

3:30 – 4:15 Breakout sessions

**Session A:** Robert Farinelli, President of the American Mathematical Association of Two-Year Colleges (AMATYC), *The Role To Two-Year Colleges in Teacher Preparation*. Since many prospective teachers take some, if not all, of their mathematics requirements at a two-year college, the two-year college role has become very important in this process. However, the requirements vary greatly from state to state and department to department. This presentation will address some of the highlights and will look for participant input.

**Session B:** Henry Kepner, University of Wisconsin, Melissa Hedges, Mequon-Theinsville Schools, and Astrid G. Fossum, Milwaukee Public Schools. *Teachers reflect on the mathematics they need to teach their students*. An interactive report from teachers and teacher leaders on sense-making in mathematics instruction.

**Session C:** Marc Roth, Woodside Learning Center, San Francisco Unified School District, *A Teacher's Perspective: the help that I have received and not received from the mathematical community*.

As a math teacher in a Juvenile Justice Center, I write all of my curriculum. Which authors and speakers have helped me the most? How accessible are the texts to a secondary teacher who, like myself, managed to complete a major in mathematics without truly mastering the art of reading terse, symbolically dense text. And finally, I would like to explain the benefits of exploiting college level mathematics in the teaching of K-12 topics.

**Session D:** Patti Huberty, Comer Elementary School, *A teacher's perspective on Daily Professional Development: How do we utilize our classroom experiences to gain mathematical understanding and enhance future instruction?* This session will focus on how teachers can use their daily mathematics teaching as a means for professional development. Successful questioning techniques, as well as what we can learn from (and how we react to) student responses, will be the main point of discussion. Specific examples of Kindergarten through College level classroom experiences and student work will be shared. The session will include time for question/answer with the facilitator.

**Session E:** Jerry Dwyer, Texas Tech University, *The Perspective of an Outreach Mathematician: Bridging the Gap*

A college outreach mathematician reflects on 15 years of teacher education and K-12 collaboration. The need to foster relationships and build respect across all boundaries is discussed. Examples of successful partnerships are described and the benefits to all parties are outlined.

**Session F:** Andrew Tyminski, Clemson University, *Developing pre-service elementary mathematics teachers' knowledge bases through Standards-based*

*curriculum materials.*

Our research with pre-service elementary mathematics teachers (PSTs) focuses on what they learn as a result of interactions with *Standards*-based elementary mathematics curriculum materials. We examine PSTs' learning in the domains of curricular knowledge (Shulman, 1986) and mathematical knowledge for teaching (Ball, Thames, & Phelps, 2008). Example activities and results will be shared. The session will conclude with a discussion regarding the kinds of knowledge PSTs will need to be prepared to teach using the Common Core Standards.

**Session G:** David Foster, *Inside Mathematics Dot Com*

The Silicon Valley Mathematics Initiative is a comprehensive professional development initiative that integrates ongoing professional development, a summative and formative assessment system, lesson study, mathematics coaching and school leadership training. The initiative, initially funded by the Robert Noyce Foundation, was founded in 1996. Using products and lessons learned from SVMI, the Noyce Foundation created a public access website to provide tools and resources to educators to enhance mathematics teaching and learning. The site offers curriculum, assessment instruments, professional development tools, leadership resources and classroom videos of effective practice. The session will highlight the work of SVMI and provide an overview of the tools and resources available.