

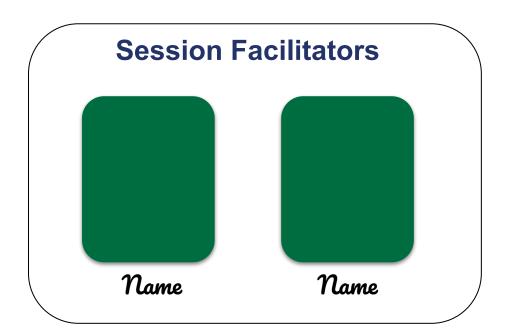
Building on Assessment (Virtual) – Session 4

© CPM Educational Program. All rights reserved. cpm.org

Welcome!

CPM Virtual Learning Series







Opening

Outcomes



Participants will:

- + Reflect on the efficacy of their current formative assessment practice.
- + Plan a formative assessment that supports the summative assessment item.

Opening Agenda



Developing Student Self-Awareness



- + Opening
- + Peer Assessment
- + Self Assessment
- + Closure

Opening



Be willing to take **risks**.

Have a **visionary** mindset.

Stay **engaged**.

Explore and reflect on your **beliefs**.

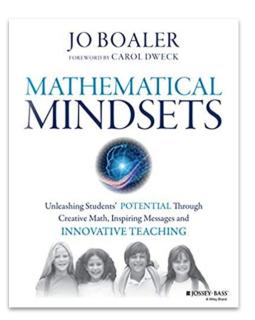
Change takes time, effort, and support!

Give **grace** to others and yourself.

Reading



Mathematical Mindsets



Golden Line

Read the article, highlight or note parts of the research that:

- + raise questions for you;
- confirm what you already believe;
- cause you to reconsider prior assumptions;
- + make you say, "aha"; or
- conflict with your beliefs.



Opening

Beliefs about Mathematics Assessment



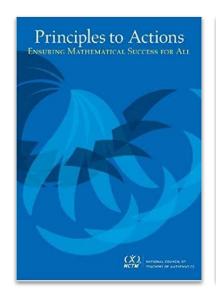
		PRODUCTIVE BELIEF				
NCTM	1	The primary purpose of assessment is to inform and improve the teaching and learning of mathematics.				
	2	Assessment is an ongoing process that is embedded in instruction to support student learning and make adjustments to instruction.				
	3	Mathematical understanding and processes can be measured through use of a variety of assessment strategies and tasks.				
	4	Multiple data sources are needed to provide an accurate picture of teacher and student performance.				
	5	Assessment is a process that should help students become better judges of their own work, assist them in recognizing high-quality work when they produce it, and support them in using evidence to advance their own learning.				
	6	Ongoing review and distributed practice within effective instruction productive test preparation strategies.				

C P M	7	Authentic assessment means assessing in a manner that mirrors the way the students have learned, and focusing on what the students know, rather than what the students do not know.	
	8	Assessment, as with the learning, should focus on the big ideas and the connections to assess for understanding, and not on the fine grain-sized skills.	
	9	Assessment and teaching should be seamlessly interwoven, and time should be spent on both. Because of the lack of time most teachers hit is important to assess wisely, and use the supports that are in place.	
	10	Assessment is the process of understanding student learning, and grading is evaluating that understanding. The bulk of the teacher's time should be spent on assessing rather than grading.	

Opening

Effective Math Teaching Practices





Facilitate meaningful mathematical discourse.

Pose purposeful questions.

Support productive struggle in learning mathematics.

Elicit and use evidence of student thinking.





"If we want students to take charge of their learning, we can't keep relegating them to a passive role in the assessment process."

Developing Assessment Capable Learners

Selecting Problems



The Learning Trajectory can be used to select Review & Preview problems for Peer & Self Assessment.





Using the Rubric



The rubric and success criteria were developed by you specifically to assess student learning.

How can students use the rubric for peer assessment?

4 Corners Jigsaw

- 1. Resource Manager STTS
- **2. Facilitator**Sentence Starters
- 3. Task Manager Heatmap
- **4. Recorder/Reporter**Shorthand Editing





Describe the method.

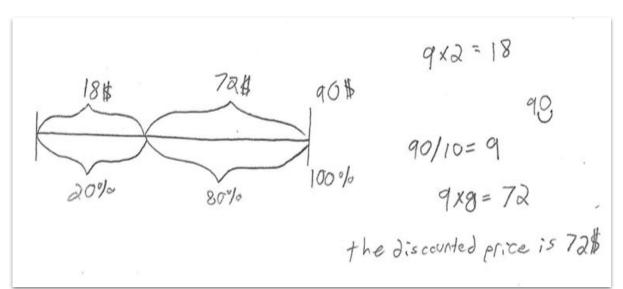
- + What will the students be doing?
- + How will this assessment method help students recognize high-quality work?
- + How will the teacher implement this in the classroom?

Peer & Self Assessment

Peer Assessment: Rubric

Marty purchased a jacket at a discounted price. The original price was \$90. If the jacket was 20% off, calculate the discounted price of the jacket.

Be sure to explain your thinking. Represent your thinking in more than one way. How do you know that your answer is correct?





9x2=18\$ 20%=18\$ 90-18=72 80%=72\$ discount price is 72\$

Peer & Self Assessment

Peer Assessment: Rubric



"Assessment is an ongoing process that is embedded in instruction to support student learning and make adjustments to instruction."

CPM's Position Paper on Assessment

If the majority of students <u>do not</u> demonstrate understanding:

- + Were students aware of your expectations?
- + Was the assessment item given too soon?
- + Does this question need to be rewritten?



Remember:

Be transparent about your expectations.

Self Reflection: What's Next

- + A next step for me is _____.
- + The most interesting thing in this work is _____.
- + One area of this work that I found easy was _____.
- + I don't yet understand _____.
- + I have a question about _____.
- + I'm still not sure how to _____.
- + The next steps in learning for me are _____.



Assessment Action Plan



Title: Peer Assessment



My plan for incorporating peer assessment in the upcoming school year is _____.



Consider:

- + What effect will this action have on your assessment culture?
- + How will peer assessment support students with recognizing and demonstrating high quality mathematics?
- + How will it support your knowledge of students' learning?



Self Assessment Examples



What should be included in a self assessment?

Self Assessment Additional Examples



What are the **connections** to the Productive Assessment Beliefs?

Additional self assessment examples in the PL Portal Filing Cabinet.

These are examples developed by CPM teachers.

Are there other methods that could work in your classroom?

Assessment Action Plan



Title: Self Assessment



My plan for incorporating self assessment in the upcoming school year is _____.



Consider:

- + What effect will this action have on your assessment practice?
- + How will self assessment support student learning?
- + How will it support your knowledge of students' learning?

Hot Potato





What topics or ideas have we discussed so far?

- One person starts with the hot potato (paper).
- + Record one topic/strategy from the workshop and pass the hot potato to the next person.
- Repeat this process until all topics/strategies are recorded.

Hot Potato



Connections to Student Learning

Select a topic/strategy.

Consider:
How will ____
impact your
assessment
culture?

Post your thoughts in the Public Chat.

Session 4 Outcomes



Participants will:

- + Reflect on the efficacy of their current formative assessment practice
 - + Peer Assessment Jigsaw
- Plan a formative assessment that supports the summative assessment item
 - + Peer and Self Assessment Action Plan

Beliefs about Mathematics Assessment



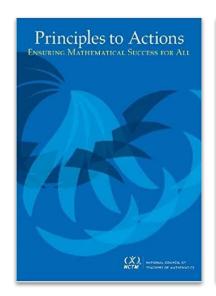
		PRODUCTIVE BELIEF				
N C T M	1	The primary purpose of assessment is to inform and improve the teaching and learning of mathematics.				
	2	Assessment is an ongoing process that is embedded in instruction to support student learning and make adjustments to instruction.				
	3	Mathematical understanding and processes can be measured through the use of a variety of assessment strategies and tasks.				
	4	Multiple data sources are needed to provide an accurate picture of teacher and student performance.				
	5	Assessment is a process that should help students become better judges of their own work, assist them in recognizing high-quality work when they produce it, and support them in using evidence to advance their own learning.				
	6	Ongoing review and distributed practice within effective instruction productive test preparation strategies.				

C P M	7	Authentic assessment means assessing in a manner that mirrors the way the students have learned, and focusing on what the students know, rather than what the students do not know.	
	8	Assessment, as with the learning, should focus on the big ideas and the connections to assess for understanding, and not on the fine grain-sized skills.	
	9	Assessment and teaching should be seamlessly interwoven, and time should be spent on both. Because of the lack of time most teachers hit is important to assess wisely, and use the supports that are in place.	
	10	Assessment is the process of understanding student learning, and grading is evaluating that understanding. The bulk of the teacher's time should be spent on assessing rather than grading.	

Opening

Effective Math Teaching Practices





Facilitate meaningful mathematical discourse.

Pose purposeful questions.

Support productive struggle in learning mathematics.

Elicit and use evidence of student thinking.



How can the Study Team & Teaching Strategies support effective, formative assessment?

Ambassador	Fishbowl	I Spy	Math Chat	Reciprocal Teaching	Think-Ink-Pair-Share (T.I.P.S)
Carousel: Around the world	Fortune Cookie	Jigsaw: 4 Corners	Notice & Wonder	Red Light, Green Light	Think-Pair-Share
Carousel: Station Rotation	Gallery Walk	Numbered Heads	Participation Quiz	Silent Appointment	Traveling Salesman
Carousel: Index Card	Give One, Get One	Pairs Check (Chat)	Peer Edit	Silent Debate	Tuning Protocol
Dyad	Hot Potato	Huddle	Pick Three	Swapmeet	Walk and Talk
Elevator Talk	Hot Seat	Listening Post	Proximity Partner	Teammates Consult	Whiparound

Closure



- 1. Choose a summative assessment topic from the Learning Trajectory.
- 2. Write a summative assessment item.
- 3. Align the generic rubric to the item(s).
- 4. Identify formative assessment opportunities.
 - a. Plan the peer assessment process.
 - b. Plan the self assessment process.

- + Parking Lot
- + Attendance & Feedback
 - In the Portal
- + Continuing Education Credit
- + Homework: On-Demand Module
 - Activity 1: Prior to Session 1
 - Activity 2: Prior to Session 3
 - Activity 3: Prior to Session 5





