2016 Northwest Two-Year College Mathematics Conference

April 21 – 23, 2016

5TH Quinennial
Joint Washington-Oregon Conference

Salishan
SPA & GOLF RESORT

Gleneden Beach, Oregon

HIGHLIGHTS

Thursday	Event
7 – 8 PM	Opening Speaker {Long House ABC} Brian Mercer
8 – 11 PM	Hosted Social {Sunset Suite} Pearson Education Cengage Learning

Friday	Event
7:15 – 8:45 AM	Breakfast {Long House ABC}
11:30 AM – 1 PM	Lunch {Long House ABC}
5:45 – 7 PM	Dinner {Long House ABC}
7 – 8 PM	Keynote Speaker {Long House ABC} Jane Tanner
8 – 11 PM	Hosted Social {Sunset Suite} McGraw-Hill Education W.H. Freeman / Macmillan Learning

Saturday	Event
7:15 – 8:45 AM	Breakfast {Long House ABC}
8 – 8:45 AM	Business Meetings ORMATYC {Long House ABC} WAMATYC {Cedar Tree}

SCHEDULE

Thursday, April 21

5:30 – 7 PM	Registration {Library}
7 – 8 PM	Opening Speaker {Long House ABC}
	BRIAN MERCER
8 – 8:30 PM	Registration {Library}
8 – 11 PM	Hosted Social {Sunset Suite}
	Cengage Learning
	Pearson Education

Friday, April 22

7:15 – 8:45 AM	Breakfast {Long House ABC}
8 – 11:30 AM	Registration {Terrace}
8:30 – 11:45 AM	Exhibits {Terrace, Salal}
9 – 10 AM	SESSION I
10 – 10:30 AM	Refreshment Break {John Wiley & Sons; Terrace}
10:30 – 11:30 AM	SESSION II
11:30 AM – 1 PM	Lunch {Long House ABC}
1 – 4:30 PM	Exhibits {Terrace, Salal}
1:15 – 2:15 PM	SESSION III
2:15 – 2:45 PM	Dedicated Exhibitor Time {Terrace, Salal}
2:45 – 3:45 PM	SESSION IV
5:45 – 7 PM	Dinner {Long House ABC}
7 – 8 PM	Keynote Speaker {Long House ABC}
	JANE TANNER, AMATYC PRESIDENT
8 – 11 PM	Hosted Social {Sunset Suite}
	W.H. Freeman / Macmillan Learning
	McGraw-Hill Education

Saturday, April 23

7:15 – 8:45 AM	Breakfast {Long House ABC}
8 – 8:45 AM	Business Meetings
	WAMATYC {Cedar Tree}
	ORMATYC {Long House ABC}
8:45 – 11:00 AM	Exhibits {Terrace, Salal}
9 – 10 AM	SESSION V
10 – 10:30 AM	Refreshment Break {Hawkes Learning; Terrace}
10:30 – 11:30 AM	SESSION VI
11:30 AM	Check Out and Departure
12:45 PM	Post-Conference Workshop {Lincoln}
	Allan Rossman; John Wiley & Sons

Featured Speakers

Opening Speaker

Brian Mercer; Parkland College

Non-STEM Pathways – Lessons Learned from Four Years on the Road

Thursday, April 21, 7 PM; Long House ABC

All across the country, pressure and excitement are building to create alternate pathways in math for non-STEM students. The leading edge of that movement is Math Literacy, a new course that replaces beginning and intermediate algebra for those students. After pioneering a Math Lit course at Parkland College, I've spent the better part of the last four years helping to build successful implementations at other schools all around the country. I'll share much of what I've learned from the dedicated people I've met along the way.

Brian is a tenured professor at Parkland College in Champaign, IL, where he has taught developmental and transfer math courses for 18 years. He began writing in 1999, and has currently co-authored 6 textbooks, with others in the planning stages. Outside of the classroom and away from the computer, Brian is kept educated, entertained and ever-busy by his wonderful wife Nikki, and their two children, Charlotte, 9, and Jake, 8. He is an avid St. Louis Cardinals fan and enjoys playing softball and golf in the summertime with colleagues and friends.

Keynote Speaker

Jane Tanner; Onondaga CC; AMATYC President

Math Madness

Friday, April 22, 7 PM; Long House ABC

Come and hear what is happening in the world of mathematics and AMATYC.

Jane Tanner is a professor of mathematics at Onondaga Community College in Syracuse, NY. She has been there for 34 years and currently teaches all of her classes online. She was AMATYC's Northeast Vice President for six years before becoming President-Elect and now President of AMATYC. She is also active in Delta Kappa Gamma, a professional organization for women educators. She has served as the past NY president and is now serving on the International and NY State's Foundation's board.

WAMATYC-Sponsored Speakers

Jen Townsend; Bellevue College

The Mathematics of AI

Friday, April 22, 10:30 AM; Gallery Room

Machine learning is used extensively: It is used to populate your Netflix recommendations and twitter feed – as well as to identify potential criminal and terrorist activity. Machine learning is incredibly powerful: Google's "AlphaGo" AI recently beat the world's top human Go player (a feat experts thought was still decades away). Artificial Intelligence sounds magical – but its principles are rooted in mathematics. In particular, machine learning is founded on methods of linear algebra, optimization, statistics, and probability. In this talk we'll explore some of the ways that undergraduate-level mathematics forms the foundation for some of the most powerful and controversial tools of the past decade.

Jen Townsend teaches math at Bellevue College. She first stumbled across formalized Machine Learning concepts while in graduate school at Georgia Tech, where she wrote programs to predict how legislators would vote based on machine-learning analysis of the text of a bill. Jen's interests in mathematics are diverse; including creative pedagogy, knot theory, combinatorial graph theory, algorithms, and machine learning. She is honored to give a talk at this year's meeting.

Christopher Lee; University of Portland

Recurrence Matrices: An Example of How Teaching Leads to Problems

Friday, April 22, 1:15 PM; Lincoln Room

Opportunities for new explorations and collaborations in mathematics can present themselves in surprising places. For example, one does not usually expect to stumble upon new mathematics while grading exams, but in this talk I will tell the story of how a fruitful collaboration arose in exactly that way. Ultimately, this curiosity from my classroom led me, together with a colleague and a student, to an investigation of matrices whose entries come from recurrence relations.

Christopher Lee, a Wyoming native, earned his Ph.D. from the University of Illinois in 2009; he is currently an Assistant Professor at the University of Portland. His primary field of research lies in differential topology and geometry, but he has interests in a variety of disciplines, including linear algebra and the mathematics of physics. When not teaching or learning math, Chris enjoys playing hockey, cooking, eating, playing with his band, and resisting the tendency for gravity to anchor heavy things to the ground.

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SESSIONS SCHEDULE

	Session I: Friday **9:00 – 10:00**	**Session II: Friday** **10:30 – 11:30**
Long House A	Pathway to College Math OER Carrie Kyser Kelly Mercer	Mindfulness: Attention Training for Mathematics John Mitchell
Long House B	Incorporating Study Skills into Developmental Math Classes Jessica Bernards	Prime Producing Polynomial Matthew Anderson
Long House C	Training Math Tutors: A Best Practices Collaboration Rosalie Tepper Sarah Adams	***15-Minute Sessions*** **10:30 AM** Building an Online Math Literacy Course David Lippman **11:00 AM** Assorted Fun Problems Murali Krishna
Council House A	Next-Gen Technology in MindTap Changes the Game for Student Success in Developmental Math Yvette Hassakoursian	Using Simulation to Introduce Concepts of Statistical Inference Allan Rossman
Council House B	When Will I ever Use This?: A Research Project for Differential Equations Laura Moore-Mueller	Math in an Instant Feedback World Jessica Bernards Wendy Fresh
Council House C	What Calculus Has to Say about Why Shaq was a Terrible Free Throw Shooter Doug Gardner	Conceptual Understanding in a Complex World Christopher Quarles
Gallery Room	Online, Emporium, and Multi-Campus Implementation – Oh My! Nikki Armstrong	The Mathematics of AI Jen Townsend **WAMATYC-Sponsored Speaker**
Cedar Tree	Mandelbrot for the Masses Elizabeth (Liz) Coleman	ALEKS PPL Experience at WSU and Increased Student Success through Proper Math Placement Sandra Cooper
Lincoln	The Probability that Two Samples Fall on Opposite Sides of a Fence Yves Nievergelt	The Pendulum ODE: A Simple Nonlinear ODE with a Not So Simple Solution Jim Ballard

	Session III: Friday 1:15 – 2:15	**Session IV: Friday 2:45 – 3:45**
Long House A	Two-Chances Skill Sheets: Algebra Worksheets that Work! Kate Cook	College Instructor Preparation: Enough to Feel Comfortable Eric Fleming
Long House B	Using Technology, New Ideas, and Traditional Teaching Methods to Encourage Acceleration through Developmental Math Ben Mayo Matt Lewis	Redesigning the Math Placement Process Shannon Waits Helen Burn
Long House C	Visualizing Introductory Statistics: Using JMP to Enhance Statistical Learning Julian Parris	Experiences with the New ASA Guidelines in Introductory Statistics Joseph Reid
Council House A	Post Exam Student Reflection Aaron Warnock	Using Reflection Activities in Education Frank Lee
Council House B	A Roundtable Discussion about Math Placement Pam Reising Laura Moore-Mueller	Mind into Matter – Possibilities in 3D Printing Lee Singleton
Council House C	Keeping the Non-STEM Ball Rolling with Quantitative Reasoning Dave Sobecki	Math Lit & Pathways: 5 Years Later Kathleen Almy
Gallery Room	Free and Open Online Homework for Free and Open Textbooks David Lippman	Addressing Poverty & Inequity in the Classroom; A Materials, Program, and Policy Review Melonie Rasmussen
Cedar Tree	Getting Started: Creating Simple and Effective Video Lessons Sonya Redmond Austina Fong, Emily Nelson	The Oregon Math Network and 9-14 Math Pathways Dev Sinha
Lincoln	Recurrence Matrices: An Example of How Teaching Leads to Problems Christopher Lee **WAMATYC-Sponsored Speaker**	Undergraduate Numerical Solution Techniques Tiernan Fogarty
Sitka	Oregon Community College Faculty Salaries – Comparison and Discussion Becky Plassmann Sean Rule	Transforming Math in Basic Education for Adults Sarah Adams Stephanie Detrick, Emily Inman Kelly Schoo, Tyler Wallace
Pine	MindTap for Math: Students Have Their Say in Developing an Effective Online Digital Experience Gary Whalen	Hawkes Learning: Revolutionizing Math Courseware Jennifer O'Brien

	Session V: Saturday 9:00 – 10:00	**Session VI: Saturday 10:30 – 11:30**
Long House A	Computational Education – The End of Expensive College Textbooks Mary Ann Kelso Deidre Lam	Cool Open Source Math Stuff Gary Parker Stan Beach
Long House B	College Math Courses in Our High Schools: A Discussion Jessica Giglio Kathy Smith	Soldiers Inc.: Math in an MMOSG Ed Miller
Long House C	***15-Minute Sessions*** **9:00 AM** Can We Predict Exam Scores of Students? Dibyajyoti Deb **9:30 AM** Use Cases for Quizzes Robert Weston	Magic Squares as a Freshman Introduction to Mathematics Randall Paul
Council House A	The MEC MSP Statewide Teacher Leadership Developmental Model: Higher Education Implications and Potential Debbie Olson Jessica Hoppe	Mathematics, the Language of the Universe (Mathematics Invented or Discovered?) or the Universal Language of Creation Ahmad Rajabzadeh
Council House B	Transformative and Sustainable Change in Pre-College Math Leading to College Success Rajesh Lal Sharon Camner, Chad Bemis	Empowering Students with Website Building Tools in the Community College Math Classroom Kristin Lassonde
Council House C	Teaching a Prestatistics Course: Propelling Non-STEM Students Forward Jay Lehmann	Cocktail Party Calculus: Collaborative Writing in Mathematics Keith Nabb
Gallery Room	Revealing Your Students' Metacognition Barbra Steinhurst	Don't Recreate! Reform, Reduce, Realize: Preparing Students for College Math Dawn Draus Terri Skeie, Erin Schoenlein
Cedar Tree	Calculus I in Community Colleges: Findings from the National MAA Study Helen Burn	The Oregon Math Network and 9-14 Math Pathways Dev Sinha
Lincoln	Math Text Editing with Open Educational Resources Alyson Day	Statway: A Pathway to Completion Kendra Feinstein

PRESENTATIONS

(Alphabetized by Lead Presenter)

Sarah Adams, saraha@bigbend.edu; Big Bend CC
Stephanie Detrick (BBCC), Emily Inman (BBCC), Kelly Schoo (BBCC), Tyler Wallace (BBCC)
Transforming Math in Basic Education for Adults
Friday, 2:45 PM; Sitka
Big Bend experimented with a flipped, team-taught (I-BEST onramp), competency based, self-paced, computer enhanced math classroom. Can any more buzz words describe one class? Come to this presentation to learn more about development, pilot, and lessons learned.

Kathleen Almy, kathleenalmy@gmail.com; Rock Valley College
Math Lit & Pathways: 5 Years Later
Friday, 2:45 PM; Council House C
Pathways courses in developmental math have evolved in the 5 years since their inception. In this session, lessons learned, problems, solutions, and data will be shared about Rock Valley College's Math Lit course. Additionally, updates on how pathways are changing developmental math nationwide will be discussed.

Matthew Anderson, matt.c1.anderson@gmail.com;Willamette University
Prime Producing Polynomials
Friday, 10:30 AM; Long House B
The trinomial $h(n)$ which goes like n^2+n+41 has structure. I restrict n to a counting numbers and then describe cases where $h(n)$ is composite. There seem to be real patterns in a graph I made. There are 2 logically consistent proofs in my project. I feel this project of more than 5 years for me developed outside the academic community needs to be shared.

Nikki Armstrong, nikki.armstrong@socc.edu; Southwestern Oregon CC
Online, Emporium, and Multi-Campus Implementation – Oh My!
Friday, 9 AM; Gallery Room
How we turned fall 2015 into a runaway success with double digit increases in developmental math pass rates and lowered our DFW rate by 17%. A case study of ALEKS at Southwestern Oregon CC.

Jim Ballard, james.ballard@oit.edu; Oregon Institute of Technology
The Pendulum ODE: A Simple Nonlinear ODE with a Not So Simple Solution
Friday, 10:30 AM; Lincoln
The development and solution of the pendulum ODE. At least two approximating solutions will be reviewed. If time permits the solutions will be compared.

Jessica Bernards, jessica.bernards@pcc.edu; Portland CC
Incorporating Study Skills into Developmental Math Classes
Friday, 9 AM; Long House B
Many developmental level students are unaware of the expectations, dedication, and workload required to succeed in math. To address this, a math specific OER study skills resource was created aimed at increasing retention. Through the format of videos, worksheets, and short class discussions, loss of vital class time is minimal. This presentation will show the program and how it works as well as data from several studies from colleges that have used it.

Jessica Bernards, jessica.bernards@pcc.edu; Portland CC
Wendy Fresh (PCC)
Math in an Instant Feedback World
Friday, 10:30 AM; Lincoln
Fitbit, MapMyRun, and MyFitnessPal, what do these popular apps have in common? Instant feedback, they're simple to use, and contain a gamification component. This presentation covers how to use technology successfully to motivate and engage students in your class using these aspects.

Helen Burn, hburn@highline.edu; Highline College
Calculus I in Community Colleges: Findings from the National MAA Study
Saturday, 9 AM; Cedar Tree
Understanding how institutions manage to keep students in the calculus track is an issue of national importance and the impetus behind the study of Characteristics of Successful Programs in College Calculus (CSPCC) undertaken by the Mathematical Association of America (MAA). This session presents the two-year colleges case study findings.

Elizabeth (Liz) Coleman, ecoleman@cocc.edu; Central Oregon CC
Mandelbrot for the Masses
Friday, 9 AM; Cedar Tree
My goal was to make the Mandelbrot Set understandable for community college students. There is an interactive "component" and a graphing calculator will be helpful.

Kate Cook, kcook@clark.edu; Clark College
Two-Chances Skill Sheets: Algebra Worksheets that Work!
Friday, 1:15 PM; Long House A
What if you gave your students two chances to complete a worksheet? Come learn about the advantages of giving students a chance to fix their mistakes in a low-pressure assignment, and find out how easy it is to create your own “two-chances” worksheets.

Sandra Cooper, scooper@math.wsu.edu; Washington State University
ALEKS PPL Experience at WSU and Increased Student Success through Proper Math Placement
Friday, 10:30 AM; Cedar Tree
We start with a brief introduction of ALEKS and how it is designed then move into our experience with ALEKS PPL at Washington State University. Throughout two and four year colleges and universities, many students struggle to succeed in college level mathematics courses. Although much has been written about both the severity of the problem and its potential causes, little has been written about successful solutions to this crisis. Data shows that students are well served by an accurate placement test combined with an opportunity to remediate areas of weakness and to demonstrate improved skills through subsequent placement testing. In many cases, this cycle of assessment, learning and re-assessment can help students place into college level math courses upon entering college and have a far better chance of success in these courses. In this session we will discuss how ALEKS PPL has lowered DFW rates, and provided Washington State University and other institutions with data analytics to articulate student proficiency in math courses across the curriculum.

Alyson Day, alyson@lumenlearning.com; Lumen Learning
Math Text Editing with Open Educational Resources
Saturday, 9:00 AM; Lincoln
Join Lumen Learning in this workshop to get a quick introduction to Open Educational Resources (OER) for mathematics, and try our textbook-editing platform. You will gain a crash course in open licensing, and learn how to locate peer-reviewed, quality, OER. You will also be given the opportunity to edit an OER text using our online platform.

Dibyajyoti Deb, dibyajyoti.deb@oit.edu; Oregon Institute of Technology
Can We Predict Exam Scores of Students?
Saturday, 9:00 AM; Long House C (15-Minute Session)
In this presentation we will see if we can use machine learning to predict exam scores of students. We will look at past exam scores and use them to predict future scores of students.

Dawn Draus, ddraus@lowercolumbia.edu; Lower Columbia College
Terri Skeie (LCC), Erin Schoenlein (Clark C)
Don't Recreate! Reform, Reduce, Realize: Preparing Students for College Math
Saturday, 10:30 AM; Gallery Room
There is no need to recreate the wheel. You can REFORM your pre-college math curriculum and REDUCE the path to college level math when you REALIZE students don't all need algorithms, but do need to think critically. Learn how Lower Columbia College's alternative math pathway and Clark College's ABE program are finding success by utilizing an open-source, activity-based, contextualized curriculum. These low-floor, high-ceiling, group-worthy tasks emphasize understanding of mathematical process over rote memorization of algorithms. Faculty and students love it and we bet you will too!

Kendra Feinstein, kfeinstein@tacomacc.edu; Tacoma CC
Statway: A Pathway to Completion
Saturday, 10:30 AM; Lincoln
Statway is a highly successful, non-STEM pathway to math completion. The Statway pathway allows students to accelerate their progress through the developmental mathematics sequence and complete their college level mathematics requirement in less than a year. The philosophy behind the pathway's success will be discussed, and the Statway curriculum will be introduced with a short lesson demonstration.

Eric Fleming, ericryanfleming@gmail.com; Oregon State University & Linn-Benton CC
College Instructor Preparation: Enough to Feel Comfortable?
Friday, 2:45 PM; Long House A
Over several decades, much attention has been paid to the preparation of K-12 teachers. More recently, the body of literature on graduate teaching assistants' preparation for teaching has begun to increase. Since many graduate teaching assistants are hired as community college and university instructors, it is important to understand how they are prepared for teaching. The purpose of this thesis is to understand what newly hired instructors found helpful, and not helpful, about their education. A series of three interviews was conducted with four instructors over the course of one academic year. I share my findings from my investigation of the instructors' experiences during their first years on the job: What courses they draw on while teaching, what courses have influenced their teaching, and what courses they are unable to draw on while teaching. Lastly, I offer recommendations for what types of courses might be helpful in supplementing a prospective instructors' education based on the participants' experiences.

Tiernan Fogarty, tiernan.fogarty@oit.edu; Oregon Institute of Technology
Undergraduate Numerical Solution Techniques
Friday, 2:45 PM; Lincoln
Undergraduate math students will most likely take a course in partial differential equations. While exact solutions exist under various conditions, interesting applications often require numerical solution techniques. In this talk we give a brief reminder of a derivation of the wave equation. Finite volume and finite difference methods for numerical solutions are introduced and compared via a set of example.

Doug Gardner, dgardner@roguecc.edu; Rogue CC
What Calculus Has to Say about Why Shaq was a Terrible Free Throw Shooter?
Friday, 9 AM; Council House C
Come see how integral and differential calculus can be harnessed to improve your basketball game…or more likely someone else's.

Jessica Giglio, jgiglio@cocc.edu; Central Oregon CC
Kathy Smith (COCC)
College Math Courses in Our High Schools: A Discussion
Saturday, 9 AM; Long House B
For this discussion, we want to bring together people that have experience with and/or opinions on high school dual enrollment programs. The presenters have worked with the established College Now program as well as a new grant-funded alternative through COCC called Cascades Commitment (inspired by EOU's Eastern Promise). They will share their experiences with these programs and invite attendees to do the same. Time permitting, we'll discuss more general areas of concern regarding dual enrollment programs, such as appropriate teacher qualifications.

Yvette Hassakoursian, **yvetteh@glendale.edu; Glendale CC**
Next-Gen Technology in MindTap Changes the Game for Student Success in Developmental Math
Commercial Presentation
Friday, 9 AM; Council House A
Today's developmental math students are different. Their needs and realities are not the same as in the past. So, why continue using digital solutions from the past expecting improved results?

Mary Ann Kelso, mkelso@olympic.edu; Olympic College
Deidre Lam (Ryerson University)
Computational Education – The End of Expensive College Textbooks
Commercial Presentation
Saturday, 9 AM; Lincoln
Interactive presentation that demonstrates to math instructors delivery of class content on mobile devices eradicating the need for text books. All content is in one place with class quizzes, practice modules, homework and tests linked. Quizzes, tests, and homework are auto graded and integrated in the Learning Management System.

Murali Krishna, mkrishna@clark.edu; Clark College
Assorted Fun Problems
Friday, 11:00 AM; Long House C (15-Minute Session)
I will present three problems from different branches (Geometry, Calculus, and Number Theory) of mathematics along with their solutions. The problems require high school math for the most part and a lot of creativity.

Carrie Kyser, carriek@clackamas.edu; Clackamas CC
Kelly Mercer (CCC)
Pathway to College Math OER
Friday, 9 AM; Long House A
The presenters have been awarded a grant through OER Oregon to support the creation and dissemination of open (free) teaching and learning materials for Math 098. In this sharing session, you'll learn about the purpose and scope of the project. Participants will be invited to discuss the needs of Math 098 students at their institution; the presenters hope to craft materials that have the greatest potential for wide implementation. There is additional funding available to support a team of editors from around the state to further contribute to the project through a peer-review process. If you are interested in an Oregon-specific alternative to commercially-published textbooks for your Math 098 course, please join us and learn how you can contribute to, and perhaps benefit from, this project.

Rajesh Lal, rlal@pierce.ctc.edu; Pierce College
Sharon Camner (PC), Chad Bemis (PC)
Transformative and Sustainable Change in Pre-College Math Leading to College Success
Saturday, 9 AM; Council House B
At Pierce College, multiple math initiatives were put in place to improve students' success in their math pathway so that overall student retention and completion would improve. Our initiatives are transformative because of: The redesign of the pre-college math sequence (STEM and Non-STEM paths); pedagogical innovations and engaging math content; scaling up to three campuses; the use of low-cost open resources; and continuing faculty collaboration. Data analysis reveals a significant positive impact on underserved student populations as well as all students. Hear about our successes and challenges two years into the new program.

Kristin Lassonde, kcc.lassonde@gmail.com; Klamath CC
Empowering Students with Website Building Tools in the Community College Math Classroom
Saturday, 10:30 AM; Council House B
All are welcome but this hands-on session strongly recommends that you Bring Your Own Device (BYOD), preferably a laptop or tablet computer, and be ready to try out new technologies. In Empowering Students with Website Building Tools in the Community College Math Classroom, we explore website building tools, including Weebly, and integration with MathJax for beautiful math displays; we also discuss how to use these and other tools in the community college math classroom for student creation of digital projects.

Christopher Lee, leec@up.edu; University of Portland
Recurrence Matrices: An Example of How Teaching Leads to Problems
WAMATYC-Sponsored Speaker
Friday, 1:15 PM; Lincoln
Opportunities for new explorations and collaborations in mathematics can present themselves in surprising places. For example, one does not usually expect to stumble upon new mathematics while grading exams, but in this talk I will tell the story of how a fruitful collaboration arose in exactly that way. Ultimately, this curiosity from my classroom led me, together with a colleague and a student, to an investigation of matrices whose entries come from recurrence relations.

Frank Lee, frank.lee@bellevuecollege.edu; Bellevue College
Using Reflection Activities in Education
Friday, 2:45 PM; Council House A
Explore the use of reflection activities that engage students to think about their understanding of course content and to make plans for personal improvement. Reflection activities can build self-regulation skills; help one evaluate their reaction to an experience and uncover new insights on learning. The work in this presentation comes from the Bellevue College, Engineering Sciences Program's participation in a grant titled: Consortium to Promote Reflection in Engineering Education (CPREE).
Learn more at: http://www.bellevuecollege.edu/engineering/cpree/.

Jay Lehmann, mathnerdjay@aol.com; College of San Mateo
Teaching a Prestatistics Course: Propelling Non-STEM Students Forward
Saturday, 9 AM; Council House C
Many colleges are propelling non-STEM students through math programs by creating a path-to-stats course, which can be taken in place of elementary and intermediate algebra. Innovative use of density histograms, interpretation of statistical concepts, and compelling collaborative activities can greatly enhance students' understanding and eventual success in a statistics course.

David Lippman, dlippman@pierce.ctc.edu; Pierce College
Building an Online Math Literacy Course
Friday, 10:30 AM; Long House C (15-Minute Session)
Our department was directed to create an online version of our math literacy (non-STEM algebra) course. This talk will share the approaches we took to attempt to preserve the productive struggle and active-learning nature of the course within the realities of an asynchronous online course environment. The result is an engaging course using completely free resources.

David Lippman, dlippman@pierce.ctc.edu; Pierce College
Free and Open Online Homework for Free and Open Textbooks
Friday, 1:15 PM; Gallery Room
MyOpenMath (known as WAMAP in Washington) is a free, open source online homework system for math. The primary focus is supporting the use of open textbooks by sharing ready-to-use online materials. Faculty created content ranging from arithmetic through calculus is available for you to use and adapt. This session with introduce the homework platform and the content available.

Ben Mayo, bmayo@yvcc.edu; Yakima Valley CC
Matt Lewis (YVCC)
Using Technology, New Ideas, and Traditional Teaching Methods to Encourage Acceleration through Developmental Math
Friday, 1:15 PM; Long House B
Over the past few years, the Math Department at Yakima Valley Community College has focused much of its effort on helping students move more quickly through the developmental math curriculum. One approach has been to use traditional teaching methods in high credit-load classes, where students complete two developmental classes in a single quarter. Another method has been to implement an Emporium Model that utilizes WAMAP and instructor-produced videos. Motivated students in these Emporium Model courses are able to complete multiple courses in a single quarter while only paying for one of them. The successes, lessons learned, and future ideas for these approaches will be discussed. Course materials, including the text books and the aforementioned resources developed for these courses, will also be presented. These resources can be used in conjunction with, or independent of, the texts used in these courses. At the conclusion of the talk, interested instructors will be informed on how to access the WAMAP homework questions and the instructor-produced videos that are being made available free of charge.

Brian Mercer, bmercer@parkland.edu; Parkland College
Non-STEM Pathways – Lessons Learned from Four Years on the Road
Opening Speaker
Thursday, 7 PM; Long House ABC
All across the country, pressure and excitement are building to create alternate pathways in math for non-STEM students. The leading edge of that movement is Math Literacy, a new course that replaces beginning and intermediate algebra for those students. After pioneering a Math Lit course at Parkland College, I've spent the better part of the last four years helping to build successful implementations at other schools all around the country. I'll share much of what I've learned from the dedicated people I've met along the way.

Ed Miller, edmiller@lcsc.edu; Lewis-Clark State College
Soldiers Inc.: Math in an MMOSG
Saturday, 10:30 AM; Long House B
Soldiers Inc. is a real-time Multi-user online strategy game that uses a contract soldier motif. Participants can play cooperatively or as individuals, against other players or against the game. The presentation will explore mathematical analyses of game mechanics. Mathematical approaches include systems of linear equations, modelling and curve fitting, and statistical methods.

John Mitchell, jmitchell@clark.edu; Clark College
Mindfulness: Attention Training for Mathematics
Friday, 10:30 AM; Long House A
Students often struggle with mathematics because of underlying focus and attention issues. This presentation will introduce the idea of "mindfulness" through short experiential exercises, and suggest simple ways mindfulness can help bring students' attention into the classroom during class, and in to their studies outside class. We will also discuss mindful use of technology: When it is helpful, and when it is a distraction. Attendees will be given guided handouts so that they can begin their own daily mindfulness practice, and apply it in their professional and personal lives.

Laura Moore-Mueller, lmooremueller@greenriver.edu; Green River College
When Will I Ever Use This?: A Research Project for Differential Equations
Friday, 9 AM; Council House B
The presentation will include details of a group research project for a first course in differential equations. Students are asked to find an application in their chosen field of study that includes a differential equation. Examples of student papers and presentations will be shown.

Keith Nabb, nabb@morainevalley.edu; Moraine Valley CC
Cocktail Party Calculus: Collaborative Writing in Mathematics
Saturday, 10:30 AM; Council House C
This session describes a project in which students wrote about a topic from calculus. A major goal was to provide students the experience of writing about mathematical concepts as a supplement to the standard mathematical experience. The project produced a "calculus manual" now being offered to incoming calculus students.

Yves Nievergelt, ynievergelt@ewu.edu; Eastern Washington University
The Probability that Two Samples Fall on Opposite Sides of a Fence
Friday, 9:00 AM; Lincoln
In fields as diverse as chemistry or literature, two supposedly identical parallel studies may yield two samples separated from each other. The talk will derive exact probabilities for such events, with real applications.

Jennifer O'Brien, jobrien@hawkeslearning.com; Hawkes Learning
Hawkes Learning: Revolutionizing Math Courseware
Commercial Presentation
Friday, 2:45 PM; Pine
Hawkes Learning has enhanced its courseware, building new functionality for customization with the feedback of instructors from across the country! Exciting innovations are now available with our tablet-friendly learning platform. Check out the new customization tools to individualize your curriculum and tailor the student experience in the learning path, including single sign-on from Blackboard, Canvas, and D2L. Join us to learn more about these exciting developments, including several brand-new courses available for review, and enter to win a $25 Amazon gift card!

Debbie Olson, debra.olson@sfcc.spokane.edu; Spokane Falls CC
Jessica Hoppe (SFCC)
The MEC MSP Statewide Teacher Leadership Developmental Model: Higher Education Implications and Potential
Saturday, 9 AM; Council House A
The recently completed 2½ year-long MEC MSP project prepared a cadre of grade 4-14 mathematics teacher leaders to provide CCSS-focused content workshops to teachers throughout Washington State. Classroom practice and student achievement of participating teachers were significantly impacted. Key features of the project will be shared, as well as classroom practice and student achievement results. Session participants will experience mathematical tasks from the professional development component of the project. Presenters will share their experiences as project participants and implications to higher education will be discussed.

Gary Parker, gary.parker@bluecc.edu; Blue Mountain CC
Stan Beach (BMCC)
Cool Open Source Math Stuff
Saturday, 10:30 AM; Long House A
Blue Mountain Community College has been researching open math resources for the last few years. We will present some of what we have adopted such as MyOpenMath.com and OpenStax.com, among others. Please bring a computer and be prepared to play and share.

Julian Parris, julian.parris@jmp.com; JMP Global Academic Programs @ SAS/UCSD
Visualizing Introductory Statistics: Using JMP to Enhance Statistical Learning
Friday, 1:15 PM; Long House C
JMP statistical software isn't just a tool to help students analyze data, but through interactive graphics and rich statistical visualization JMP is a tool to help students learn and engage with core concepts in introductory statistics. In this session we will see how JMP can be used in a first or second statistics course for analysis and graphing of data as well as using JMP for statistical simulations to demonstrate foundational topics such as the sampling distribution of the mean.

Randall Paul, randall.paul@oit.edu; Oregon Institute of Technology
Magic Squares as a Freshman Introduction to Mathematics
Saturday, 10:30 AM; Long House C
One of the oldest and most accessible mathematical puzzles is the construction of a magic square. As such it is a wonderful introduction to mathematics as a subject using inquiry and experiment, rather than simply drill. We'll discuss Latin squares and how they can be combined to produce magic squares.

Becky Plassmann, rplassmann@cocc.edu; Central Oregon CC
Sean Rule (COCC)
Oregon Community College Faculty Salaries – Comparison and Discussion
Friday, 1:15 PM; Sitka
Members of the COCC collective bargaining teams have spent the last several years gathering and verifying faculty salary schedules from all 17 Oregon community colleges. We would like to share and discuss this information, especially for the benefit of other faculty bargaining teams. It would be very helpful if each school sent at least one representative to this session, along with a copy of your current salary schedule.

Christopher Quarles, cquarles@everettcc.edu; Everett CC
Conceptual Understanding in a Complex World
Friday, 10:30 AM; Council House C
The world is becoming more complicated every day, and our daily lives are far more complex than they were 50 years ago. In this session, we'll examine the relationship between complex systems, the changing face of the American workforce, and a historical dichotomy in mathematics education. We'll examine research on how to teach for conceptual understanding. And we'll tie this directly to the classroom with some activities you can try with your students.

Ahmad Rajabzadeh, rajabzadeha@lanecc.edu; Lane CC
Mathematics, the Language of Universe (Mathematics Invented or Discovered?)or the Universal Language of Creation
Saturday, 10:30 AM; Council House A
Is mathematics a language developed by mankind to understand the universe, or is it the intrinsic language of Nature which we are only discovering and uncovering? Is the existence of mathematics contingent on the existence of humankind? Would aliens visiting us be able to communicate with us at least through mathematical language? Maxwell used mathematics to calculate what the speed of light must be, Einstein to calculate the existence of gravity waves, and Higgs to calculate the existence of the Higgs boson particle. I will talk about how derivatives, integrals, and many other mathematical relations can easily be observed around us, and how all the phenomena observed in classical electricity and magnetism can be explained by means of just four mathematical equations. I will also address questions such as "why does our universe seem so mathematical, and what does this mean?" and "Is mathematics invented or discovered?" I will try to bring you an enlightened approach to these old-age questions.

Melonie Rasmussen, mrasmussen@pierce.ctc.edu; Pierce College
Addressing Poverty & Inequity in the Classroom; a Materials, Program, and Policy Review
Friday, 2:45 PM; Gallery Room
A discussion on how poverty and inequity impacts the math classroom and student success. An overview of programs, policies, attitudes that can help students be successful, along with ideas to help students save money, by using open/free or inexpensive resources and technology.

Sonya Redmond, sonya.redmond@pcc.edu; Portland CC
Austina Fong (PCC), Emily Nelson (PCC)
Getting Started: Creating Simple and Effective Video Lessons
Friday, 1:15 PM; Cedar Tree
Have you created instructional videos for your students? Have you wanted to, but weren't sure where to start? In this roundtable discussion, presenters and attendees will share their experiences using various hardware and software – and a little MacGyvering – to create video lessons for online, flipped, and face-to-face instruction.

Joseph Reid, joseph.reid@oit.edu; Oregon Institute of Technology
Experiences with the New ASA Guidelines in Introductory Statistics
Friday, 2:45 PM; Long House C
A look into the results of teaching intro stats courses by following the recommendations of the GAISE College Report from the American Statistical Association. This includes the collection of data from labs within class, implementing software, and injecting scientific writing and posters as part of the curriculum. A consideration of the datasets generated and special properties will also be considered.

Pam Reising, preising@greenriver.edu; Green River College
Laura Moore-Mueller (GRC)
A Roundtable Discussion about Math Placement
Friday, 1:15 PM; Council House B
Initial placement into a math level at the community college does not only involve a placement test, it also entails a process. With COMPASS discontinuing its placement test service many institutions are reevaluating what measures they should/can use for placement and how these should be implemented. I would love to facilitate a roundtable discussion of what options are being considered and how they may be implemented and by whom.

Allan Rossman, arossman@calpoly.edu; Cal Poly – San Luis Obispo
Using Simulation to Introduce Concepts of Statistical Inference
Friday, 10:30 AM; Council House A
I present activities for introducing students to concepts of statistical inference using simulation-based methods. The focus will be on statistical significance and *p*-values, in settings involving a single proportion, comparing two proportions and comparing two means, and correlation. The activities involve real data from genuine studies and make use of freely available applets.

Lee Singleton, lsingleton@whatcom.ctc.edu; Whatcom CC
Mind into Matter – Possibilities in 3D Printing
Friday, 2:45 PM; Council House B
3D printing has gained in popularity in recent years, mostly due to decreasing prices and increasing options for desktop printers. But what is really possible with a 3D printer? This talk aims to introduce you to the world of 3D printing and help walk you through considerations you will need before printing an object or designing a lesson with 3D objects. This talk will include a brief introduction to different types of 3D printers and software, personal experiences with 3D printing over the last year and a half, and samples of several objects that have been used in various ways. Come find out more about the journey involved to convert ideas from mind into matter, allowing students to actually grasp the math.

Dev Sinha, dps@uoregon.edu; University of Oregon
The Oregon Math Network and 9-14 Math Pathways
Friday, 2:45 PM; Cedar Tree
Saturday, 10:30 AM; Cedar Tree (repeated)
In the first part, we describe the Oregon Math Network, which brings together math teachers at all levels in Oregon to solve problems and share work. Then we discuss one important problem, namely envisioning and developing pathways to better serve all students in grades 9-14.

ORMATYC 2016

Allan Rossman

(Cal Poly - San Luis Obispo)

Presents

Concepts of Statistical Inference:

A Simulation-Based Approach

The workshop begins at 12:45 PM on Saturday, April 23rd in the Lincoln Room.

Abstract: This workshop will present hands-on activities for introducing introductory statistics to concepts of statistical inference through simulation-based methods. Topics covered include both significance testing and confidence intervals, in situations involving a single proportion, comparing two groups, and correlation/regression. The activities make use of freely available applets to explore concepts and analyze real data from genuine research studies. The presenter will also offer suggestions for implementing these activities and for assessing student learning.

Bio sketch: Allan Rossman is Professor and Chair of Statistics at Cal Poly - San Luis Obispo. He has served as Chief Reader for the Advanced Placement program in Statistics and as Program Chair for the U.S. Conference on Teaching Statistics. He is a Fellow of the American Statistical Association and a recipient of the Mathematical Association of America's Haimo Award for Distinguished Teaching.

***To register, please email: sfackert@wiley.com** (Lunch will be provided)

Dave Sobecki, davesobecki@gmail.com; Miami University – Hamilton
Keeping the Non-STEM Ball Rolling with Quantitative Reasoning
Friday, 1:15 PM; Council House C
Oregon and Washington have been at the forefront of the national movement toward adopting Math Literacy as the dev course of choice for non-STEM students. Where do those students go after math lit? Traditionally, the direction is intro to stats or liberal arts math. The new trend, however, is Quantitative Reasoning. So what exactly does that mean? How does it compare to liberal arts math? I've spent the last two years of my life learning everything I could about what QR means to pretty much anyone who would talk to me, and I think I've got a handle on how to modernize the non-STEM curriculum with Quantitative Reasoning. My goal is to share my thoughts with you, and learn what the great Northwest is looking for in a Quant Reasoning course.

Barbra Steinhurst, barbra.steinhurst@pcc.edu; Portland CC
Revealing Your Students' Metacognition
Saturday, 9 AM; Gallery Room
Ever wonder how your students think they're doing? Notice that they seem surprised by their exam results? Tired of begging for extra credit? This classroom activity sheds light on students' self-evaluation skills AND helps them build those skills. Put your students back in the driver's seat of their own performance.

Jane Tanner, tannerj@sunyocc.edu; Onondaga CC, AMATYC President
Math Madness
Keynote Speaker
Friday, 7 PM; Long House ABC
Come and hear what is happening in the world of mathematics and AMATYC.

Rosalie Tepper, rtepper@shoreline.edu; Shoreline CC
Sarah Adams (Big Bend CC)
Training Math Tutors: A Best Practices Collaboration
Friday, 9:00 AM; Long House C
Many of us involved in tutor training have developed methods for helping tutors go beyond the basics of good tutoring, including strategies for working with students who have math anxiety, beliefs about being "bad at math," stress, or test anxiety. Let's share some strategies to learn more from each other. If you have training materials, you'd be willing to share, please bring it along. We would like to share our approaches to the logistics of running a tutoring center all while providing consistent training to a group of tutors who are rarely all available at the same time and come and go on a rotating schedule that, many times, does not align with the quarterly schedule.

Jen Townsend, jen.townsend@bellevuecollege.edu; Bellevue College
The Mathematics of AI
WAMATYC-Sponsored Speaker
Friday, 10:30 AM; Gallery Room
Machine learning is used extensively: It is used to populate your Netflix recommendations and twitter feed – as well as to identify potential criminal and terrorist activity. Machine learning is incredibly powerful: Google's "AlphaGo" AI recently beat the world's top human Go player (a feat experts thought was still decades away). Artificial Intelligence sounds magical – but its principles are rooted in mathematics. In particular, machine learning is founded on methods of linear algebra, optimization, statistics, and probability. In this talk we'll explore some of the ways that undergraduate-level mathematics forms the foundation for some of the most powerful and controversial tools of the past decade.

Shannon Waits, swaits@highline.edu; Highline College
Helen Burn (HC)
Redesigning the Math Placement Process
Friday, 2:45 PM; Long House B
Ensuring that students are accurately placed into their initial mathematics course is a priority given that placement into developmental mathematics reduces a student's probability of completing a degree. Highline College has embarked on a 3-year College Spark grant to create a math placement process that is educational, participatory, and focuses on students' degree pathway, in order to achieve more accurate math placement. This presentation will describe the components of the research-based redesigned mathematics placement process and include lessons' learned throughout the first year of implementation. This will be an interactive presentation of information combined with participant activities and engagement. Participants of this session will learn about current research on institutional placement practices and challenges, and engage in an activity that will position their current college within the research findings. Participants will engage with one another in a discussion about current math placement practices and challenges or goals for the future. This discussion will lead into a presentation of the components of the math placement redesign effort undertaken at Highline College and provide concrete examples of ways to incorporate these components into the placement process at participants' colleges. Participants will see current data collected from students and staff via surveys and focus groups, and learn about the evaluation plan for the redesign. Participants will have ample time to ask questions and situate their learning into their own campus needs.

Aaron Warnock, awarnock@highline.edu; Highline College
Post Exam Student Reflection
Friday, 1:15 PM; Council House A
Tired of seeing your students make the same mistakes from exam to exam? Tired of seeing them nod approvingly at their below average test score and shove it into their bag never to be looked at again? Come hear how Partial Credit Requests encourage students to reflect on their exams and learn from their mistakes. This activity has been repeatedly tested in the classroom and refined with insight and support through Consortium to Promote Reflection in Engineering Education (CPREE) through the University of Washington.

Robert Weston, rweston@clark.edu; Clark College
Use Cases for Quizzes
Saturday, 9:30 AM; Long House C (15-Minute Session)
I will describe and discuss multiple use cases for short 5-minute quizzes. These will include: Assessment, pre-skill building, preparing for lecture, determining problem areas, building student relationships, and others.

Gary Whalen, gary.whalen@cengage.com; Cengage Learning
MindTap for Math: Students Have Their Say in Developing an Effective Online Digital Experience
Commercial Presentation
Friday, 1:15 PM; Pine
Key processes of Cengage's new online system MindTap for Math will be presented with a focus on students' input during development and the resulting changes made to the user's experience.

EXHIBITORS

{Terrace, Salal}

CASIO
Nathan Austin

CENGAGE LEARNING
Co-Sponsor
Thursday Evening Social
Eric Ziegler, Danielle Davis, Casey Coovert, Linda Babat, Cameron Barclift, Gary Whalen

COMPUTATIONAL CLASSNOTES
Dara Gholizadeh, Diedre Lam, Wayne Allen

HAWKES LEARNING
Sponsor
Saturday Morning Refreshment Break
Jennifer O'Brien, Kristin Marley

LUMEN LEARNING
Alyson Day, Alyson Indrunas

MCGRAW-HILL EDUCATION
Co-Sponsor
Friday Evening Social
Daniel Ly, Sara Swangard, Colleen Suljic, Danielle Meier, Sally Yagan

OPENTEXTBOOKSTORE.COM
David Lippman

PEARSON EDUCATION
Co-Sponsor
Thursday Evening Social
Jennifer Gutierrez, Stacey Sveum, Alysun Burns, Jennifer McGill, John Biernat, Bart Stewart, Michelle Cook

TEXAS INSTRUMENTS
Brian Dunnicliffe

W.H. FREEMAN / MACMILLAN LEARNING
Co-Sponsor
Friday Evening Social
Tom DeMarco, Ryan Comeau, Margaret Cook, Nathan Digweed

JOHN WILEY & SONS
Sponsor
Friday Morning Refreshment Break
Alicia Martinenko, Meg Maloney, Jacqueline Bjork, Sue Fackert

XYZ TEXTBOOKS (MATHTV.COM)
Rich Jones

Washington Conferences

The first Washington State Community Colleges Mathematics Conference and Retreat was held in 1969. The organizers were Phil Heft, Jim Relf, Larry Larson, and John Van Duff. We are told that the per-person cost at the time was $16.68 and that 33 people attended the conference. It was held at "The Lodge" at Ashford where accommodations required sleeping bags.

The menus for the first banquet as well as the name of the first guest speaker remain unsolved mysteries. Today's retreats, usually referred to as Spring Math Conferences, involve more than 200 mathematicians from both two- and four-year colleges. There are usually a few invited talks, but the bulk of the program is contributed by inspired volunteers.

Responsibility for conference planning is passed among the 34 Washington community colleges. There's no particular formula for who hosts when; and there is no set location where the meetings are held. As if by magic, volunteers appear (usually a few years in advance) and destination meeting sites are found in the Cascade Mountain corridor, on the Olympic Peninsula, or in the Columbia Gorge. There is a traveling fund, the Washington State Math Conference Foundation, that helps the host institution with start-up costs.

Year	Conference Hosts	Location
1969	Green River, Highline & Ft. Steilacoom	The Lodge
1970	Spokane Falls CC	The Lodge
1971	Everett CC	Snoqualmie Pass
1972	Everett CC	Snoqualmie Pass
1973	Seattle Central CC	Snoqualmie Pass
1974	Green River CC	Lake Wilderness
1975	Highline CC	Providence Heights
1976	Bellevue CC	Snoqualmie Pass
1977	Shoreline CC	Providence Heights
1978	Edmonds CC	Providence Heights
1979	Olympic College	Port Ludlow
1980	Spokane Falls CC	Sun Mountain
1981	Spokane Falls CC	Sun Mountain
1982	Highline CC	Lake Chelan
1983	Olympic College	Port Ludlow
1984	Green River CC	Alderbrook
1985	Shoreline CC	Sun Mountain
1986	North Seattle CC	Alderbrook
1987	Lower Columbia CC	Alderbrook
1988	Olympic College	Port Ludlow
1989	Bellevue CC	Lake Chelan
1990	Clark College	Alderbrook
1991	Pierce College & Tacoma CC	Lake Chelan
1992	Yakima CC	Yakima
1993	Highline CC	Wenatchee
1994	South Seattle CC	Silverdale
1995	Skagit Valley CC & Whatcom CC	Wenatchee
1996	Spokane Falls CC & ORMATYC	Skamania Lodge Stevenson, WA
1997	Green River CC	Lake Chelan
1998	Tacoma CC & Big Bend CC	Lake Chelan
1999	Edmonds CC	Ocean Shores
2000	Bellevue CC	Wenatchee
2001	Peninsula College & ORMATYC	Skamania Lodge Stevenson, WA
2002	Clark College	Yakima
2003	Spokane Falls CC & North Idaho CC	Wenatchee
2004	Pierce College	Yakima
2005	Highline CC	Ocean Shores
2006	Olympic College & ORMATYC	Skamania Lodge Stevenson, WA
2007	Wenatchee Valley CC	Wenatchee
2008	North Seattle CC	Lake Chelan
2009	Columbia Basin College	Pasco
2010	Yakima Valley CC	Yakima
2011	Green River CC & ORMATYC	Skamania Lodge Stevenson, WA
2012	Tacoma CC	Wenatchee
2013	Whatcom CC	Bellingham
2014	Everett CC & Shoreline CC	Wenatchee
2015	Bellevue CC	Lake Chelan
2016	Clark College & ORMATYC	Salishan Resort Gleneden Beach, OR
2017	Highline CC May 18-20	Great Wolf Lodge Grand Mounds
2018	Edmonds CC (50th Annual Conference)	

ORMATYC

ORMATYC is a non-profit educational association.

ORMATYC has several purposes.

- To encourage the development of effective mathematical programs.
- To afford a state forum for exchange of ideas.
- To further develop and improve the mathematics education and the mathematics-related experience of students in two-year colleges.
- To promote the professional welfare and development of its members.
- To afford a forum for input at the state level concerning mathematics education.

ORMATYC Executive Board

President	Stefan Baratto, Clackamas CC
Past President	Jerry Kissick, Portland CC
Secretary	Frank Goulard, Portland CC
Treasurer	Lisa Folberg, Portland CC
Technology	Bill Jennings, Klamath CC

Conference Committee & Organization

Registration	Lisa Folberg, Portland CC
Program	Chris Milner, Clark College
	Paul Casillas, Clark College
	Stefan Baratto, Clackamas CC
Technology	Bill Jennings, Klamath CC
Exhibitors Liaison	Frank Goulard, Portland CC

Historians

Liz Coleman, Central Oregon CC
Becky Plassmann, Central Oregon CC
Donna J. (Raymond) Casey, Central Oregon CC

CONFERENCES

Year(s)	Location
1987	Eugene
1988-1995	Newport
1996	Skamania Lodge; Stevenson, WA
1997	Salishan Lodge; Gleneden Beach
1998-2000	Inn at Spanish Head; Lincoln City
2001	Skamania Lodge; Stevenson, WA
2002-2005	Inn at Spanish Head; Lincoln City
2006	Skamania Lodge; Stevenson, WA
2007-2010	Inn at Spanish Head; Lincoln City
2011	Skamania Lodge; Stevenson, WA
2012-2015	Inn at Spanish Head; Lincoln City
2016	Salishan Spa & Golf Resort; Gleneden Beach
April 27-29, 2017	Inn at Spanish Head; Lincoln City

PRESIDENTS

Year	President
1987-1988	Jim Streeter
1988-1989	Roger Judd
1989-1990	Mary Ellen White
1990-1991	Dorothy Beaufait
1991-1992	Dick Clark
1992-1993	Dick Holliday
1993-1994	Gary Grimes
1994-1995	Wally Waldman
1995-1996	Tom Reimer
1996-1997	Don Hutchison
1997-1998	Frank Goulard
1998-1999	Lynn Trimpe
1999	Marvin McCready
1999-2001	Doug Nelson
2001-2002	Dennis Kimzey
2002-2003	Renae Weber
2003-2005	Kurt Lewandowski
2005-2007	Ronda Kingstad
2007-2009	Pat Rhodes
2009-2011	Jerry Kissick
2011-2013	Charlie Naffziger
2013-2015	Jerry Kissick
2015-Present	Stefan Baratto

WAMATYC

Washington State college mathematics faculty members are encouraged to be active in WAMATYC through membership, participating in the annual membership meeting at the spring Washington State CC Math Conference, and by serving on the WAMATYC Executive Board. Special thanks to our current officers, previous board members, particularly our Presidents, and the membership at large. WAMATYC makes important contributions to Washington State mathematics education.

Year	President	Institution
1986-1988	Barbara Poole	Yakima Valley CC
1988-1990	Charles “Chuck” Ainsley	Spokane Falls CC
1990-1992	Phil Heft	Green River CC
1992-1994	Mike Greenwood	Clark College
1994-1996	Paul Casillas	Clark College
1996-1998	Paul Casillas	Clark College
1998-2000	Dale Hoffman	Bellevue CC
2000-2002	Emily Woods	Peninsula College
200--2004	Doug Mooers	Whatcom CC
2004-2006	Mike Kenyon	Yakima Valley CC
2006-2008	Bev Parnell	Yakima Valley CC
2008-2010	David Nelson	Green River CC
2010-2012	Christopher Milner	Clark College
2012-2014	Salah Abed	Big Bend CC
2014-2016	Peter Wildman	Spokane Falls CC
2016-2018	Paul Casillas	Clark College

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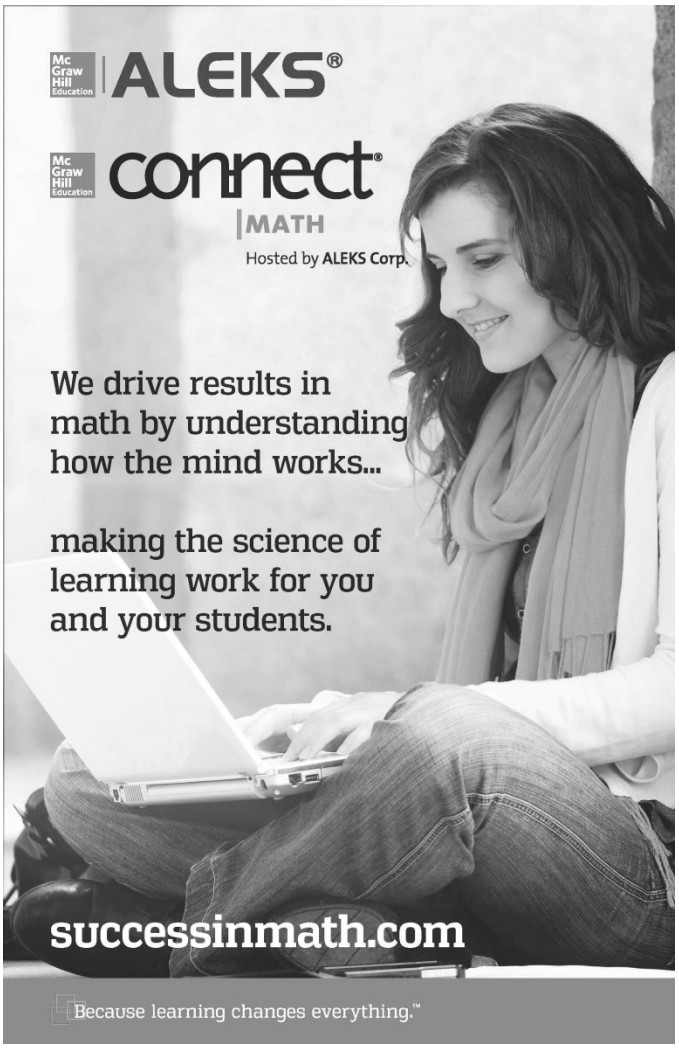

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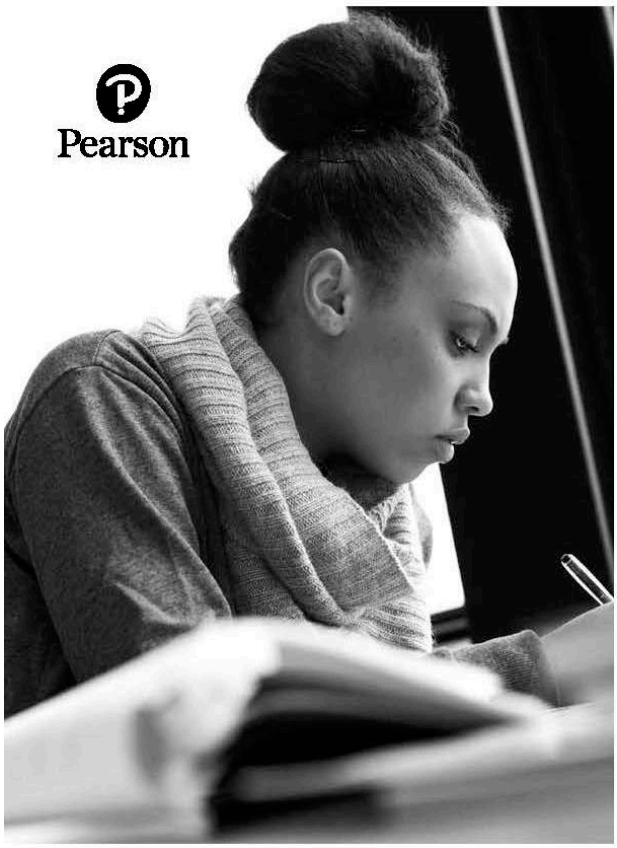
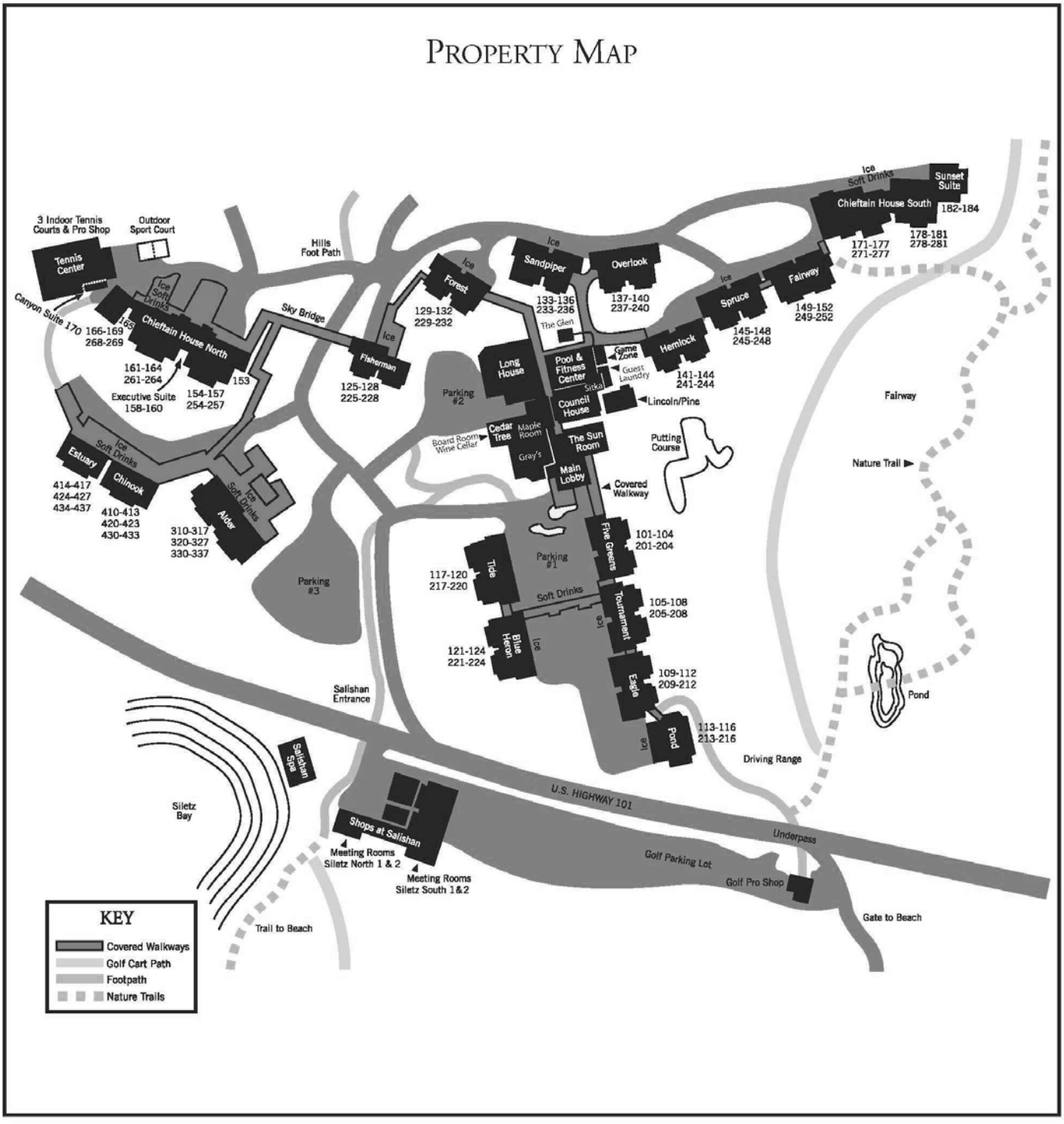
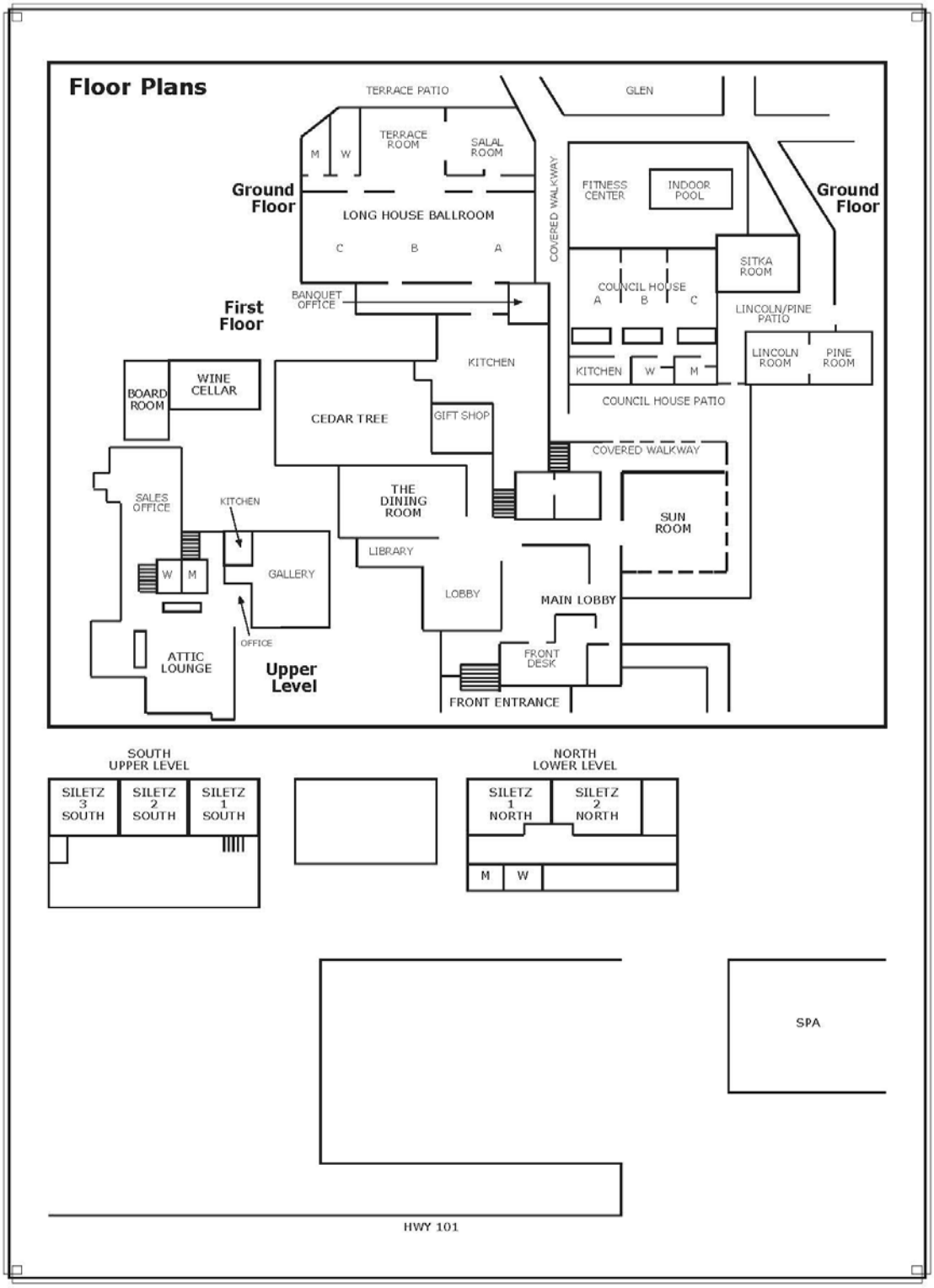


Property Map




Floor Plans
TERRACE PATIO
GLEN
TERRACE ROOM
SALAL ROOM
M
W
Ground Floor
LONG HOUSE BALLROOM
C
B
A
COVERED WALKWAY
FITNESS CENTER
INDOOR POOL
Ground Floor
SITKA ROOM
COUNCIL HOUSE
A
B
C
LINCOLN/PINE PATIO
BANQUET OFFICE
First Floor
KITCHEN
LINCOLN ROOM
PINE ROOM
KITCHEN
W
M
COUNCIL HOUSE PATIO
BOARD ROOM
WINE CELLAR
CEDAR TREE
GIFT SHOP
COVERED WALKWAY
SALES OFFICE
KITCHEN
THE DINING ROOM
SUN ROOM
LIBRARY
W
M
GALLERY
LOBBY
MAIN LOBBY
OFFICE
ATTIC LOUNGE
Upper Level
FRONT DESK
FRONT ENTRANCE
SOUTH
UPPER LEVEL
SILETZ 3 SOUTH
SILETZ 2 SOUTH
SILETZ 1 SOUTH
NORTH
LOWER LEVEL
SILETZ 1 NORTH
SILETZ 2 NORTH
M
W
SPA
HWY 101

Notes

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