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Using Formative Assessment for Joint Decision-Making

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Welcome!

Catherine Castillo
Sr. Specialist,
Implementation Portfolio

Claire Neely
Sr. Specialist,
Implementation Portfolio

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Agenda

- Reflect on collaborative planning practices
- Examine formative assessments in classroom video
- Analyze student work samples

Reflecting on Collaborative Practices

"When teachers improve student learning by working with their colleagues, they begin to see that powerful learning is primarily a function of the work they do with students and their colleagues, rather than mainly a function of factors beyond their control, such as students' prior knowledge or background characteristics."

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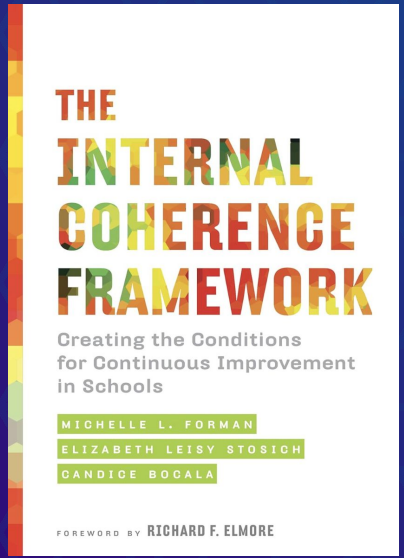

Forman, M. L., Stosich, E. L., & Bocala, C. (2017). *The Internal Coherence Framework : Creating the conditions for continuous improvement in schools.* Harvard Education Press.

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Types of Tasks

Handout p. 1

	Independent	Interdependent
Lesson Planning		
Formative Assessment		
Analyzing Student Work		

The Internal Coherence Framework, Table 7.1 Examples of independent and interdependent tasks in schools, p. 161

Types of Tasks

	Independent	Interdependent
Lesson Planning	Teachers agree on the content and standards to teach in the next month and work separately to write and prepare lessons.	Teachers agree on the content and standards to teach in the next month and collaboratively plan a lesson that they will all use.
Formative Assessment	Require ***individual*** problem solving and action.	Require ***collaborative*** problem solving and ***collective action***.
Analyzing Student Work	Teachers look separately at student work from their own classrooms and, in a later meeting, report on how their students are progressing with essential content and standards.	Teachers use a protocol to collectively examine a cross-section of student work samples from all classrooms across the grade or department and develop a common rubric to assess future work.

The Internal Coherence Framework, Table 7.1 Examples of independent and interdependent tasks in schools, p. 161

How does your team work?

Handout p. 1

Independently

Interdependently

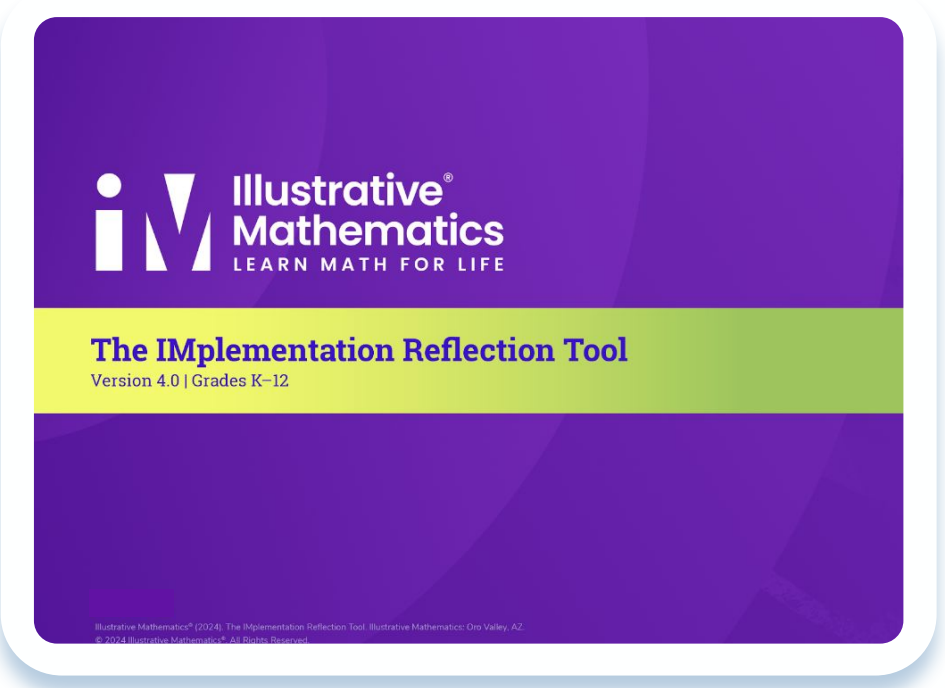
Individual problem solving and action

Collaborative problem solving and collective action

The Internal Coherence Framework, p. 172

The IMplementation Reflection Tool

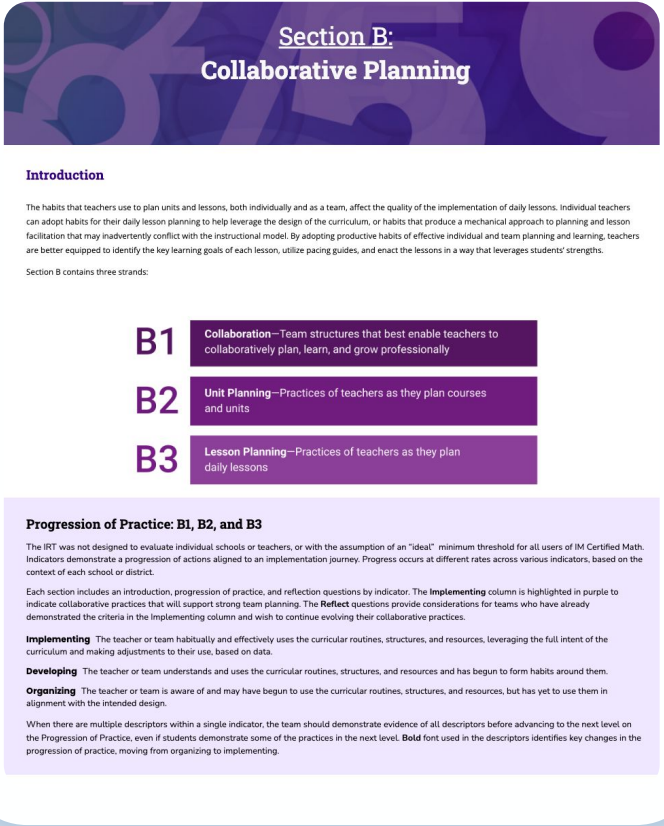
- **Section A:** Systemic Leadership
- **Section B:** Collaborative Planning
- **Section C:** Classroom Implementation



B. Collaborative Planning

- What do you notice?
- What do you wonder?

Handout p. 1



Section B:
Collaborative Planning

Introduction

The habits that teachers use to plan units and lessons, both individually and as a team, affect the quality of the implementation of daily lessons. Individual teachers can adopt habits for their daily lesson planning to help leverage the design of the curriculum, or habits that produce a mechanical approach to planning and lesson facilitation that may inadvertently conflict with the instructional model. By adopting productive habits of effective individual and team planning and learning, teachers are better equipped to identify the key learning goals of each lesson, utilize pacing guides, and enact the lessons in a way that leverages students' strengths.

Section B contains three strands:

B1 **Collaboration**—Team structures that best enable teachers to collaboratively plan, learn, and grow professionally

B2 **Unit Planning**—Practices of teachers as they plan courses and units

B3 **Lesson Planning**—Practices of teachers as they plan daily lessons

Progression of Practice: B1, B2, and B3

The IRT was not designed to evaluate individual schools or teachers, or with the assumption of an "ideal" minimum threshold for all users of IM Certified Math. Indicators demonstrate a progression of actions aligned to an implementation journey. Progress occurs at different rates across various indicators, based on the context of each school or district.

Each section includes an introduction, progression of practice, and reflection questions by indicator. The **Implementing** column is highlighted in purple to indicate collaborative practices that will support strong team planning. The **Reflect** questions provide considerations for teams who have already demonstrated the criteria in the Implementing column and wish to continue evolving their collaborative practices.

Implementing The teacher or team habitually and effectively uses the curricular routines, structures, and resources, leveraging the full intent of the curriculum and making adjustments to their use, based on data.

Developing The teacher or team understands and uses the curricular routines, structures, and resources and has begun to form habits around them.

Organizing The teacher or team is aware of and may have begun to use the curricular routines, structures, and resources, but has yet to use them in alignment with the intended design.

When there are multiple descriptors within a single indicator, the team should demonstrate evidence of all descriptors before advancing to the next level on the Progression of Practice, even if students demonstrate some of the practices in the next level. **Bold** font used in the descriptors identifies key changes in the progression of practice, moving from organizing to implementing.

Reflect

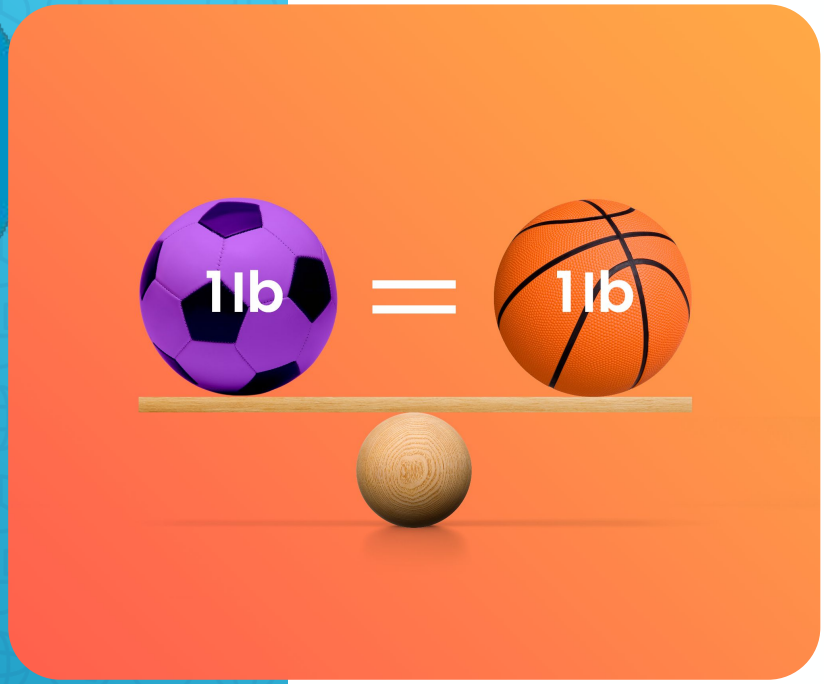
1.

How can ideas from the IRT support your collaboration?

2.

How do you formatively assess student learning?

Formative Assessment in Action



B3.2 Using Formative Assessment Data

Implementing	Developing	Organizing
Teachers review student responses on formative assessments (e.g., the cool-downs, practice problems, teacher questions) and **use multiple sources** of data to inform planning for upcoming lessons.	Teachers **review student responses from the most recent formative assessments** to inform lesson planning.	Teachers plan lessons individually but may share their individual planning experiences with their PLCs. Teachers work out math problems and activities together.

Grade 1, Unit 8, Lesson 4:
Change Unknown Story Problems

Lesson Learning Goal:

Explain (orally) strategies for solving Add To and Take From, Change Unknown Problems within 20, including using the relationship between addition and subtraction.

Student Task:

17 penguins sit on the rocks. Some of the penguins jump into the water. Now 5 penguins sit on the rocks.

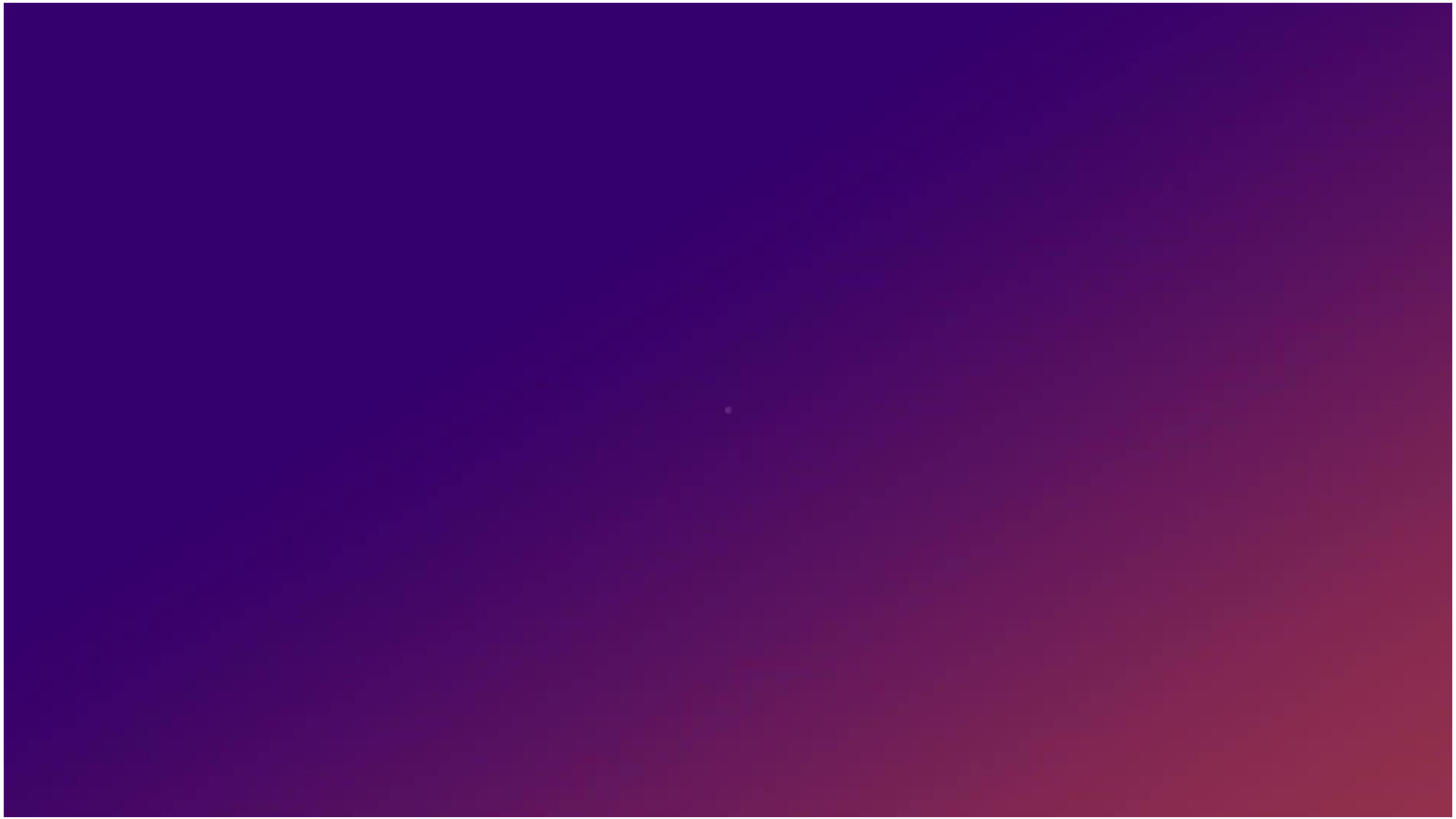
How many penguins jump into the water?

Grade 6, Unit 7, Lesson 1

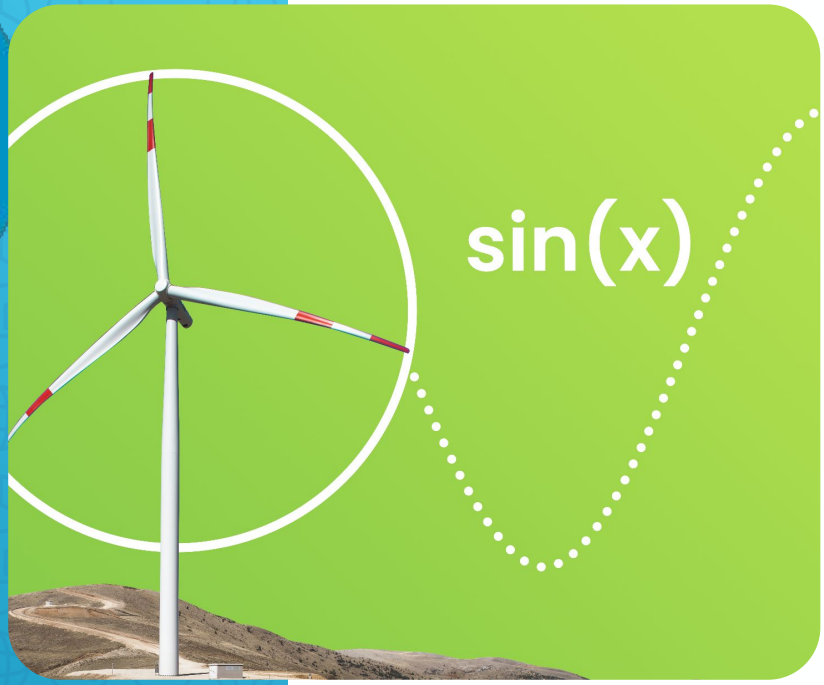
Lesson Learning Goals:

- Comprehend the words “positive” and “negative” and the symbol “-”. Say “negative” when reading numbers written with the “-” symbol.
- Recognize that the number line can be extended to represent negative numbers.
- Interpret positive and negative numbers that represent temperature or elevation, and understand the convention of what “below zero” typically means in each of these contexts.

city	elevation (feet)
Harrisburg, PA	320
Bethell, IN	1,211
Denver, CO	5,280
New Orleans, LA	-8
Death Valley, CA	-282
New York City, NY	33
Miami, FL	0



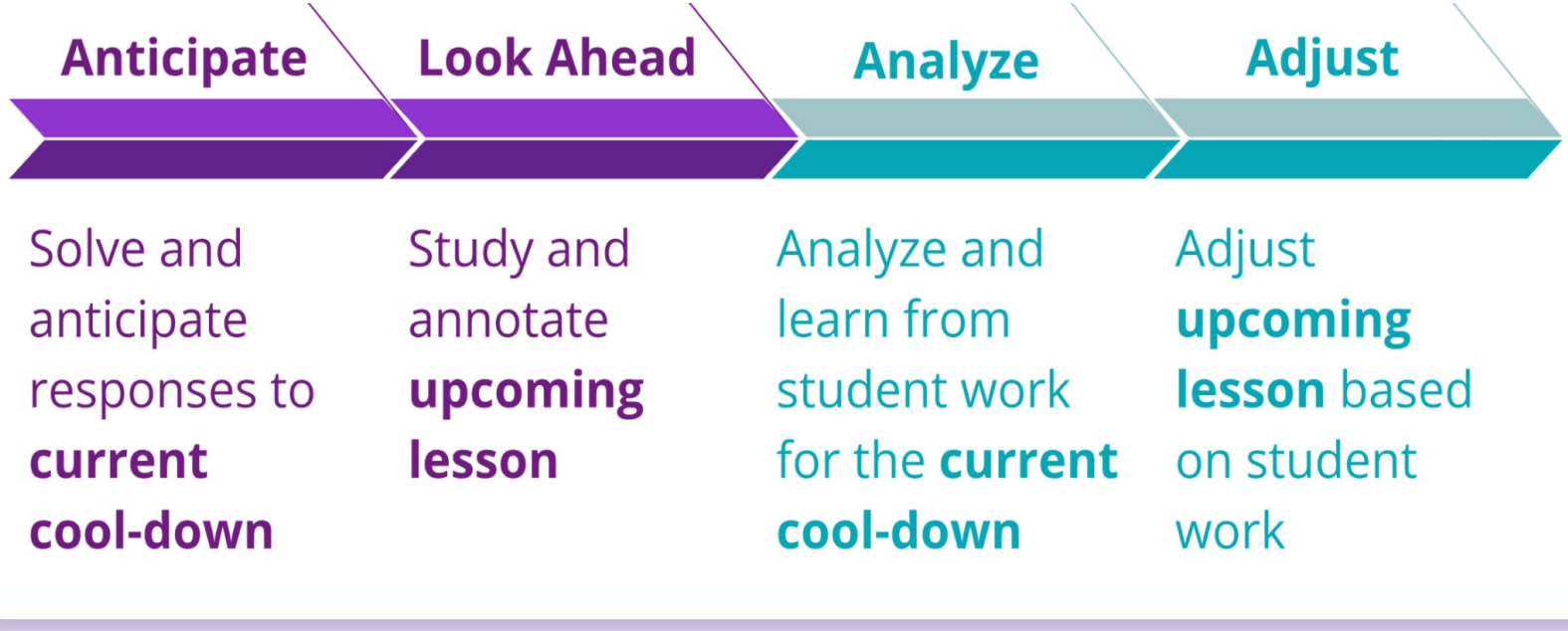
Collaboratively Analyzing Student Work Samples



B1.3 Planning

Implementing	Developing	Organizing
Teachers co-plan upcoming lessons and units, **share evidence of student learning, and reflect on teaching effectiveness.** Teachers work out math problems and activities together, **sharing and connecting anticipated student strategies and misconceptions.**	Teachers **co-plan upcoming lessons, units, instructional supports, or other logistics** (e.g., assessments, supplemental programs). Teachers work out math problems and activities together, **sharing potential student strategies**.	Teachers plan lessons individually, but may share their individual planning experiences with their PLCs. Teachers work out math problems and activities together.

What do you notice? What do you wonder?



Anticipate

Solve and anticipate responses to **current cool-down**

Handout p. 2

Grade 1, Unit 8, Lesson 4 Cool-Down

Clare counts 8 sharks swimming. Then some more sharks swim by. Clare counts 13 sharks all together.

How many more sharks swim by?

Show your thinking using drawings, numbers, or words.

Handout p. 2

Look Ahead

Study and annotate **upcoming lesson**

Grade 1, Unit 8, Lesson 5 Put Together and Take Apart Story Problems

- Read and annotate the lesson independently
- What stood out to you?
- How do these concepts build upon the prior lesson?

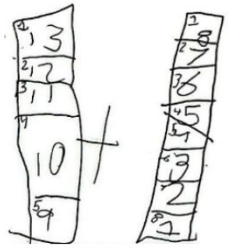
Analyze and learn from student work for the **current cool-down**

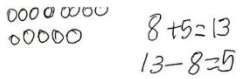
Student Work Protocol

Notice: I notice that the student (wrote, drew, used).
Wonder: I would like to learn _____ about this student's thinking, and so I will ask _____.
Evaluate: This work reveals that the student understands _____.
Adjust: In light of student thinking, I might _____ in the next lesson.

Student Work Samples

- With a partner, analyze student responses for Clare's shark problem.
- Fill in tables on p. 3-4.

Strategy 1	Notice	Wonder
		
	Evaluate	**Adjust**

Strategy 2	Notice	Wonder
		
	Evaluate	**Adjust**

Handout p. 3

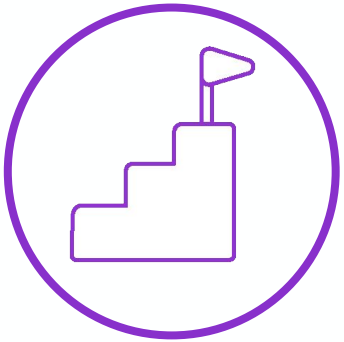
Employing Collective Challenge

- **Question interpretations.** “I hear you saying _____. Is that right?
- **Check assumptions.** “Does this mean you’re assuming that they didn't get it the first time because _____”
- **Play devil’s advocate, or push back on ideas.** “If we keep scaffolding, will they ever learn to do it on their own?”
- **Surface underlying tensions.** “On the one hand, Linda is concerned about _____. On the other, Derek fears this might _____.”
- **Examine group hypotheses.** “What we’re saying is that if we all _____, then we will see _____”
- **Reframe the group’s collective understanding.** “What we decided today is _____”

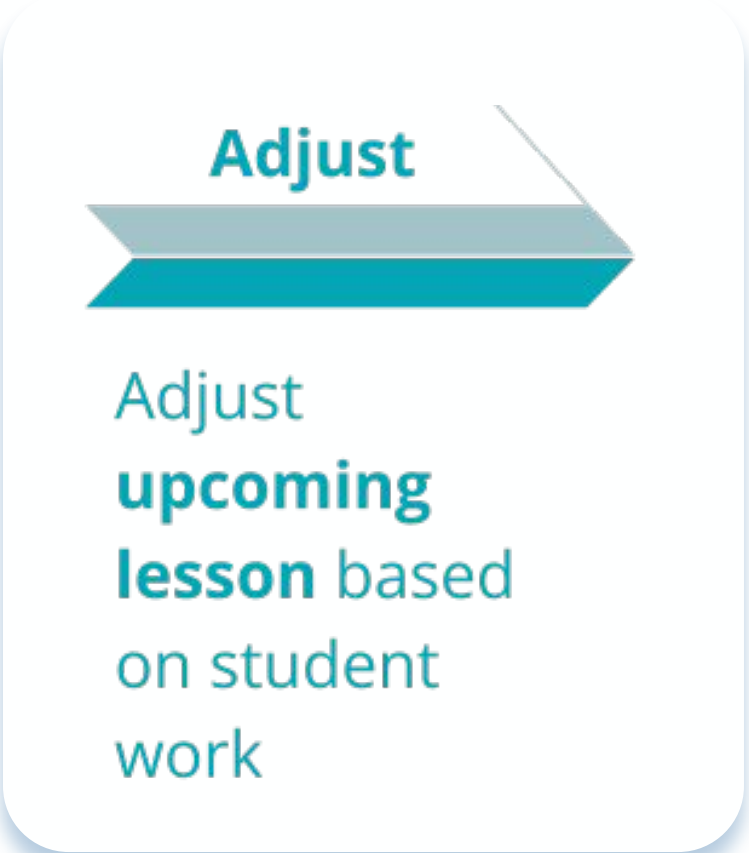
The Internal Coherence Framework, Employing Constructive Challenge Protocol, p. 53

Employing Collective Challenge

- Join with another group of two.
- Share your reflections about the student work.
- Use a prompt to challenge the thinking of the other team.



The Internal Coherence Framework, Employing Constructive Challenge Protocol, p. 53



Adjustment Considerations

- What other opportunities will students have to practice the concept?
  - What are the learning goals of the next lesson(s)?
  - Where are there additional opportunities for formative assessment?
  - Where is mastery expected?
- What does the cool-down guidance suggest?

Reflecting on Collaborative Practices

- How might using the *Looking at Student Work* protocol with your team support access to grade-level learning?
- What potential impacts do you see of interpreting formative assessment data collaboratively?

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"Making commitments for shared learning is one concrete strategy that leaders can use to signal how seriously they take educators' willingness to engage in productive collaboration around instruction"

- The Internal Coherence Framework, p. 43

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Thank You

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