

A **How-To Guide** from Edmentum International

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# Data-Driven Instruction

# What Is Data-Driven Instruction?

Data-driven instruction relies on teachers like you having assessment information on your students to inform your teaching and learning plans in the classroom. It works on two levels. One, it'll provide you with the ability to be more responsive to students' needs, and two, it allows students to 'own' their own learning.

It's fantastic for individualized learning, as students focus on the skills that they need to develop, and it gives them a good grasp of where their strengths and weaknesses lie, so aligns really well with a diverse range of curricula. So, what is data-driven instruction and how does it work?

## Data-Driven Instruction Cycle

The data-driven instruction cycle has four phases:

### 1. Plan and Teach

In this phase, you'll instruct students, using any data you have available on student progress, and cover the skills as outlined in the curriculum.

### 2. Assess

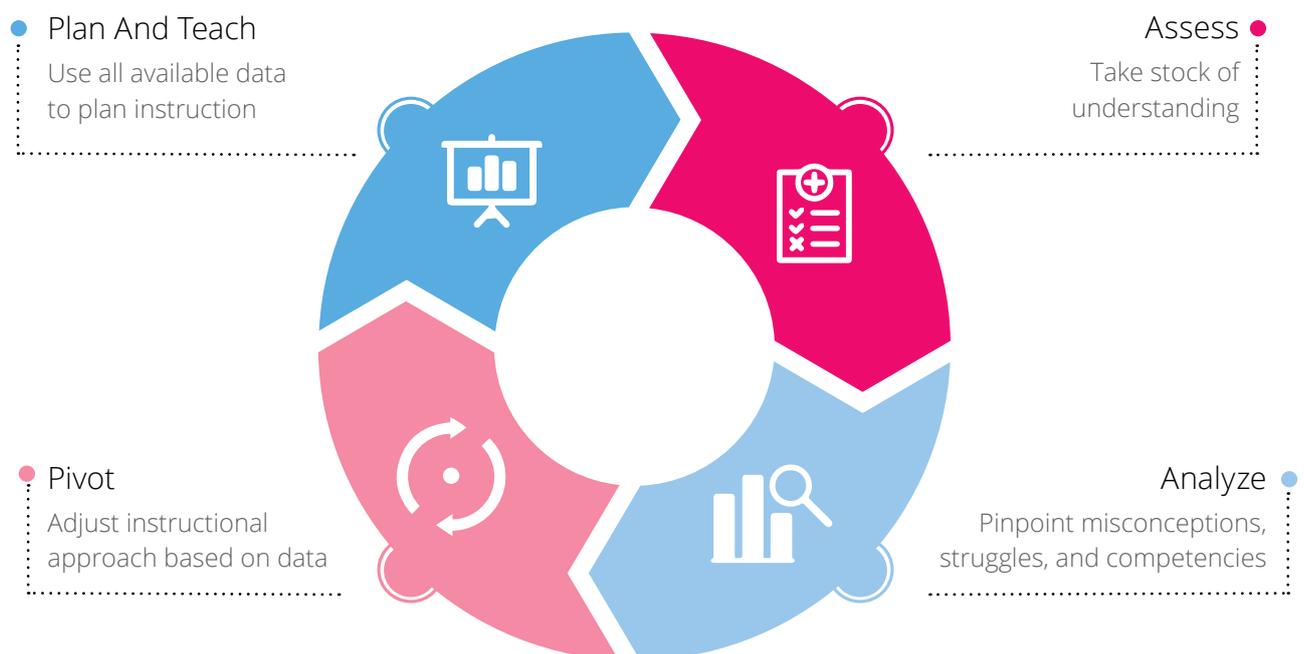
Students take an assessment, correlated to the curriculum.

### 3. Analyze

The results from Phase 2 are collated together, so you'll be able to get a good grasp of what your students have understood and where any potential gaps/misconceptions are.

### 4. Pivot

At this point, enriched by the in-depth data analysis completed in Phase 3, you can move from analysis to action in the classroom to improve your student performance.



# Four Requirements of Data-Driven Instruction

There are four critical requirements that data-driven instruction programs need to include:



## Baseline Data

Baseline data tells us what students know at the beginning of the school year, semester, unit or lesson. It serves two main purposes: a baseline for measuring gains, and as a tool for identifying strengths and weaknesses so that data can be used to influence instruction.



## Clear Goals

Clear learning goals/objectives are the backbone of data-driven instruction. Learning goals should be based on the standards and clear to students.



## Regular Assessments

Assessing your students regularly is crucial to data-driven instruction because it provides you with the data you need to determine whether the learning goals are being met and to what degree.



## Well-Planned Instruction

Data-driven instruction does not work without effective planning. Every lesson must focus on the learning goal/objective and incorporate all available data. In addition to whole group lessons, the teacher must also plan what adjustments will be made for students who don't grasp the concept initially.

# Assessment Types

There are three types of assessments, which should be used regularly so, as teachers, you know that your students know what they need to know.

Regular assessments are an integral part of instruction. They determine whether or



## Formative, Short-Cycle Assessments

Formative Assessments refer to a wide variety of methods that you'll use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or course. Formative assessments help identify concepts that students are struggling to understand, skills they are having difficulty acquiring, or learning standards they have not yet achieved so that adjustments can be made to lessons, instructional techniques, and academic support.

The general goal of formative assessment is to collect detailed information that can be used to improve instruction and student learning **while it's happening**. What makes an assessment "formative" is not the design of a test, technique, or self-evaluation, per se, but the way it is used - i.e., to inform in-process teaching and learning modifications.

**Also called:** real-time assessments; diagnostic testlets; quick, informal assessments; and continuous assessments



## Interim, Medium-Cycle Assessments

An interim assessment is a form of assessment that you might use to evaluate where students are in their learning progress and determine whether they are on track to performing well in future assessments, such as standardized tests or end-of-course exams.

Interim assessments are usually administered periodically during a course or school year, and separately from the process of instructing students. They are often sat across multiple classrooms or schools to compare student performance in preparation for high-stakes summative assessments.

**Also called:** benchmark assessments, diagnostic assessments, unit or quarter assessments, and interval assessments



## Summative, Long-Cycle Assessments

Summative assessments are used to evaluate student learning, skill acquisition, and academic achievement at the end of an instructional period such as a unit, course, semester grading period, or project.

What makes the assessment summative is not the design of the test, but instead how the test is used. Summative tests are used to evaluate learning **after the learning has taken place**. Summative assessments are defined by three major criteria:

- The tests, assignments, projects, or exhibition in the PYP, are used to determine whether and to what degree students have learned the material they have been taught.
- Summative assessments are given at the conclusion of a specific instructional period, and therefore they are generally evaluative, rather than diagnostic. Data from summative test scores can be used to determine grade or course placements, school and district accountability ratings, educational program effectiveness, and even teacher quality.
- Summative-assessment results are often recorded as scores or grades that are then factored into a student's permanent academic record, be these grades on a report card or test scores used in the college admissions process.

**Also called:** end-of-semester/end-of-year assessments, and high-stakes assessments

# Your Data-Driven Instruction Program

Before developing a whole new plan for data-driven instruction, it's worth spending some time evaluating how you are currently monitoring progress and driving instruction in your school.

Using a worksheet like the one below can help provide some necessary structure, so you can see at a glance what types of assessment are currently being used, their frequency, how they feed

	How do we currently do this? Why is this type of assessment important?	How is the data used?	What works well? What are the challenges?
Formative Assessment			
Interim Assessment			
Summative Assessment			

In addition to the above, it would be worth considering the following too:

- What technology is available to you?
- What expertise is available?
- What resources are available in school?
- Do your students have access to technology/internet at home?

# Your Educational Goals

Once you have all the information about your present program to hand, you need to consider how your current program is helping you meet your educational goals, and if there are any issues with your current assessment schedule or gaps in the resources you have to manage it.

- What is the result that you want to achieve?
- Why do you want to achieve the result?
- How are you going to achieve the result?

Defining 3-5 goals by which to measure the success of implementing your data-driven instruction program would be ideal.



## Building Your Implementation Team

Having the right people involved is critical to the success of your data-driven instruction program. Recruit a cross-functional team that represents the varied

This could include:

- Teacher Groups
- Head of Primary
- PYP Coordinator
- MYP Coordinator
- Technology Director
- Special Education Director
- Alternative Education Director
- Department Leads
- Interventionists
- Virtual Program Directors

# Your Educational Goals (continued)

## Questions to Engage Participants in a Discussion About Leadership

1. Are there any candidates who have previous experience with a data-driven instruction program?
2. What roles are necessary for implementing the program?
3. Who makes curriculum decisions?
4. What is the process to build “buy-in” or parental support?

## Identify the Innovative Teachers, Who Are Social and Willing to Try Anything and Take Risks

### What types of teachers do you have at your school?

- Innovators – Willing to take risks and try anything, very social
- Early Adopters – High degree of opinion knowledge, high social status, more discreet in adoption choices
- Early Majority – Adopt an innovation after a varying degree of time and success
- Late Majority – Adopt an innovation after the average participant, skeptical about an innovation
- Late Adopters – Last to adopt an innovation, averse to change, focused on “traditions” for sake of traditions

## Questions to Engage Participants in a Conversation About Their Innovative Teachers

1. Are there team/grade lead teachers who would do well in this program pilot?
2. Who are the most “tech-savvy” teachers?
3. Are there teachers who have experience of a data-driven instruction program?
4. Who are the innovative teachers?

# Planning for Success

The appropriate collection and use of data can help make a lasting impact on student achievement over the course of a school year. This worksheet will help you collect and organize your data in an effort to create a meaningful action plan for your students.

Ensure you involve all parties when creating it, so that you all take joint ownership of the

Assessment Name:		Administration Date:	
Assessment Tool:		Subject Area/Grade Level:	
Leadership Team:		Educational Goals:	
Target Metrics (SMART):			

Reporting Category Area of Focus	Reporting Category Areas of Strength

Standards Proficiency:

Standards Needing Improvement - High Priority	Correct/Total	Correct %
Standards Needing Improvement - High Priority	Correct/Total	Correct %
Standards Needing Improvement - High Priority	Correct/Total	Correct %
Standards Needing Improvement - High Priority	Correct/Total	Correct %

Student Performance:

Far Below	Approaching	Meeting	Exceeding
Percentage	Percentage	Percentage	Percentage
Student Names	Student Names	Student Names	Student Names

Action Plan:

# About Edmentum

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