

Washington State  
Community College Math Conference  
May 1 – 3, 2008



Campbell's Resort  
Chelan, Washington

# Conference Schedule

Date	Time	Event
<b>Thursday, May 1, 2008</b>	6 – 7:30 pm	Registration
	7:30 – 8:30 pm	Tracy Furutani Opening Speaker
	8:0 – 9:15 pm	Registration
	8:45 – 10:30 pm	Hosted Social
<b>Friday, May 2, 2008</b>	7:15 – 8: 15 am	Breakfast Buffet
	8:30 – 9:30 am	Session I
	9:45 – 10:45 am	Session II
	11 am – 12 pm	Session III
	12:15 – 1:15 pm	Lunch Buffet
	1:30 – 2:30 pm	Session IV
	2:45 – 4:15 pm	Session V
	4:30 – 6:00 pm	Discussion Groups/Activities
	6:00 – 7:00 pm	Dinner Banquet
	7:00 – 8:00 pm	Jerry Johnson Keynote Speaker
	8:15 – 10:30 pm	Game Night and Hosted Social
<b>Saturday, May 3, 2008</b>	7:30 – 8:30 am	Breakfast Buffet
	9:00 –10:00 am	Session VI
	10:15 – 11:15 am	Session VII
	11:15 am – 12 pm	Checkout and Departure
	12:00 – 1:30 pm	Lunch (preregistration required)

# Guest Speakers

## Thursday Evening Speaker – Dr. Tracy Furutani

Dr. Furutani will speak on Thursday night about the use of interesting mathematical functions in the science of geomorphology, the study of the Earth's landforms and their evolution over time. An example of such a function is the use of the error function  $\text{erf}(x)$  to model the profile of a fault scarp, caused when earth movement abruptly lifts one side of a fault to a higher elevation than the other side. The error function then can be used to model the degradation of that slope profile over time, providing geologists with a method of determining the age of earth movements.



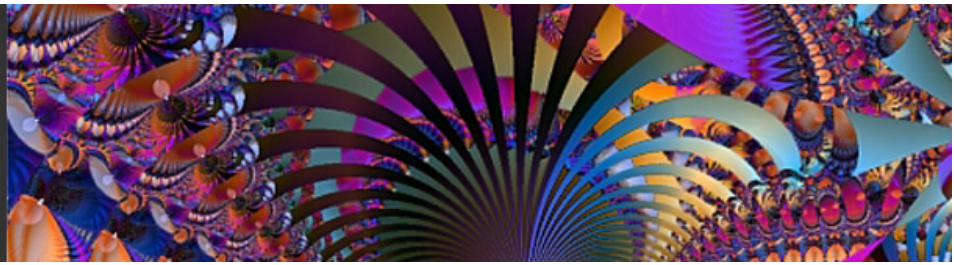
## Friday Evening Banquet Speaker – Dr. Jerry Johnson



*Yogi Berra's Guide to Teaching Mathematics:  
Its Like Deja Vu All Over Again*

Yogi's inane quotes provide both the motivation and insight underlying questions about simple mathematics that can perplex, entice, and challenge students at all levels of understandings. Fortunately or unfortunately, these questions do not separate students from teachers...rather they turn all of us into learners working together as we explore interesting mathematics.

"Yogi dressed as a mathematics teacher, ready for a classroom of students!"



## **Social Events**

### **Thursday**

**8:45 to 10:00 pm**

#### **Social**

Hosted by  
***Cengage Learning***  
***Houghton Mifflin Company***  
***McGraw-Hill Higher Education***

Located in the Ballroom

### **Friday**

**4:30 - 5:45 pm**

#### **Wine Tasting**

Meet in Campbell's Resort Main Lobby for  
carpooling

Pre-Registration required

Location: Tsillan Cellars

**8:15 – 10:30 pm**

#### **Board Games and Social**

Hosted by ***Pearson Higher Education***

Come play games during the social.  
Bring your own or try one of ours!

Located in the Park Rooms (across the street).

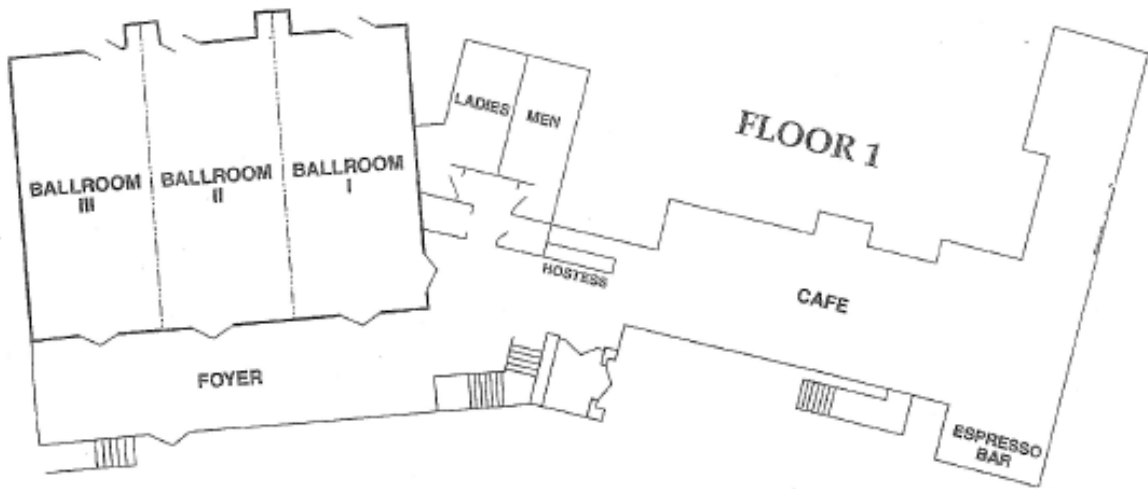
### **Saturday**

**12:15 – 1:30 pm**

#### **Lunch on the Terrace**

Pre-Registration required

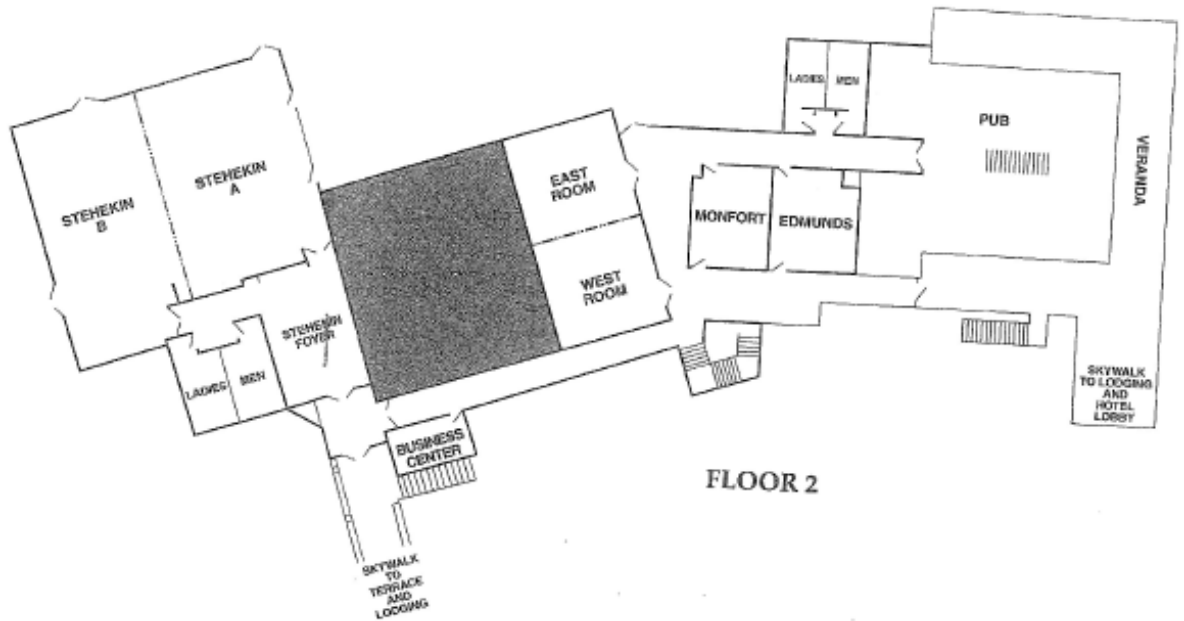
# Campbell's Resort Floor Plans



First floor foyer: Registration

Ballroom: Meals, keynote speakers and Thursday evening social

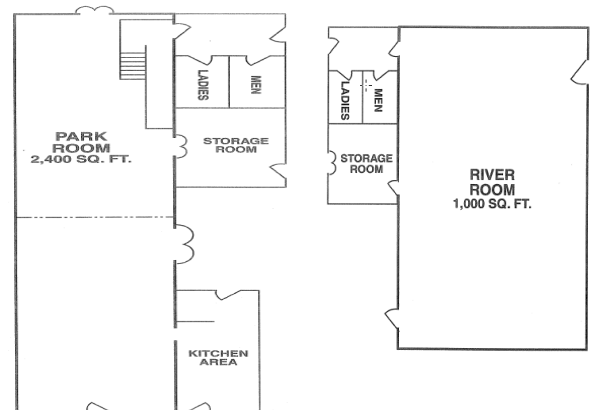
Sessions will be held in East, West and Stehekin B

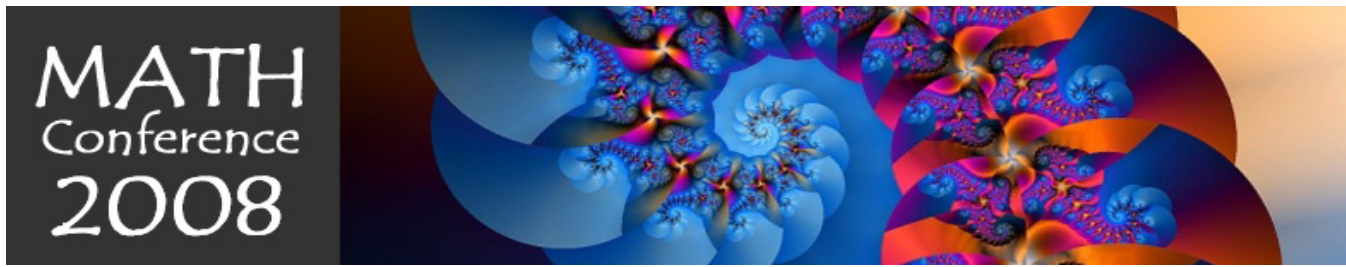


## “Across the Street”

Sessions will be held across the street, in River, Park North and Park South rooms.

Friday evening social will be held in the Park rooms.





## Session Abstracts

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**Tophe Anderson**

Seattle Central & Bellevue Community Colleges

**Friday 11:00 – 11:30**

***WAMAP on the Go!***

For me as a part-time instructor, using WAMAP has been a life-saver. This session will be a demonstration/discussion to share ideas about using WAMAP to keep in touch with students and manage grades, as well as to assess and allow students to take ownership of their practice. This system is a FREE and flexible tool appropriate for all levels.

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**Peg Balachowski**

Everett Community College

**Friday 2:45 – 4:15**

***Bears in Space: Using Active Learning Strategies in the Introductory Stats Classroom***

Statistics instruction is evolving in a number of ways. Experienced teachers have long recognized that for many students hearing a lecture or reading the textbook is less enlightening than engaging in an activity. Not surprisingly, in the past decade, an element of the reform movement in an undergraduate elementary statistics course has been greater emphasis on data production/collection in classroom activities. The main activity that I will demonstrate in this workshop session is used to introduce students to the basic concepts of data collection and experimental design. The nominal goal of the experiment is to understand the factors that influence the distance traveled by gummy bears when launched from a homemade launcher. But more importantly, it introduces students to the need for a protocol, for replication and randomization. Participants in this workshop will participate in an actual data collection activity, receive complete instructions for at least two activities and will be able to view samples of student work. The audience for this presentation includes college level math instructors who teach or want to teach statistics, and anyone who wants to attend a fun session!

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**Helen Burn**

Highline Community College

**Jadwiga Weyant**

Edmonds Community College

**Saturday 9:00 – 10:30**

***Alternative Intermediate Algebra: Why, Where, and How?***

Over the past decade, a handful of community colleges in the state have developed alternative intermediate algebra courses. Most recently, Edmonds Community College began offering *Applied Intermediate Algebra* in winter quarter of 2008. This session uses the case at Edmonds as a point of departure for a more general comparison of alternative intermediate algebra courses offered by Highline Community College, Pierce College, and Tacoma Community College. The analysis compares and contrasts the four cases along several dimensions, including rationale for the course, intended student audience, course content, and current challenges.

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**Betsy Campbell, Deanna Li and Pam Lippert**  
North Seattle Community College

**Saturday 10:15 – 11:15**

***Hosting the Washington State Community College Math Conference***

Are you planning to host the Washington State Math Conference within the next couple of years? Or are you interested in learning about what's involved in hosting the conference? This workshop will outline the conference planning process. Topics covered will be: the registration process, the budget, how to recruit speakers, presenters and exhibitors; and the timelines and work effort involved in hosting the conference. We'll also share some helpful hints that we learned from our experience with this year's conference. A question and answer session will follow.

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**Sharon Camner**  
Pierce Community College

**Friday 1:30 – 2:30**

***Mathematics for Preschool Teachers***

What math should we offer our students who plan to teach preschool? As part of the new statewide effort and grant to improve the math preparation of Early Childhood Education majors, at Pierce College we developed a new course to provide them with accessible, fun, and relevant mathematics. Come to learn about this new course, and to discuss what should be part of the math courses for both preschool teachers and Elementary Education majors.

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**Mike Daniel**  
Peninsula College

**Saturday 9:00 – 10:00**

***An Atlantic Crossing--in the wake of the Mariagalante***

Mike Daniel was one of a crew of six on a recent 3200 mile sailing adventure aboard the 53 foot sloop 'La Salsa'. Topics presented in this talk will include planning, final boat preparation, provisioning, and other details of the 20 day trans-Atlantic crossing from Santa Cruz de La Palma, Canary Islands, Spain, to Falmouth Harbor, Antigua. He will also explain how he has used the trip as a teaching and learning experience for his Precalculus II students. The talk will address the necessary mathematical calculations involved in the trip planning, an explanation of a project based on the trip for the Precalculus II class, and how concepts of navigation and trigonometry relate outside a textbook. La Salsa's track was similar to that of Columbus' second voyage. The Columbus flagship for the 1493 voyage was named the 'Mariagalante'.

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**Jordan Enzor**  
Hawkes Learning Systems

**Saturday 9:00 – 10:00**

***Motivate Students to Learn by Using Software***

In the presentation, we will demonstrate how Hawkes Learning Systems helps students and instructors in learning and teaching mathematics. This courseware program has changed the face of mathematics education with its student software, online grade book, and test generator. The student software promotes grade improvement and motivates students by engaging them with interactive learning. We will explore how the software helps students learn through tutorials, unlimited practice, mastery-based homework assignments, and helpful feedback provided by artificial intelligence. These features make it ideal for all types of learning environments: on its own or as a supplement, and in online, distance-learning, self-paced, or traditional lecture courses. Students aren't the only ones who benefit from the courseware. Our online grade book and state-of-the-art test generator are valuable tools for instructors, as they greatly improve course management and make the grading process easier. Throughout the presentation, we will show these and many more beneficial aspects of the Hawkes Learning Systems courseware, and will conclude with questions and answers.

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**Hideshi Fukaya**  
Casio MRD Center

**Friday 8:30 – 9:30**

***Understanding the Logic behind a Calculators CAS Output***

Understanding how to use CAS commands in teaching is important. Understanding why CAS commands return the form they return is also important. Why does SIMPLIFY return what it does? This question and other CAS questions will be discussed in detail as examples using the ClassPad's CAS system are presented.

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**Earl Hamilton & Ralph Jenne**  
North Seattle Community College

**Friday 8:30 – 9:30**

***Non-Standard Derivations (Earl)***

A couple of non-standard derivations, not usually found in calculus texts: Euler's relation can be obtained from techniques of integration, and also some Series expansions can be obtained from L'Hopital's rule. These connections are not usually drawn.

***Trigonometric and Calculus Curiosities (Ralph)***

A nice proof of the tangent angle addition formula and a direct calculation of curvature from three points will be discussed.

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**Gregg Harbaugh**  
Seattle Central Community College and the University of Washington

**Friday 11:00 – 12:00**

***Using Animations in Instruction & Assessment***

Have you ever thought about incorporating animations into your classroom instruction or assessment activities? Or, do you have some animations that you would like to share with your colleagues? If so, you will find this session very engaging. A brief introduction to using animations with (quasi-ubiquitous) programs such as Excel, PowerPoint and *Mathematica* will be followed with many demonstrations. There will be time for session participants to share their creations (please bring material on a flash-drive or provide access via a website.)

**Saturday 9:00 – 10:00**

***Project-Based Assessment & the Need for Epistemic Scaffolds***

Many instructors have tried to incorporate authentic (real-world) based problems or open-ended projects (ill-defined problems) into their math classes in an attempt to improve student motivation and interest in mathematics. However, the increases in motivation and interest are often not realized by the students. This presentation will introduce a model to explain this phenomenon. The central tenet of the hypothesized model is that student's epistemic beliefs need to change in order to accommodate such non-traditional projects, and such change will not occur passively. A brief overview of current research in motivation theory and personal epistemology in the math classroom will accompany an introduction to the concept of epistemic scaffolding.

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**Birgit Hindman**  
Lake Washington Technical College

**Friday 8:30 – 9:30**

***Math for Computer Graphics***

In computer graphics, objects are defined by points in three dimensional object space. They need to go through several transformations in order to create an image out of colored pixels on a flat screen. This presentation will explain the math used in the graphics rendering pipeline.

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**Nancy Hyde**  
Broward Community College (Retired)

**Friday 10:15 – 10:45**

***Get Ready, Get Set, Get Math***

In this session, the presenter will discuss how preliminary activities can be used in math classes. These activities have been found to foster discovery learning, improve student retention and understanding of concepts and foster interaction among students. Handouts of sample activities will be shared.

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**Jerry Johnson**  
Western Washington University

**Friday 9:45 – 10:45**

***Using Non-Standard Problems in a Calculus Classroom . . . No Way, No Time!***

When teaching Calculus I & II, I use non-standard "precalculus" problems to motivate students to rethink the basic understandings needed to support key calculus ideas. These weekly problems are fun, often surprising, and help keep some students involved ... in fact, one student became a mathematics major because of these problems. Come and join in the exploration of these problems ... and hopefully you can use some of them as well.

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**Pete Kaslik**  
Pierce College

**Friday 1:30 – 2:30**

***Teaching Developmental Math with Patterns***

It is well known that math involves patterns. Unfortunately, struggling students may not recognize the important patterns, thus affecting their ability to remember the concepts. This direct approach to pattern recognition for pre-college algebra students involves jigsaw puzzles, clamshell taxonomy, a stopwatch, free money (sorry, not US currency) and pattern games. The majority of the time in the session will be devoted to playing games.

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**Mike Kenyon, Tom Caulton & Tom Flaherty**  
Green River Community College

**Friday 9:45 – 10:15**

***Fun with Birthdays***

One of our colleagues recently celebrated his 80th birthday. We noticed something interesting, investigated it, and found some other fun things too. Let's see what else we can discover!

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**Greta Kleinert**  
Cengage Learning

**Friday 2:45 – 4:15**

***Enhanced WebAssign: Easy to Use. Easy to Assign. Easy to Manage***

Join Brooks/Cole for a presentation of Enhanced WebAssign, the most widely used homework management system in higher education. This proven homework system is enhanced to include videos, links to textbook sections, and problem-specific tutorials. Enhanced WebAssign is more than a homework system; it is a complete learning system for math students!

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**Fred Kuczmariski**  
Shoreline Community College

**Friday 11:00 – 12:00**

***Roads, Wheels, Pedals and Roulettes***

We explore the problem of designing wheels to roll on curved roads. A well-known example is a square rolling on a series of inverted catenaries. We present a geometric solution to the problem, which allows us to generate some familiar curves such as roulettes. Along the way we explore some properties of pedal curves and roulettes. If time permits, the idea of gear pairs will be presented. The mathematics behind the graphics is primarily trigonometry and first year calculus.

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**Maia Langenberg, Melissa Henry, Amber Hixon & Katie Stables**  
Western Washington University

**Friday 8:30 – 9:30**

***The Lesson Study Experience***

'Lesson Study' is a collaborative process, in which participants work together to design an effective lesson. The lesson is then taught by one of the members of the team and observed by the others in order to evaluate and further enhance the lesson. In this talk we will discuss our experiences with 'Lesson Study' and share some of the ideas that came out of our study group.

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**Andrea Levy**  
Seattle Central Community College

**Friday 9:45 – 10:45**

***Math Phobia & Test Anxiety: Lowering the Stress Level***

Increased stress levels can affect students' ability to learn and/or demonstrate their understanding of mathematics. Many developmental level math students have some form of math phobia and/or test anxiety. This presentation identifies the symptoms (fight, flight, or hide response) and provides suggestions for helping students address their fears without lowering the course expectations. Mentoring strategies, in-class group work, and community service learning are among the methods discussed.

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**Friday 11:30 – 12:00**

***Closing the Learning Gap: Kindergarten Readiness Standards***

The learning gap for math and science starts before a child enters kindergarten and widens each year thereafter. How can we narrow the gap? This presentation introduces a Math and Science Methods course that is taught as part of an Early Childhood Education Certificate Program at Seattle Central Community College.

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**David Lippman**  
Pierce College

**Friday 9:45 – 10:45**

***What's new with WAMAP.org?***

WAMAP.org is an online course management and assessment tool, truly free of cost and not tied to a publisher. Students receive immediate feedback on algorithmically generated questions with numerical or algebraic expression answers. Come find out how you can use WAMAP with your students for delivering information, daily online homework, quizzes, placement tests, and more.

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**Sasha Malinsky**  
Bellevue Community College

**Friday 1:30 – 2:30**

***Vivid Illustrations For Problem Solving and Study Mathematics: Language and Experience***

This presentation will demonstrate illustrations that were generated with Maple software for several problems and mathematical concepts. I will be using colorful and sometimes animated graphs. Some of these were developed for use in the classroom, to help present topics ranging from pre-calculus and analytic trigonometry to multivariable and vector calculus. One of the problems explored here was solved out of personal curiosity, but the techniques used are part of the college mathematics curriculum and the problem ties together a family of parabolic trajectories and two other conic sections in a surprising and delightful way.

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**Elayn Martin-Gay**  
University of New Orleans, Pearson Education

**Friday 8:30 – 9:30**

***Save Time, Increase Understanding, and Make Algebra Exciting***

How can you save time, increase student understanding, and yet bring fun and excitement back into your mathematics classroom? It is possible! We'll explore hands-on examples and ways to weave them into your existing teaching plans.

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**Bill Moore**  
Washington State Board for Community and Technical Colleges  
Project Director, Transition Mathematics Project

**Saturday 10:15 – 11:15**

***Re-Thinking Approaches to Math Placement in the Context of the College Readiness Standards and New Test Options: Sharing Progress and Soliciting Input***

Since last spring the statewide Transition Math Project has been supporting work in new assessments around the math College Readiness Standards and has begun the process of exploring the potential implications and issues that this effort could have on math placement in Washington Community and Technical Colleges. This session will provide an update on that work and solicit from participants their recommendations and ideas for how to proceed from here in addressing policy, institutional, and student needs with regard to college readiness preparation and placement.

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**Laura Moore-Mueller**, Green River Community College  
Project Director: Project TIME

**Friday 2:45 – 4:15**

**Russ Ballard**, Kentlake High School

**Deann Anguiano**, Kentridge High School

***Quadratic Cliff Jumping***

Considering base jumping without a parachute? Want to know if you will land on that nice soft cushion or moving car? Designed to engage and excite students, 'Cliff Jumping' encourages active involvement while also teaching the relevance of quadratics to real-world applications. Participants will have an opportunity to test their data collection and modeling skills, see how TV media can be used as a resource for projects and experience data-collection software *Logger Pro*. 'Cliff Jumping' uses quadratics to model projectile motion in problems involving position v. position and position v. time graphs. It could be used in intermediate algebra, pre-calculus or physics courses. The activity was developed collaboratively with high school and college math faculty and funded by Project TIME.

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**Ed Morris**  
Highline Community College

**Friday 11:00 – 12:00**

***Exploring the Beauty of Escher's Art of Vanishing Patterns***

How did Escher create those wonderful works of art where things get smaller and smaller and smaller and smaller ... ? Attend and learn how you can create these tessellations.

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**Yves Nievergelt**  
Eastern Washington University

**Friday 8:30 – 9:30**

***Documented Applications for Undergraduate Math Students***

Who needs this? Excluding purely imaginary applications, this session shows applications that you may already know, with activities that your students may already be doing, but documented by real names of real persons or real firms, with real addresses (or geographical area, if deceased), who actually used the mathematics to produce real products.

The mathematical level of the planned applications ranges from pre-calculus and liberal-arts mathematics to differential equations, with activities at these levels.

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**Gail Nord**  
Gonzaga University

**Friday 11:00 – 11:30**

***History of Mathematics***

Topics will cover material for the secondary mathematics endorsement competencies related to the history of mathematics. Handouts will be provided.

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**Rose L. Pugh**  
Bellevue Community College

**Saturday 10:15 – 11:15**

***Interactive Online Math Tutoring at BCC***

How do we provide academic support to online students or students who are unable to come to campus? How do we provide tutorial assistance to students during those evening hours when many are working on their assignments at home? In an attempt to address these needs, the BCC Academic Success Center launched the Online Tutoring Pilot Project Summer Quarter 2007. This project provides real-time, LIVE, interactive online tutoring for Math students at BCC. Come find out how the online tutoring is delivered, how the project is doing, and what the data seems to be telling us about the viability of the online tutoring service. Share your ideas about and/or experiences with online tutoring.

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**Paul Riopel**  
Texas Instruments

**Friday 2:45 – 4:15**

***Grasp the Math with the new Texas Instruments TI-Nspire***

The TI-Nspire from Texas Instruments is available with or without a Computer Algebra System (CAS) and has a changeable keypad that enables compatibility with the TI-84 Plus and TI-83 Plus. The TI-Nspire incorporates dynamically linked multiple representations to help teachers and students approach and explore mathematics from several different perspectives. Documents can be created and saved in TI-Nspire and easily transferred to computers for additional analysis or exploration. The combination of these capabilities increases learning opportunities for more students.

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**Eric Schulz**  
Walla Walla Community College

**Friday 1:30 – 2:30**

***Technology to Support an Interactive Classroom***

An interactive whiteboard, *Mathematica* 6, and the Mathematica Assistant palette work extremely well together to create an engaging and interactive classroom environment. Material will range from beginning algebra through linear algebra with heavy emphasis on dynamic visualizations and light emphasis on Mathematica syntax ... there will be something for everyone. The Mathematica Assistant palette was created by the presenter and allows an individual to work with *Mathematica* "live" without relying on a keyboard to enter and edit commands - although the palette works very well alongside a traditional keyboard and mouse too.

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**Katie Stables**  
Western Washington University

**Saturday 10:15 – 11:15**

***The JoY(x) of Composition***

A look at composition of functions using the Rule of Four (words, tables, graphs and equations). I will share my favorite examples from algebra through calculus.

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**Carl Swenson**  
Seattle University

**Pat Shure**  
University of Michigan

**Friday 2:45 – 4:15**

***Algebra: Form, Function, and Fluency***

The session centers on analyzing a set of college algebra problems that are designed to illuminate the underlying structure of algebra. Participants will discuss how the solutions foster symbolic understanding and why this type of problem might prove valuable in teaching.

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**Dale Trockel**  
Western Washington University

**Friday 11:30 – 12:00**

***Caterpillar March***

A simple physics problem that can be solved with trigonometry asks: If three caterpillars are placed on the vertices of an equilateral triangle and all walk at the same rate towards each other how far does each caterpillar walk before they meet? I will present the solution of this problem and then present some interesting variations of the problem which include using various  $n$ -sided polygons or placing the triangle on a sphere.

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**Alan Tussy**  
Citrus College, Cengage Learning

**Friday 1:30 – 2:30**

***The Eureka! Experience: Instructional Techniques that Encourage it!***

Watch as several of your peers participate in an intriguing experiment that explores the relationship between thought and language. Learn about the successive stages that your students go through to assimilate mathematical terms and concepts. Witness the Eureka! experience - that point in the learning process when students confidently claim, "Now I get it!" You'll leave with some specific instructional techniques that help students better speak, write, and think mathematically using the language of algebra.

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**Ginger Warfield**  
University of Washington

**Friday 11:00 – 11:30**

***The Launching of a Statewide K-20 Project***

I have been working with Ruth Parker of the Mathematics Education Collaborative for over a year, building a project that will build leadership and community engagement for the state's K-12 mathematics education and sustain the results by building a strong partnership among the state's colleges and universities founded on connecting with our K-12 professional development efforts. We hope for NSF support, but even without it the project will happen in some form, and we would like to involve as many of you as possible.

**Friday 11:30 – 12:00**

***The Math Wars, the Standards Revision: the Eyes of the Nation are upon us!***

After upwards of a decade of progressing steadily, albeit ponderously, in an excellent direction, two years ago Washington found itself the battleground of choice for the long-raging Math Wars. Mixing legitimate concerns, disinformation and tremendous expertise at lobbying the legislature and managing the media, a group has made a strenuous effort to reverse everything that has happened here since the mid-nineties. The one perceptible benefit has been the revision of the Standards -- a process that is still on-going. My point of perspective has been close to the center of the maelstrom, and I will report what I have learned.

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**Diane Whitfield**  
Casio MRD Center; Portland Community College

**Friday 2:45 – 4:15**

***Fuel Student Interest***

We will do algebra/pre-calculus level activities designed to help you learn the *ClassPad*, and to show how this tool can be used in lectures and online learning to increase student involvement. Use a *ClassPad* or bring a PC laptop, sample software will be provided.

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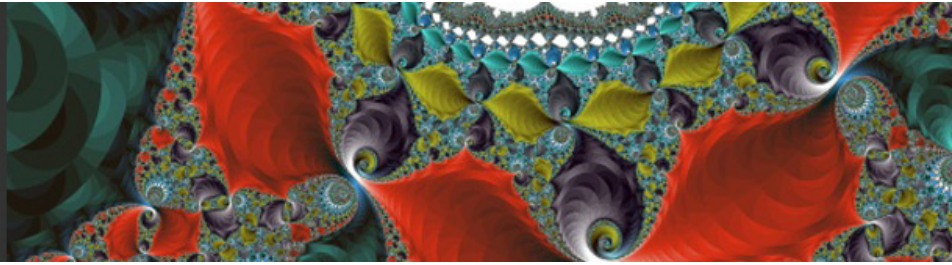
**Andre Yandl**  
Seattle University

**Friday 9:45 – 10:45**

***Mathematical Potpourri***

I will present results from three different areas of mathematics. The first is a generalization of a recent geometry problem proposed in the December 2007 issue of the American Mathematical Monthly (Problem 11328). I will show that by using vectors to prove the result, we can eliminate the convexity condition required in the statement of the problem. The second is a new proof of Heron's formula. The proofs that have appeared in the literature and in basic textbooks make use of the Law of Cosines, or the Pythagorean Theorem, and involve some messy algebraic manipulations, difficult for most students of trigonometry. I will give a simple proof based on the following, which I believe is a new identity: If  $A, B, C$  are real numbers whose sum is  $\pi/2$ , then  $\cot A + \cot B + \cot C = (\cot A)(\cot B)(\cot C)$ . Finally, a simple formulation of Bernoulli numbers, using determinants, will be given.

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## Participants

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# 2008 Exhibitors

Exhibitors are housed in Stehekin room A.

Exhibit hours are Friday from 8:30 am to 5 pm and Saturday from 8:30 a.m. to 11:30 am

## ***Casio Education***

Hideshi Fukaya, Diane Whitfield

## ***Cengage Learning***

Greta Kleinert, Alan Tussy, Bryan Endreson, Josh Fletcher,  
Brittney Bent, Debbie Rubel, Eric Englund

## ***W.H. Freeman***

Jeff Ward, Bill Davis

## ***Hawkes Learning Systems***

Jordan Enzor, Lalie Gibson

## ***Houghton Mifflin Company***

Eric Ziegler

## ***McGraw-Hill Higher Education***

Peggy Lucas, Amelia Keeney

## ***Pearson Higher Education***

Margaret Dzierzanowski, Brenna Bray, Dwayne Coy, Kari Smith,  
Bart Stewart, Elayn Martin-Gay

## ***PLATO Learning, Inc.***

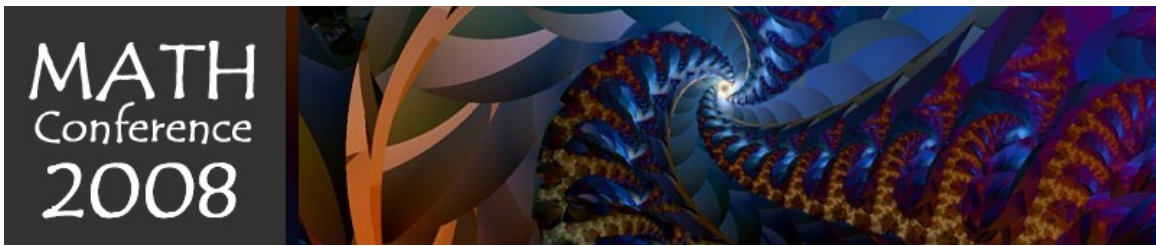
Suzanne Ayers

## ***Texas Instruments***

Paul Riopel

## ***WAMAP.org***

David Lippman, Melonie Rasmussen



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## Special Thanks

The NSCC Conference Committee extends a special thanks to:

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PLATO Learning, Inc.  
Starbucks  
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for contributions toward the hosted social events and door prizes.

And extra thanks to:

Linda Gasparovic of The Creative Spot  
for the design of the conference flash drive logo.

Doug Harrington of Fractalarts.com  
for the use of his fractals on our website and in our program.  
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Session	Stehekin B	East	West
<b>I Friday 8:30-9:30</b>	Save Time, Increase Understanding, and Make Algebra Exciting (Martin-Gay)	Math for Computer Graphics (Hindman)	Understanding the Logic behind a Calculators CAS Output (Fukaya)
<b>II Friday 9:45-10:45</b>	Using Non-Standard Problems in a Calculus Classroom.... No Way, No Time! (Johnson)	Math Phobia and Test Anxiety: Lowering the Stress Level (Levy)	What's new with WAMAP.org? (Lippman)
<b>III Friday 11:00-12:00</b>	The Launching of a Statewide K-20 Project The Math Wars, the Standards Revision: the Eyes of the Nation are upon us! (Warfield)	Using Animations in Instruction & Assessment (Harbaugh)	WAMAP on the Go! (Anderson)
			Closing the Learning Gap: Kindergarten Readiness Standards (Levy)
<b>IV Friday 1:30-2:30</b>	The Eureka! Experience: Instructional Techniques that Encourage it! (Tussy)	Technology to Support an Interactive Classroom (Schulz)	Vivid Illustrations for Problem Solving and Study Mathematics (Malinsky)
<b>V Friday 2:45-4:15</b>	Enhanced WebAssign: Easy to Use. Easy to Assign. Easy to Manage (Kleinert)	Quadratic Cliff Jumping (Moore-Mueller et al)	Grasp the Math with the new Texas Instruments TI-Nspire (Riopel)
<b>VI Saturday 9:00-10:00</b>	Transition Math Project Panel	Project-Based Assessment & the Need for Epistemic Scaffolds (Harbaugh)	An Atlantic Crossing --in the wake of the Mariagalante (Daniel)
<b>VII Saturday 10:15-11:15</b>	College Readiness Testing and Placement (Moore)	Interactive Online Math Tutoring at BCC (Pugh)	Hosting the Washington State Community College Math Conference (Campbell et al)

Park (North)	Park (South)	River	Session
Non- standard Derivations Trigonometric and Calculus Curiosities (Hamilton and Jenne)	Documented Applications for Undergraduate Math Students (Nievergelt)	The Lesson Study Experience Panel (Langenberg et al)	<b>I</b> <b>Friday</b> <b>8:30-9:30</b>
Fun with Birthdays (Kenyon et al)	Mathematical Potpourri (Yandl)	Assessment Panel	<b>II</b> <b>Friday</b> <b>9:45-10:45</b>
Get Ready, Get Set, Get Math (Hyde)			
History of Mathematics (Nord)	Roads, Wheels, Pedals and Roulettes (Kuczmarski)	Exploring the Beauty of Escher's Art of Vanishing Patterns (Morris)	<b>III</b> <b>Friday</b> <b>11:00-12:00</b>
Caterpillar March (Trockel)			
Teaching Developmental Math with Patterns (Kaslik)	Mathematics for Preschool Teachers (Camner)	Math Learning Centers Roundtable	<b>IV</b> <b>Friday</b> <b>1:30-2:30</b>
Fuel Student Interest (Whitfield)	Algebra: Form, Function, and Fluency (Swenson and Shure)	Bears in Space: Using Active Learning Strategies in the Stats Classroom (Balachowski)	<b>V</b> <b>Friday</b> <b>2:45-4:15</b>
Alternative Intermediate Algebra: Why, Where, and How? (Burn and Weyant) 9:00 – 10:30 am	Motivate Students to Learn by Using Software (Enzor)	Informal Roundtable	<b>VI</b> <b>Saturday</b> <b>9:00-10:00</b>
WAMATYC Meeting 10:45 – 11:15 am	The JoY(x) of Composition (Stables)	Informal Roundtable	<b>VII</b> <b>Saturday</b> <b>10:15-11:15</b>



Hosted by the Mathematics Faculty and Staff  
of  
North Seattle Community College



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