San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- 2017/2018 SCHEDULE - UPDATED 10/27/2017

GRADES K-2

Number Talks…
A Powerful Strategy

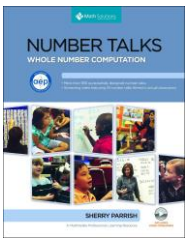
Building Fluency, Understanding and Evidence of Thinking through NUMBER TALKS…

- What are Number Talks?
- Why are they so important?
- What are the guiding principles of Number Talks?
- How do I enact them in my classroom?
- How do Number Talks build fluency (automaticity, flexibility, strategies and accuracy) and conceptual understanding?

Participants will learn how to shift from teaching and learning by telling, to teaching and learning by using purposeful problems and intentional discourse. Participants will learn guiding principles for enacting Number Talks and talk moves that help manage productive discussion in math classes.

Number Talks are a great way to dramatically transform teaching and learning in the mathematics classrooms!

Book included with registration:



Number Talks:
Whole Number Computation, Grades K-5:
A Multimedia Professional Learning Resource

Author: Sherry Parrish

Cost: $185 per person

December 4, 2017

Registration Deadline:
November 21, 2017

REGISTRATION

http://formbuilder.sjcoe.org/form.aspx?f=683

FLYER

http://workshops.sjcoe.org/Uploads/102720173253069581.pdf

San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- 2017/2018 SCHEDULE - UPDATED 10/27/2017

GRADES K-5

Developing Rich Mathematical Tasks

The mathematical tasks that children experience shape the way they view mathematics. Children might see math as a subject of right or wrong based on procedures and memorization. Or, children might view math as a time of problem solving through communication and collaboration where their creativity in thinking is valued. Rich mathematical tasks engage students in Standards for Mathematical Practices while building content knowledge and critical thinking skills. Participants will learn:

- What makes a problem cognitively demanding?
- What types of math tasks better support our children's critical thinking and conceptual understanding?
- How can we ensure that level of rigor (DOK) is maintained throughout the task as we guide our kids to construct their own knowledge and they learn what they are expected to learn?
- How to modify textbook problems into more cognitively demanding questions and create their own tasks.

As we provide plenty of thoughtful and conceptual learning experiences via rich tasks to our kids, we begin to not only cultivate sophisticated math minds but also develop the 21st century skills.

Cost: $250 per person

February 13 & 14, 2018

Registration Deadline: February 2, 2018

REGISTRATION

http://formbuilder.sjcoe.org/form.aspx?f=680

FLYER

http://workshops.sjcoe.org/Uploads/102720173143017202.pdf

San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- 2017/2018 SCHEDULE - UPDATED 10/27/2017

GRADES 3-5

Number Talks…
A Powerful Strategy

Building Fluency, Understanding and Evidence of Thinking through NUMBER TALKS…

- What are Number Talks?
- Why are they so important?
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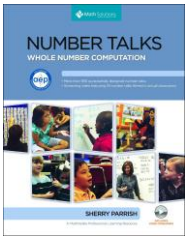
- How do Number Talks build fluency (automaticity, flexibility, strategies and accuracy) and conceptual understanding?

Participants will learn how to shift from teaching and learning by telling, to teaching and learning by using purposeful problems and intentional discourse. Participants will learn guiding principles for enacting Number Talks and talk moves that help manage productive discussion in math classes.

Number Talks are a great way to dramatically transform teaching and learning in the mathematics classrooms!

Book included with registration:



Number Talks:
Whole Number Computation, Grades K-5:
A Multimedia Professional Learning Resource

Author: Sherry Parrish

Cost: $185 per person

December 5, 2017

Registration Deadline:
November 21, 2017

REGISTRATION

http://formbuilder.sjcoe.org/form.aspx?f=685

FLYER

http://workshops.sjcoe.org/Uploads/102720173253069581.pdf

San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- 2017/2018 SCHEDULE - UPDATED 10/27/2017

GRADES 3-7

Understanding the Fraction Progression

Traditionally, fractions have been taught as if they are in a "different galaxy" and fraction instruction has long been viewed as a problem area.

"The ultimate underlying principle is you want kids to understand that fractions are numbers," said William G. McCallum, a mathematics-education professor at the University of Arizona, in Tucson, and one of the lead writers of the common standards. "They're new, but they're not in a different galaxy."

In this session, participants will explore the following:

- What are the significant shifts in teaching fractions in the California math standards for the 21st century?
- Why is the number line important and how can it be used to help develop understanding and fluency?
- What other representations support student learning?

Participants will study the fractions progression, engage in a variety of tasks and activities, and learn how to develop fraction sense as well as how to implement effective instruction on fraction skills, concepts, and application in conjunction with the Standards of Mathematical Practice.

Cost: $250 per person

November 16 & 17, 2017

Registration Deadline: November 6, 2017

REGISTRATION

http://formbuilder.sjcoe.org/form.aspx?f=679

FLYER

http://inside.sjcoe.org/attachments/2034UnderstandingtheFractionProgressionrevised2.pdf

San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- 2017/2018 SCHEDULE - UPDATED 10/27/2017

GRADES 6-8

Developing Rich Mathematical Tasks

The mathematical tasks that children experience shape the way they view mathematics. Children might see math as a subject of right or wrong based on procedures and memorization. Or, children might view math as a time of problem solving through communication and collaboration where their creativity in thinking is valued. Rich mathematical tasks engage students in Standards for Mathematical Practices while building content knowledge and critical thinking skills. Participants will learn:

- What makes a problem cognitively demanding?
- What types of math tasks better support our children's critical thinking and conceptual understanding?
- How can we ensure that level of rigor (DOK) is maintained throughout the task as we guide our kids to construct their own knowledge and they learn what they are expected to learn?
- How to modify textbook problems into more cognitively demanding questions and create their own tasks.

As we provide plenty of thoughtful and conceptual learning experiences via rich tasks to our kids, we begin to not only cultivate sophisticated math minds but also develop the 21st century skills.

Cost: $250 per person

January 24 & 25, 2018

Registration Deadline:
January 12, 2018

REGISTRATION

http://formbuilder.sjcoe.org/form.aspx?f=681

FLYER

http://workshops.sjcoe.org/Uploads/102720173204749388.pdf

San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- 2017/2018 SCHEDULE - UPDATED 10/27/2017

GRADES 6-12

Robert Kaplinsky:

Implementing Problem Based Lessons

This one-day session with Robert Kaplinsky will help participants understand what real world problem-based lessons are all about and why it is so critical that they be used with our students. The session will focus on hands-on classroom implementation from both the teacher and students' perspectives.

Depth of Knowledge as well as using Open Middle problems to build procedural skills and conceptual understanding will also be explained.

Participants will leave with access to hundreds of free problems that are ready for student implementation.

Cost: $195 per person

March 22, 2018

Registration Deadline: March 8, 2018

REGISTRATION

http://formbuilder.sjcoe.org/form.aspx?f=690

FLYER

http://workshops.sjcoe.org/Uploads/102720172435211306.pdf