Making Waves Academy

Math Deep Dive

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Learning Objective

- (SWBAT) Board members will be able to understand the value of re-teaching through a simulated lesson.

Agenda

- Simulated Math Lesson
- Reflection and Debrief

The Problem

Emmanuel added two integers. For each condition, identify whether the sum what the sign of the sum would be. Explain your reasoning for each answer.

a. Two integers that have negative values.

b. Two integers that have positive values.

c. One integer has a positive value, and one integer has a negative value.

d. The values of the two integers are opposites.

Share Out Analysis

a. What skills/knowledge do students need to answer this correctly?

b. What vocabulary to students need to understand?

c. What misconceptions do you anticipate?

Teacher Reflection

After reviewing the exemplar response and the student samples, the misconceptions in the student work are:

-Students confused multiplication and division procedures with addition and subtraction procedures. This indicates a conceptual understanding gap for the four operations in general.

-Students seem to think that a negative has greater influence than a positive which is both incorrect and further indicates a conceptual understanding gap of the four operations.
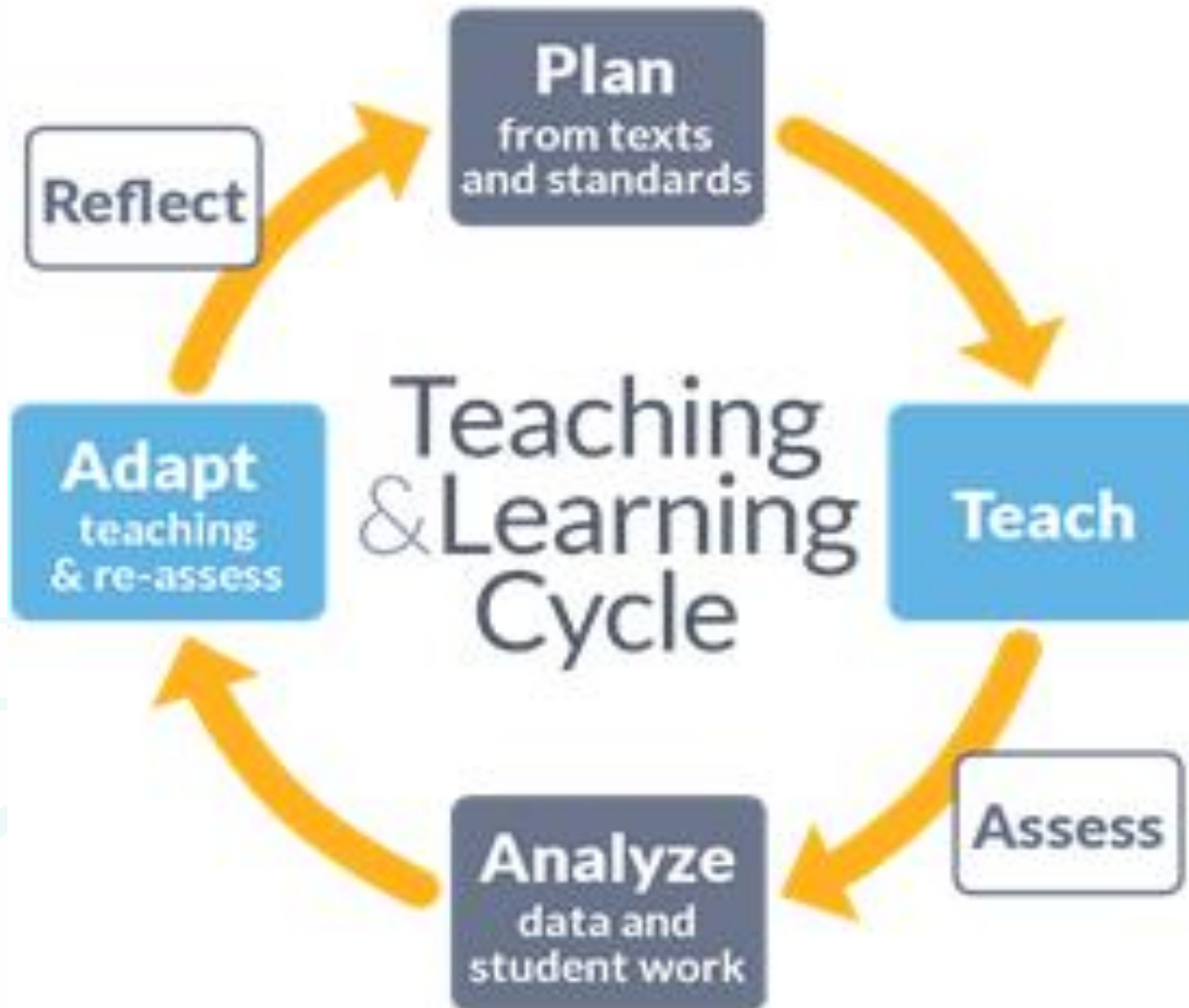
Outcomes

Before: The data showed that only 32% of my students answered every part of this question accurately.

The plan: Use a visual strategy (number lines) and real-world examples.

After: 78% of students answered every part of this question correctly.

Teaching and Learning Cycle

Reflection and Debrief

Takeaways from Semester 1

- <u>Academy Wide:</u> Peer Observation proved to be an effective practice.

- <u>Middle School:</u> When our Math Lead Teacher has time and capacity to coach, our practices and student learning data increases.

- <u>Upper School:</u> With the implementation of the T&L Cycle, PLCs have consistent and rich discussions about practice.

Discussion and Questions

Did we meet our Learning Objective?