2017 – 2018
KSDE Regional Math Trainings

October 2, 2017 – Maize School District
October 9, 2017 – Lansing School District
October 23, 2017 – Olathe School District
November 6, 2017 – Fort Hays State
November 13, 2017 – Newman University
February 5, 2018 – Garden City High School
February 12, 2018 - Junction City School District
February 19, 2018 – Pittsburg High School

General Session

2017 Mathematics Standards
We will share the newly adopted 2017 Mathematics Standards highlighting changes and improvements within the document. Participants will receive links to the standard document as well as other related resources.

Power of Mathematical Growth Mindsets
This session will be based on the work of Jo Boaler and her book "Mathematical Mindsets" and the work of Carol Dweck and her book "Mindset." We will explore how the brain works and what we can do to help students move from just "learning mathematical information" to "knowing the math and how to use and apply it." We will learn and experience how productive struggle and mistakes are critical for mathematical learning. We will develop rich mathematical tasks to meet our grade level standards- and - practice methods of teaching with and for a growth mindset.

Elementary Strand

Building Procedural Fluency from Conceptual Understanding in the areas of Geometry
Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding. One of the essential mathematics teaching practices is "Building Procedural Fluency from Conceptual Understanding". Many educators see this practice as only applicable to the number and operation domains, but it needs to be used for all domains! Join this session to experience and explore how this practice impacts instruction in Geometry. Participants will leave this session with a deeper understanding of geometry as well as ideas for planning and implementing instructional practices to support their students.

Building Procedural Fluency from Conceptual Understanding in the area of: Fractions
Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding. One of the essential mathematics teaching practices is "Building Procedural Fluency from Conceptual Understanding". Join this session to experience and explore how this teaching practice impacts instruction in Fractions. Participants will leave this session with a deeper understanding of fractions as ideas for planning and implementing instructional practices to support their students.

MS/HS Strand

Building Procedural Fluency from Conceptual Understanding in the areas of: Expressions

Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems. Fluency is more than speed and accuracy. This session will focus on the research based teaching practice "Build Procedural Fluency from Conceptual Understanding". Using the topics of expressions, we will explore models and strategies that provide a conceptual foundation for these topics and lead to fluent use of procedures. Teachers should leave with a deeper understanding as to how to plan and implement lessons that have student outcomes that reflect the content standards about expressions.

Building Procedural Fluency from Conceptual Understanding in the areas of: Equations
Effective teaching of mathematics builds fluency with procedures on a foundation of conceptual understanding so that students, over time, become skillful in using procedures flexibly as they solve contextual and mathematical problems. Fluency is more than speed and accuracy. This session will focus on the research based teaching practice "Build Procedural Fluency from Conceptual Understanding". Using the topics of equations, we will explore models and strategies that provide a conceptual foundation for these topics and lead to fluent use of procedures. Teachers should leave with a deeper understanding as to how to plan and implement lessons that have student outcomes that reflect the content standards about equations.

Administrator Strand

Shaping Formative Math Assessments to Work for You
Join this session to engage in conversations about how to structure formative assessments in mathematics to gain the information you want from your students. Too often assessments are seen as obstacles to be overcome for students or as tests to rate the performance of schools and teachers. Formative assessments should inform educators of students' understanding and what modifications should be made to instruction for greater impact. You will leave with some ideas to immediately use in your practice for providing a richer education for all students.

Curriculum Selection Process
We will share rubrics aimed at evaluating the alignment of instructional and professional development resources with the 2017 Kansas Standards for Mathematics as well as instructional shifts necessary in their implementation and training. Resources specifically designed for the 2017 math standards will be shared.

Introduction to the Mathematics Teaching Practices (High Leverage Teacher Actions)
Student success in mathematics requires that district mathematics leaders take action to ensure that all teachers have the resources and support that are essential for effective mathematics teaching. We will share a set of specific recommended actions for ensuring success for all learners found in Principles to Actions (NCTM, 2014), reflecting more than a decade of experience and research. We will discuss eight research-based teaching practices that synthesize what we now know about what it takes to support students' understanding and learning of mathematics. Session leaders will share available tools for assisting schools and districts with staff, parent, and public communication related to standards and assessment; available tools for instructional leaders and coaches to support their work with teachers; as well as resources to assist teachers with standards-aligned instruction.