

California Early Math Project presents

EARLY STEAM SPRING SEMINAR Full STEAM Ahead

Free Virtual Event
February 15, 2024
6-8pm (PST)



Schedule

6:00pm Opening remarks and Keynote -
Exploring STEM: Engaging
Young Learners

7:00pm Break

7:10pm Breakout Sessions (Choose 1 of 5)

- Big Math for Small Learners through Problem Solving
- Equitable Early Mathematics in the Early Grades PK-3
- How the Next Generation Science Standards (NGSS) Change Science Teaching and Learning
- SURPRISING STEM - Focus on the Skills, Not the Tech!
- The Brilliance of Children's Thinking Through Counting

7:55pm Closing Remarks

Presentations

Exploring STEM: Engaging Young Learners

Jon Dueck and Lesley Gates

This keynote is all about engaging our youngest learners by creating opportunities for their curiosity to push them forward. What rolls? What slides? What happens when I change one small thing? We will explore the benefits of engaging in STEM activities for infants, toddlers, preschoolers and beyond. This keynote will also highlight the all-new STEAM Book Guides.

Big Math for Small Learners through Problem Solving

Christine Roberts and Melanie Janzen

Use big ideas from counting to jump into problem solving in ways that support our youngest learners! Watch children solve problems and discuss ways to support students in making sense of the problems, sharing their ideas, and engaging with others' ideas. Plan next steps for using what you learned about student thinking in tomorrow's lesson!

Equitable Early Mathematics in the Early Grades PK-3

Ma Bernadette Andres-Algarino and Robyn Stone

Effective leaders of PK-3 mathematics learning communities understand the importance of partnership with families, developmentally appropriate teaching and learning environments, and need for multiple measures of ongoing student growth in mathematical skills and employment of the mathematical practices.

How the Next Generation Science Standards (NGSS) Change Science Teaching and Learning

Jill Grace

I wish I learned science this way! Join in to understand how the Next Generation Science Standards (NGSS) is changing classrooms. We will explore the shifts and engaging practices that support student sensemaking in science.

SURPRISING STEM - Focus on the Skills, Not the Tech!

Ruth Spiro

Ruth will share ideas for STEM activities using materials you may already have on hand, including picture books and items repurposed from the recycling bin. In this workshop, we'll examine children's books and discover how story elements connect to and support the foundational skills of STEM, including: • Sequencing/Beginning, Middle and End • Cause and Effect • Making Predictions • Describing, Summarizing and Sharing. Then, we'll look at ways to develop an open-ended "STEM Challenge" activity using basic craft supplies, items from the recycling bin, or even treasures found in nature.

The Brilliance of Children's Thinking Through Counting

Jody Guarino, Sue Kim, and Debbie Mendez

Our session will address the power of counting in early childhood including the role of counting principles and how it can be bridged into problem solving. Considerations will include the types and attributes of collections, intentional questions that can be asked about a collection and how noticings we make about a student counting can help us ask better questions to move our instruction forward. We will also watch kids count to support our thinking around these important decisions.

Speakers

Christine Roberts

Christine serves as a Program Manager for California Education Partners where she supports districts in Preschool to 3rd Grade Coherence Collaborations for Mathematics. She works with districts to support their continuous improvement efforts and develop coherent systems to support California's youngest learners. She serves as a coach for district teams, mathematics education specialist, and knowledge broker to help accelerate and sustain district efforts. During her 18 years in public education, Christine served as an elementary school teacher, middle school mathematics teacher, mathematics staff development and curriculum specialist, and the director of a Networked Improvement Community. Christine is currently working on her doctorate in Education at the University of California, Los Angeles. Her research interests focus on educator collaboration and system-wide approaches to improving mathematics teaching and learning. Throughout her career, Christine has seen the power of collaboration to strengthen relationships and transform mathematics teaching lead to improved outcomes for students.



Debbie Mendez



Debra Mendez is a veteran TK and kindergarten teacher with more than 30 years of experience. Debra's interest in Cognitively Guided Instruction (CGI) began three years ago with a school and district focus on training teachers in CGI. The early training focused on teachers' understanding of children's mathematical thinking and then using student thinking to guide instruction. This ignited Debra's passion for using CGI in her classroom. For the past 3 years she has continued to participate in the training and collaboration provided for with Cotsen funds and a partnership with the University of California, Irvine. Her classroom has been a demonstration class for many TK and Kinder teacher CGI trainings. She continues to grow her expertise as she uses CGI strategies and Counting Collections in her classroom developing students' understanding of real world math and number sense around counting, count sequence, cardinality and 1:1 correspondence.

Jill Grace

Jill Grace is the director of WestEd's K-12 Alliance and directs the design and coordination of programs for science educators throughout all levels of the education system. She supports school systems across states to help advance science education, implementation of the Next Generation Science Standards (NGSS), the development and implementation of educator leadership programs, and has expertise in curriculum and instructional practices that establish equitable access for all students to high-quality science teaching and learning. Part of her work involves representing California on the Steering Committee for OpenSciEd, providing input into the development of the professional learning and instructional materials and overseeing the California Field Test. She has served as the professional learning and technical assistance provider for programs including the CA NGSS K-8 Early Implementation Initiative and was involved in the development of NextGen TIME (Toolkit for Instructional Materials Evaluation). She is a Co-Principal Investigator on the National Science Foundation Funded project, Empowering Changemakers: Urban Biodiversity Initiative for Teachers and Youth to design, develop, and test a research-based professional learning (PL) approach that will ensure that teachers, and ultimately their students, have the knowledge to act in a way that promotes zero net loss of biodiversity in their communities.



Jody Guarino

Jody is a teacher educator who supports teacher and student learning at the elementary level. She considers teaching and learning central to all of her work. Jody believes children and adults, are sense makers and bring intuitive knowledge to their classrooms. Through the development of content knowledge, pedagogical knowledge, knowledge for teaching, and understanding student thinking, her goal is for all students to be proficient. She has been a classroom teacher, district mentor, teacher on special assignment, and administrator. Working at district, state, and national levels, Jody has developed and implemented research-based professional learning with preservice and inservice teachers and administrators across the country. She has been involved in several research projects, understanding how teachers can learn to learn from mathematics teaching, investigating the use of video to support teacher learning, exploring professional learning that supports discourse and argumentation in elementary classrooms, and understanding and implementing school wide improvement initiatives in mathematics and English Language Arts. Jody works as manager of the Teaching and Instructional Leadership Learning Collaborative.

Jon Dueck

Jon Dueck helps coordinate the California Early Math Initiative as a part of the Fresno County Early Care & Education Team. Jon works with teachers and administrators to build programs that promote a worthwhile and optimistic view of math and science, and help show families and the community that math is all around us. As a part of the CA Early Math Initiative, he leads the countplayexplore.org site, coaches preschool and primary teachers, and supports community math events. Jon leads STEM initiatives in the region while supporting schools and districts with comprehensive math program tools. Jon has spoken at local, state-wide, and international conferences about building strong math understanding and deepening math concepts in daily math lessons. He has worked in preschools, TK-12 schools and at the secondary level. Jon enjoys talking about numbers with young children.



Lesley Gates



Lesley Gates is the Science Content Specialist for the Fresno County Superintendent of Schools. Lesley began her career in science education as the Education Specialist at the Fresno Chaffee Zoo. She transitioned to be a high school science teacher and then a K-8 STEM instructional coach. She was also a project director for the statewide NGSS K-8 Early Implementation initiative led by WestEd. Her current role at the county office includes working with TK-6

teachers from across Fresno County and the state of California to identify challenges and design solutions for the transition to NGSS, focusing on integrating English Language Arts and Math standards into elementary science lessons. Lesley has been on numerous statewide NGSS committees and has presented at the National Science Teaching Association (NSTA) conferences, California's Science Educators conferences, Statewide NGSS Roll-outs, and has also presented internationally.

Ma Bernadette Andres-Salgarino

Ma Bernadette Andres-Salgarino is Assistant Director of Integrated STEAM at Santa Clara County Office of Education. Previously, she served as Mathematics Coordinator for eight years and as a high school mathematics teacher for the East Side Union High School District for twelve years.





Melanie Janzen

Melanie Janzen is a curriculum coordinator for mathematics at the San Bernardino County Superintendent of Schools. She has been supporting schools in this capacity for over 7 years. Prior to her current role, she served as an assistant principal, coordinator for professional development, district math coach, site math coach, and math teacher. As a curriculum coordinator, Melanie is responsible for developing and implementing mathematics curricula

that align with state standards and meet the needs of students. She works closely with teachers and administrators to ensure that students receive high-quality instruction and have access to the resources they need to succeed. Melanie is passionate about mathematics education and is committed to helping students develop the skills they need to succeed in school and beyond.

Robyn Stone

Robyn Stone is Coordinator of Educator Preparation Programs at Santa Clara County Office of Education developing a new PK-3 teacher credential program. She has been an adjunct instructor in the Early Childhood Education Certificate Program at UCSC Silicon Valley Extension for ten years and has served public and private schools as a STEM specialist and instructional coach.



Ruth Spiro

Ruth Spiro is the author of more than 30 children's books, with over one million copies in print worldwide. Her bestselling Baby Loves Science board books are the groundbreaking originals that introduce big ideas to the littlest listeners in an age-appropriate and engaging style. In addition to these board books, Ruth is the author of picture books including Made by Maxine, Maxine and the Greatest Garden Ever, and Love Grows. The enthusiastic response to the Baby Loves Science

books inspired a new picture book series perfect for early elementary readers, How to Explain Science to a Grown-Up. Ruth's work has been praised by the Los Angeles Times, NPR, TODAY, Bank Street College of Education, Purdue Engineering, and more. Fans who have publicly shared their love of her books include Gabby Giffords, Chelsea Clinton, and Chance the Rapper. A frequent speaker at schools and conferences, Ruth's previous appearances include Windy City Live on WMAQ-TV, Los Angeles Times Festival of Books, World Science Festival, Chicago Tribune Printer's Row LitFest, and the National Association for the Education of Young Children. She hopes her books inspire kids to observe the world, ask questions, and when it comes to their futures, DREAM BIG!



Sue Kim

Sue identifies first and foremost as an advocate for childrens' thinking and providing them a voice in learning mathematics. Additionally she has a passion for learning alongside teachers to provide equitable and meaningful math instruction that position students at the center. She has been an educator for 15 years and has taught and coached across Tk-5th grade classrooms including Los Angeles Unified School District, El Segundo Unified School District as well as several other Orange County school districts. Sue has served as math facilitator for the UCLA Math Project and is an alumni mentor of the Cotsen Foundation for the Art of Teaching. Sue currently works as a math coordinator for the Orange County Department of Education of the Teaching and Instructional Leadership Learning Collaborative.

