



# Building on Assessment (Virtual) – Session 6

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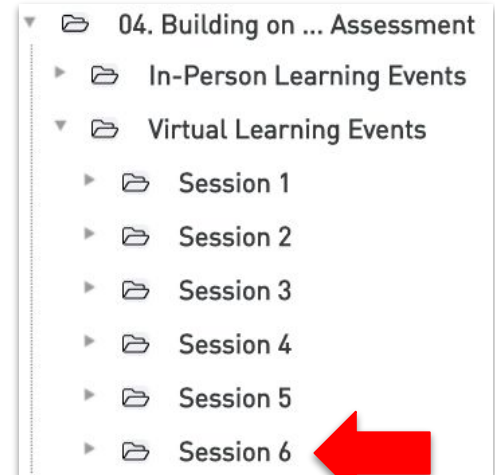
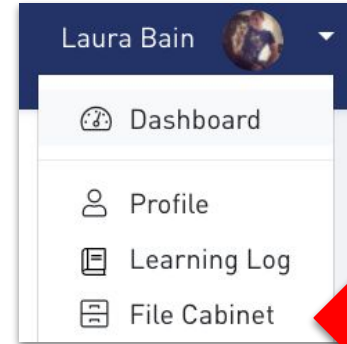
# Welcome!

CPM Virtual Learning Series

## Building on Assessment – Session 6

*What should I do before we get started?*

- + Public Chat: Share your favorite vacation spot.
- + Open the resources from the File Cabinet.
  - + 00 Productive, Unproductive Beliefs Poster
  - + 01 Talk Moves



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# 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.

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# Opening Agenda



## Implementation Planning



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

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# Opening



Be willing to take **risks**.  
Have a **visionary** mindset.  
Stay **engaged**.  
Explore and reflect on your **beliefs**.  
Give **grace** to others and yourself.

Set your status to thumbs up if you are ready to begin.





## 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.

# Tech Tip



## Task Card

### Team Task: 5 Minutes

1. Review Team Rooms Agreement. (1 min)
2. Take turns introducing yourselves. (3 min)
  - Name
  - Location
  - Grade(s) you have taught
  - Highlight from your week
3. Write down your team room number.

EXAMPLE

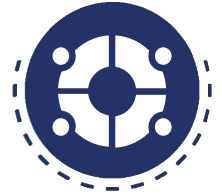
The screenshot shows a web browser with two tabs: 'BigBlueButton - IC EE - Default' and '1 - IC EE'. The active tab displays a meeting interface with a sidebar on the left containing 'MESSAGES', 'NOTES', and 'USERS (2)'. The main area shows a 'Public Chat' and 'Shared Notes'. A red box highlights a timer in the top right corner of the meeting area that reads 'Breakout room time remaining: 14:33'. A red arrow points to this timer.

Time

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# Opening – Icebreaker

## Team Room Task Card



### Team Task: 7 Minutes

1. Determine team roles and introduce yourselves. (2 min)
  - a. If there is a CCA teacher in your team, they will be the Recorder/Reporter.
2. Share a test that left a BIG impression on you and why you recalled this memory. (5 min)



# 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.

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# Opening

## Effective Math Teaching Practices



Implement tasks that promote reasoning and problem solving.

Facilitate meaningful mathematical discourse.

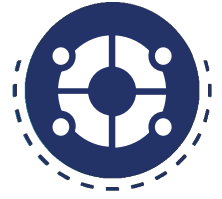
Pose purposeful questions.

Elicit and use evidence of student thinking.

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# Questioning and Talk Moves

Lesson ???



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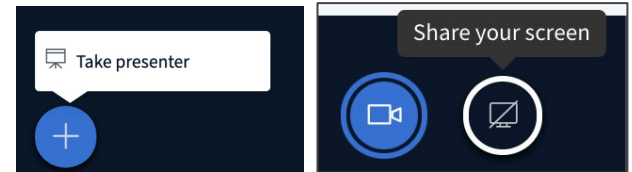
# Questioning and Talk Moves

CCA Lesson 4.2.2



## Team Task: 20 Minutes

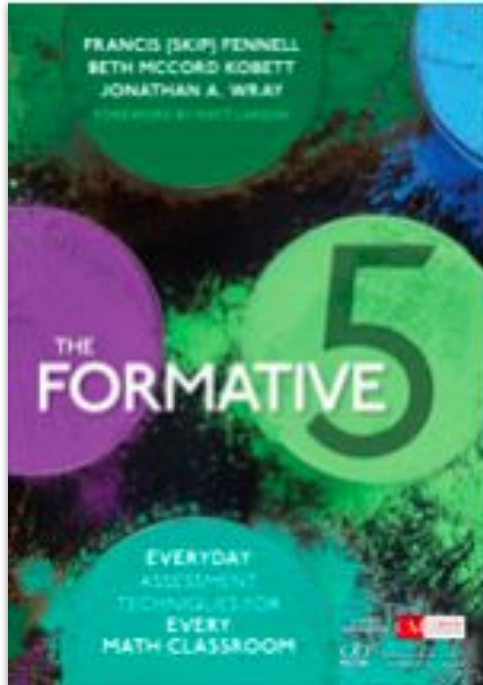
1. Read your team role in the Public Chat. (1 min)
2. Work together on the Desmos Activity. (19 min)
  - a. During the last 4 minutes, you will be directed to the card sort activity.



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# Questioning and Talk Moves

CCA Lesson 4.2.2



## The Formative Five

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

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# 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.

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# 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



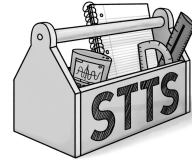
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# Questioning and Talk Moves

## 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?*

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# Screen Break

Take a break and walk away from the computer.



Share your experience using

**#MoreMath**  
**#MOREMATH**  
**#moremath**

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# Implementation Planning

## Key Ideas



# Team Brainstorm

List the topics and ideas discussed in the live sessions and the on-demand module.

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# Implementation Planning

## Key Ideas

- + Hinge Questions
- + 5 Key Strategies
- + Cognitive Rigor Matrix
- + Formative Five
- + Learning Trajectory
- + Definition of Assessment
- + Productive Assessment Beliefs





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

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# Closure

## Outcomes



## Participants will:

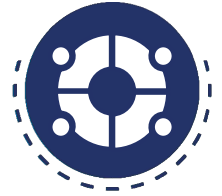
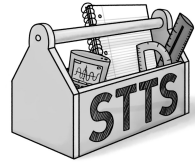
- + Gain knowledge of questioning research and apply it to formative assessment.
  - + (Modeling the Math Problem and Talk Moves)
- + Utilize given tools to gradually transfer the questioning process to students.
  - + (Modeling the Math Problem and Talk Moves)
- + Utilize the chapter progression to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



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# Closure

## Fortune Cookie



### Team Task: 10 Minutes

1. The team member whose name is first alphabetically selects and answers a question.
2. The other team members answer the same question.
3. Continue the process with the team member whose name is next alphabetically. Repeat until all questions have been answered.



## 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

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# 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



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