

Reflecting on Practice: Supporting Students' Metacognition



Week 2, Day 4
2019

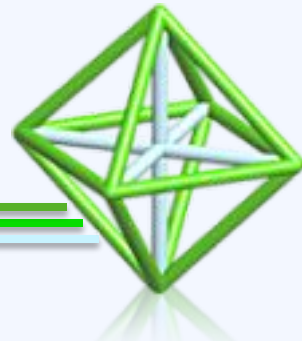


Metacognition

What is your definition of metacognition?

Take a moment to think...

Discuss at your table



Metacognition

Artifacts benefiting students:

Practicing metacognition with artifacts, in the moment when they are returned and spaced over time



Metacognition - Research

Because metacognition often takes the form of an internal conversation, it can easily be assumed that individuals will develop the internal dialogue on their own. Yet many of the strategies we use for thinking reflect cultural norms and methods of inquiry (Hutchins, 1995; Brice-Heath, 1981, 1983; Suina and Smolkin, 1994).

Research has demonstrated that children can be taught these strategies, including the ability to predict outcomes, explain to oneself in order to improve understanding, note failures to comprehend, activate background knowledge, plan ahead, and apportion time and memory.

-[How People Learn](#), p. 18



Silent Discussion

At your table there are 6 pieces of paper, one with each of these artifacts of student thinking:

Exit Ticket

Homework

Classwork

Quiz/Test

Project

Warm Up/Do Now



Silent Discussion

Exit Ticket

Homework

Classwork

Quiz/Test

Project

Warm Up/Do Now

Grab one of the pieces. Answer the Round 1 prompt:

What do you typically do with this artifact of student thinking if/when you return it to students?

1 After you finish answering, pass to your right and answer the Round 1 prompt for the one that is passed to you.

2 Once you get the sheet you started with back, answer the Round 2 prompt and continue as before.

Once you finish, you can discuss at your table



Random Pair-Share

Find your partner...

When you find them, tell them your favorite number and why



Random Pair-Share

Take a moment to think:

What is one idea you read/heard at your table that you would be excited to try in your classroom?



Random Pair-Share

Find your partner...

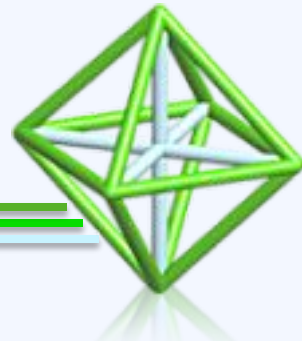
When you find them, tell them your favorite math topic to teach and why



Random Pair-Share

Take a moment to think:

What do you perceive as a challenge to helping students practice metacognition in your classroom?



Random Pair-Share

Find your partner...

When you find them, tell them your favorite repeating decimal and why



Random Pair-Share

Take a moment to think:

What is one small adjustment you could make to what you're already doing to support student metacognition?



Metacognition over the Long Term

- What evidence do students typically have of their learning over time?
- How do you think students typically use this evidence?

This could be in your classroom, a colleague's classroom, when you were a student, or in general...



Video

Geoff Krall, “The Art of Mathematical Anthropology”

<https://vimeo.com/217761640>



Reflect

- What are the benefits of having students reflect on their work over time, not just when it is returned?
- What might you ask students to do with an artifact of their thinking to help them see their growth over time?



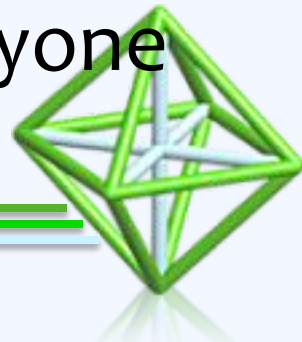
Discuss

- What are the benefits of having students reflect on their work over time, not just when it is returned?
- What might you ask students to do with an artifact of their thinking to help them see their growth over time?



Sharing your ideas

- We have finite time, and far more artifacts of student thinking than we can use effectively. What is one strategy that you either use or would like to try that supports student learning without taking up all of your time?
- Go to **bit.ly/rop-reflection** and enter your idea on the padlet, then see what everyone else wrote



Name Tent Feedback Question

On the back of your name tent, respond to this statement for Day 4:

How are you metacognitive in your teaching practice?



Outline

