

SAME 2019 Break-Out Sessions

#	Title	Presenter	Grade	Description
1	The Potential of Instructional Routines to Create Engagement	Jennifer Graziano, Steven Arndt, Suzie Craig, and Tim Hebert	K-12th	Teachers' "default" mathematics instructional routines tend to unintentionally limit student engagement. Smart teachers have more recently designed NEW instructional routines that increase the NUMBER of students who engage and improve the QUALITY of their engagement. The routines aren't specific to a particular grade level or to particular math content - they work in a variety of situations. Experience these routines and learn how to make them part of your teaching practice.
2	The Two Ways of Engagement: Listening to Students	Nova Katz	K-6 th	Lessons designed to meet the needs of your individual students is the best way to ensure engagement. Come learn how to use interviews, questioning strategies, and student misconceptions to tailor your instruction and just watch how students suddenly fall in love with your math class!
3	Student Voice through Three Act Tasks	Kami Cadeaux and Jeni Veale	2nd-6th	Three Act Math tasks are known for their ability to engage students in sense making and promote students' mathematical thinking. In this session, we will familiarize teachers with Three Act Tasks, discuss powerful partnering and grouping strategies and consider different ways to foster collaborative thinking. Come explore how to use the structure of Three Act Tasks to empower student voice in your classroom!
4	Discourse Routines to Foster Student Voice	Julie Villeneuve and Caroline Goodnight	3rd-6th	Do you want to establish a classroom where every student feels they are being heard? This workshop will address several strategies to promote equitable discourse in your classroom. Come learn ways to group students, structure for partner talks, and specific strategies and activities to engage students in quality discourse. We will engage in activities you can take back and implement in your classroom on Monday.
5	Fair or Not? Making Sense and Making Arguments	John Friedrich and Virginia Dorman	7th-9th	Join us to experience a lesson we collaboratively designed that asks students if a particular dice game is fair or not. You will experience how a short silent video immediately engages and provokes thinking and questioning. We will share what we learned about the ways students think, and about our challenges and successes in moving focal students to persevere while making sense, to take a stand and to justify their ideas about the stand taken. We collaboratively planned and implemented the lesson using the Comprehensive Lesson Study process a part of the California Action Network for Mathematics Excellence and Equity.

6	Beyond the Perimeter	Marizza Lundstrom	6th-12th	Join this session to get a hands-on look of a lesson study formulated by several local math teachers involved in a grant called the Engineering & Mathematics, Inspiring Thinking & Solutions (EMITS). Challenge students to recognize the effects of increasing area and its relationship to perimeter. This lesson leads to a surprising twist where students think beyond the perimeter, discussing patterns and processes. Strategies will be discussed to help and guide student thinking through discovery. This lesson can be modified for middle school and high school.
7	Slower and Louder Won't Work: Changing Students' Mindset	Ellen Byron and Louis Silva	7th-12th	This session provides the nuts and bolts on how we designed a math class to support students who were below standards, but not too far below. So often students are taught using the same format as their regular math class just with more time. We broke the mold and designed a growth mindset and SMP model that helps the long-term success of our students. We will share the format, free resources and student success data detailing how you too can implement this student-centered class.

Student Competition Problem Break-Out Session

Join us as we work through a rich task from the student competition requiring students to MODEL, to mathematize the situation to provide a solution. We'll share a rubric which supports communicating clearly and correctly the mathematical solution path, and which supports grounding the reasoning in the context of the problem. The task provides students an opportunity to demonstrate their abilities to model with mathematics (SMP4), to construct viable arguments (SMP 3), and to reason abstractly and quantitatively (SMP 2).

Student Problem – How many straws are inside this bathtub?

Go watch the video for the full problem at:

www.sacramentomathproject.org/content/same-student-competition

