



San Joaquin County Office of Education

Mathematics Professional Learning Opportunities

- Summer 2017 -



San Joaquin County Office of Education

GRADES K-12 ADMINSTRATORS

Mathematics Professional Learning for Administrators

California Standards aligned instruction looks significantly different from the rule-based instruction of which most of us are familiar. Students need to engage in thoughtful conceptual learning experiences that help them develop their skills in communication, critical thinking, creativity, and collaboration.

- How can we as educators facilitate mathematics instruction that better supports our children in acquiring the skills necessary to thrive now and in the future?
- How do we know that the work our teachers assign students is aligned to the expectations of the California Standards and is adequately preparing them for the CAASPP summative assessment?
- What does 21st century mathematics learning look like?

Come hone your skills to become a better instructional leader and deepen your understanding of the vital student actions that inform the support you provide to your classroom teachers.

Cost: \$125 per person

June 5, 2017

**Registration Deadline:
May 26, 2017**

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=623>

FLYER

<http://workshops.sjcoe.org/Uploads/421201711195611465.pdf>

GRADES TK-2

Teaching for Robust Understanding of Mathematics

How can we **create more opportunities** for students to make their own sense of mathematical ideas, to **participate meaningfully**, and to see themselves and each other as **powerful doers of mathematics**?

Improving mathematics learning can overwhelm novice or experienced teachers, coaches and administrators. Come learn about the **five dimensions of mathematically powerful classrooms** with emphasis on increased access to content and how agency, authority and identity impact students' ability to problem solve. Classrooms that exhibit these five dimensions produce students who are **powerful thinkers**.

During these three days, participants will engage in mathematically rich tasks to deepen students' mathematical **understanding and discourse**, learn strategies to **engage all learners**, experience a variety of **technological resources** and walk away feeling **more confident** in making the instructional shifts to impact **student success in mathematics**.

Cost: \$375 per person

June 19, 20, & 21, 2017

Registration Deadline:
June 9, 2017

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=627>

FLYER

<http://workshops.sjcoe.org/Uploads/421201711182840402.pdf>

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 skills necessary to thrive in the 21st Century.

Cost: \$250 per person

July 17th & 18th 2017

Registration Deadline:
July 7, 2017

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=624>

FLYER

<http://workshops.sjcoe.org/Uploads/421201711221626559.pdf>

GRADES 3-5

Teaching for Robust Understanding of Mathematics

How can we **create more opportunities** for students to make their own sense of mathematical ideas, to **participate meaningfully**, and to see themselves and each other as **powerful doers of mathematics**?

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During these three days, participants will engage in mathematically rich tasks to deepen students' mathematical **understanding and discourse**, learn strategies to **engage all learners**, experience a variety of **technological resources**, and walk away feeling **more confident** in making the instructional shifts to impact **student success in mathematics**.

Cost: \$375 per person

June 26, 27, and 28, 2017

***Registration Deadline:
June 16, 2017***

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=628>

FLYER

<http://workshops.sjcoe.org/Uploads/421201711171886338.pdf>

GRADES 6-8

Developing Rich Mathematical Tasks

The mathematical tasks that students experience shape the way they view mathematics. Students might see math as a subject of right or wrong based on procedures and memorization. Or, students 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 student'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.

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Cost: \$250 per person

July 17 & 18, 2017

Registration Deadline:
July 7, 2017

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=625>

FLYER

<http://workshops.sjcoe.org/Uploads/421201711213884418.pdf>

GRADES 9-12

Developing Rich Mathematical Tasks

The mathematical tasks that students experience shape the way they view mathematics. Students might see math as a subject of right or wrong based on procedures and memorization. Or, students 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 student'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 skills necessary to thrive in the 21st Century.

Cost: \$250 per person

July 24 & 25, 2017

Registration Deadline:
July 14, 2017

REGISTRATION

<http://formbuilder.sjcoe.org/form.aspx?f=626>

FLYER

<http://workshops.sjcoe.org/Uploads/421201711210698214.pdf>