

## 52<sup>nd</sup> Northwest Mathematics Conference October 11 and 12, 2013 Bellevue Hyatt Regency Hotel, Bellevue, Washington

The Northwest Mathematics Conference has an excellent reputation based on quality and diversity of presenters. Participants will learn ways to engage <u>all</u> students in doing important mathematics. There will be a focus on technology and STEM education. Appropriately, this year's conference will provide multiple opportunities to learn about the Common Core State Standards for Mathematics with a focus on K-12 mathematics content, practices, and assessment.

## The keynote speakers are:

- ➤ **Joe Willhoft**, Executive Director of the Smarter Balance Assessment Consortium, will present insights about the Common Core Assessments that Washington and Oregon will begin using in 2014-2015.
- ➤ **Ed Burger**, President of Southwestern University in Texas, has created more than 3,000 videos covering mathematics curriculum from kindergarten through college level that are watched by people around the world. His talk, *Shifting from "Thinking about Mathematics" to "Thinking Through Mathematics"* will explore the true lessons that mathematics can offer long after our students have forgotten how to solve for 'x'.
- > **Steve Leinwand**, a Principal Research Analyst at the American Institutes for Research (AIR) in Washington, D.C., will speak on *Now That It Is Clear That the Common Core is NOT Another Fad: Hopes, Fears and Challenges*.
- > **J. Michael Shaughnessy**, Immediate Past President of the National Council of Teachers of Mathematics, will address *Some Ongoing Challenges and Dreams in Mathematics Education:* Reflections of an NCTM President.

Sessions that will focus on the Common Core include Greta Bornemann,
Director of Mathematics at OSPI, who will help participants continue their work on
transitioning to the Common Core. There will be a strand featuring the Standards for
Mathematical Practice and another focus on deepening teachers' knowledge of the
mathematics content within the Common Core.

The program includes a strong technology component that includes Geometer's Sketchpad creator, Nick Jackiw, Math Forum representatives, Suzanne Alejandre and Max Ray, Texas Instruments Regional and National trainers, and Cal Armstrong and Steve Phelps, technology in the classroom specialists. An Apple Education specialist will help participants think about how tools such as iPads and Mac-books can help create and deliver STEM content. Rory Wilson and others will share what Bainbridge School District is learning about creating STEM classrooms that link emerging technology with real-world projects.

### Featured Speakers from across the United States and Canada:

- **Gail Burrill**, Past President of N.C.T.M. and faculty at Michigan State University, will address *The CCSS Mathematics Content and Practice Standards: The Role of Interactive Dynamic Technology* and *Rethinking Fractions: Implications for Teaching and Learning Algebra*.
- **Peg Cagle**, an advocate for national education reform who was named a 2011–2012 Albert Einstein Distinguished Educator Fellow, will talk about *Instructional Choices for More Effective Math Classrooms*, management of homework, public records of work to guide mathematical discourse, and assessment and evaluation of reasoning and sense-making.
- **Dr. Elizabeth Smith,** K-12 Learning Disabilities Specialist at KinderMinds, will speak on *Einstein, Edison, and Franklin: Dyslcalculia and Giftedness.*
- **Donald Fraser**, Professor Emeritus of Mathematics Education at the Ontario Institute for Studies in Education, University of Toronto, will talk about what makes mathematics fun for teachers and students alike using ideas from current events and the world of math. His talk will include interactive ideas, teaching strategies and creative websites.
- **Carole Greenes**, an affiliated faculty member of the Learning Sciences Institute at Arizona State University and author of more than 70 articles and 300 books for students pre-K through 12, will give two talks, *Using Assessment to Identify and Develop Students' Algebraic and Problem Solving Talents* and *Mystifying Mathematical Puzzlers*.
- **Cathy Humphreys,** a high school mathematics teacher well known as the co-author with Jo Boaler of *Connecting Mathematical Ideas: Middle School Video Cases to Support Teaching and Learning*, will address *Renegotiating Classroom Practices: Number Talks in High School*.
- **Elham Kazemi**, Associate Dean for Professional Learning and Associate Professor for Curriculum and Instruction at the University of Washington, has teaching and research interests that attend to classroom discourse, students' mathematical thinking, and students' learning and identities. Elham will model her work designing and implementing high quality job-embedded math professional development.
- **Eric Knuth**, Curriculum and Instruction University of Wisconsin-Madison, students justifying and proving mathematical claims and using algebraic representations appropriately, flexibly, and efficiently to model and to solve problems. His presentation is entitled *Laying a Foundation for Proving: Fostering Mathematical Curiosity, Sense Making, and Reasoning.*
- **Ruth Parker**, co-founder of the Mathematics Education Collaborative, is nationally known as a mathematics educator, professional development leader, and dynamic speaker. At this conference, Ruth will address *Bringing the Standards for Mathematical Practice to Life in the Classroom* and *The Standards for Mathematical Practice of the CCSS: Rethinking Our Practice*.
- **David Schwartz,** well-known author of children's books that focus on mathematics, will address, *Math Happens When Children Wonder About What They Read* and *Nature Books Are a Natural*. In his second talk, David will show ways that nature books can be used for math investigations and problem solving.
- **Peg Smith,** Associate Professor of Mathematics and Education and Research Scientist at the University of Pittsburgh, is known to many of us for her work related to Cognitive Demand and the Five Practices of Orchestrating Productive Mathematical Discussions. Peg will engage participants in working on *Tasks, Tools, and Talk* and also *Reasoning and Proving*.

**Kim Sutton** from Creative Mathematics served as an Associate Director of Project AIMS, focuses on the power of hands-on mathematics for elementary students. Her presentations are entitled *Building Strong Number Sense Through Place Value, Fraction Games That Go the Distance,* and *Teaching Geometry Concepts With Meaning.* 

**Darryl Yong** of Harvey Mudd College co-directs the Harvey Mudd College Professional Development and Outreach Group and serves as the Associate Dean for Diversity. Darryl will talk about the *Mathematics of Perfect Shuffles*, that is, performing perfect riffle shuffles on a deck of cards that will eventually return to its original order.

**Jerry Johnson,** Professor of Mathematics at Western Washington University, is on the WWU faculty team working toward the integration of science, mathematics, and technology curricula. He is also the director of MathNEXUS, an online partnership building communities of learners and leaders in mathematics.

#### Well-known presenters with local connections include:

Lynn Adsit	Julia Aguirre	Sunshine Campbell
Ruth Chamberlin	Jessica Cohen	Elly Claus-McGahan
Jackie Coomes	Tom Dick	Joyce Frost
Allison Hintz	Lisa Jilk	Marcy Cook
Jim King	Anita <mark>Leng</mark> es	Kristin Lesseig
Andrea Levy	Art Mab <mark>b</mark> ott	Phil Mallinson
June Morita	Swapna Mukhopadhyay	Karen O'Connell
Mark Roddy	Tom Seidenberg	David Slavit
Gini Stimpson	Kim Vincent	Ginger Warfield

# Register later this spring at the 52<sup>nd</sup> Northwest Mathematics Conference website, www.northwestmathconf.org/NWMC2013/index.html.

Rates for existing or new members of the Washington State Mathematics Council, Puget Sound Council of Teachers of Mathematics, Oregon Council of Teachers of Mathematics and British Columbia Association of Math Teachers:

• Early Registration: \$175

Post 9/20/2013 Registration: \$195

Rates for non-members:

Early Registration: \$200

• Post 9/20/2013 Registration: \$220

You will see at the registration website that for the difference in the member and non-member registration cost, a person can join one of the sponsoring organizations.

Please support your teachers who want to leverage this opportunity to learn with and from engaging and informed colleagues and experts at a time when significant changes are planned for mathematics education.

## The program is designed to address your needs as an administrator as well.

You will benefit from attending sessions that will help you be an instructional leader who is strategic in organizing your school for learning, effective in analyzing mathematics teaching and learning, and providing a leadership voice for mathematics.

#### **Questions or suggestions please contact:**

**Program Committee co-chairs** 

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Conference co-chairs of the 52nd NWMC, October 11-12, 2013

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