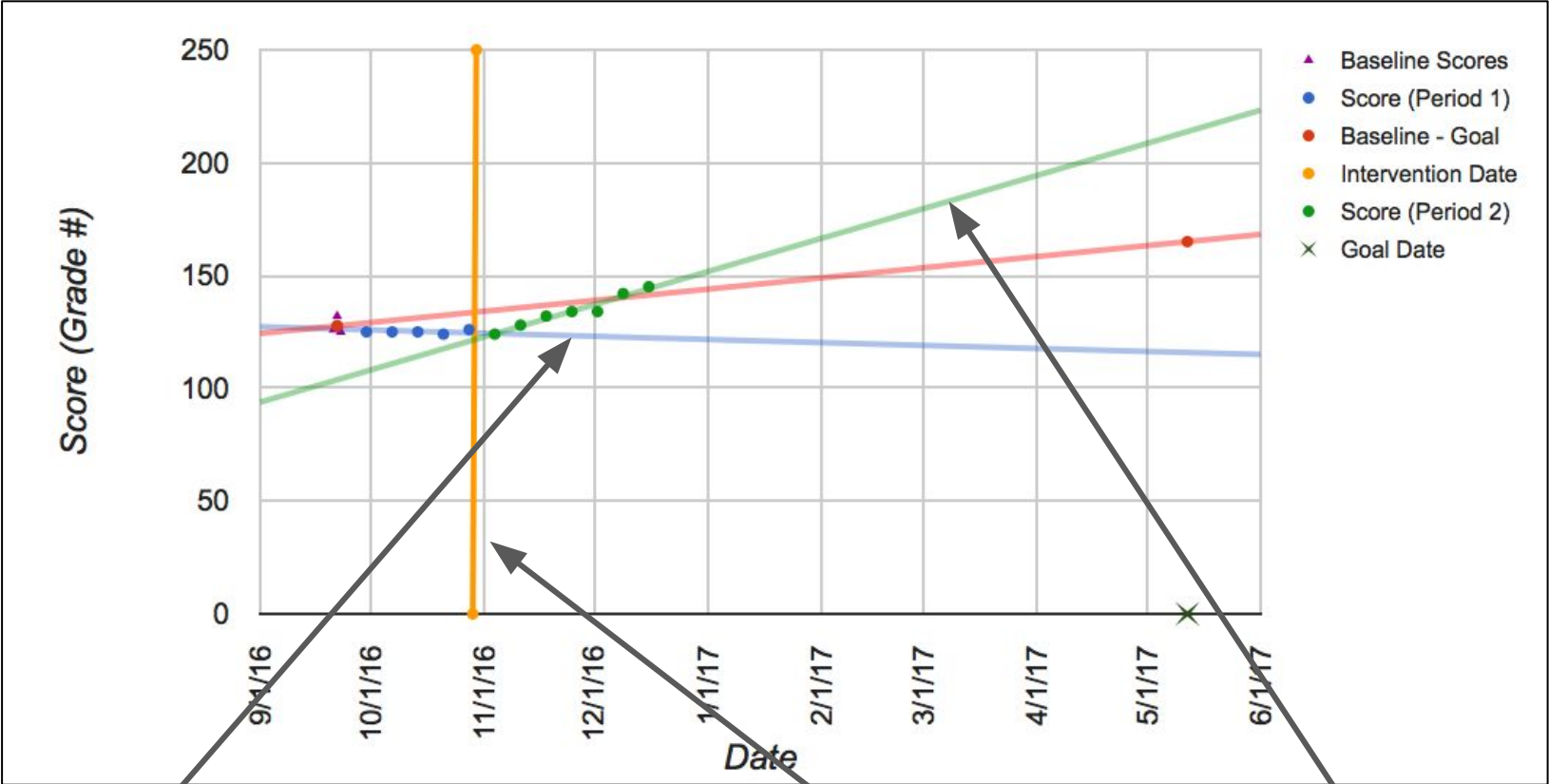


Progress Monitoring Chart

Let's take a closer look. The **green trend line** during the intervention is steeper than the **blue trend line** before the intervention. With this finding, you might increase the student's end of year goal, continue the intervention because it's working, or discontinue the intervention because the student is now projected to achieve positive learning outcomes at the end of the year.



Progress Monitoring Chart



Blue line = pre-intervention trend line

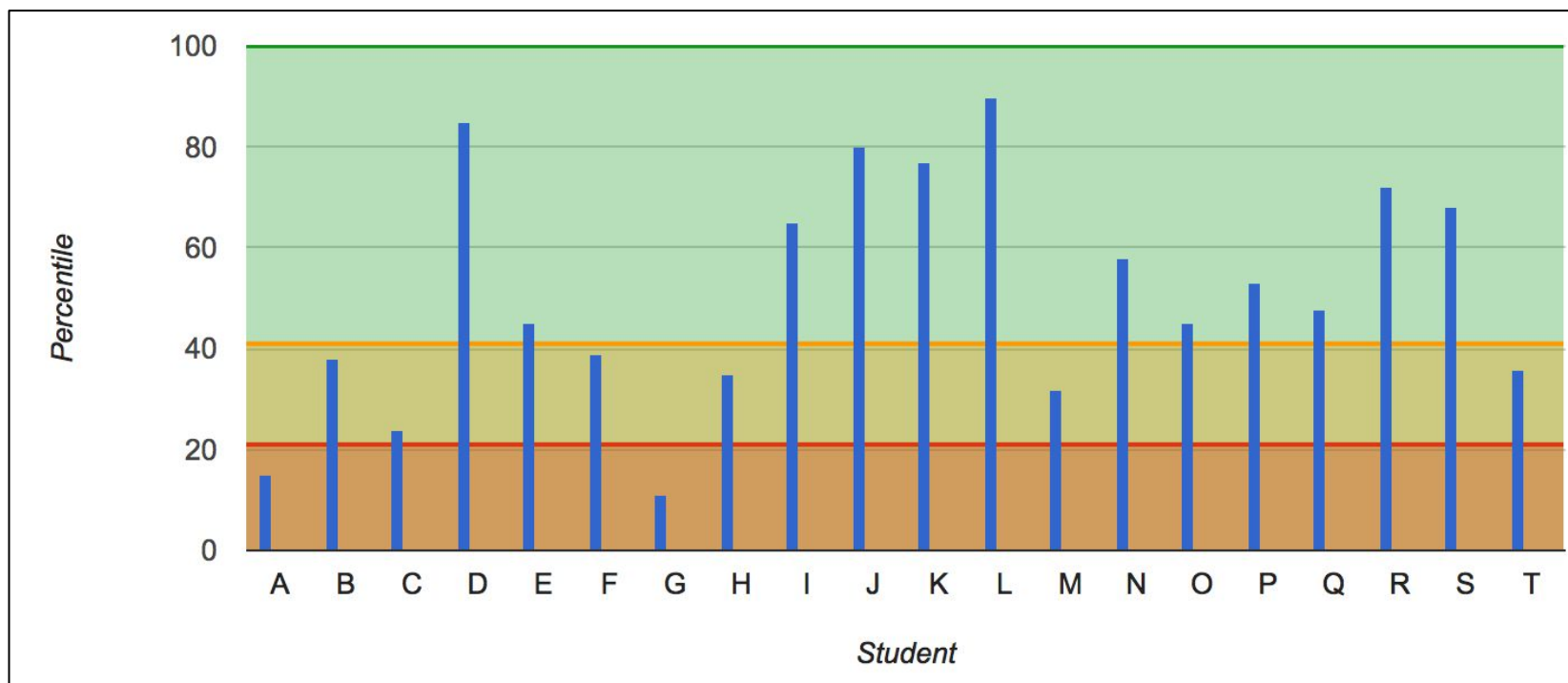
Yellow line = intervention date

Green line = during-intervention trend line

Purpose of Data Example

Now that we have looked at some progress monitoring data from last year, let's look at some data on the students in your class this fall.

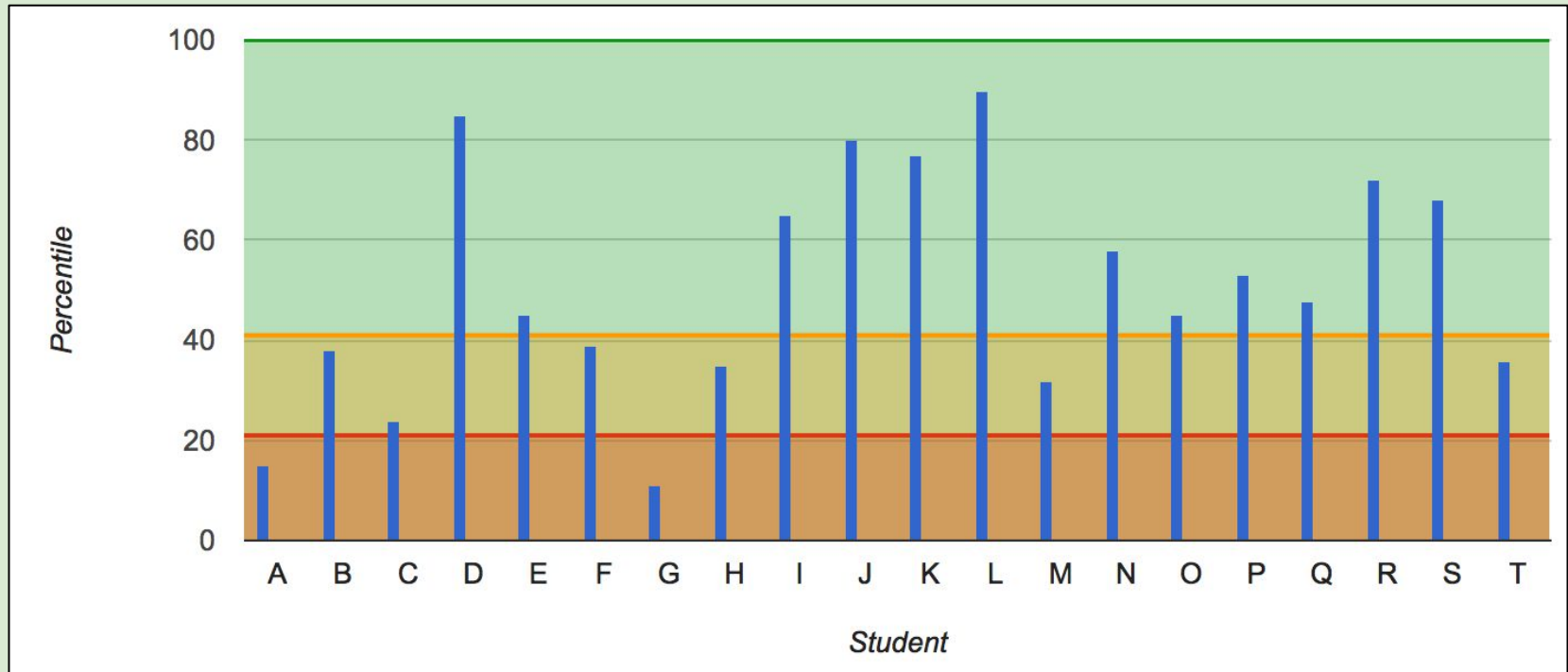
What could you do with data from this chart as you prepare for the school year?



Activity

What is the purpose of using data in this chart?

- Universal Screening
- Diagnostic Assessment
- Progress Monitoring
- Process Evaluation



Activity Answer

What is the purpose of using data in this chart?

- **Universal Screening**

- Universal screening is used to identify students who are potentially at risk for poor learning outcomes.

- **Diagnostic Assessment**

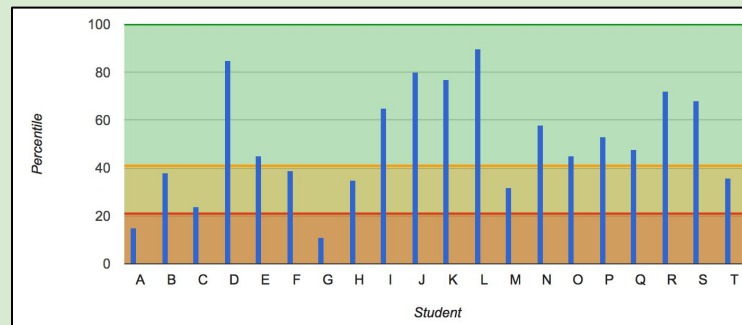
- Diagnostic assessment is used to identify a student's strengths, weaknesses, knowledge and skills.

- **Progress Monitoring**

- Progress monitoring is used to evaluate the effectiveness of an intervention on an individual student. This allows us to determine whether the intervention is effective and to make decisions, such as whether to continue, discontinue, or adjust the intervention or to modify the student's end of year goal.

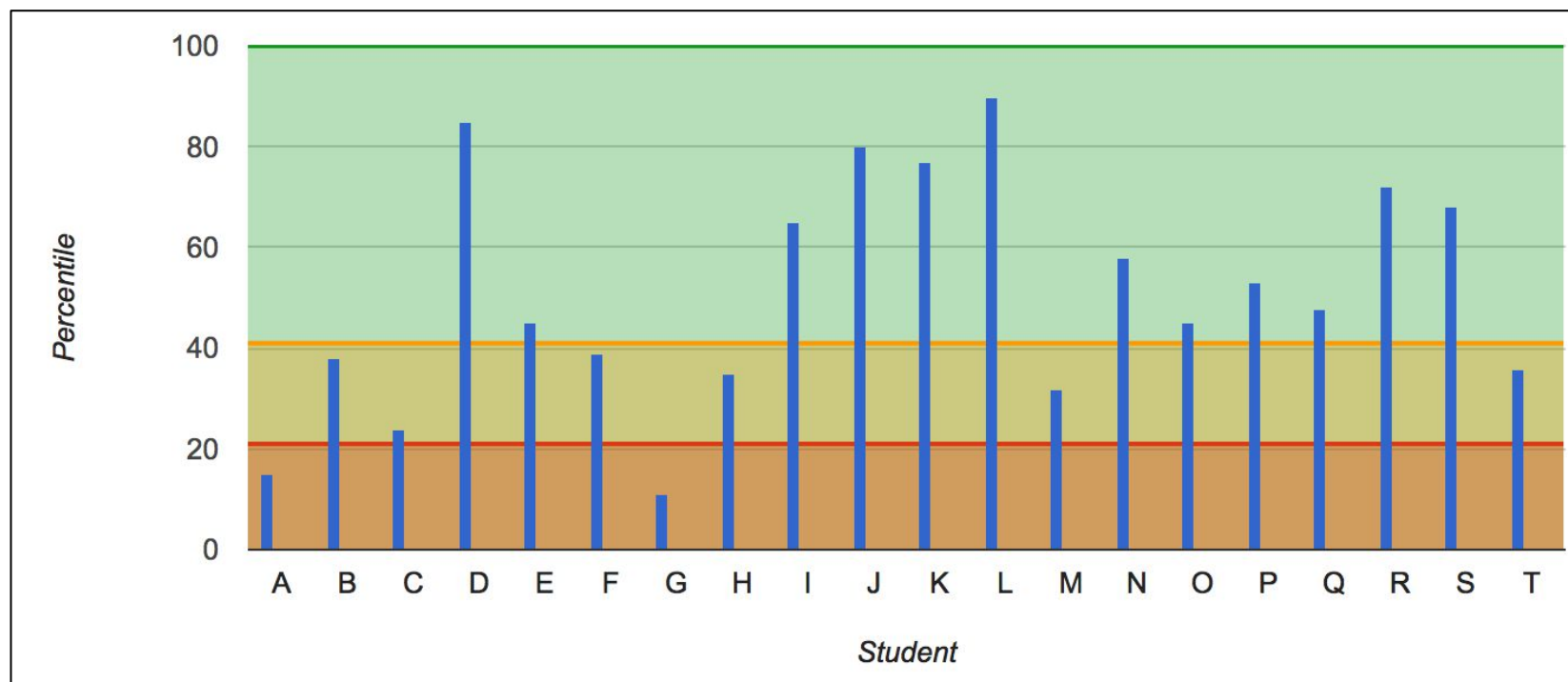
- **Process Evaluation**

- Process evaluation is actually examining how a program is being implemented. In this graphic we are examining the impact of one particular intervention.



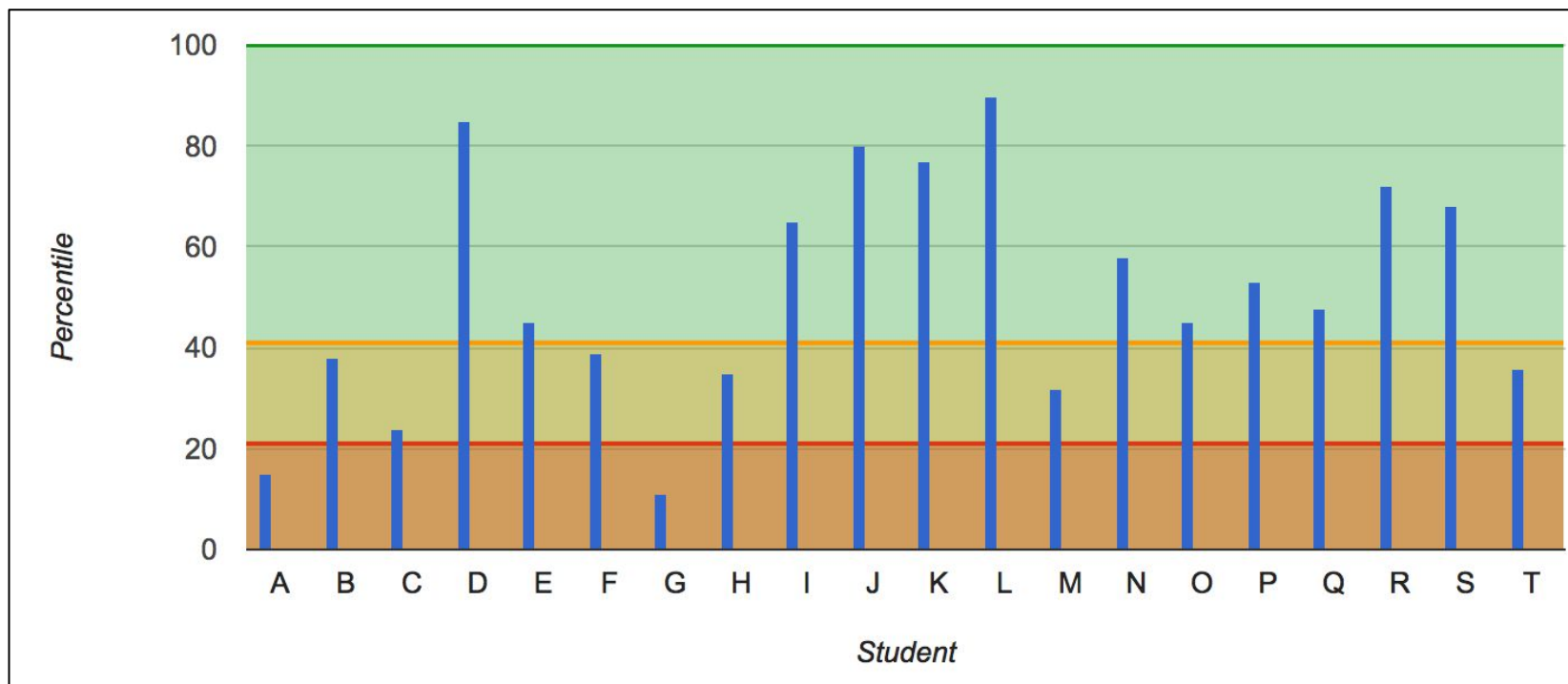
Universal Screening Chart

Let's take a closer look. Each blue column represents the percentile value of an individual student. If a column extends into the **green** section, it means the student is performing adequately in the normal classroom instructional setting. If a column is only as high as the **yellow** section, it means the student might be at risk for poor learning outcomes.



Universal Screening Chart

A student in yellow may need further progress monitoring and/or an intervention. If a column only extends as high as the red section, it means the student might be at an even greater risk for poor learning outcomes and may need progress monitoring or an intervention. A decision could be made to keep green students in the normal classroom setting and to begin the progress monitoring process for students in the red and yellow sections.

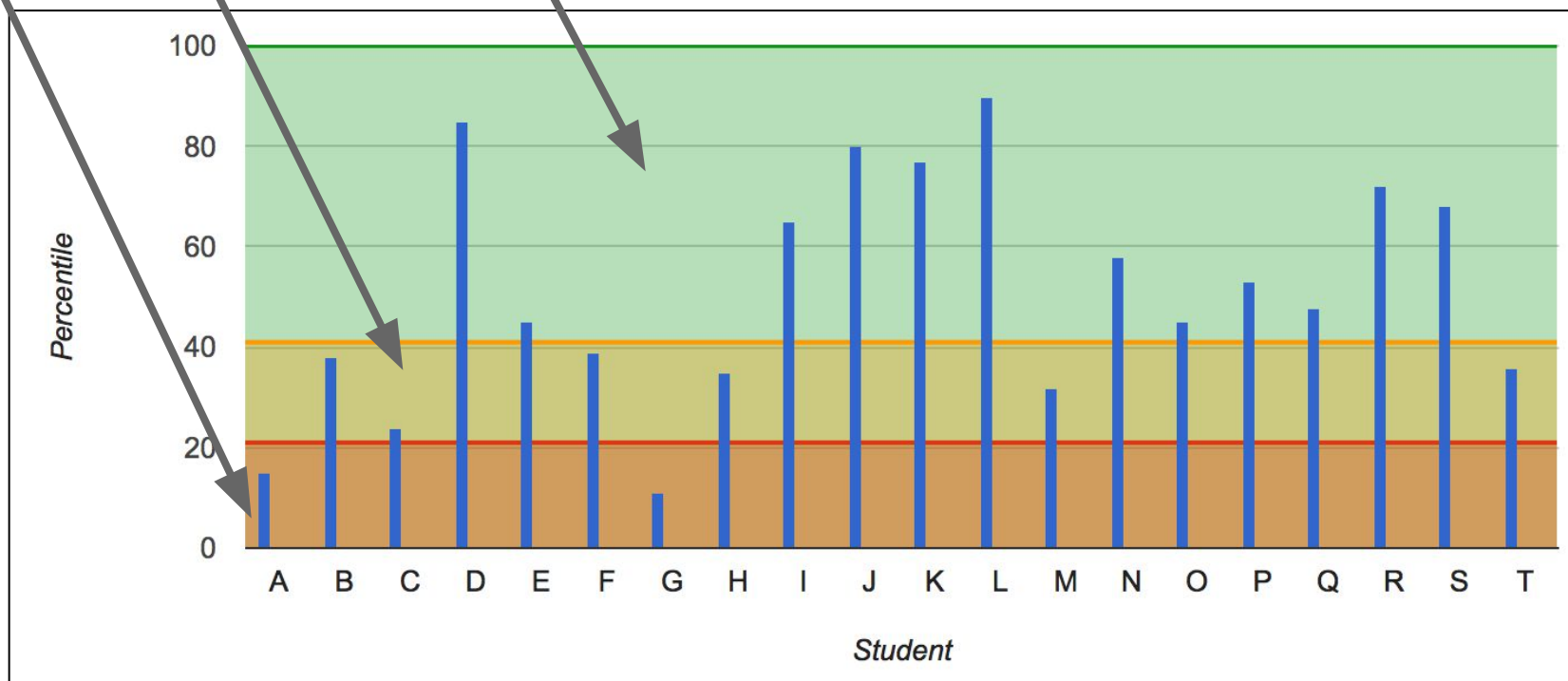


Universal Screening Chart

Red = at risk

Yellow = at risk

Green = not at risk

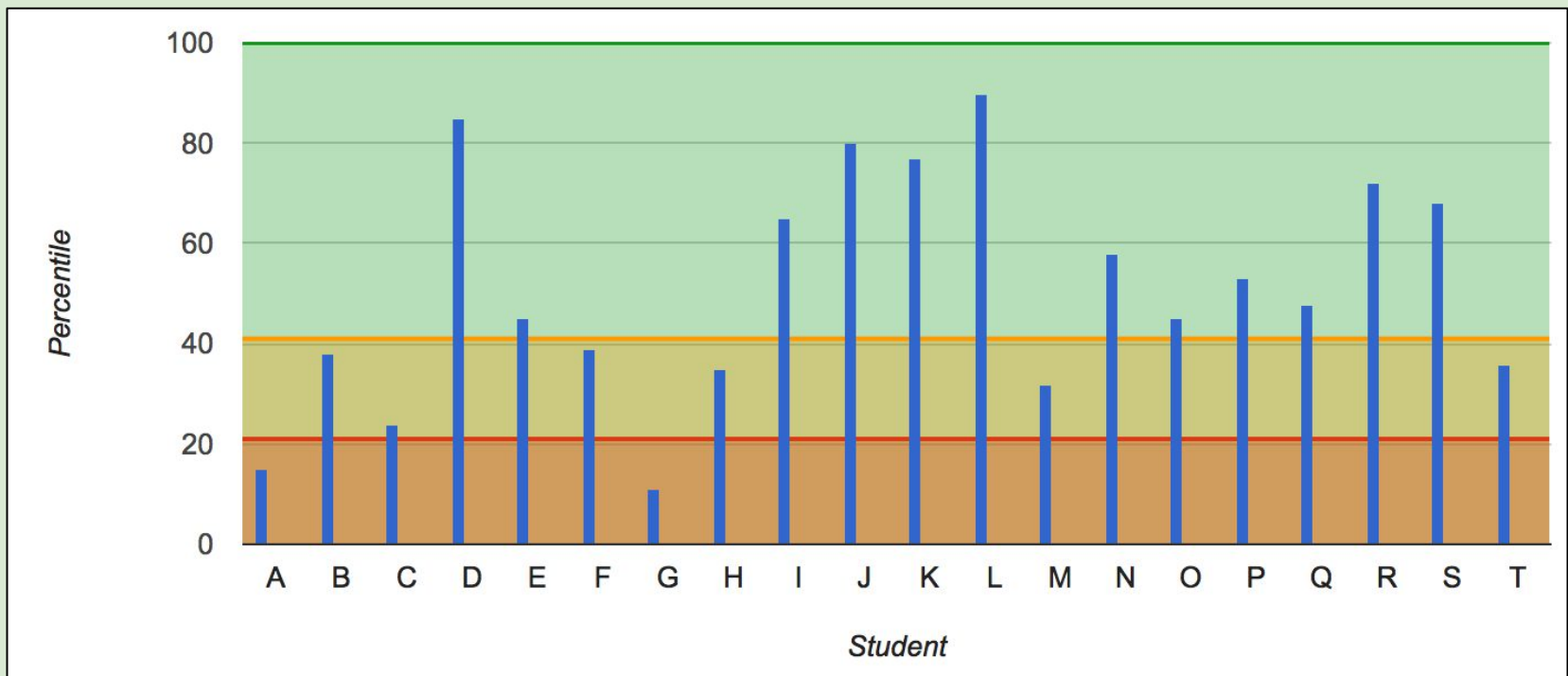


Activity

Please select whether the following statement is true or false.

Student J is at risk and may need additional support to be successful.

- True
- False

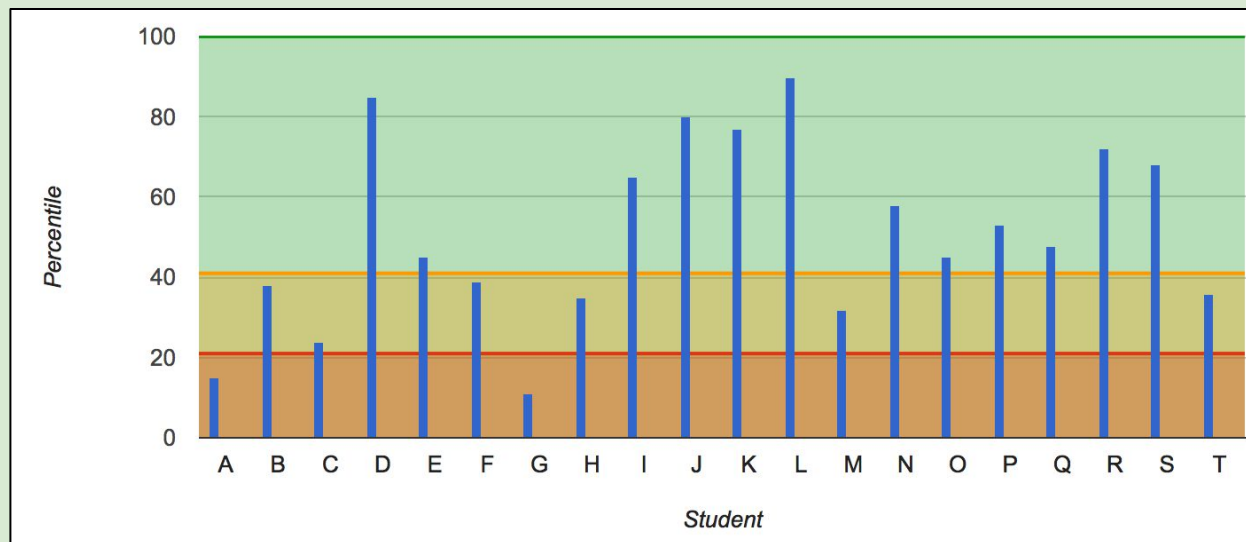


Activity Answer

Please select whether the following statement is true or false.

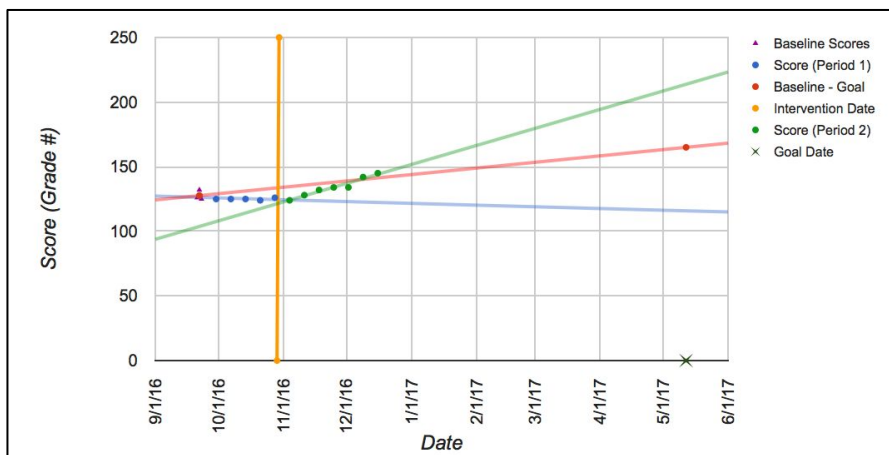
Student J is at risk and may need additional support to be successful.

- True
 - In universal screening data, students who have scores in the green are not likely to need additional support. However, students in the yellow, and more specifically the red, are likely to need additional support.
- False
 - Only students in yellow or red may be in need of additional support in universal screening data.

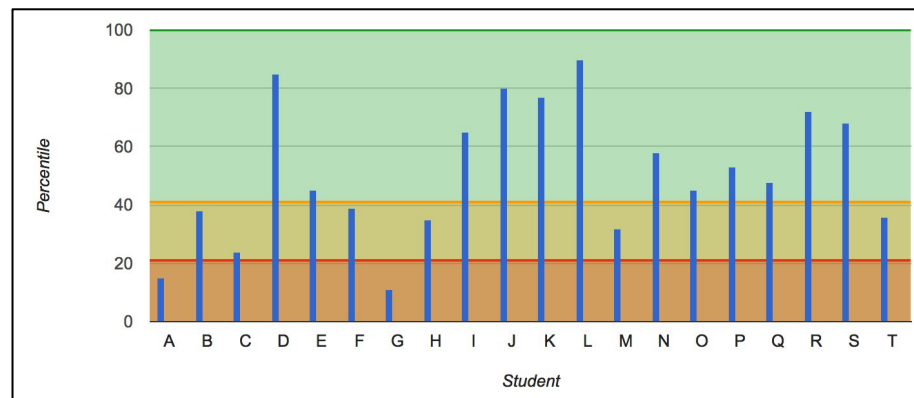


Similar Appearance, Different Purpose

The data needed for universal screening and progress monitoring look sort of similar. There's an x-axis, y-axis, some numbers, and a few colors, but the purposes for the data are vastly different. If you don't know the purpose for the data exist, you'll get stuck. If you try doing progress monitoring with universal screening data, you'll also get stuck because universal screening data are not meant for progress monitoring.



Progress Monitoring



Universal Screening

What if you knew?

- Why the data exist
- Why the data need to be analyzed
- How the data should be analyzed to serve their intended purpose
- When and how the findings of analysis will be used

As we move forward in this curriculum, we're going to use the A+ Inquiry framework to demonstrate data use knowledge and skills through an array of examples representing a variety of data use purposes.

Teacher Thought

Now that I know the different purposes in Progress Monitoring and Universal Screening, I can quickly read the charts and make instructional decisions. I'm beginning to feel so empowered.

Indicate the extent to which you agree or disagree

	Strongly disagree	Disagree	Agree	Strongly Agree
This module part increased my awareness of the need for data use training				

Well Done

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