SAME 2018 Break-Out Sessions

Title	Presenter	Grade	Description
What do we do now? Once the math lesson is over, how do you keep practicing math skills?	Brenda Hansen	K-2nd	This session will share several activities and games you can easily put together and use in your classroom on Monday that can be differentiated for your students. I will talk about the value of a strong number sense and how introducing Counting Collections can support this. I am excited to share the idea of STEM Tubs and how they can be set up and running in your room for under $50, all in a weekend. See how you can extend your math lesson, have fun activities for your students to do, and create some time for you to do interventions and observations with your students.
Problem Solving with Young Learners	Van Lay	K-5th	This session includes an analysis of the structures word problems, using the scientific method as an approach to solving them, and engaging students with open tasks. This helps provide equitable access for the students.
Flexible Planning: New Strategies for Teaching Without Traditional Lesson Plans	Demetrius Olsen	6th-9th	Why do the lesson plans I create for my annual evaluations look nothing like the lesson plans I use every day? If I had the time, would I create that kind of lesson plan for all my lessons? After teaching for eight schools and using at least that many planning templates, the answer is no. Please join me as I combine ideas from leading thinkers in education (John Hattie, Dr. Timothy Kanold, and Dan Meyer), Stephen R. Covey (7 Habits of Highly Effective People), Sendhil Mullainathan (Scarcity: The New Science of Having Less and How It Defines Our Lives) and other ideas that came out of collaborative conversations with current and former colleagues. I'll be sharing a system for planning that works more like teacher's actual work and is more effective and equitable for all stakeholders.
Little Activities with a Big Bang	Jennifer Graziano, Steven Arndt, and Tim Hebert	6th-12th	In this session we will focus on answering the question, "How can we implement brief, powerful mathematical tasks in order to develop students' reasoning and problem-solving skills, and provide opportunities for discourse?" We will share a variety of resources that offer quick, low-prep activities that get students thinking and talking about math as well as protocols to support student engagement.
Equity, Mathematics, and Mindset	Jennifer Graziano, Steven Arndt, and Tim Hebert	6th-12th	In this session we will highlight some of Jo Boaler's work around growth mindset and equity in mathematics. We will demonstrate and discuss effectve strategies for increasing equity in our classrooms and teaching with heterogeneous groups. We will engage in math tasks and experience strategies that provide opportunities for all learners to access high-level mathematics, as well as have conversations with colleagues around equitable practices at our schools.
Desmos -More than a CAASPP Calculator	Carole Pryor	7th-12th	In this hands-on session we will explore the many activities, lessons, and features available on Desmos. Participants will leave with a user-friendly Hyper-Doc containing links, descriptions, tips and tricks for each Desmos application. Strategies will be shared for using these activities with your current math curriculum to increase engagement and collaboration, strengthen academic vocabulary, and for making thinking visible.

Student Competition Problem Break-Out Sessions

Join us as we work through a rich task from the student competition requiring students to MODEL, to mathematicise 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 #1 – Cost of Shoes (available to students in grades 3-12)
Should people with small feet pay less for shoes? Justify your answer mathematically.

Student Problem #2 – Ice-cream Flavors (available to students in grades 3-7)
In shops with lots of ice-cream flavors there are many different flavor combinations, even with only a 2-scoop bowl. With 1 ice-cream flavor there is 1 kind of 2-scoop ice-cream, but with 2 flavors there are 3 possible combinations (e.g. vanilla/vanilla, chocolate/chocolate, and vanilla/chocolate). How many kinds of 2-scoop bowls are there with 10 flavors? What about "n" (any number) of flavors?

Student Problem #3 – Noodles in the Pool (available to students in grades 3-12)
How many noodles are in this swimming pool (from the movie Patch Adams):