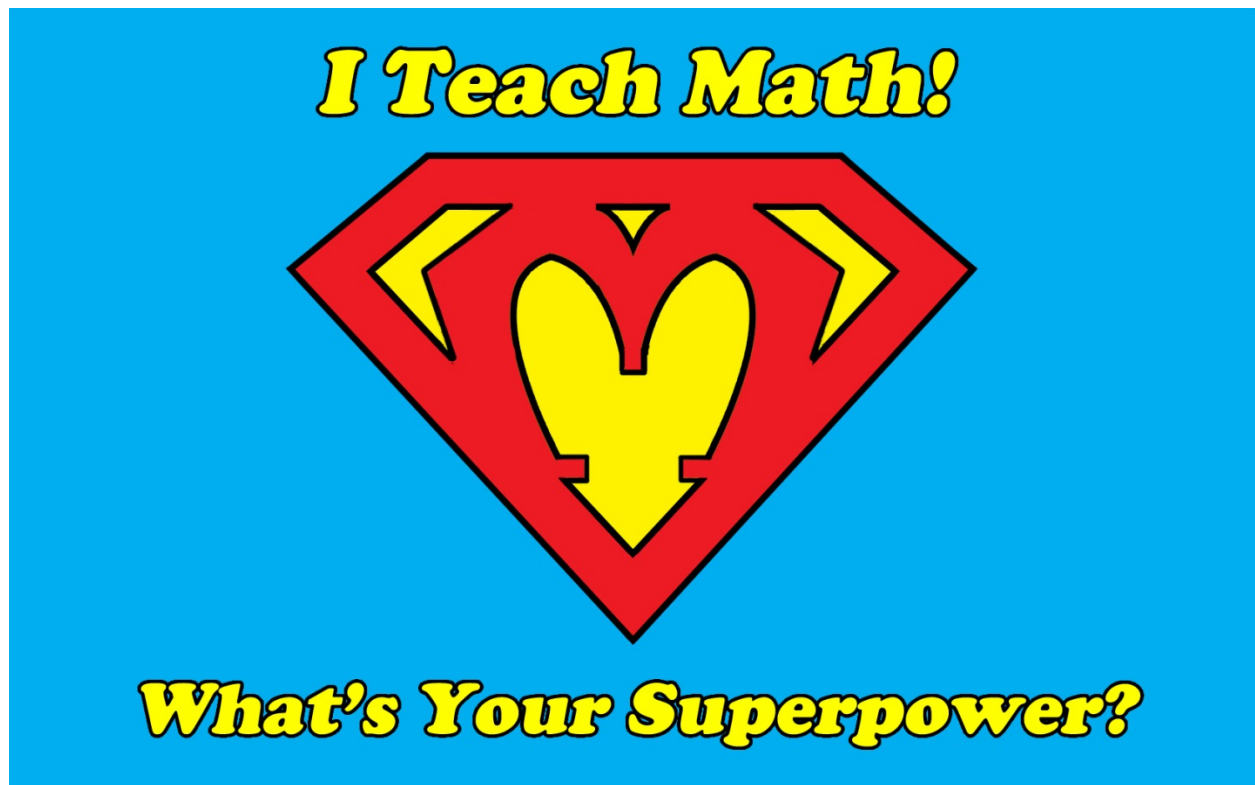
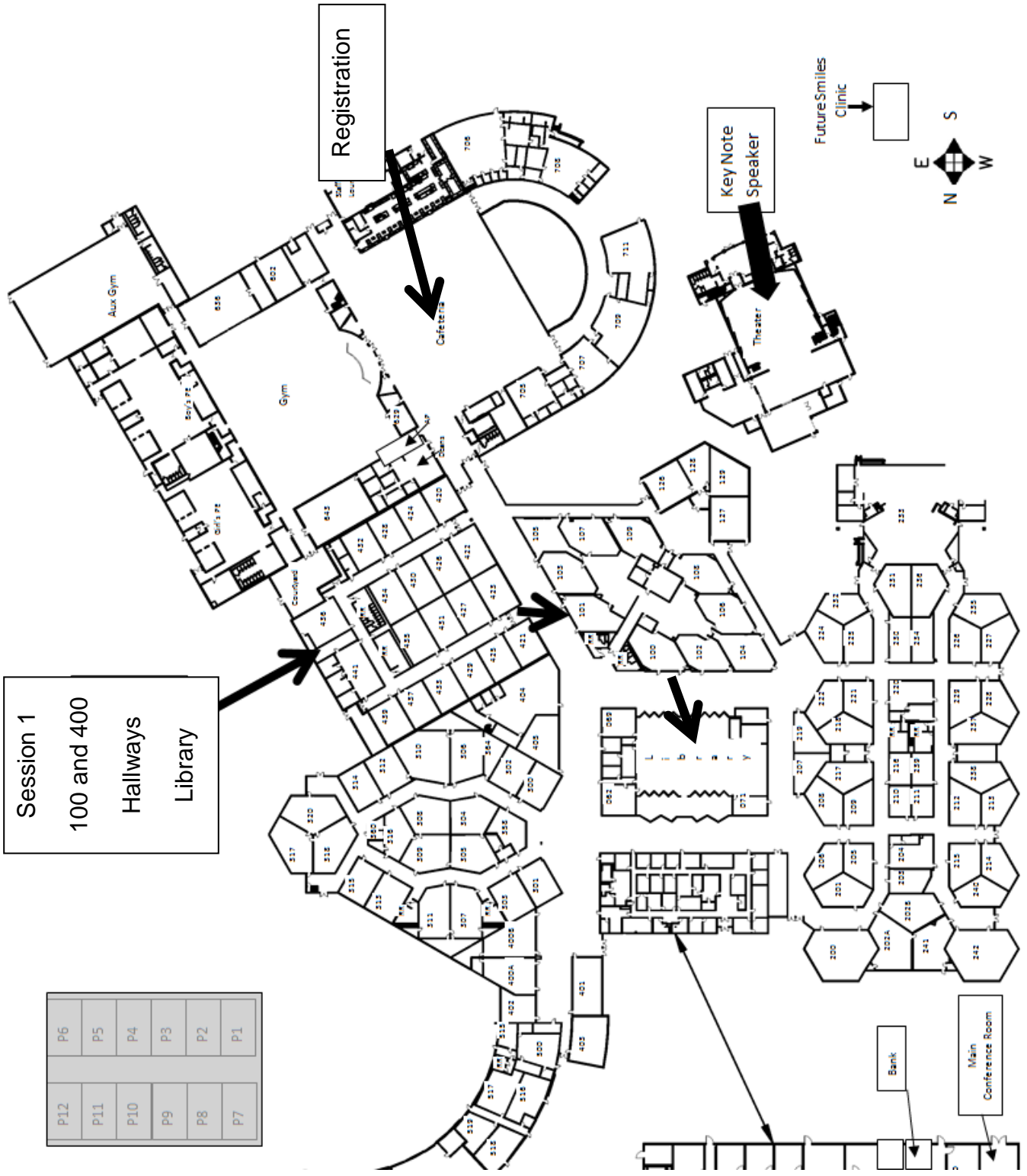
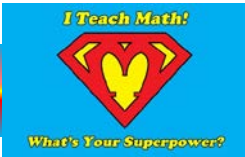


Southern Nevada
Mathematics
Mini Conference



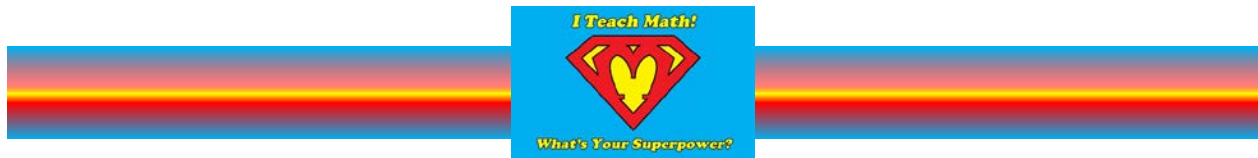
Clark High School, January 16, 2015

presented by
Southern Nevada Mathematics Council
Clark County School District – Instructional Design and
Professional Learning



Session 1
100 and 400
Hallways
Library

P12	P6
P11	P5
P10	P4
P9	P3
P8	P2
P7	P1



Session 1- 5:00 pm — 6:20 pm

Grade K-5 Room 429

Using Foldables in Math Instruction to Increase Student Retention

Shelley Manweller, McGraw-Hill Education, Curriculum Specialist

Teachers will leave this Make It, Take It style workshop with several completed Foldables (three-dimensional, interactive graphic organizers) of various styles and exposure to many more. It's great to have some new "tricks" to engage students as they return from winter break. Math vocabulary, basic facts, problem solving, and self-assessment will be emphasized.

Grade K-5 Room 431

STEM starts with a story - Using EDU2000 STEM Builder in Early STEM Learning

Richard Vineyard, NV Dept of Education, Asst. Director Assessment

In this presentation we will use EDU2000's STEM Builder as a resource to find the information needed to work on and solve a STEM based (engineering) problem. Participants will be able to see and use STEM Builder, write and draw a solution for the problem, and test their solution.

Grade K-5 Room 433

Building Capacity in Mathematics Teaching and Learning

Denise Porter, Center for Elementary Math and Science Education, University of Chicago, Director, School Support Services

This session will look at tools, structures, and resources that can be used in a school district to build leadership capacity centered around mathematics teaching and learning.

Grade K-8 Room 435

Asking Purposeful Questions to Promote Student Understanding

Linda Gojak, John Carroll University, Director of Center for Mathematics Education

The Common Core mathematical practices call for students to reason and construct mathematical arguments. NCTM's latest landmark publications, Principles to Actions describe eight effective teaching practices. Posing purposeful questions probes student thinking, leads to deeper understanding, and helps to differentiate instruction. What to ask and when to ask it is the key. Let's look at some K-8 concepts and great questions to go with them!

Grade 3-5 Room 101

Build it, Draw it, Talk it, Write it - Own Fractions!

*Rudy Neufeld, Neufeld Learning Systems Inc., Senior Author / Consultant
Maria Dufek, Clark County, Math Consultant*

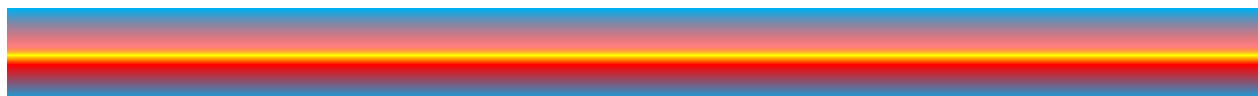
Change the mindset from "remember how" to "understand why". This session will model conceptual procedures which stimulate learning through approaches adapted to the regular classroom and intervention. We will model fraction operations with multiple entry points to support content and instruction. Attendees will receive access to related software and 3 partial lessons.

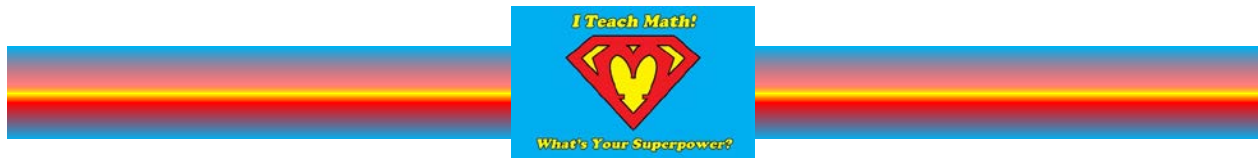
Grade 3-8 Room 103

Partial Products, Area Models - Decimals to Algebraic Thinking

*Rudy Neufeld, Neufeld Learning Systems Inc., Senior Author / Consultant
Robin Maglicco, Mabel Hogarth ES, Math Strategist*

Participants will use related manipulatives, paper and computer activities to help understand and instruct related topics from multiplication of single and 2 digit whole numbers to decimals and on to algebraic thinking. Attendees will receive access to related software and 3 partial lessons.





Grade 3-8 **Room 421**

Geometric Reasoning Front and Center!

Thomas Fox, University of Houston Clear Lake, Associate Professor Mathematics Education

Let's look at the development of geometric reasoning in children! Discussed will be open-ended geometry tasks and a framework for examining children's thinking elicited in these tasks. We'll also talk about how we can use the information gathered from students in lesson planning.

Grade 6-12 **Room 423**

The Student-Centered Classroom - Never Say What a Kid Can Say

Carrie Hair, Swope Middle School – Gifted and Talented Magnet, Washoe County School District Mathematics Teacher

How do you get your students "doing" mathematics rather than "watching" mathematics? How do you lead your students to their own connections rather than sharing your connections? In this session teachers will learn strategies that can help make the shift from a teacher centered class to a student centered class through mathematical tasks.

Grade 9-12 **Room 425**

CCSS, Transformational Geometry, and the Pythagorean Theorem

*Ray Klein, T³ Teachers Teaching with Technology, National Instructor
Ilene Hamilton, Adlai Stevenson High School, Retired Math Teacher*

The Common Core State Standards call for a renewed study of Transformational Geometry. Come and see how this approach can give you some new insights to an old friend—The Pythagorean Theorem.

Grade 9-12 **Room 427**

Using the TI-Navigator for Formative Assessment

David Young, Fayetteville Public Schools, Teacher

How do you know if the kids get it? Come see how the TI-Navigator can give you real time data on what your students understand and what they missed. Using this data you can fill in gaps and move forward with the knowledge that you're not leaving anyone behind.

Session 2- Keynote Speaker

Grade K-12 **Theatre**

Desirable Difficulties: Is easier always better?

Andrew Isaacs, University of Chicago

What kinds of difficulties are desirable? Is spacing or massing practice better? Can taking a test be a learning experience? Should teachers "be less helpful"? We describe research findings about desirable difficulties learning experiences that are difficult but that result in increased learning and how to implement them in your classroom.

Andy Isaacs received a BA in classical Greek from Northwestern University in 1974, an MST in elementary education from the University of Chicago in 1977, and a DA in mathematics (with concentrations in abstract algebra and theoretical computer science) from the University of Illinois at Chicago (UIC) in 1994. From 1977 until 1985, Isaacs taught fourth and fifth grades in Chicago-area public schools. In 1985, he joined the Department of Mathematics, Statistics, and Computer Science at UIC as a lecturer in mathematics education. Beginning in 1986, Isaacs worked on the NSF-funded Teaching Integrated Mathematics and Science Project (TIMS) at UIC, which was directed by Philip Wagreich and Howard Goldberg. In 1989 and 1990, he worked with Wagreich and David Page on UIC's Maneuvers with Mathematics Project, another NSF-funded curriculum development effort.

In 1995, Isaacs joined the University of Chicago School Mathematics Project to work on the Bridges to Classroom Mathematics Project, which was directed by Sheila Sconiers. Since the late 1990s, Isaacs has directed a series of teacher development projects funded by grants and contracts from the Illinois Board of Higher Education, the Chicago Public Schools, and school districts across the nation. He is co-director of the University's Center for Elementary Mathematics and Science Education and a Senior Research Associate in the University's Physical Sciences Division.

