

# *Southern Nevada Annual Mathematics Conference*

Rancho High School, January 20-21, 2017

presented by  
Southern Nevada Mathematics Council

## **Friday, January 20, 2017**

3:30 p.m. – 5:00 p.m.      Registration

5:00 p.m. – 6:20 p.m.

**Sessions**

6:30 p.m. – 8:30 p.m.

**Keynote Speaker** - Christie LaFleur

**Strand Span, a progression of standards from Crayons  
to College and Career Readiness**

Room 200 – Theater

## **Saturday, January 21, 2017**

7:30 a.m. – 11:00 a.m.      Registration Open

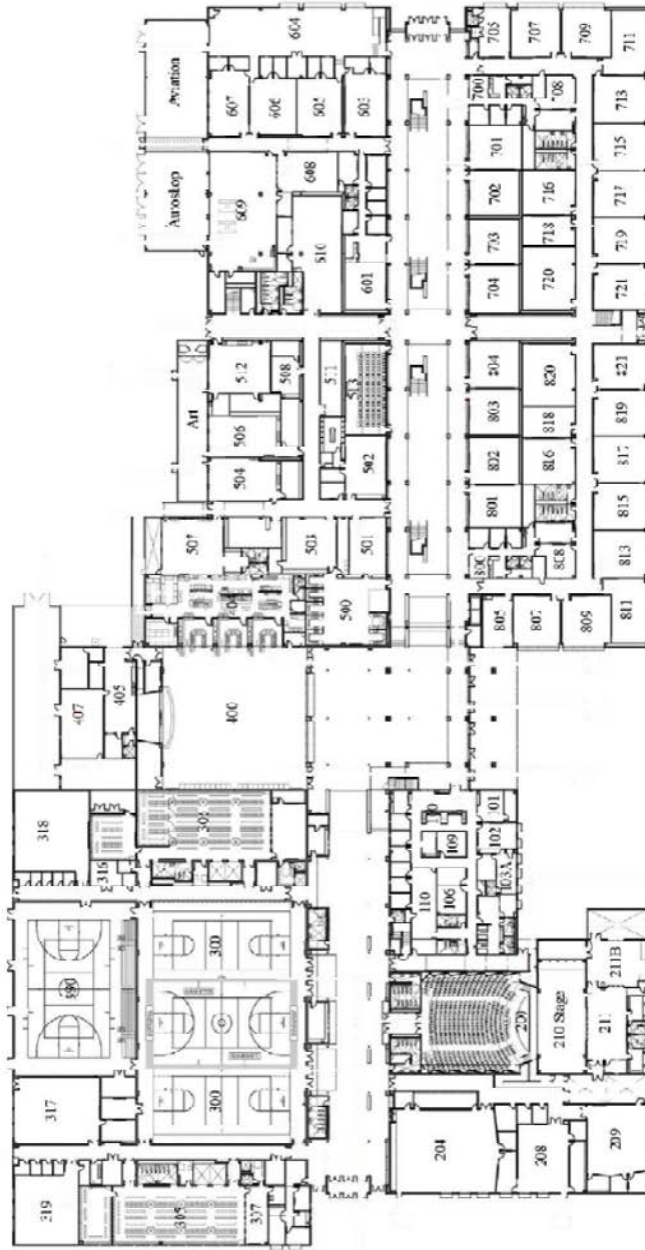
9:00 a.m. – 3:00 p.m.      **Sessions**

Lost and found, volunteer check-in, and conference questions:  
Go to the **information booth** in the **main foyer**.

Please see the Student Volunteers or Committee  
Members if you have additional questions.

# RANCHO HS MAP FIRST FLOOR

Rancho High School  
First Floor Map



# RANCHO HS MAP SECOND FLOOR

Rancho High School  
Second Floor Map



**Friday - 5:00 - 6:00**

Room: 1219

Richard Vineyard - Public Consulting Group

[rvineyard@pcgus.com](mailto:rvineyard@pcgus.com)

**Title: NGSS in support of language acquisition for all students**

Grade Band: 3 - 8

Description: This presentation makes the case that NGSS based science instruction will help all students, ELL and non-ELL learn, remember, and use language correctly in all their academic subjects. Language rich learning that takes advantage of science content and process skills to support learning across the curriculum.

**Friday - 5:00 - 6:00**

Room: 1319

Candice Meiries - SNRPDP

[meiriesc@rpd.net](mailto:meiriesc@rpd.net)

Carol Long

**Title: A New Approach to the Mathematical Practices**

Grade Band: K - 16

Description: Teachers will explore and investigate the 8 Mathematical Practices and use creative ideas for implementation.

**Friday - 5:00 - 6:30**

Room: 1315

Judy Kraus - Hyde Park MS/CCSD

[krausja@nv.ccsd.net](mailto:krausja@nv.ccsd.net)

**Title: What is double stuff about a double stuff cookie?**

Grade Band: 6 - 8

Description: Middle School teachers will investigate what is double about a double-stuffed cookie. This measurement and data collection activity provides an opportunity to collect authentic information - evidence to support a claim. It is based on an activity from NSTA's Science Scope, September 1, 2016.

**Friday - 5:00 - 6:00**

Room: 1221

Kristen Taylor - A-Tech/CCSD

[taylokl@nv.ccsd.net](mailto:taylokl@nv.ccsd.net)

Mike Patterson

**Title: Geometry App Slam**

Grade Band: 9 - 12

Description: In this presentation we will look at a variety of APPS suited for the Geometry Learning and Teaching. We will look at Socrative as a way to teacher with essential student formative data, Geometry Pad and Geometry: Construction Tutor to explore the geometric constructions, iCrosss to investigate the cross sections of a cube and then GeoGebra to explore all of the rest. BYOD (It would speed things up if you downloaded Socrative Student, Geometry Pad, Geometry: Constructions Tutor, iCrosss and GeoGebra)

**Friday - 5:00 - 6:30**

Room: 1313

David Young - Fayetteville Public Schools

[dayoung7@gmail.com](mailto:dayoung7@gmail.com)

**Title: The TI-Innovator and Coding - How STEM Can You Get!**

Grade Band: 6 - 12

Description: Come learn and explore the new STEM tool from TI. Make it go and discuss possibilities for using this engineering tool in your classes.

**Friday - 5:00 - 6:30**

Room: 1321

Kelly Ostrovsky - Tarkanian MS/CCSD

[kwilson1@interact.ccsd.net](mailto:kwilson1@interact.ccsd.net)

Eleanor Williams

**Title: Robinson Caruso and Beyond!**

Grade Band: 3 - 8

Description: Learn how to engage your students with STEM activities that meet both content and engineering strands of the NGSS.



**KEYNOTE SPEAKER:**

**Christie LaFleur**

**Friday, January 20, 2017**

**6:30 p.m. in the Theatre, Room 513**

**Strand Span, a progression of standards from Crayons to College and Career Readiness**

Christie LaFleur presents "Strand Span, a progression of standards from Crayons to College and Career Readiness" which targets all grade levels and is highly interactive incorporating Foldables, games and manipulatives. Explore how a strand beginning in kindergarten evolves throughout the grade levels. Expect to think, explore, play and most importantly DISCOVER!

Christie LaFleur is a National Mathematics Specialist. She holds a Masters of Education in Secondary Education from Lamar University and a Bachelor of Science for the University of Texas at Austin. Christie began her teaching career in Conroe, Texas and continued to teach middle and high school math in Texas for almost 20 years. She is also a professor at Lamar University teaching math/science methods for elementary teachers as well as a certified trainer of Dinah Zike Foldables.

Most recently Christie has been providing middle school mathematics implementation training for all teachers in both Southern and Northern Nevada providing support for both Glencoe Math and ALEKS, an innovative, personalized solution to learning math for grades 3-12.

Sponsored by McGraw-Hill Education Group.



**Saturday - 8:00 - 11:00**

Room: 1301

Cassandra Arquette - Clark HS/CCSD

[carquette@interact.ccsd.net](mailto:carquette@interact.ccsd.net)

**Title: Advanced Placement Review Strategies - Calculus AB**

Grade Band: 9 - 12

Description: This workshop will help teachers design a plan for effective review of AP Calculus AB. Teachers will learn how to pace the review to cover all content prior to the testing date. Resources for immediate use for each subject area will be given to attending participants.

**Saturday - 9:00 - 9:30**

Room: 1319

Tracy Gruber - Nevada Department of Education

[tgruber@doe.nv.gov](mailto:tgruber@doe.nv.gov)

**Title: Aligning Instruction with Classroom Assessment**

Grade Band: 3 - 5

Description: Have you ever wondered if your classroom assessments parallel the depth and breadth of the state level assessments? With the next generation of assessments, are your classroom formative assessments measuring up to the rigor of the state assessments. This session will focus on rigor and item types used on the state assessments and how they can be embedded into classrooms on a daily basis.

**Saturday - 9:00 - 10:30**

Room: 1309

Steve Isaak - Coronado HS/CCSD

[isaaksp@nv.ccsd.net](mailto:isaaksp@nv.ccsd.net)

**Title: Getting Started with Geometer's Sketchpad**

Grade Band: 9 - 12

Description: Participants will be introduced to using Geometer's Sketchpad to create geometric constructions and given time investigate geometric theorems

**Saturday - 8:00 - 11:00**

Room: 1303

Rachael Jones - Rancho HS/CCSD

[rmjones1@interact.ccsd.net](mailto:rmjones1@interact.ccsd.net)

**Title: Advanced Placement Review Strategies - Statistics**

Grade Band: 9 - 12

Description: This workshop will help teachers design a plan for effective review of AP Statistics. Teachers will learn how to pace the review to cover all content prior to the testing date. Resources for immediate use for each subject area will be given to attending participants.

**Saturday - 9:00 - 10:00**

Room: 1307

Karen Staffen - Hugh Gallagher Elementary School

[kstaffen@storey.k12.nv.us](mailto:kstaffen@storey.k12.nv.us)

Sonja Hicks

**Title: They Love Games? Then Give 'Em Games**

Grade Band: 3 - 5

Description: Looking for ways to reinforce math skills? Get students up and moving around? Kids love games! This hands-on demonstration will show you physical, dice, and board games that your students will love to play again and again. Participants will take away ideas and materials ready to go for Monday morning.

**Saturday - 9:00 - 10:30**

Room: 1311

Cynthia Raff - Center for Mathematics and Teaching

[cynthia@mathandteaching.org](mailto:cynthia@mathandteaching.org)

**Title: Expressions and Equations: 3 Strategies to Spark Engagement**

Grade Band: 6 - 8

Description: Come experience three activities that engage students in concept development and practice around expressions and equations: Poster Problems, a Blank Paper Lesson, and a Big Square Puzzle. Take-away lessons included.

**Saturday - 9:00 - 10:30**

Room: 1315

Tia Price - SNRPDP

[tmprice@interact.ccsd.net](mailto:tmprice@interact.ccsd.net)

**Title: My Favorite New Technology Resource - Investigating Desmos**

Grade Band: 6 - 12

Description: Desmos is a fantastic, engaging, student-centered resource that helps students investigate mathematics in multiple formats. We will explore the online graphing calculator features as well as the activity builder which allows math teachers to meet goals of incorporating engaging, collaborative, investigative technology experiences in the math classroom.

**Saturday - 9:30 - 10:30**

Room: 1219

Richard Vineyard - Public Consulting Group

[rvineyard@pcgus.com](mailto:rvineyard@pcgus.com)

**Title: NGSS in support of language acquisition for all students**

Grade Band: 3 - 8

Description: This presentation makes the case that NGSS based science instruction will help all students, ELL and non-ELL learn, remember, and use language correctly in all their academic subjects. Language rich learning that takes advantage of science content and process skills to support learning across the curriculum.

**Saturday - 10:00 - 11:00**

Room: 1215

Monika Neda - University of Nevada Las Vegas - UNLV

[monika.neda@unlv.edu](mailto:monika.neda@unlv.edu)

**Title: Applications of Computational Mathematics**

Grade Band: 9 - 16

Description: Fluid flow problems occur in countless applications spanning a wide spectrum in science and engineering. These problems are modeled by mathematical systems of partial differential equations. The fundamental equations of fluid flow, the Navier-Stokes equations, will be introduced and their mathematical studies will be presented. Numerical simulations of some benchmark problems will be presented as well.

**Saturday - 9:30 - 10:00**

Room: 1221

Carryn Warren - UNLV

[carryn.bellomo@unlv.edu](mailto:carryn.bellomo@unlv.edu)

**Title: Open Forum: What Does a Liberal Arts College Math Class Look Like?**

Grade Band: K - 16

Description: What should a mathematics requirement offer to college students not in Science, Technology, Engineering and Mathematics fields? Help me redevelop UNLV's current General Education Mathematics Course with an open discussion of what, as educators, we feel are necessary mathematics skills these students should have. Topics in the current course will be presented, along with new ideas, and a discussion of possible topics.

**Saturday - 10:00 - 10:30**

Room: 1217

Jennifer Loranger - William Wright ES/CCSD

[Jaloranger@interact.ccsd.net](mailto:Jaloranger@interact.ccsd.net)

**Title: Krypto**

Grade Band: 3 - 8

Description: Krypto is a card game game that can be used to reinforce mental math skills using all 4 operations. Many variations of the game can be used with whole and small group math instruction.

**Saturday - 10:00 - 11:30**

Room: 1318

Anna Reynolds - CCSD - K-12 Online and Blended

Learning Department

[reynoal@nv.ccsd.net](mailto:reynoal@nv.ccsd.net)

Beverly Little

**Title: Blend Your Classroom with CCSD-developed Digital Math Content**

Grade Band: 6 - 12

Description: Looking for high quality digital math content to blend learning in your classroom? CCSD has created digital math content aligned to standards and benchmarks that is freely available to CCSD teachers. Come see how to utilize the CCSD digital content, complete with lesson plans, within your classroom using Google Classroom or Canvas learning management system. CCSD content can be easily accessed through

**Saturday - 10:00 - 11:30**

Room: 1319

Cody Moore - McGraw-Hill

[cody7brandon@gmail.com](mailto:cody7brandon@gmail.com)

Title: **Mathematics Digital Hands-On Training**

Grade Band: K - 16

Description: Learn how to use your current digital resources such as ConnectED and ALEKS to meet the needs of all students.

**Saturday - 10:30 - 12:00**

Room: 1221

Mike Patterson - A-Tech/CCSD

[mpatt@nv.ccsd.net](mailto:mpatt@nv.ccsd.net)

Kristen Taylor

Title: **The New Geometer's Sketchpad - GeoGebra**

Grade Band: 9 - 12

Description: Coming play with GeoGebra. We will start at the basics and build up our experience with this amazing FREE program. Its Web and APP interfaces give it great flexibility for the classroom. We will explore its menus while looking at specific activities to help students understand the EOC objectives in Geometry. Come have some fun with us. BYOD (Laptop/Tablet preferred) No download required.

**Saturday - 10:30 - 12:00**

Room: 1321

Tina Westwood - NNRPPD

[tinabaer68@gmail.com](mailto:tinabaer68@gmail.com)

Title: **Growth Mindset Interventions Pay Big Dividends**

Grade Band: 6 - 12

Description: Mindset makes a big difference in students' belief that they can and need to learn mathematics. If you are wondering how you and your students can shift from fixed to growth mindset this session is for you! See what happened in a Nevada high school classroom where mindset interventions paid big dividends for the students and teacher.

**Saturday - 10:30 - 11:00**

Room: 1217

Lindsey Pratus - Derfelt ES/CCSD

[Lhbrown@interact.ccsd.net](mailto:Lhbrown@interact.ccsd.net)

Title: **Number talks**

Grade Band: 3 - 8

Description: During Number talks students use mental math strategies to solve problems of various styles. Ten frames, hundreds charts, dots cards, and numerical equations can all be used. Students mentally solve problems and then explain the strategies they used.

**Saturday - 10:30 - 12:00**

Room: 1313

David Young - Fayetteville Public Schools

[dayoung7@gmail.com](mailto:dayoung7@gmail.com)

Title: **The TI-Innovator and Coding - How STEM Can You Get!**

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Description: Come learn and explore the new STEM tool from TI. Make it go and discuss possibilities for using this engineering tool in your classes.

**Saturday - 11:00 - 11:30**

Room: 1217

Jill Rozmus - Sister Joseph Bailey ES/CCSD

[Jarozmus@interact.ccsd.net](mailto:Jarozmus@interact.ccsd.net)

Title: **Front row math**

Grade Band: 3 - 5

Description: Front row is a computer based program that can be used for grade level reinforcement or intervention. Teachers can set up classes and individualize instruction for each student based on grade level standards and student needs.



**Saturday - 11:00 - 12:00**

Room: 1219

Richard vineyard - Public Consulting Group

[rvineyard@pcgus.com](mailto:rvineyard@pcgus.com)

Title: **STEM starts with a Story**

Grade Band: 3 - 8

Description: Participants in this workshop will gain information and examples of how the use of stories can engage students in the content of math and science courses and help them learn both the content and the needed vocabulary. .

**Saturday - 12:00 - 1:00**

Room: 1217

Angel Muleshkov - University of Nevada, Las Vegas

[muleshko@unlv.nevada.edu](mailto:muleshko@unlv.nevada.edu)

Kurt Sweat

Title: **Strict Definition and Some Properties of Elementary Functions**

Grade Band: Higher Education

Description: In contemporary calculus books most of the problems involve elementary functions. However, to the best of our knowledge, books do not give a strict definition of elementary functions. In our talk, we give the definition and some properties of elementary functions which show the richness and usefulness of these functions.

**Saturday - 12:00 - 1:00**

Room: 1311

Susan Johnson - CCSD ELL Division

[sjohnson1@interact.ccsd.net](mailto:sjohnson1@interact.ccsd.net)

Erin Kipp

Donna Williams

Title: **The Language of Math (ELL Tips and Tricks)**

Grade Band: 3 - 8

Description: We've all heard math is another language, but how exactly do we teach language in our math classrooms? Understanding that all of our students are developing their academic language we will look at a variety of ways to engage ELL and all language learners by using discourse and academic vocabulary.

**Saturday - 11:00 - 12:00**

Room: 1315

Jane Owen - ExploreLearning

[jowen@explorellearning.com](mailto:jowen@explorellearning.com)

Title: **Naturally Inquiring Minds Find Success with Interactive Simulations**

Grade Band: 3 - 8

Description: Looking for a solution to assist students of all ability levels develop lasting math conceptual understanding? In classrooms that resemble mathematics laboratories, students manipulate key variables, generate and test hypothesis, and engage in extensive "what-if" experimentation. Experience how you can supplement and enhance instruction with powerful math simulations.

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**Saturday - 12:00 - 1:00**

Room: 1318

Joe Lawson - Cram MS/CCSD

[jlawson@interact.ccsd.net](mailto:jlawson@interact.ccsd.net)

Title: **ALEKS**

Grade Band: 6 - 12

Description: Learn how to get more out of ALEKS from RTI to Course Curriculum.

**Saturday - 12:00 - 1:00**

Room: 1319

Amy Nelson - West Career & Technical Academy

[anelson1@interact.ccsd.net](mailto:anelson1@interact.ccsd.net)

Sarada Toomey

Title: **Technology in the Classroom**

Grade Band: 6 - 12

Description: Come learn about Desmos and TI-Nspire calculators with easy and fun to use activities for the classroom.

**Saturday - 12:00 - 1:30**

Room: 1309

Steve Isaak - Coronado HS/CCSD

[isaaksp@nv.ccsd.net](mailto:isaaksp@nv.ccsd.net)

Title: **Transforming Rational/Trig functions**

Grade Band: 9 - 12

Description: Participants will investigate and explore the transformation of trig/rational functions by using a dynamic TI Nspire file and to create ordered pair mappings to easily create graphs of image functions. Time permitting gsp files will also be created for presentation

**Saturday - 1:00 - 1:30**

Room: 1313

Micah Stohlmann - UNLV

[micah.stohlmann@unlv.edu](mailto:micah.stohlmann@unlv.edu)

Title: **The Power of Formative Assessment**

Grade Band: 6 - 8

Description: Classrooms with a formative assessment focus lead to greater student understanding. Participants will learn about a variety of formative assessment techniques where teachers can use the student information they gather to inform their teaching.

**Saturday - 1:00 - 1:30**

Room: 1315

Derek Fialkiewicz - Cram MS/CCSD

[fialkde@nv.ccsd.net](mailto:fialkde@nv.ccsd.net)

Title: **Parent University**

Grade Band: K - 12

Description: How many times do you hear parents say, "I would love to help my child with math, but it doesn't look like how I learned it?" Parent University is a program of bi-weekly classes developed to teach parents the math concepts and strategies needed to help their children succeed. Parents learn upcoming content in their child's class from the teacher.

**Saturday - 1:00 - 2:00**

Room: 1215

Jeff Rispin - Cram MS/CCSD

[jrispin@interact.ccsd.net](mailto:jrispin@interact.ccsd.net)

Title: **Exploring the NEPF from both sides using The Unit Circle**

Grade Band: 6 - 12

Description: The Unit Circle will be utilized to demonstrate how teachers and administrators can see the NEPF teaching standards during a lesson. The presentation will shed light on how to address instructional standards from an administrator and teacher perspective. Working knowledge of the Unit Circle is not required to benefit from this presentation!

**Saturday - 1:00 - 2:00**

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Richard vineyard - Public Consulting Group

[rvineyard@pcgus.com](mailto:rvineyard@pcgus.com)

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**Saturday - 1:00 - 2:00**

Room: 1311

William Speer - University of Nevada Las Vegas

[william.speer@unlv.edu](mailto:william.speer@unlv.edu)

Title: **Productive Struggle is Good for ALL**

Grade Band: 6 - 12

Description: We can't help students become seekers if we aren't seekers ourselves. In this research-based, practice-oriented presentation we explore the benefits of creating productive struggle with desirable difficulties to help students shake up naïve or loose thinking and to construct "new" knowledge by encouraging transfer of related knowledge to new situations.

**Saturday - 1:30 - 2:30**

Room: 1318

Joe Lawson - Cram MS/CCSD

[jlawson@interact.ccsd.net](mailto:jlawson@interact.ccsd.net)

Title: **ALEKS**

Grade Band: 6 - 12

Description: Learn how to get more out of ALEKS from RTI to Course Curriculum.

**Saturday - 2:00 - 3:00**

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Susan Johnson - CCSD ELL Division

[sjohnson1@interact.ccsd.net](mailto:sjohnson1@interact.ccsd.net)

Erin Kipp

Donna Williams

Title: **The Language of Math (ELL Tips and Tricks)**

Grade Band: 3 - 8

Description: We've all heard math is another language, but how exactly do we teach language in our math classrooms? Understanding that all of our students are developing their academic language we will look at a variety of ways to engage ELL and all language learners by using discourse and academic vocabulary.

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Tracy Gruber - Nevada Department of Education

[tgruber@doe.nv.gov](mailto:tgruber@doe.nv.gov)

Title: **Aligning Instruction with Classroom Assessment**

Grade Band: 3 - 5

Description: Have you ever wondered if your classroom assessments parallel the depth and breadth of the state level assessments? With the next generation of assessments, are your classroom formative assessments measuring up to the rigor of the state assessments. This session will focus on rigor and item types used on the state assessments and how they can be embedded into classrooms on a daily basis.

**Saturday - 2:00 - 3:00**

Room: 1217

Heather Sander - Pearson

[heather.sander@pearson.com](mailto:heather.sander@pearson.com)

Title: **Mathematical Modeling in 3 Acts**

Grade Band: 6 - 12

Description: Do your students hate word problems? Do you often hear the question, "When am I ever going to use this?" Join us to discover a new way to engage and intrigue your middle or high school math students through reality-based problem solving. Mathematical Modeling in 3 Acts embodies the spirit of the Standards for Mathematical Practice as it sets up students for productive struggle that enables them to persevere with mathematics.

**Saturday - 2:00 - 3:00**

Room: 1313

Amy Nelson - West Career & Technical Academy

[anelson1@interact.ccsd.net](mailto:anelson1@interact.ccsd.net)

Title: **Fractals Oh My!**

Grade Band: 6 - 12

Description: See how fractals can enhance geometric sequences and build student interest.

**Saturday - 2:00 - 3:00**

Room: 1315

Angel Muleshkov - University of Nevada Las Vegas

[muleshko@unlv.nevada.edu](mailto:muleshko@unlv.nevada.edu)

Tan Nguyen

**Title: Explicit Algebraic Solving of Polynomial Equation;  
Cases of Biquadratic Equation**

Grade Band: 9 - 16

Description: The polynomial equations of power 4 or less are “algebraically solvable”, whatever it means. We will give the definitions/cases/formulas for explicit algebraic solving of polynomial equations of power 4 or less.

Special attention will be given to the biquadratic equation.

**Saturday - 2:00 - 3:00**

Room: 1321

Jane Owen - ExploreLearning

[jowen@explorellearning.com](mailto:jowen@explorellearning.com)

**Title: Math Fact Fluency, is it a Road Block for Your  
Students?**

Grade Band: 3 - 8

Description: Math Fact Fluency is essential for a student’s confidence and success in math. Students with automatic recall of basic math facts are more capable problem solvers, learn new math skills more quickly, and are more likely to succeed in math courses. Come experience how Reflex Math is changing classrooms.

The Southern Nevada Mathematics Council and the Southern Nevada Science Teachers Association would like to give many thanks to the following for their generous support.

***RANCHO HIGH SCHOOL***

Deb Reed, Cindy Jackson, Shelly Kinnunen, and the Entire Staff, Administration, and Student Volunteers

***KEYNOTE SPEAKER***

McGraw-Hill School Education Group

***PROGRAM PRINTING***

Cram Middle School

## Conference Committee

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