



Building on Assessment (Virtual) – Session 6

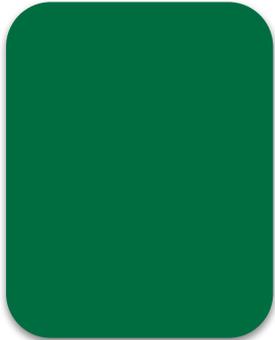
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Welcome!

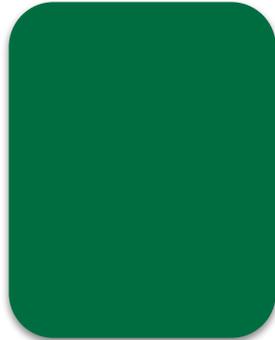
CPM Virtual Learning Series



Session Facilitators



Name



Name

Support



**Regional
Professional
Learning
Coordinator**

Opening

Outcomes



Participants will:

- + Gain knowledge of questioning research and apply it to formative assessment.
- + Utilize given tools to gradually transfer the questioning process to students.
- + Utilize the chapter progression to support student learning over time.

Opening Agenda



Implementation Planning



- + Opening
- + Questioning & Talk Moves
- + Implementation Planning
- + Closure

Opening



Be willing to take **risks**.

Have a **visionary** mindset.

Stay **engaged**.

Explore and reflect on your **beliefs**.

Give **grace** to others and yourself.

Change takes time, effort, and support!



Icebreaker



Think about a test you took that left a BIG impression with you (emotional, successful or not successful, funny, etc.).



Be prepared to share why you recalled this memory.

Opening

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 are 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 have, it 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



Implement tasks that promote reasoning and problem solving.

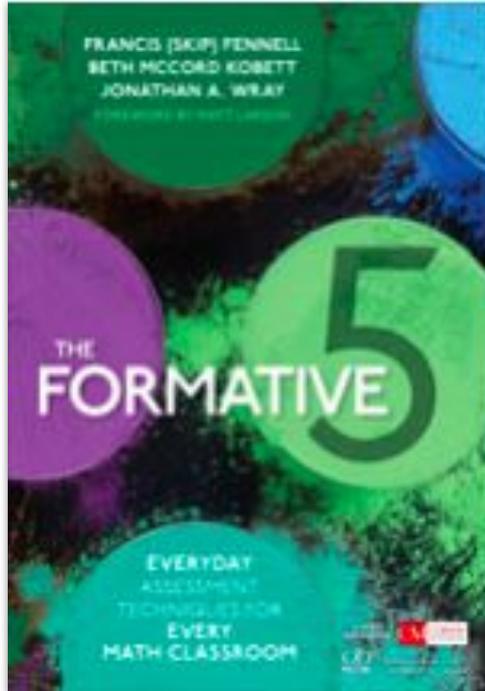
Facilitate meaningful mathematical discourse.

Pose purposeful questions.

Elicit and use evidence of student thinking.

Questioning and Talk Moves

CCA Lesson 4.2.2



The Formative Five

- + Observations
- + Interviews
- + Show Me
- + Hinge Questions
- + Exit Tasks

Questioning and Talk Moves

Hinge Questions



Hinge Question Tips

- + Anticipate possible student responses.
 - + If a large percentage of students are unsuccessful:
 - + the goal may be too lofty (more likely on a multi-day lesson);
 - + the goal may have been assessed too soon; and
 - + the teacher may have assumed all of the learning authority.
- + Use STTS effectively within the lesson.

Questioning and Talk Moves

Talk Moves



Class Discussion

What is a hinge question?

What is the value of a hinge question?



Questioning and Talk Moves

Talk Moves



- ▼ 02. Building on Assessment
 - ▶ In-Person Learning Events
 - ▼ Virtual Learning Events
 - ▶ Session 1
 - ▶ Session 2
 - ▶ Session 3
 - ▶ Session 4
 - ▶ Session 5
 - ▼ Session 6
 - 00 Productive, Unproductive Beliefs Poster-NCTM, CPM.pdf
 - 01 Talk Moves.pdf
 - Session 6 - Slides.pdf

Questioning and Talk Moves

5 Tips for Effective Questioning



1. Plan to use questions that encourage thinking and reasoning.
2. Ask questions in ways that include everyone.
3. Give students time to think.
4. Avoid judging student responses.
5. Follow up on students' responses in ways that encourage deeper thinking.



Reciprocal Teaching



A hinge question...



Talk moves...

In what ways can the Reciprocal Teaching STTS support effective formative assessment?

Implementation Planning

Key Ideas



Team Brainstorm



Intentional Planning Time

Session 1 & 2

- + Learning Trajectory
- + Questions for Understanding

Session 3 & 4

- + Rubrics
- + Self/Peer Assessment Plan

Session 5 & 6

- + Formative Assessment
(Hinge Questions, Learning Trajectory)
- + Questioning Strategies
(Incorporate Talk Moves into Launch or Closure)

Implementation Planning Choice Board



<p>1 CONTINUE DEVELOPING THE LEARNING TRAJECTORY.</p> <p><i>Session 1</i></p>	<p>2 IDENTIFY A LESSON TO INCORPORATE TALK MOVES.</p> <p><i>Session 6</i></p>	<p>3 DEVELOP AN ALTERNATIVE ASSESSMENT (PORTFOLIOS, PRESENTATIONS, INTERVIEWS, PERFORMANCE TASKS).</p> <p><i>Session 2</i></p>
<p>4 DEVELOP A PEER ASSESSMENT PLAN USING REVIEW & PREVIEW PROBLEMS FROM THE LEARNING TRAJECTORY.</p> <p><i>Session 4</i></p>	<p>5 IDENTIFY OR CREATE HINGE QUESTIONS FOR A CHAPTER.</p> <p><i>Session 5</i></p>	<p>6 DEVELOP QUESTIONS FOR UNDERSTANDING.</p> <p><i>Session 2</i></p>
<p>7 CREATE A SUMMATIVE ASSESSMENT.</p> <p><i>Session 2</i></p>	<p>8 PLAN FOR INTENTIONAL USE OF YOUR RUBRIC.</p> <p><i>Session 3</i></p>	<p>9 DEVELOP A SELF ASSESSMENT PLAN USING REVIEW & PREVIEW PROBLEMS FROM THE LEARNING TRAJECTORY.</p> <p><i>Session 4</i></p>

Closure

Outcomes



Participants will:

- + Gain knowledge of questioning research and apply it to formative assessment.
 - + (Modeling the Math Problem and Talk Moves)
- + Utilize given tools to gradually transfer the questioning process to students.
 - + (Modeling the Math Problem and Talk Moves)
- + Utilize the chapter progression to support student learning over time.
 - + (Implementation Planning)

Closure

Fortune Cookie



Summarize your Learning

- + First person selects a prompt.
- + Each person responds to the prompt.
- + The next person selects a prompt.
- + Each person responds.
- + Continue process for all prompts.

In what ways can the Fortune Cookie STTS support effective formative assessment?



Reflection



How has the Building On Assessment learning event impacted your thinking around assessment design and the role of students in the assessment process?



Write a **one-word summary** to capture the essence of this learning event for you.

Closure

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Closure

Effective Math Teaching Practices



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Closure



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



- + 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
 - Activity 4: After Session 6



QR CODE HERE



#MoreMathforMorePeople