REGIONAL CONFERENCE & EXPOSITION ALBUQUERQUE, NEW MEXICO November 2-4, 2011



NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS (800) 235-7566 | www.nctm.org PROGRAM BOOK

www.nctm.org

 $\frac{Lift = V \bullet \left(\frac{P}{2.87}\right) \bullet \left(\left(\frac{1}{Tamb}\right) - \left(\frac{1}{Tenv}\right)}{1}\right)}{Tenv}$

Our 25th Year of Service!



More than 2,500 *Making Algebra Child's Play*[®] workshops conducted since 1990.



Borenson and Associates, Inc.

Hands-On Equations[®] For grades 3 - 9

Visit our booth #412 - #414 to see a demo & enter our raffle for a class set!

A FUN and EXCITING introduction to algebra.

u



Your students will LOVE solving equations such as 4x + 3 = 3x + 9 and 2(3x + 1) = 2x + 10.

* Hands-On Equations Borenson and Associates, Inc. P.O. Box 3328 Allentown, PA 18106 Call us at 800-993-6284 to schedule your onsite staff development workshop! Visit us at www.borenson.com for a listing of public workshops and to register for our free 45-minute webinar!

REGIONAL CONFERENCE & EXPOSITION ALBUQUERQUE, NEW MEXICO

November 2-4, 2011

Technology and Mathematics: Get Connected!

HOST

New Mexico Council of Teachers of Mathematics

MEETING FACILITIES

All Regional Conference presentations will be held at the Albuquerque Convention Center and the Hyatt Regency Hotel. See pages 66–67 for floor plans.

REGISTRATION

Wednesday Thursday Friday 5:00 p.m.-8:00 p.m. 7:00 a.m.-4:00 p.m. 7:00 a.m.-4:00 p.m.

EXHIBITS

Thursday Friday 8:00 a.m.-4:00 p.m. 8:00 a.m.-4:00 p.m.

BOOKSTORE AND MEMBER SHOWCASE

Wednesday Thursday Friday 5:00 p.m.-7:00 p.m. 7:00 a.m.-4:00 p.m. 8:00 a.m.-4:00 p.m.



CONTENTS

Advertisers Guide	76
Affiliates	, 0 62
Rockstore	5
Certificate of Attendance	. O
	57 67
Directory and Special Locations	64 66
	00 A
	.0 71
	/ I 40
	00 A
Exhibitor v vorkshops	.0
El e e Diese	. 0 66
Focus of the Vegr	00 2
	. J
	. J
Information Booth	.0
	.0
Wember Showcase	. J
	61
NCIM Officers	64
Program Information	. 3
Opening Session	. 8
Thursday Presentations	. 9
Friday Presentations	35
Learn↔Reflect Strand	. 3
Common Core State Standards Strand	. 3
New and Preservice Teachers Workshop	. 4
New Member and First Timers' Orientation	. 4
Program Updates	. 4
Types of Presentations	. 4
Registration and Access to Presentations	. 5
Speaker Index	75
Sponsors	. 6

The publications and programs of the National Council of Teachers of Mathematics present a variety of viewpoints. The content, affiliations, and views expressed or implied in this publication, unless otherwise noted, should not be interpreted as official positions of the Council. References to particular commercial products by a speaker should not be construed as an NCTM endorsement of said product(s). NCTM reserves the right to change speakers, change facilities, or modify program content.

In compliance with federal privacy policies, NCTM does not sell or distribute member e-mail addresses. However, some speakers on this program have elected to print their e-mail addresses as a means for individual correspondence with conference attendees. Unsolicited commercial e-mail or unsolicited bulk e-mail, whether or not that e-mail is commercial in nature, is expressly prohibited. Any use of e-mail addresses beyond personal correspondence is not authorized by NCTM.

National Council of Teachers of Mathematics, 1906 Association Drive, Reston, VA 20191-1502; Telephone (703) 620-9840; Fax (703) 476-2970; E-mail nctm@nctm.org; Web www.nctm.org

Printed in U.S.A



Photo Credit: MarbleStreetStudio.com

Welcome to Albuquerque!

¡Bienvenidos! The members of the New Mexico Council of Teachers of Mathematics welcome you to the Land of Enchantment. We're glad you're joining us for NCTM's 2011 Regional Conference and Exposition in Albuquerque. This is an opportunity to explore new ideas to take back to your classroom, investigate new products and technologies, collaborate with colleagues, and meet with leaders and innovators in mathematics education. We encourage you to take advantage of the variety of sessions and hands-on gallery workshops offered during the conference. Remember to take time to explore the Exhibit Hall and investigate some of the latest teaching products and technology. We hope you leave the conference with a wealth of knowledge and answers to your biggest challenges.

Before you depart our beautiful city, take some time to enjoy our unique heritage and rich culture. Albuquerque has much to explore, from Old Town to Sandia Peak, from a world-class Aquarium and Zoo to the National Hispanic Cultural Center. Discover the answer to the state question: Red or Green? Albuquerque offers an abundance of culture for you to enjoy.



Terry Palmer Program Chair Albuquerque Public Schools Placitas, New Mexico



Peggy Foos Local Arrangements Chair Valley High School Albuquerque, New Mexico

PROGRAM INFORMATION

THE 2011 NCTM Regional Conference and Exposition officially begins with the Opening Session, starting at 5:30pm on Wednesday in Ballroom C on the upper level of the Albuquerque Convention Center. All other presentation days begin at 8:00 a.m. and are scheduled concurrently throughout the day on Thursday and Friday.

We have made every attempt to provide adequate seating for participants at the Regional Conference and Exposition. The room capacity for each presentation is listed on all meeting room signs. For your safety and due to fire regulations, only those with seats will be allowed to stay in meeting rooms.

Please remember:

- · All meeting rooms will be cleared between presentations.
- All seats are available on a first-come, first-served basis.
- Reserving spaces in line or saving seats is not permitted.
- In compliance with fire codes, sitting on the floor or standing is not permitted.
- As a courtesy to the speakers and your colleagues, please turn off your cell phone during all presentations.

Professional Development Focus of the Year 2011–2012

This year's Focus of the Year is *Technology and Mathematics: Get Connected!* The conference will highlight this theme as the topic of Thursday's Learn↔Reflect strand, as well as in many other NCTM activities throughout the year. For more information, visit **www.nctm.org/focus**.

NCTM Newbie?

Attend the New Member and First Timers' Orientation to learn how to enhance your conference experience and maximize your membership's benefits. See page 4 for details.

Learn↔Reflect Strand

Plan one full day for the Focus of the Year topic, *Technology and Mathematics: Get Connected!*. The strand begins with a morning Kickoff session and concludes with an end-of-the-day Reflection session. In between, you choose from among a number of sessions exploring the topic, all marked with the symbol **L**⊂**R**. Immerse yourself in the topic, and collaborate with leaders and colleagues. We ask participants to reflect on the following questions throughout the Learn↔Reflect strand and then discuss them at the end of the strand, during the Reflection session.

- 1. What role does technology play in providing multiple representations and opportunities for communication to help students develop mathematical understanding?
- 2. How does technology influence your instructional decisions, and vice versa?
- 3. How can technology increase access to significant mathematics to all students? How do you promote social justice for access to and facility with technology in learning mathematics?
- 4. How are you thinking differently about your use of technology as a result of participating in the Learn↔Reflect strand? What are some of the steps you plan to take to promote growth in your own use of technology?

Learn↔Reflect sessions are open for anyone to attend throughout the day. Participants who attend the Kickoff session, at least one Learn↔Reflect session during the day, and the final Reflection session will receive personalized certificates by mail.

Learn↔Reflect Kickoff Session Thursday, 9:30 a.m. Ballroom C (Albuquerque Convention Center)

Learn↔Reflect Reflection Session Thursday, 3:30 p.m. Brazos Room (Albuquerque Convention Center)

Common Core State Standards

Get ready to teach the Common Core. Participate in workshops to learn strategies and activities aligned with teaching the Common Core State Standards for Mathematics, and hear the latest from experts on what the Common Core means for your classroom, curriculum, and students.

Look for the symbol **(**for Common Core State Standard Strand Presentations.

PROGRAM INFORMATION

New and Preservice Teachers Workshop

Wondering how to manage your classroom, work with parents, find engaging lessons, and handle homework—all while keeping your sanity? You're not alone! A must for every new teacher, this interactive workshop is your chance to ask questions on topics of your choice. Plus, you will connect with other new and early-career teachers. If you are in the first five years of teaching or are seeking certification, come get resources, materials, and fun prizes to encourage you and give you insight along your journey.

Thursday

2:30 p.m.–4:00 p.m. Aztec Room (Albuquerque Convention Center)

Friday 10:30 a.m.–12:00 noon Aztec Room (Albuquerque Convention Center)

New Member and First Timers' Orientation

New to NCTM or a first time attendee at a regional conference? Join us to learn how to maximize your membership experience! From journals, online lessons, tools, and activities; to networking and career-advancement opportunities, you'll discover all that NCTM has to offer you. Also, first-time attendees will learn how to make the most of their time at the conference.

Thursday and Friday 7:15 a.m.–7:45 a.m. San Miguel Room (Albuquerque Convention Center)

> Pick up your copy of the *Program Updates* for more exhibitor workshops, the latest changes to the program schedule, and other important information.

Types of Presentations

All presentations are open to all conference participants. Admission is on a first-come, first-served basis. Reserving spaces in line or saving seats is not permitted.

Sessions (60 minutes) represent a common format where the speaker relates his or her ideas to an audience. The speaker may use audiovisual equipment, technology, and handouts, and he or she may include audience participation. Rooms are set theatre style and vary in size.

Gallery Workshops (90 minutes) have rooms set with round tables for hands-on work and additional gallery seating around the perimeter of the room. The gallery participants will receive the print materials and observe the workshop in a fashion similar to that of a classroom observer.

Exhibitor Workshops (60 minutes) are set theatre style for at least 70 people. Exhibitors showcase their products and services away from the Exhibit Hall. Look for the symbol **CW** indicating exhibitor workshops in the program book.

Grade Bands

To assist attendees in finding appropriate presentations to attend, each presentation lists the presentation's target grade-band audience. The grade bands are:

- Pre-K-2
- Grades 3–5
- Grades 6–8
- Grades 9–12
- **Higher Education**—university and college level issues including both two-year and four-year institutions
- **Preservice and In-Service**—content and techniques for providers of preservice teacher education, and professional development for practicing teachers, supervisors, specialists, coaches, and mathematics educators
- General Interest—applies to multiple grades and audiences

Program Updates

Don't forget to pick up your copy of the *Program Updates*, which includes conference highlights, speaker and program updates, a complete exhibitor directory, and exhibitor workshop information. *Program Updates* are available in the Registration Area.

GENERAL INFORMATION

Tips for a Rewarding Regional Conference and Exposition

- Download the 2011 Albuquerque Conference App for conference alerts and up to the minute information.
- Become familiar with the layout of the Albuquerque Convention Center and the Hyatt Regency by reviewing the floor plans on pages 66–67.
- Visit the NCTM Bookstore for the latest NCTM educational resources (save 25 percent on all items), and the Member Showcase, where you can learn more about how NCTM can help you professionally and pick up free resources.
- Stop by the Information Booth for information on the local area.
- If attending the conference with colleagues, attend different presentations and share your learned knowledge after the conference.
- Wear comfortable shoes and clothes, and dress in layers.
- Turn off cell phones during presentations.
- Visit the Exhibit Hall, where exhibitors will share the latest educational products.
- The more you participate in the presentations, the more you will get out of the conference.
- Tell us about your conference experience by filling out the postconference online survey.
- Be safe! Remove your name badge when you leave the conference facilities at the end of the day.

Registration and Access to Presentations

You must wear your badge to enter all presentations and the NCTM Exhibit Hall. Please be aware that the fee for a replacement badge is **\$5**.

By registering for the 2011 NCTM Regional Conference and Exposition, participants grant NCTM the right to use, in promotional materials, their likeness or voice as recorded on, or transferred to, videotape, film, slides, audiotapes, or other media.

Recycling

Help NCTM Recycle—Finished with your Program Book, plastic name badge holders, or Program Updates? Place them in the specially marked containers for recycling, in the registration area.

For Your Child's Safety

Due to the size and nature of the 2011 NCTM Regional Conference and Exposition, this event is not an appropriate setting for children under 16 years of age. Children under age 16 will not be permitted in the Exhibit Hall. We appreciate your understanding and cooperation. Children 16 years and over will need to register as nonteaching guests. To register a nonteaching guest, please visit the Registration Area.

Member Showcase

Looking for professional resources to help you overcome the challenges you face on a daily basis? Then stop by the **NCTM Member Showcase** located in Hall NE/SE of the Convention Center. We'll help you learn more about how your NCTM membership provides you access to lessons, teaching tips and strategies, research findings, and more. Plus, you can also pick up classroom-ready activities, sample journals, and other materials to take back to your classroom.

Whether you are a new member, a current member, or thinking of joining, the NCTM Member Showcase is here to help make your job easier!

Renew your membership or join NCTM for the first time onsite and you will receive a **free** 2012 NCTM Annual Meeting t-shirt! Supplies are limited.

Bookstore

Save 25 percent off the list price on all purchases made at the NCTM Bookstore in NE/SE Exhibit Hall of the Albuquerque Convention Center. Flip through NCTM's many publications or find a gift for someone at home. Spreading the word about the importance of math has never been easier. Start your wish list today by previewing NCTM's wealth of resources at www.nctm.org/catalog.

Note on Sales Tax Exemptions: To be considered exempt from sales tax in the NCTM Bookstore, you must provide a copy of a New Mexico tax exemption certificate at the time of purchase. NCTM is required by law to keep a copy of the certificate, so we cannot return it to you. To qualify, you must make payment with a purchase order, check, or credit card from the school to which the Missouri Exemption Certificate is issued. We cannot accept personal checks, personal credit cards, or cash in conjunction with tax exemption certificates. Tax exemption certificates for states other than New Mexico are not valid for this regional conference.

The NCTM Bookstore is not equipped to handle shipping from the meeting site. The Business Center at the Albuquerque Convention Center can assist you with your shipping needs.

EXHIBIT HALL INFORMATION

Information Booth

The NCTM Information Booth will be in the lobby area of the Albuquerque Convention Center, outside the SE Exhibit Hall. Local personnel from New Mexico will be on hand to answer any questions you may have. They will also assist you with directions and local information, from transportation and historical sites to shopping and entertainment.

Lost-and-Found

You may retrieve or turn in lost-and-found items at the NCTM Information Booth. Unclaimed items will be turned over to Convention Center Security.

First Aid Station

There will be a first-aid station at the Albuquerque Convention Center during the NCTM conference. If you need medical services while in Albuquerque, please check with the hotel concierge for the closest medical facilities.



NCTM Clear Air Act

In accordance with a resolution of the 1978 Delegate Assembly, smoking is permitted only in designated areas.

Your Opinion Counts!

Thank you for attending the 2011 NCTM Regional Conference and Exposition. In the days following the Regional Conference, you will receive an e-mail asking for an evaluation of your meeting experience. Please take a moment to complete the survey. Your feedback is important to us and will be instrumental in the future Regional Conference and Exposition planning process.

Exhibits

Be sure to make time in your schedule to visit the NCTM Exhibit Hall. The hours allow ample opportunity to explore, try out, and purchase products and services for use in your classroom or to help you meet your career goals. You'll also be able to meet the people who produce these products, get fresh ideas, and see demonstrations of how products work. Be sure to check out the list of exhibits and a map of the Exhibit Hall on page 68. Please note: Children under age 16 will not be permitted in the Exhibit Hall.

Exhibitor Workshops

Do you want more in-depth, personal interaction with exhibitors? If so, plan to attend the Exhibitor Workshops. These workshops will occur on Thursday and Friday, and they will offer a wide variety of topics. For exhibitor workshop offerings, look for presentations in this program book marked with the symbol <insert Icon> or see the Program Updates.

Internet Station

Need to check e-mail or want to surf the Web? Stop by the NCTM Internet Station located in the registration area.

Conference Sponsors

A special thank you goes to our sponsor: Texas Instruments for providing our volunteer t-shirts. Please stop by their booth when you are in the Exhibit Hall.



WEDNESDAY PLANNER

5:00			
5:30			
6:00			
6:30			
7:00			



noto Credit: newmexicostock.com

Highlights

Fire Codes

• Opening Session (Presentation 1): Is It Time to Upgrade? Making the Case for Change

Registration Hours 5:00 p.m.-8:00 p.m.

Bookstore and Member Showcase Hours 5:00 p.m.-7:00 p.m.

We have made every attempt to provide adequate seating for participants at the conference, but for your safety and because of fire regulations, only those with seats will be allowed in meeting rooms. To conform to fire codes, it will be necessary to ask persons sitting on the floor or standing to leave the room.

5:30 P.M.--7:00 P.M.



Is It Time to Upgrade? Making the Case for Change **Opening Session**

Dr. Tyson will explore some unprecedented changes that have taken place in the last 100 years, including the role of children and the nature of childhood, transition from an agricultural society to an industrial society to the information age, and the impact of globalization on our lives.

Tim Tyson drTimTyson.com, Manhattan Beach, California

Ballroom C (Albuquerque Convention Center)

Looking for Tools and Activities for the Classroom? Need Ideas to Make Your Job Easier?

Stop by the **NCTM Member Showcase!**

We've got time saving tips and resources to help you meet the challenges you face on a daily-basis. Stop by to pick up...

- Classroom-ready Activity Packets
- Sample journals
- Free math resources, giveaways, and more!

Not a member or want to learn more about membership? Don't worry; we can help you there too! Plus, when you join or renew onsite, you'll receive a *free t-shirt*.



NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS (800) 235-7566 | WWW.NCTM.ORG

Stop by... Wed. 5:00 p.m. – 7:00 p.m. Thurs. 7:00 a.m. – 4:00 p.m.

Fri. 8:00 a.m. – 4:00 p.m.



THURSDAY PLANNER

8:00	
8:30	
9:00	
9:30	
10:00	
10:30	
11:00	
11:30	
Noon	
12:30	
1:00	
1:30	
2:00	
2:30	
3:00	
3:30	
4:00	
4:30	
5:00	

L⊂R Learn↔Reflect Strand

CW Exhibitor Workshop

Common Core

Highlights

- New Member and First Timers' Orientation (Presentation 2)
- Learn↔Reflect Kickoff (Presentation 28)
- New and Preservice Teachers Workshop (Presentation 117)
- Learn↔Reflect Reflection Session (Presentation 120)

Registration Hours 7:00 a.m.-4:00 p.m.

Exhibit Hours 8:00 a.m.-4:00 p.m.

Bookstore and Member Showcase Hours 7:00 a.m.-4:00 p.m.

Fire Codes

We have made every attempt to provide adequate seating for participants at the conference, but for your safety and because of fire regulations, only those with seats will be allowed in meeting rooms. To conform to fire codes, it will be necessary to ask persons sitting on the floor or standing to leave the room.

7:15 A.M.-7:45 A.M.

2

New Members and First Timers' Orientation

(General Interest) Session

Find answers to your questions on topics such as classroom management, parents, motivation, and keeping your sanity. Connect with other new teachers, learn from experienced professionals, and find resources to engage you and your students. You might even win a prize!

Sara Normington

Council of Presidential Awardees in Mathematics, Portland, Oregon

San Miguel (Albuquerque Convention Center)

8:00 A.M.-9:00 A.M.

2.1

Raising Scores and Raising Eyebrows: Immediate, Positive Classroom Change (General Interest) Session

Teachers lose 5–9 hours a week dealing with minor misbehavior, which translates to low test scores, high staff turnover, and a negative atmosphere in your school. It doesn't have to be that way! Learn effective classroom management strategies that will end student-teacher power struggles and dramatically improve academic performance.

Katrina Ayres

Time to Teach!, Hayden Lake, Idaho

Grand Pavilion IV (Hyatt)

4

Grades K–3 Teachers Engaged in Algebraic Thinking: Modeling for Learning

(Pre-K-5) Session

This session will showcase work with elementary school teachers in an algebraic thinking institute in which teachers used visual, numeric, linguistic, and concrete modeling to solve problems and share solutions. Teachers enthusiastically explored patterns, collected data, and used algebraic expressions to generalize solutions.

Cynthia O. Anhalt

University of Arizona, Tucson, Arizona

Mesilla (Albuquerque Convention Center)

5

So Many Children, So Little Time! (Pre-K-5) Session

This session will focus on intervention techniques, routines, and activities for the specialist and classroom teacher working with grades 1–5 students. Participants will receive examples of daily routines, process-oriented interview guidelines, and activities to promote skillful development of mathematical concepts.

Peggy Cuevas

Hays Consolidated Independent School District, Kyle, Texas

Brazos (Albuquerque Convention Center)

6

So You're a Mathematics Specialist? Got This Figured Out?

(Pre-K-5) Session

Elementary mathematics specialists, coaches, and instructional leaders deal with their own set of challenges every day! participants will actively explore issues around transitioning to the Common Core State Standards, the adult learner, and relationships with other teachers and others.

Jonathan Wray

Elementary Mathematics Specialists and Teacher Leaders Project; Howard County Public Schools, Ellicott City, Maryland

Beth Kobett

Stevenson University, Eldersburg, Maryland

Ballroom C (Albuquerque Convention Center)

7

Adventures in Creativity, Architecture, Design, and the Shapes of Mathematics (3–5) Session

Creativity, architecture, and design, this segment gives examples of the architects hands on problem solving classes in creativity, architecture, and design with geometric shapes. Shapes of mathematics: a demonstrations and explanation using manipulatives to show the shapes and forms created by squares, triangles and circles.

Melvin D. Shivvers

Architect, Des Moines, Iowa

Taos (Albuquerque Convention Center)

8:00 A.M.-9:00 A.M.

8

Strengthening Fraction Reasoning to Lay the Foundation for Algebra Success (3–8) Session

This session will examine how to strengthen students' understanding of fractions. The speaker will use a variety of contexts and models to help students understand and reason about fraction concepts, order, and equivalence. She will explore connections between fraction reasoning and understanding the meaning of variables.

Nadine Bezuk

San Diego State University, San Diego, California

Grand Pavilion VI (Hyatt)

9

Fractals with LOGO®

(6-8) Session

Fractals are self-similar geometric patterns. We can examine them and express their generation as mathematically recursive sequences. This analysis will use LOGO to construct familiar, two-dimensional fractals and create our own.

Glen W. Richgels

Bemidji State University, Bemidji, Minnesota

Grand Pavilion III (Hyatt)

10

Helping Students Overcome Their Tendency to Apply Procedures without Thinking

(6-8, Preservice and In-Service) Session

Many students tend to "do whatever first comes to mind" in mathematics classrooms. We should help students cultivate a habit of being analytical and skeptical. One strategy is to pose problems for which recently learned ideas would not work. The speaker will discuss examples of contraproblems involving proportions, measurement, and algebra.

Kien H. Lim

University of Texas at El Paso, El Paso, Texas

Enchantment A-B (Hyatt)

11

The Spinner Game: Using Student Solutions to Build Understanding

(6-8, Preservice and In-Service) Session

Many teachers struggle to balance problem solving, sharing students' work, and curriculum requirements. This presentation will share how using a rich task,appropriate for middle school, with purposeful selection and sequencing of students' work built usable understanding of compound probability in preservice teachers.

Jessica S. Cohen

Western Washington University, Bellingham, Washington

Robert Ely

University of Idaho, Moscow, Idaho

Enchantment C-D (Hyatt)

12

Closure: Making Every Minute Count, Especially the Last Five Minutes (6–12) Session

Do you find your students packing up when valuable time still remains in class? Don't waste those last five minutes! Learn about several different ways to make those last five minutes productive and relevant. You will leave with closure activities you can implement on Monday.

Karen Wootton

Anne Arundel Community College, Arnold, Maryland

Christine Mikles

College Preparatory Mathematics Educational Program, Sacramento, California

Grand Pavilion I-II (Hyatt)

13

Overcoming Challenges to Develop Mathematically Promising Students in Urban Schools

(6-12) Session

Understand cultural and social issues in urban schools to serve the needs of mathematically promising students better. Develop strategies to keep up with math classrooms' changing dynamic and strengthen students' belief and ability to do well in mathematics. Students will be able to develop their mathematical potential fully.

PingHsiu Lee

Reagan High School, Houston, Texas

San Miguel (Albuquerque Convention Center)

ew 14

Interact with the Common Core Mathematical Practices, Every Day! (K-5) Exhibitor Workshop

In this session participants will experience the Common Core State Standards for Mathematical Practice in action using interactive technology. Through meaningful classroom discussion centered on the *Every Day Counts* digital white board curriculum, attendees will learn ideas for reinforcing, building, and mastering the Common Core in just 10 minutes, every day.

Houghton Mifflin Harcourt

Boston, Massachusetts

Isleta-Jemez (Albuquerque Convention Center)

8:30 A.M.-10:00 A.M.

15

Mathematics Activities with Unifix Cubes (Pre-K-2) Gallery Workshop

As a concrete manipulative, Unifix Cubes are an important part of any beginning mathematics program. They are useful for developing classification skills, one-to-one correspondence, basic operations, ordinal numbers, problem-solving skills, patterning, and geometric ideas. Materials will be provided.

Don Balka

Saint Mary's College, Notre Dame, Indiana Dona Ana (Albuguergue Convention Center)

(16

Developing Number Sense Aligned with the Common Core State Standards

(Pre-K-5) Gallery Workshop

The Common Core State Standards for Mathematics call for a strong emphasis on developing students' number sense. Examine your beliefs about number sense, and leave with brain-compatible strategies to help students in your classroom become more flexible in their thinking about numbers.

Debbie Scruggs

Kokopelli Educational Consulting, Inc., Albuquerque, New Mexico

La Cienega (Albuquerque Convention Center)

17

Let's Get Physical, with Math on the Floor!

(Pre-K-5) Gallery Workshop

This very interactive session will introduce teachers to innumerable creative ways of exploring many concepts in all math strands on a large, 100-square floor grid. The speaker will share fun, foolproof strategies for immediate implementation.

Wendy E. Hill

Retired, Huntsville, Ontario, Canada

Tesuque (Albuquerque Convention Center)

18

Mesoamerican Math, Astronomy, and Mythic Pedagogy (Pre-K-5) Gallery Workshop

Our body is our first pedagogy. The Aztec calendar's precision rests on having been designed according to the human body's geometry. Its mathematics, geometry, and mythology present an exciting opportunity to teach children about complex concepts such as geometry constants and fractal geometry in a way that is natural and fun.

Carlos Aceves

Canutillo Elementary School, Canutillo, Texas

Grand Pavilion V (Hyatt)

19

Hands-On Math Activities from Cultures Past and Present (3-5) Gallery Workshop

Participants will try hands-on math activities in Egyptian numeration, Inca Quipus, Native American counting ropes, Mancala, Roman numerals, Aztec calendar, Dreidels, Japanese numeration, and more, using simple materials. Take instruction sheets with you and implement the activities in your elementary school classroom next week.

Lynne E. Houtz

Creighton University, Omaha, Nebraska

Enchantment (Albuquerque Convention Center)



Download the new NCTM Regional Conference App! Visit www.nctm.org/confapp

8:30 A.M.-10:00 A.M.

20

Adventures in Problem Solving: Using Games to Reach All Students

(3–5, Preservice and In-Service) Gallery Workshop

These highly motivational games help *all* students develop problem-solving abilities, basic skills, and self-esteem. Participants will engage actively in learning cooperative games that teach computational, spatial, and critical reasoning.

Mary Gilfeather

Pentathlon Institute, Indianapolis, Indiana

Aztec (Albuquerque Convention Center)

21

Engaging Activities + Effective Instructional Strategies = Numerically Nimble Students

(3–5, Preservice and In-Service) Gallery Workshop

"Work smarter, not harder" to improve numeric competence. This session's strategies promote greater participation and sense making, ideal for intervention success and "family math" efforts. A ready-for-immediateuse handout will include engaging activities to improve students' performance and enhance mathematical reasoning.

Leigh Childs

Consultant, San Diego, California

Picuris (Albuquerque Convention Center)

22

Mean Olde Stepmothers: Fairy Tales in Urban Mathematics Classrooms

(6–12) Gallery Workshop

Help students link geometric and algebraic concepts to real-world applications. Students can learn to make crosscurricular connections by exploring fairy tales. Create their own lessons that use fairy tales in your own mathematics classroom!

Rhonda L. Williams

Duval County Public Schools, Jacksonville, Florida

Ballroom B (Albuquerque Convention Center)

23

Organizing, Algebraic Thinking for Disorganized, Adolescent Minds (6–12) Gallery Workshop

Graphic organizers, flow charts, similarities, differences, and visual representations help students organize the concepts taught in Algebra 1. The speakers will show how to include these research-based strategies, especially helpful for students who are English language learners or on individual educational plans, into your lessons.

Jeanne M. Palmer

Central Consolidated School District, Kirtland, New Mexico

Lisa Archuleta

Central Consolidated School District, Kirtland, New Mexico

Ballroom A (Albuquerque Convention Center)

24

Slaying Math Dragons with Notebook Foldables®

(6-12) Gallery Workshop

Slay math dragons, organize students' work, and add dimensionality to interactive math notebooks with Foldables 3–D graphic organizerss. Transform notebooks into individualized, brain-smart tools that will revolutionize how you teach and how your students learn. Leave with a composition minibook ready for immediate use.

Nancy Wisker

Dinah Zike Academy, Comfort, Texas

Ruidoso (Albuquerque Convention Center)

25

Combination and Permutation Activities to Engage Students and Deepen Learning

(9–12) Gallery Workshop

Participants will solve several problems with permutations and combinations, some with very surprising results. They will complete two in-depth activities with cards and dice that can enhance students' learning, and then discuss implementation strategies and activity assessments.

James R. Matthews

Siena College, Loudonville, New York

Pecos (Albuquerque Convention Center)

THURSDAY

Now Offering ALGEBRA I



Introducing the last teaching tool you'll ever need at a price you can afford.

Apperson Prep is an online supplemental teaching tool that provides rich lessons via engaging video tutorials, informative quizzes, and smart practice problems. Apperson Prep offers powerful assessment analytics and progress monitoring tools that allow teachers to quickly evaluate their students' learning.

Stop by **BOOTH #607** to learn more.

Annual teacher subscriptions with unlimited students only

\$109



8:30 A.M.-10:00 A.M.

26

Hands-On, Minds-On Geometry (9–12) Gallery Workshop

Participate in some fun, quick geometry activities, replicatable in your classroom, that will increase students' interest and your enthusiasm by engaging students actively. Use the "explore and discover" approach to learning, and discover how manipulatives can spice up your teaching and help your students retain what they learn.

Gary Kubina

Retired, Mobile, Alabama

Fiesta (Hyatt)

27

Teachers as Learners

(Preservice and In-Service) Gallery Workshop

Professional teaching knowledge is essential for improved learning. The speakers explored three mediums for coursework supporting teachers' mathematics learning. Pretests and posttests determined strengths and challenges. They will share research and practical applications for developing mathematical knowledge for effective teaching.

Cathy J. Kinzer

New Mexico State University, Las Cruces, New Mexico

Janice Bradley

New Mexico State University, Las Cruces, New Mexico

Lida Uribe

New Mexico State University, Las Cruces, New Mexico

Sage (Hyatt)

9:30 A.M.-10:30 A.M.

L⊂R 28 Learn↔Reflect Kickoff: Interactive, Online Simulations That Pique Interest and Improve Conceptual Understanding

(General Interest) Session

Easy-to-use, online simulations help teachers in grades 3–12 vitalize their instruction and inspire their students. Learn how using Internet-based simulations at school and at home helps students gain insight into mathematical reasoning, acquire vital knowledge, and develop an understanding of basic to highly complex math concepts.

Richard A. Feay

Los Angeles Unified School District (Retired), Los Angeles, California

Ballroom C (Albuquerque Convention Center)

29

Math Poems, Stat! Mathematical Poetry for Probability and Statistics

(General Interest) Session

Participants will explore a variety of math poems about probability, statistics, and related content. They will compose at least one poem and discuss how to implement and assess such an instructional strategy.

John E. Hammett III

Saint Peter's College, Jersey City, New Jersey

Enchantment A-B (Hyatt)

30

Building Algebraic Thinking for Grades Pre-K–2

(Pre-K-2) Session

This session will share valuable strategies for building algebraic thinking through literature, songs, movement, and meaningful mathematical content. Participants will leave with practical strategies that model differentiation and higher-level thinking. The speaker will share her energetic, meaningful message about teaching content-intensive mathematics.

Kim Sutton

Creative Mathematics, Arcata, California

San Miguel (Albuquerque Convention Center)

31

Math Learning Centers (Pre-K-5) Session

Small groups may be the key to teaching children with different learning styles and varying abilities. Join the speaker, author of *Grapes of Math*, as he introduces his vision of math learning centers—carefully planned, meticulously designed stations that teach, challenge, and inspire. A revolution in math education is beginning. Come be part of it!

Greg Tang

Houghton Mifflin Harcourt Math, Boston, Massachusetts

Grand Pavilion VI (Hyatt)

Participate in today's Learn⇔Reflect Strand. Look for sessions marked with the L≎R icon. THURSDAY

9:30 A.M.-10:30 A.M.

32

On-the-Spot Assessment: Closing the Gap between Instruction and Learning (Pre-K-5) Session

On-the-spot assessments and corresponding interventions are pivotal components in today's student-centered classroom. This session will explore a new process, adaptive assessment. Embedded in instruction, this process enables teachers and students to analyze problems, find solution pathways, and use tools strategically.

Phyllis Burks

Associates for Educational Success, Tucson, Arizona

Grand Pavilion I-II (Hyatt)

33

Response to Intervention (Rtl): An Opportunity for Professional Development?

(Pre-K-5) Session

Rather than adopt intervention programs to address RtI efforts, a school district chose to offer its teachers professional development focused on how children develop early numeracy concepts and strategies. Find out how our teachers are using their new knowledge for both intervention and prevention with their students.

Rebecca Campos

Moriarty-Edgewood Schools, Moriarty, New Mexico

Grand Pavilion IV (Hyatt)

34

Making Mathematics Explicit

(6–8) Session

Hiebert and Grouws's research states that attending explicitly to concepts while teaching influences students' learning of mathematics. Participants will work through several middle school problems, share solutions, make connections, and make the mathematical concepts explicit.

Mary Buck

CORE, Berkeley, California

Brazos (Albuquerque Convention Center)

35

Reaching All Students with Mathematics: Experience Success in Action

(6-8, Preservice and In-Service) Session

Actions speak louder than words. Experience proven strategies for increasing focus, feedback, and conceptual understanding. Learn questioning techniques to elicit enthusiastic, whole-class participation; raise achievement; and prepare students for success in algebra and beyond.

William J. Glee Project SEED, Berkeley, California

Caroline Clark Project SEED, Berkeley, California

Grand Pavilion III (Hyatt)

36

Building Mathematical Identity and Capacity in an Ability-Grouped Classroom

(9-12) Session

Students' self-conception can launch or hinder their success in mathematics. This session will focus on building students' mathematical identities as capable, even when grouped by ability determined by test scores.

Mark Franzak

Gadsden Independent School District, Anthony, New Mexico

Taos (Albuquerque Convention Center)

37

Reclaiming Lost Ground: Research-Based Interventions for Underprepared Algebra Students

(9-12) Session

Today, all students must succeed in algebra, including those who are underprepared. These students may need more time in algebra, but time alone is not sufficient. Learn about comprehensive, research-guided strategies and resources from mathematics learning, literacy, social psychology, and special education that help underprepared students.

James Lynn

Learning Sciences Research Institute, University of Illinois at Chicago, Chicago, Illinois

Diane J. Briars

National Council of Supervisors of Mathematics, Pittsburgh, Pennsylvania

Mesilla (Albuquerque Convention Center)

16

9:30 A.M.-10:30 A.M.

38

A Question of When, for Beginning Mathematics Teachers

(Higher Education, Preservice and In-Service, Research) Session

The presenters will discuss research methods, data, and analysis from an empirical study conducted regarding when beginning mathematics teachers report learning attributes of successful teaching. Participants from two teacher education programs offer reflection for teacher educators on how to prepare successful teachers.

Nicholas H. Wasserman

Marymount School of New York, New York, New York

Edward Ham

Ph.D. Candidate, Teachers College, Columbia University, New York, New York

Enchantment C-D (Hyatt)

10:00 A.M.-11:00 A.M.

ew 39

Cracking the Code of Algebra, or Cracking One's Head on Algebra (3–9) Exhibitor Workshop

How does Hands-On Equations[®] enable 80 percent of innercity fourth graders to succeed with such basic equations as 4x + 3 = 3x + 10? If algebra is a foreign language to your students, this session is for you! Grades 3–9.

Borenson and Associates

Allentown, Pennsylvania

Navajo-Nambe (Albuquerque Convention Center)

ew 40

CCSS-Aligned Mathematics for the Middle Grades

(6-8) Exhibitor Workshop

At last, a new middle grades curriculum in an engaging digital format that's also aligned to the Common Core State Standards (CCSS). *Math Innovations* focuses on reasoning, sense making, questioning, and mathematical discourse while increasing students' conceptual understanding. Learn about the interactive eBook and integrated learning tools, including whiteboard activities, practice games, and more.

Kendall Hunt Publishing Company

Dubuque, Iowa

Isleta-Jemez (Albuquerque Convention Center)

10:30 A.M.-12:00 P.M.

41

Math Explorations: Developing Numeracy through Play (Pre-K-2) Gallery Workshop

Learn how early learners develop visual representations for the digits in our number system through playing with puzzles. Understand the stages that children go through as they learn to count. Play with materials developed for learning about our base-ten number system as we celebrate the importance of the number 10 for early learners.

Aldo Bacallao

Henry County Schools, McDonough, Georgia

Pecos (Albuquerque Convention Center)

Cracking the Code of Algebra



10:30 A.M.-12:00 P.M.

42

Rtl: Ready to Inspire (Pre-K-2) Gallery Workshop

Response to Intervention (RtI) requires thoughtful planning to ensure that all students have opportunities to learn and succeed. This interactive workshop will include hands-on activities and games with references to children's literature that will make you ready to inspire your students in the classroom.

Donna Long

Houghton Mifflin Harcourt, Indianapolis, Indiana

Ballroom A (Albuquerque Convention Center)

43

Adding and Subtracting Numbers Using Ideas from before Columbus (Pre-K-5) Gallery Workshop

Come to learn about number representations based on the ideas from before Columbus's era. Original thinking of indigenous people has brought us new, simple manipulatives (counters, sticks, and shells) that can help strengthen placevalue understanding. We will explore these representations through addition and subtraction.

Olga Kosheleva

University of Texas at El Paso, El Paso, Texas

Laura Serpa University of Texas at El Paso, El Paso, Texas

Grand Pavilion V (Hyatt)

(44

Assessment and Instruction on Multiplication and Fractions for Response to Intervention

(3–5) Gallery Workshop

Research-based strategies related to assessment and differentiated instruction will be applied to NCTM's Curriculum Focal Points and the Common Core State Standards. Lessons use manipulatives, games, and vocabulary, appropriate for special-needs and English language learner students to integrate basic skills and problem solving. Receive handouts.

Caryl K. Pierson

Math Teachers Press, Inc., Minneapolis, Minnesota

Barbara Schallau

East Side Union High School District, San Jose, California Ballroom B (Albuquerque Convention Center)

45

Differentiation and Accommodation for Students with Special Needs (3–5) Gallery Workshop

This presentation will discuss differentiation and accomodation in lesson planning and teaching for students with special needs. The speakers will offer techniques for teaching rich mathematical tasks in probability and patterns to students with cognitive or social difficulties.

James E. R. Beyers College of New Jersey, Ewing, New Jersey

John DeRosa College of New Jersey, Ewing, New Jersey

Fiesta (Hyatt)

45.1

Writing across the Mathematics Curriculum to Assess Conceptual Understanding (3-8) Gallery Workshop

This session will focus on the benefits of using authentic, meaningful writing in the math classroom as an assessment tool and an instructional strategy. The speakers will share and explain different writing strategies along with a stepby-step process. Participants will receive clear examples that they can use as models with students.

Carla J. Hunt Albemarle County Schools, Charlottesville, Virginia

Colleen Branche Albemarle County Schools, Charlottesville, Virginia

Monica Cabarcas

Albemarle County Schools, Charlottesville, Virginia

Ruidoso (Albuquerque Convention Center)

47

My Favorite Middle Level Statistics Activities

(6–8) Gallery Workshop

Participants will actively explore activities linked to realistic contexts, through which pupils can build an understanding of and skill in using statistical concepts and processes. Activities will address creating and interpreting graphs; means, medians, and modes; and generating and using regression lines to make predictions.

Michael Hardy

Saint Xavier University, Chicago, Illinois

Tesuque (Albuquerque Convention Center)

10:30 A.M.-12:00 P.M.

48

Let's Play Damath! (6–12) Gallery Workshop

This session will teach participants how to play Damath, a board game that reinforces operations with integers, rational numbers, radical numbers, and polynomials. You can use the game as a review, enrichment, practice, or assessment. Participants will bring home ready-to-use materials.

Reynaldo L. Duran

Presidio Independent School District, Presidio, Texas

La Cienega (Albuquerque Convention Center)

49

Making Adequate Yearly Progress: A Multilingual Approach to Learning Math (6-12) Gallery Workshop

This experiential presentation will use audience interaction to introduce a discussion on the need for greater awareness of students' language-learning needs in math instruction.

Mary M. Neikirk

Emeritus, Santa Fe Indian School, Santa Fe, New Mexico

Kathryn C. Sherlock

Northern New Mexico College, Espanola, New Mexico

Enchantment (Albuquerque Convention Center)

50

AP Calculus: Strategies to Support All Learners

(9–12) Gallery Workshop

Math teachers must use strategies in advanced placement precalculus and calculus to make calculus concepts and skills more accessible to students. Try out strategies and graphic organizers, rule-of-four link sheets, sorts and matches, webs, concept splashes, labs, and learning stations. Visit our Web site for hundreds of examples.

Carol A. Hynes

Leominster Public Schools (Retired), Leominster, Massachusetts

Sage (Hyatt)

51

Facets of Functions: Making Sense of *F*(*x*) Using Illuminations Resources (9–12) Gallery Workshop

Students are taught to evaluate, graph, and transform functions, but sometimes teachers don't succeed in teaching students to understand them. Participate in a variety of ready-to-use activities that explore representations of functions, graphs, and limits. Best of all, everything is available free from the NCTM Illuminations project.

Julia Zurkovsky

National Council of Teachers of Mathematics, Reston, Virginia

Dona Ana (Albuquerque Convention Center)

52

The Spatial Eye: Bringing Reasoning and Sense Making to Geometry (9–12, Preservice and In-Service) Gallery Workshop

Bringing spatial visualization to algebra through geometry is a powerful tool in mathematical reasoning and sense making that also illuminates state standards in geometry. Several hands-on activities, easily integrated into the classroom, will show dissection geometry's elegant power and surprising applications in polynomial inequalities.

David K. Masunaga

Board of Directors, National Council of Teachers of Mathematics; Iolani School, Honolulu, Hawaii

Aztec (Albuquerque Convention Center)

53

TI-NspireCX[™] Color and SMART Boards: Integration Enhances Success (9–12, Preservice and In-Service) Gallery Workshop

Get hands-on experience with the *new* TI-Nspire CX color handheld—how to create valuable instruction time with color, pictures, 3D graphs, much more. Use SMART Boards and color to help your students learn more effectively, posting notes online in pdf and video formats. Obtain a CD with hundreds of ready-to-use Nspire and other teaching activities.

Tom Reardon

Fitch High School; Youngstown State University, Youngstown, Ohio

Picuris (Albuquerque Convention Center)

11:00 A.M.-12:00 P.M.

54

Culturally Relevant Mathematics Teaching: What, Why, and How? (General Interest) Session

Culturally relevant teaching has been effective at helping to close the achievement gap. Participants will learn about what culturally relevant teaching is and why it's important when working with students of color and low socioeconomic status. They will also learn practical strategies they can implement immediately in their classrooms.

Karina K. R. Hensberry

University of Florida, Gainesville, Florida

Grand Pavilion IV (Hyatt)

55

Making Math Much More Accessible to Our Students

(General Interest) Session

This fast-paced, upbeat presentation will identify and model a set of practical, easy-to-adopt instructional strategies that significantly enhance mathematical learning and retention at all grades. The speaker will look at how adopting a few daily routines can pay rich dividends in students' mastery.

Steven J. Leinwand

American Institutes for Research, Washington, D.C.

Ballroom C (Albuquerque Convention Center)

LOR 55.1

Developing Algebra, Number Sense, and Geometry through NCTM's Free E-Examples

(Pre-K-5) Session

Make your classroom come alive with NCTM's E-examples! From geoboards and tangrams to hundreds boards and interpreting graphs, these newly revised, interactive applets offer online resources for demonstrating multiple representations, exploring connections, and communicating understanding. Leave prepared to facilitate guided reflections on Monday!

Sarah Marie DeLeeuw

National Council of Teachers of Mathematics, Reston, Virginia

Brazos (Albuquerque Convention Center)

57

Effective Methods for Developing Math Fact Fluency

(Pre-K-5) Session

How can math facts be mastered successfully? Which methods promote automaticity for a broad range of students and for all operations? See the latest results of ongoing research into fact fluency and how students attain it over time, based on longitudinal performance data continuously collected through an innovative, online research platform.

Paul Cholmsky

ExploreLearning, Charlottesville, Virginia

Enchantment A-B (Hyatt)

LOR 58

Developing Mathematical Thinking, Reasoning, and Real-Life Problem-Solving Skills

(3–8) Session

The speaker will discuss the importance of using real-life problems, and of effective questioning strategies, as essential elements in developing problem-solving and reasoning skills. She will demonstrate effective use of technology tools to amplify students' learning, and actively engage attendees in problem solving.

Donna L. Knoell

Consultant, Shawnee Mission, Kansas

Mesilla (Albuquerque Convention Center)

(59

Lessons From Singapore: Transitioning from Arithmetic to Algebra

(6–8) Session

Ever since Singapore's rise to prominence on the Third International Mathematics and Science Study, its math curriculum has drawn much interest. This session will focus on the visual models the curriculum uses that enable students to tackle algebraic problems and develop deep understanding of such topics as operations with fractions and proportion.

Andy Clark

Houghton Mifflin Harcourt, Portland, Oregon

Grand Pavilion I-II (Hyatt)

11:00 A.M.-12:00 P.M.

60

Empowering Students through Reasoning and Sense Making: Video Clips and Tasks

(6-12) Session

This session will share examples and new developments in NCTM's ongoing high school initiative on reasoning and sense making. Participants will discuss video clips of students engaged in reasoning, students' work samples gathered with Live Scribe pens, and a collection of newly developed reasoning tasks available on the NCTM Web site.

J. Michael Shaughnessy

President, National Council of Teachers of Mathematics; Portland State University, Portland, Oregon

Laurie A. Boswell

Riverside School, Lyndonville, Vermont

Grand Pavilion VI (Hyatt)

61

Illuminate Variables and Functions' Behavior Geometrically with Sketchpad 5®

(6-12) Session

Students needn't struggle with domain, range, composition, and inverses. Learn how students, using Sketchpad 5, have created geometric functions, dragged input points to determine output points, produced visual images of compositions and inverses, and transformed photographic images.

Scott Steketee

Key Curriculum Press Technologies, Emeryville, California

Grand Pavilion III (Hyatt)

LOR 62

Space Math@NASA and NASA eClips™: Real-World Algebra Connections

(6-12) Session

Do your students ask *why* they should learn algebra and *when* they might use it? Space Math@NASA, paired with NASA eClips video segments, answer these questions by building real-world connections and relevance to algebra content. You will also learn how to power up your lessons through other Web 2.0 tools such as online models and simulations.

Sten Odenwald

NASA Goddard Space Flight Center, Greenbelt, Maryland

Elaine Lewis

NASA Goddard Space Flight Center, Greenbelt, Maryland

Sharon Bowers

National Institute of Aerospace, Hampton, Virginia

Taos (Albuquerque Convention Center)

LOR 63

Powerful Technology = Powerful Mathematics

(9-12) Session

Some mathematics is possible because technology allows it. Come see some of the cool mathematics that effective use of technology exposes.

John E. Hanna

Texas Instruments (T³), Dallas, Texas

San Miguel (Albuquerque Convention Center)

Hear what's new from Exhibitors—attend an Exhibitor Workshop (see pg. 6)

11:00 A.M.-12:00 P.M.

64

Voices of Mathematics Course Repeaters

(Higher Education) Session

The presenter will share data, results, and students' selected comments from a study conducted at St. Louis Community College at Meramec to learn more about why students say they repeat mathematics courses. The study analyzed the results in the context of current research literature on students' academic success.

Laurie K. McManus

St. Louis Community College at Meramec, St. Louis, Missouri

Enchantment C-D (Hyatt)

11:30 A.M.-12:30 P.M.

ew 65

Conquer Times Tables in Only Three Weeks, Guaranteed! (K-8) Exhibitor Workshop

The research-based, *multisensory* program teaches times tables in three weeks, guaranteed! If your class average isn't 90 percent on the final test, get a 100-percent refund. Addresses all four learning styles; regular, special, and gifted education; and Response to Intervention. Tons of fun! *No* training! Visit www.rhymesntimes.com and www. clockwisemath.com.

Rhymes 'n' Times

Lewisville, Texas

Isleta-Jemez (Albuquerque Convention Center)

ew 65.1

Navigating Your Way through the Fraction Story of the Common Core (K-8) Exhibitor Workshop

One approach to the story of fractions is to build on students' understanding of counting and whole-number arithmetic and extend this previous knowledge to the study of fractions. This session will focus on conceptual understanding of the "knotty" topic of fractions, including connections to equal partitioning and unitizing. Video clips will be used to examine the conceptions many students have that allow them to complete some tasks successfully but prove inadequate in other contexts.

Pearson

Upper Saddle River, New Jersey

12:30 P.M.-1:30 P.M.

66

Math and Money\$marts

(General Interest) Session

Learn about tools and games available to integrate financial literacy concepts into your curriculum and make it fun, too. Enjoy participating as your students would.

Adrian Trujillo

Jump\$tart Coalition of New Mexico, Albuquerque, New Mexico

Enchantment A-B (Hyatt)

67

What the Beatles, Hockey Players, and Rice Paddies Teach Us

(General Interest) Session

Malcolm Gladwell's book *Outliers* takes a fresh look at how one achieves success. Participants will engage in conversation and contemplation regarding the Gladwell's conclusions and explore the roles that culture, opportunity, and practice play in achieving mathematical success.

John A. Anderson

Houghton Mifflin Harcourt, Boston, Massachusetts Ballroom C (Albuquerque Convention Center)

68

Developing the Whole Child for Mathematics Success

(Pre-K-2, Preservice and In-Service) Session

In order to improve the quality of early childhood programs, we must establish a pedagogical commitment with children and their families. This session will explore how being a caring, reflective practitioner can shape a child's development and her opportunity to succeed.

Luis Huerta-Charles

New Mexico State University, Las Cruces, New Mexico

Grand Pavilion IV (Hyatt)

Free T-shirts— Stop by the Member Showcase to learn how to get one!

ORIGO

dare to be different

Looking for better results in your classroom?

ORIGO Education provides in-depth professional learning, intervention resources, and supplemental materials for elementary schools. Our unique solutions are research-based, highly effective, and utilize the latest technologies. Educators with decades of mathematics experience create all of ORIGO's resources and services to help classroom teachers make a difference.

Visit us at booth #400 for your FREE Scope and Sequence Chart.



12:30 P.M.-1:30 P.M.

LOR 69

Multiplayer Gaming and Math Fact Fluency

(Pre-K-5) Session

Ninety-seven percent of elementary school students play video games. Combining aspects of multiplayer gaming with educational content can transform the learning experience. The speaker will demonstrate multiplayer multiplication games, results from an NSF study on multiplayer gaming and fact fluency, and ideas for integrating games into classrooms.

David Woodward

Boulder Valley School District, Boulder, Colorado

Taos (Albuquerque Convention Center)

LR 70

Organizing Your Guided Math Classroom

(Pre-K-5) Session

The speaker will share techniques for organizing and implementing a guided math classroom—lesson plan format, flexible grouping, sample activities, journal activities, task cards, and numeracy activities. She will showcase several technology resources. Participants will leave able to implement new strategies in their classrooms.

Amber Evenson

McREL, Denver, Colorado

San Miguel (Albuquerque Convention Center)

71

Teaching Troublesome Topics (3–5) Session

Can place value be the key to teaching not only traditional algorithms but problem areas like measurement, elapsed time, money and fractions? Join best-selling the speaker as he explores an algebraic approach to teaching these troublesome topics.

Greg Tang

Houghton Mifflin Harcourt Math, Boston, Massachusetts Grand Pavilion I-II (Hyatt)

72

Beyond Good Teaching: Meeting the Mathematical Needs of ELLs

(6-8, Preservice and In-Service) Session

This presentation will overview teaching mathematics to English language learners (ELLs), focusing on describing stages of second-language development and implications for teaching secondary school mathematics. Video clips and lesson plans will illustrate examples of how ELLs at different English proficiency levels can engage in learning mathematics.

Sylvia Celedón-Pattichis

University of New Mexico, Albuquerque, New Mexico

Nora G. Ramirez TODOS: Mathematics for ALL, Tempe, Arizona

Grand Pavilion VI (Hyatt)

Lor 73

Unlock the Secret: Solving Equations + Multiple Representations = Students' Success

(6-12) Session

Treat algebra as a handy language for unlocking secrets (i.e., equation solving) and building mathematical models. Participate in innovative, engaging, nontraditional approaches for solving equations—unorthodox, researchedand-tested methods designed to empower your students and move them to mastery!

Donna Davis

Baltimore City Public School System, Baltimore, Maryland Mesilla (Albuquerque Convention Center)

LOR 74

The Housekeeper and the Professor: Teaching Mathematics with Fiction and Film

(9-12) Session

The Housekeeper and the Professor, a novel by Yoko Ogawa and The Professor's Most Beloved Equation, a movie based on the book, both tell a touching story about memory, family, and a boy with a flat head named Root who grows up to be a math teacher. This workshop will appeal to teachers wanting to use fiction and film to teach algebra and geometry.

Ron Lancaster

Ontario Institute for Studies in Education, University of Toronto, Toronto, Canada

Brazos (Albuquerque Convention Center)

12:30 P.M.-1:30 P.M.

75

Assessing Knowledge of Geometry for Teaching

(Preservice and In-Service, Research) Session

The speakers will present the process of empirically validating an instrument designed to measure teachers' knowledge about geometry, proof, and conjecture. They will discuss the overall assessment framework, specific items, and validation results from a sample of 70 in-service geometry teachers.

M. Alejandra Sorto

Texas State University—San Marcos, San Marcos, Texas

Alana Rosenwasser

Texas State University—San Marcos, San Marcos, Texas

Ewelina McBroom

Texas State University—San Marcos, San Marcos, Texas Grand Pavilion III (Hyatt)

76

Preservice Teachers' Mathematics Content Knowledge, Confidence Levels, and Math Anxiety

(Preservice and In-Service) Session

The speakers will present findings from a study on preservice teachers' content knowledge, confidence levels, and math anxiety. Teachers in the study included a large percent of first-generation college attendees and speakers of other languages. In this population, English reading ability, content knowledge, and anxiety interact in interesting ways.

Gwendolyn Johnson

University of North Texas at Dallas, Dallas, Texas

Noureen Khan University of North Texas at Dallas, Dallas, Texas

Ali Shaqlaih University of North Texas at Dallas, Dallas, Texas

Enchantment C-D (Hyatt)

Shop and save 25 percent at the NCTM Onsite Bookstore!

12:30 P.M.-2:00 P.M.

77

Building Grades K-2 Math Skills through Interactive Calendar Activities (Pre-K-2) Gallery Workshop

Learn how you can build math skills through daily, calendar-based activities. Participants will solve calendar patterns, observe counting and visual models in practice, engage in data analysis, learn how to teach fact strategies, work with money and time activities, and more, and can access all activities online.

Dennis E. Adams

The Math Learning Center, Salem, Oregon

Enchantment (Albuquerque Convention Center)

78

Supporting Children's Numerical Operations with Math Games and Graphic Organizers

(Pre-K-2) Gallery Workshop

This session will focus on games and graphic organizers that help students explore relationships between addition and subtraction. It will support children's understanding of numbers related in fact families, number combinations, missing addends, and word problems. Participants will receive the graphic organizers and ready-to-use games.

Socorro H. Tapetillo Chandler Unified School District, Chandler, Arizona

Allison J. Davis

Chandler Unified School District, Chandler, Arizona

Aztec (Albuquerque Convention Center)

79

Transforming Money, Eating Away Time, and Flip-Flop Operations Develop Excited Learners

(Pre-K-2) Gallery Workshop

The speaker will use transformers, moveable numbers, play dough, and snacks to develop concepts of numbers, money, time, and measurement. English Speakers of Other Languages, exceptional students, or anyone will enjoy these hands-on activities that will transform reluctant learners into avid mathematicians.

Kathryn Robinson

WriteMath Enterprises, Inc., Valrico, Florida

Picuris (Albuquerque Convention Center)

12:30 P.M.-2:00 P.M.

80

A Number Sense Approach to X Facts: Every Day Counts (3–5) Gallery Workshop

Try a systematic approach to teaching basic facts in 5–10 minutes a day, encouraging reasoning and thinking while building fluency for all. A counting tape with multiple markers and unique, array flash cards help students break harder facts into easier ones while building crucial connections among multiplication, division, and fractions of a set.

Janet G. Gillespie

Great Source/Houghton Mifflin Harcourt Specialized Curriculum, Wilmington, Massachusetts

Pecos (Albuquerque Convention Center)

Session #85 Understanding Equality... Demystifying Equations

Thursday, November 3 12:30 - 2:00 p.m. Ruidoso Albuquerque Convention <u>Center</u>

Speaker: Kay Smitherman

Visit our Booth (#412 - #414) ENTER THE RAFFLE TO WIN A CLASS SET!

> Hands-On Equations[®] Borenson and Associates, Inc. P.O. Box 3328, Allentown, PA 18106 800.993.6284

82

From Good Idea to Consistent Practice: Coaching Strategies That Work

(3–5, Preservice and In-Service) Gallery Workshop

Just as all students can learn math, all teachers can become good mathematics teachers. Join us for lively activities, videos and discussions as we examine the "Six Steps to Leverage Change in Math." Learn simple, yet effective ways to engage teachers in researching and using best practices in their own classrooms.

Chris Confer

Associates for Educational Success, Tucson, Arizona

Marco A. Ramirez

Associates for Educational Success, Tucson, Arizona

Sage (Hyatt)

82.1

An Introduction to the Illustrative Mathematics Project

(3-8) Gallery Workshop

Many states have adopted the Common Core State Standards (CCSS) in Mathematics, and everyone is trying to figure out how to implement them. This session will introduce participants to a new and growing resource that provides teachers with tasks that illustrate the CCSS. While this resource is available for all grade levels, this session will focus on the elementary band.

Michael Nakamaye

University of Mexico, Albuquerque, New Mexico

Grand Pavilion V (Hyatt)

(83

Breaking the Algebra Barrier, with Arithmetic!

(3–8) Gallery Workshop

Why do the digits of a multiple of nine always add to nine? Students often perceive algebra as disconnected from their prior math learning; nothing could be further from the truth. Teachers will investigate techniques to reorganize arithmetic knowledge and harvest familiar concepts for the connections that support skills transfer to algebra.

Cheryl Jaffe

Northrop Grumman Electronic Systems, Baltimore, Maryland

Fiesta (Hyatt)

12:30 P.M.-2:00 P.M.

83.1

If You Give a Moose a Map (3-8) Gallery Workshop

Take a journey with Maddie Moose down the Appalachian Trail. This culminating unit incorporates computation skills (buying supplies, balancing a checkbook) fractions, geometry, measurement, probability, and graphing. The unit is geared for 4th grade, but can be adaptable to any level.

Lisa Carlson

Saint Charles School, Kettering, Ohio

Dona Ana (Albuquerque Convention Center)

85

Understanding Mathematical Equality and Demystifying Equations, Grades 6–8

(6-8) Gallery Workshop

Do your students have difficulty understanding mathematical equality or solving equations? See how Hands-On Equations' visual, kinesthetic approach simplifies teaching linear equations with unknowns on both sides and the distributive property.

Kay Smitherman

Borenson and Associates, Inc., Allentown, Pennsylvania

Ruidoso (Albuquerque Convention Center)

86

Use Problem Solving to Understand Ratios and Proportional Relationships (6–8) Gallery Workshop

The Common Core State Standards for grades 6–7 consider ratios and proportional relationships crucial areas for instructional time. How can teachers facilitate this learning so that *all* students, particularly English language learners, acquire this knowledge and use it to solve problems? Come to this session and be problem solvers!

Susie Hakansson

University of California at Los Angeles, Los Angeles, California

Ballroom A (Albuquerque Convention Center)

87

Color by Numbers: Teaching All Types of Learners

(6–12) Gallery Workshop

We as teachers know the diversity of learners, yet we seldom connect students' learning types with who those students are. The speaker will talk about how personalities and learning styles tie together in mathematics how to use this to create lessons that reach all types of students.

Joseph Bolz

Mountain Range High School, Westminster, Colorado

Tesuque (Albuquerque Convention Center)

88

Stories and Technology: Gateways into Mathematics for All

(6–12) Gallery Workshop

This workshop will use teacher-created stories to explore using technologies (e.g., SMART Board, PowerPoint, CAST UDL Web site) to access various mathematics concepts. The speakers will address specific strategies for diverse learners, including students with learning disabilities and Englishlanguage learners.

Karen Terrell

Boston College, Chestnut Hill, Massachusetts

Dennis DeBay Boston College, Chestnut Hill, Massachusetts

Ballroom B (Albuquerque Convention Center)

89

Riding the Ferris Wheel: A Sinusoidal Model

(9–12) Gallery Workshop

Students often encounter scenarios that model the sine function, such as tides or a Ferris wheel, yet students do not get a concrete understanding of the model. This activity will use a hamster wheel and other inexpensive, everyday items to model Ferris wheel motion. Participants will collect data and develop their own model for the motion.

Kathleen Mittag

University of Texas at San Antonio, San Antonio, Texas

Sharon E. Taylor

Georgia Southern University, Statesboro, Georgia

La Cienega (Albuquerque Convention Center)

1:00 P.M.-2:00 P.M.

ew 90

The Interactive Whiteboard and the Common Core Mathematical Practices in an Inquiry-Based Classroom

(General Interest) Exhibitor Workshop

Through example whiteboard activities, investigate strategies for teaching, supporting, and recognizing the Common Core mathematical practices in your classroom, developing further understanding of the mathematical practices along the way.

Pearson

Upper Saddle River, New Jersey

Navajo-Nambe (Albuquerque Convention Center)

ew 91

Mental Math with Fractions, Decimals, Percents, and Degrees (K-8) Exhibitor Workshop

The research-based, *multisensory* program connects fractions, decimals, percents, and degrees on a clock face! Do mental math in a snap, compare fractions, convert them to decimals, add or subtract in your head, and master pie charts! Discover real-world applications ad support all four learning styles for regular, special, or gifted education and Response to InterventionI. Tons of fun! *No* training! www. clockwisemath.com

ClockWise Fractions

Lewisville, Texas

Isleta-Jemez (Albuquerque Convention Center)

2:00 P.M.-3:00 P.M.

92

Collective Mathematics Identity: Thinking across Classes

(General Interest, Research) Session

The presentation is based on research conducted with four bilingual Mexican immigrant students. Two video vignettes will demonstrate two Latinas' differing approaches to problem solving. Discussion will focus on students' burgeoning identities as learners of mathematics and how an individual's identity in mathematics relates to the development of the collective's identity.

Richard Kitchen

University of New Mexico, Albuquerque, New Mexico

Enchantment C-D (Hyatt)

93

Curse—No! Technology, Recursion, and Induction—Yes

(General Interest) Session

From the time very young students describe an "add 3" pattern, they use recursion. With spreadsheets, in middle school, they use recursive formulas. In high school, they prove conjectures naturally with mathematical induction. Come experience recursive thinking.

Johnny Lott

Past President, National Council of Teachers of Mathematics, University of Mississippi, Oxford, Mississippi

Grand Pavilion III (Hyatt)

94

Math Happens When Children Wonder about What They Read

(General Interest) Session

The speaker's books inspire readers to raise questions and solve problems. This author of more than fifty children's math and science books will demonstrate how teachers can encourage children to read, wonder, and do the math, all the while supporting the standards. He will share instructive, impressive, and hilarious students' work.

David M. Schwartz

Author, Oakland, California

Ballroom C (Albuquerque Convention Center)

LOR 94.1

Growing Up Tech-Savvy: Digital Storytelling as Instructional and Assessment Tools

(Pre-K-2, Preservice and In-Service) Session

This session will address how students use digital storytelling to demonstrate their understanding of geometric and algebraic concepts. Students can take photos, collect them succinctly, and develop a digital story that portrays their knowledge through a short movie clip with actual voice or sound overlay.

Tyrette S. Carter

North Carolina Agricultural and Technical State University, Greensboro, North Carolina

Ereka Williams

North Carolina Agricultural and Technical State University, Greensboro, North Carolina

Kimberly Erwin

North Carolina Agricultural and Technical State University, Greensboro, North Carolina

Brazos (Albuquerque Convention Center

2:00 P.M.-3:00 P.M.

94.2

Developing Number Sense in Early Childhood with Five-Frames and Ten-Frames

(Pre-K-2) Session

In this presentation we describe how five- and tenframe representations can be used to support students' development of key number sense skills (e.g., 1-1 correspondence, cardinality, place value, etc.) in grades Pre-K-2. Session attendees will be provided with specific resources and tips to support their instruction

Catherine Kelly

University of Colorado, Colorado Springs, Colorado

Patrick McGuire

University of Colorado, Colorado Springs, Colorado Grand Pavilion IV (Hyatt)

LOR 96

Build It, Write It, Talk It, Own It: Empowerment Strategies

(Pre-K-5) Session

The speaker will explore methods to "hook" students with different abilities to deeper conceptual understanding in mathematics. Participants will receive a CD and sample lessons for grades 3–5 that they can use in their own classes.

Rudy V. Neufeld Neufeld Learning Systems, Inc., London, Canada

San Miguel (Albuquerque Convention Center)

98

The Heart of Math Word Problems: Understanding Structutral Reading Barriers

(3-8) Session

Learn to identify and remediate issues in math problems that prevent success in math operations. Students must negotiate vital and auxiliary words in each of three essential functions—set-up, givens, and "whachya want from me?" Recognizing these elements cures math reading issues in normal, developmental, remedial, and special-education levels.

Richard H. Sherman

University of Phoenix—South Florida Campus, Plantation, Florida

Grand Pavilion VI (Hyatt)

99

Students' Engagement: What Is It? How Do We Get It?

(6-8) Session

We hear a lot about the importance of students' engagement, but what exactly is it? Students sitting quietly and listening to their teacher and others? Students actively doing a math task? It could be both or neither. Participants will think about what student engagement really is and how we can structure learning tasks to ensure a higher degree of it.

Debbie Duvall

Board of Directors, National Council of Teachers of Mathematics; Elk Island Public Schools, Sherwood Park, Canada

Grand Pavilion I-II (Hyatt)

Lor 100

Take Geometry Out of the Box!

(6-8) Session

Engage students of all ability levels by connecting geometry with other math strands. Learn how to weave interactive technology into your mathematics program, along with high-yield instructional strategies in a variety of instruction settings. Explore interconnections among geometry and fractions, algebra, graphing, and probability. Receive a CD and other resources.

Perry Gelakis

Thames Valley District School Board, London, Canada

Taos (Albuquerque Convention Center)

Lor 101

What Is GeoGebra, and How Could I Use It?

(6-12) Session

The speakers will discuss and demonstrate how to use the free, open-source dynamic mathematics software GeoGebra. Participants will experience the ease of changing graphs of functions using a slider, how to restrict the domain to graph piecewise functions, and how to use everyday pictures to analyze mathematical properties.

Lisa Herron

Cypress Bay High School, Weston, Florida

Ana Escuder

Florida Atlantic University—Boca Raton, Boca Raton, Florida

Carol Marinas

Barry University, Miami Shores, Florida

Mesilla (Albuquerque Convention Center)

THURSDAY

2:00 P.M.-3:00 P.M.

102

Dynamic Language + Geometry (9–12, Preservice and In-Service) Session

Interactive geometry is a generic term referring to continuous, real-time transformations of geometric figures. This presentation will demonstrate interactive geometry of handheld and computer-based technologies, lessons, products, and strategies for helping students increase their communication skills.

Gilbert Cuevas

Texas State University—San Marcos, San Marcos, Virginia Enchantment A-B (Hyatt)

2:30 P.M.-3:30 P.M.

ew 103

Visualize Singapore Math: Transitioning from the Concrete to the Abstract (K-6) Exhibitor Workshop

Singapore's mathematics framework focuses on problem solving and conceptual understanding through visualization. Transition from concrete-to-pictorial-to-abstract with Math in Focus: Singapore Math by Marshall Cavendish, the U.S. edition of Singapore's most widely used program. This workshop will model Singapore's visual strategies: Ten Frames, Number Bonds, and Bar Models.

Houghton Mifflin Harcourt Boston, Massachusetts

Isleta-Jemez (Albuquerque Convention Center)

ew 104

Pearson's New **digits** Program: Where Math Clicks!

(6-8) Exhibitor Workshop

Experience *digits*, the only Common Core middle grades math curriculum built for today's digital students, with all interactive whiteboard lessons, online assessments, robust Response to Intervention, and automatic grading and reporting. Find out how *digits* harnesses technology's power to optimize your time and individualize their learning, both in and out of the classroom.

Pearson

Upper Saddle River, New Jersey

Navajo-Nambe (Albuquerque Convention Center)

2:30 P.M.-4:00 P.M.

105

Building Place-Value Knowledge to Increase Computation Skills (Pre-K-2) Gallery Workshop

This session will give participants the activities and knowledge to build their students' understanding of place value and the base-ten numeration system. Participants see a connection between these understandings and how they can increase computational skills in primary school students.

HollyDee Archuleta

Meridian Elementary School, Meridian, Idaho

Sarah Bautista

Lincoln Elementary School, Caldwell, Idaho

Ruidoso (Albuquerque Convention Center)

106

Be Strategic: Number Sense, Computational Fluency, and Professional Learning

(Pre-K-5) Gallery Workshop

Strategies that give the reasoning underlying basic facts can help teaching number and computational fluency make sense to elementary school students. Explore the strategies, in an engaging session filled with practical ideas and demonstrations, using Mathedology, a Web-based resource that empowers teachers with professional learning.

Rob Nickerson ORIGO Education, Saint Charles, Missouri

Fiesta (Hyatt)

(107

Chess Minigame: Supporting the Common Core State Standards

(Pre-K-5) Gallery Workshop

Learn how to use simple games of chess to engage students in mathematical problem solving, and support the new Common Core State Standards. No prior knowledge of chess is needed! The games are rich in language, critical thinking, and computation; build confidence with fractions; and are fun!

Kathy Price

Bloomfield Schools, Bloomfield, New Mexico

Enchantment (Albuquerque Convention Center)

2:30 P.M.-4:00 P.M.

108

Shuffling into Math: Primary School Math Games

(Pre-K-5) Gallery Workshop

Come prepared to play card and dice games that help your primary school students achieve success in numeration, operations, place value, and graphing. The speaker will share excellent take home ideas, gameboards, student samples and more, great for regular, English language learner, and afterschool programs.

Jane Felling

Box Cars & One-Eyed Jacks, Edmonton, Canada

Ballroom B (Albuquerque Convention Center)

109

Literature Plus Technology Increases "Aha" Moments for All Students (3–5) Gallery Workshop

Familiar children's stories can engage and increase students' application of number operations and concepts. Come join in multiple activities designed to engage all students in application problems involving number operations and other math concepts. Each participants will receive a preview CD and sample lesson plans.

Brenda J. Morgan

Houston Independent School District, Houston, Texas

Ballroom A (Albuquerque Convention Center)

110

Conceptual Systematic Intervention: Your Classroom

(3-8) Gallery Workshop

This session will focus on instructional strategies that develop mathematical understanding of fractions, through systematic instructional design that addresses your classroom's intervention needs. Try hands-on activities, including games and technology, and receive handouts and materials.

Carolyn M. Moore

McGraw-Hill, Columbus, Ohio

Tesuque (Albuquerque Convention Center)

111

A Closer Look at Formative Assessment in Mathematics

(6-8) Gallery Workshop

Participants will explore Five Key Strategies of Formative Assessment and engage in activities that highlight implementation in a standards-based classroom. These strategies are setting goals; engineering effective discussions; providing feedback; and activating students as owners of their own learning, and as learning resources for one another.

Emmanuel A. Espinoza

Mathematically Connected Communities (MC²), Espanola, New Mexico

Michelle Sterling-Rodriguez

Mathematically Connected Communities (MC²), Las Cruces, New Mexico

Sage (Hyatt)

112

Math Lessons for a World of 7 Billion (6–8) Gallery Workshop

The world population reaching 7 billion in late 2011 will offer a teachable moment to help students understand large numbers, growth patterns, and vital statistics that shape the global family. Engage in hands-on activities that use math concepts and skills to explain social studies and science content. Receive a free CD-ROM of activities.

Denise Ames

Center for Global Awareness, Albuquerque, New Mexico Picuris (Albuquerque Convention Center)

113

How a Kindergarten Teacher Changed How I Teach Math

(6–8, Preservice and In-Service) Gallery Workshop

This workshop's activities will reflect the pedagogy that the speaker learned from a kindergarten teacher and applied to middle and high school. The topics are upper level, but the management strategies cross all grades.

Cathy Draper

The Math Studio, Inc., Salem, Massachusetts

La Cienega (Albuquerque Convention Center)

2:30 P.M.-4:00 P.M.

114

Fostering Flexible Thinking in First-Year Algebra

(6–12) Gallery Workshop

Despite best intentions, first-year algebra courses can default to a list of procedures and practice exercises. Students perceive only one way to solve each problem, something they find boring and defeating. Come learn strategies for designing lessons that promote multiple solutions and empower students to thinking more flexibly on a regular basis.

Kasi Allen

Lewis and Clark College, Portland, Oregon

Dona Ana (Albuquerque Convention Center)

115

Improve At-Risk Students' Understanding of Algebraic Concepts through Technology (6–12) Gallery Workshop

Electronic whiteboards, graphing calculators, and software are changing the way we teach mathematics. This interactive workshop will focus on how this technology can help atrisk students visualize difficult topics and gain confidence in their math ability. Participants will examine algebraic functions through a guided exploration.

James W. Kearns

Salem State College, Salem, Massachusetts

Pecos (Albuquerque Convention Center)

116

Efficient Polynomial Multiplication, Division, Factoring, and Completing the Square

(9–12) Gallery Workshop

Although multiplying binomials, factoring, completing the square, and polynomial division are important skills, belaboring them can interfere with students' broader vision of algebra. This session will have you practice each skill using algebra tiles and area models in ways that both are efficient and promote students' understanding.

Raymond Johnson

University of Colorado at Boulder, Boulder, Colorado

Grand Pavilion V (Hyatt)

117

New and Preservice Teachers Workshop

(Preservice and In-Service) Gallery Workshop

Find answers to your questions on topics such as classroom management, parents, motivation, and keeping your sanity. Connect with other new teachers, learn from experienced professionals, and find resources to engage you and your students. You might even win a prize!

Sarah Marie DeLeeuw

National Council of Teachers of Mathematics, Reston, Virginia

Aztec (Albuquerque Convention Center)

3:30 P.M.-4:30 P.M.

118

Assessing Students on the Common Core: Your Next Steps

(General Interest) Session

The speaker will give an update on the PARCC and SMARTER Better Balanced Assessment consortia as they produce math assessments for use by 2014–15. He will make recommendations for use and interpretation to improve your students' learning. Provide your feedback during test development through your school, district, and state.

Henry Kepner

Past President, National Council of Teachers of Mathematics; University of Wisconsin—Milwaukee, Milwaukee, Wisconsin

Grand Pavilion IV (Hyatt)

119

Digging Deeper into Data from New Mexico Standards-Based Assessments (NMSBA)

(General Interest, Research) Session

Reports and pivot tables from the NMSBA do not typically offer detailed insights into an individual student's mind. This presentation will help you decode some of the seemingly meaningless raw data to determine how any given student did on any given question, so that you can develop appropriate interventions.

Kalle V. Jorgensen

Mathematically Connected Communities (MC²), Las Cruces, New Mexico

Enchantment A-B (Hyatt)

3:30 P.M.-4:30 P.M.

LOR 120

Learn↔Reflect Reflection Session

(General Interest) Session

The culmination session of the Learn \leftrightarrow Reflect strand is a facilitated discussion of four reflection questions. Those who attend the Kickoff, at least one Learn \leftrightarrow Reflect session, and the Reflection session will earn a personalized certificate.

Francesca Blueher

Albuquerque Public Schools, Albuquerque, New Mexico

Tori Gilpin Gadsden Independent School District, Santa Teresa, New Mexico

Diana Fesmire Chaparral Middle School, Alamogordo, New Mexico

Dana Dawson Moriarty High School, Moriarty, New Mexico Brazos (Albuquerque Convention Center)

121

Using National Board Standards to Guide and Improve Mathematics Teaching

(General Interest) Session

National Board for Professional Teaching Standards represents a professional consensus on what accomplished teachers should know and be able to do. Explore mathematics standards in early or middle childhood generalist and early adolescence through young adulthood, and consider why you might pursue National Board certification.

Lisa Stooksberry

National Board for Professional Teaching Standards, Arlington, Virginia

Fabio Augusto Milner Arizona State University, Temple, Arizona

Suzanne Nakashima Lincrest Elementary School, Yuba City, California

Michelle Sterling-Rodriguez New Mexico State University, La Cruces, New Mexico

Elaine Surbeck Arizona State University, Tempe, Arizona

Richard Seitz Helena High School, Helena, Montana

Mesilla (Albuquerque Convention Center)

122

Effective Games and Practices That Lead to Students' Success

(Pre-K-2) Session

Be more efficient and selective about time devoted to number. A ready-to-use handout of highly engaging, repeatable activities and instructional strategies will help you enhance number sense and build confidence in your students.

Laura L. Choate

Fallbrook Union Elementary School District, Fallbrook, California

Grand Pavilion I-II (Hyatt)

123

Teaching for the Struggling Learner: The Six-Kid Rule

(3-8) Session

Every math teacher knows about these kids—the six or so students who lack basic, prerequisite math skills and struggle with any new math lesson because of it. Participants will learn how to design and deliver whole-group instruction that supports for these students, and how to design and manage guided math groups that give lagging learners a catch-up path.

Annette S. Holmstrom

University Place School District, University Place, Washington

Jeff Loupas

University Place School District, University Place, Washington

Taos (Albuquerque Convention Center)



3:30 P.M.-4:30 P.M.

124

Use Assessment to Facilitate Students' Learning, Interest, and Effort

(6-8) Session

Appropriate assessment can motivate the unmotivated, restore the desire to learn, and encourage students to keep learning. Participants will receive assessment strategies guaranteed to improve students' achievement and inspire effort. This session will explore the challenges and successes teachers experience using more rigorous assessments.

Suzanne Mitchell

Arkansas State University, Jonesboro, Arkansas

Grand Pavilion VI (Hyatt)

125

Problem Solving with van Hiele Geometric Reasoning

(6-12) Session

This presentation will meander through the van Hiele model's geometric levels of reasoning, with problem solving and sense making at the core of the discussed situations. Real applications and a hands-on approach will be the main tools for constructing students' geometric thinking.

Nick B. Bradford

Blount County Schools, Maryville, Tennessee

Grand Pavilion III (Hyatt)

Interested in presenting at a 2012 NCTM Regional Conference?

Submit Speaker Proposals for Dallas, Hartford, and Chicago by November 1, 2011 at www.nctm.org/speak

126

Achieve Growth with the Students Who Need It Most

(9–12) Session

The presenters share a program model, funded by a Colorado Council of Teachers of Mathematics grant, that achieves remarkable results in "closing the math gap" for atrisk and English language learner students. They will show how exacting use of curricula, assessments, and relationships pushes students forward in secondary school mathematics.

Susan Holloway

New America School, Littleton, Colorado

San Miguel (Albuquerque Convention Center)

127

Fourth-Year Mathematics: A Vehicle for College and Career Readiness

(9–12) Session

What does college and career readiness mean in today's world, and how can we prepare every student for college or a well-paying career? We will look at how to give every student the research and work tools they need for the future and discuss alternatives to the calculus path, including a course called Advanced Mathematical Decision Making.

Cathy Seeley

Past President, National Council of Teachers of Mathematics; Charles A. Dana Center, University of Texas at Austin, Austin, Texas

Ballroom C (Albuquerque Convention Center)

128

Using Genetics Models to Capstone an Introductory Statistics Course

(Higher Education) Session

Genetic models serve well as capstones in an introductory statistics course. For instance, Mendelian models illustrate discrete probability, whereas DNA microarray data show the idea of multiple testing. Since genetics interests many students, these models can help students see the relevance of statistics.

Jonathan Corbett

Harris-Stowe State University, St. Louis, Missouri

Ann Podleski

Harris-Stowe State University, St. Louis, Missouri

Enchantment C-D (Hyatt)
FRIDAY PLANNER

8:00	
8:30	
9:00	
9:30	
10:00	
10:30	
11:00	
11:30	
Noon	
12:30	
1:00	
1:30	
2:00	
2:30	
3:00	
3:30	
4:00	
4:30	
5:00	

Exhibitor Workshop

Common Core

Highlights

- New Member and First Timers' Orientation (Presentation 129)
- New and Preservice Teachers' Workshop (Presentation 180)

Registration Hours 7:00 a.m.-4:00 p.m.

Exhibit Hours 8:00 a.m.-4:00 p.m.

Bookstore and Member Showcase Hours 8:00 a.m.-4:00 p.m.

Fire Codes

We have made every attempt to provide adequate seating for participants at the conference, but for your safety and because of fire regulations, only those with seats will be allowed in meeting rooms. To conform to fire codes, it will be necessary to ask persons sitting on the floor or standing to leave the room.

7:15 A.M.-7:45 A.M.

129

New Members and First Timers' Orientation

(General Interest) Session

Find answers to your questions on topics such as classroom management, parents, motivation, and keeping your sanity. Connect with other new teachers, learn from experienced professionals, and find resources to engage you and your students. You might even win a prize!

Sara Normington

Council of Presidential Awardees in Mathematics, Portland, Oregon

San Miguel (Albuquerque Convention Center)

8:00 A.M.-9:00 A.M.

130

Albert Einstein Distinguished Educator Fellowship

(General Interest) Session

The Albert Einstein Distinguished Educator Fellowship is available to outstanding, current grades K–12 classroom teachers of science, technology, engineering, or math with at least five year's teaching experience, to share their educational experiences and expertise at a national education policy level.

Kathryn Culbertson

Triangle Coalition for Science and Technology Education, Arlington, Virginia

Enchantment C-D (Hyatt)

131

Attaining Uncommon Results with Common Standards

(General Interest) Session

The advent of Common Core State Standards for Mathematics does not change a fundamental research finding: instructional practices and policies manufacture much of what we have traditionally labeled the achievement gap. The speaker will discuss three features of schools that are successfully closing the gap.

Matt Larson

Board of Directors, National Council of Teachers of Mathematics; Lincoln Public Schools, Lincoln, Nebraska

Ballroom C (Albuquerque Convention Center)

132

Hoops, Homeruns, and Holes in One: All Star Math Night

(Pre-K-2) Session

Turn parents into math fans and students into "mathletes!" Learn how to involve your community, school, and parents in an action-packed math night. Sport-related activities based on core standards will excite and motivate families to extend learning at home. Leave with all the necessary steps needed to implement a successful math night.

Connie C. Jones

Webster Elementary School, Muscle Shoals, Alabama

Wendi H. Thornton Webster Elementary School, Muscle Shoals, Alabama

Madonna I. Choat Webster Elementary School, Muscle Shoals, Alabama

Brazos (Albuquerque Convention Center)

133

Mental Mathematics: Strategies for Teaching Number Facts and Beyond (Pre-K-5) Session

Confidence with mental mathematics is essential for all, students through adults. This session will describe proven strategies that help ensure success with number facts for all four operations that can be extended to greater numbers. These strategies are successful in part because they make sense to students.

Calvin Irons Queensland University of Technology, Brisbane, Australia

Rosemary Irons

Queensland University of Technology, Brisbane, Australia

San Miguel (Albuquerque Convention Center)

134

Teaching Fractions to Build Proportional Reasoning

(3–5) Session

This session will focus on strategies for building proportional reasoning through three models of fractions—area, set and number line. Participants will experience literature, songs, and meaningful, ready-to-go activities for the elementary school classroom.

Kim Sutton

Creative Mathematics, Arcata, California

Taos (Albuquerque Convention Center)

8:00 A.M.-9:00 A.M.

135

Infectious Math: Epidemics as a Means to Teaching Math

(6-8) Session

The speaker will describe how he used epidemics study to introduce advanced math concepts from combinatorics, statistics, and calculus successfully to Clark County, Nevada, middle schoolers as part of the 2009 Alexander Dawson Foundation summer program.

Frank Wang

Alexander Dawson Foundation, Las Vegas, Nevada

Grand Pavilion I-II (Hyatt)

136

I Believe: Common Myths about Mathematics Learning

(6-12) Session

"If you can't work a problem in 5 minutes, you might as well give up." "Math must be learned from an expert." These and other common myths about math can affect how much your students learn. This session will present strategies for changing those beliefs and increasing success for all your students.

Rita Barger

University of Missouri-Kansas City, Kansas City, Missouri

Mesilla (Albuquerque Convention Center)

137

Newton Says, "Wear Your Seat Belt!" (6–12) Session

Perfect for preteen and teen drivers, this lesson combines algebra and physics principles to support the importance of wearing a seatbelt in a moving vehicle. Discussion will include reading and interpreting charts and graphs, formula calculation, and integrating laws of force, motion, and energy. Bring a calculator.

Sherrie L. Wisdom

Lindenwood University, Saint Charles, Missouri

Grand Pavilion III (Hyatt)

138

Refocusing College Algebra at an Open-Enrollment, Historically Black College or University

(9–12, Higher Education) Session

Students often believe that mathematics does not relate to real life. The speakers will discuss their experience refocusing college algebra to give them a more positive attitude and the ability to use math practically. They will share classroom activities, group projects, successes and challenges so far, and college algebra's future direction.

Ann Podleski

Harris-Stowe State University, St. Louis, Missouri

Jonathan Corbett

Harris-Stowe State University, St. Louis, Missouri

Enchantment A-B (Hyatt)

139

Selling Sporks: A Yearlong Sequence of Projects for Calculus

(9–12, Higher Education) Session

The speaker has developed small projects for AP Calculus AB around the theme that the class is the analysis department of a corporation that sells sporks. He uses the projects to present many central ideas of calculus and some important economic applications. He will discuss the investigations and students' reactions to them.

David S. Metzler

Albuquerque Academy, Albuquerque, New Mexico

Grand Pavilion VI (Hyatt)

(140

Learning to Learn Mathematics: Preservice Assessments to Shape Content Preparation

(Preservice and In-Service) Session

As part of their teacher preparation, the speakers develop course assessments that benefit learners and guide curriculum development. They will share assessments, feedback, and data that contribute to their review process, shape their program to identify content knowledge gaps, and help design courses to prepare students better for teaching mathematics.

Deborah Barany

Lewis and Clark College, Portland, Oregon

Kasi Allen Lewis and Clark College, Portland, Oregon

Grand Pavilion IV (Hyatt)

8:30 A.M.-9:30 A.M.

ew 141

HELP Implement for Response to Intervention (Rtl) for ELL Math (5–8) Exhibitor Workshop

Participants will interact with HELP Math, a digital intervention designed for English language learners (ELLs) in late elementary and middle school, and explore strategies shown to increase achievement, such as targeting precise learning needs; adjusting the intensity or nature of instruction; scaffolding new material and language; and integrating technology into an Rtl model.

Houghton Mifflin Harcourt

Boston, Massachusetts

Navajo-Nambe (Albuquerque Convention Center)

ew 141.1

Changing our Story of Math (6-7) Exhibitor Workshop

From big changes like the introduction of the Common Core State Standards to smaller changes such as integrating new technologies into your math curriculum, a new story of math for our next generation is unfolding. Join Dr. Scott Laidlaw in an exploration of new paradigms and structures to support you and your students. Scott is a recent Next Generation Learning Challenges grant awardee funded by the Gates Foundation for his first-of-its-kind math game, Ko's Journey, created out of a New Mexico classroom. The story is one of inspiration and heart with a set of practices that lead to real improvement with students.

Imagine Education

Salt Lake City, Utah

Isleta-Jemez (Albuquerque Convention Center)

8:30 A.M.-10:00 A.M.

142

Domino Games: Connecting the Dots for Primary School Students (Pre-K-5) Gallery Workshop

Dominoes are a staple found in most primary school classrooms. Come play games that teach number sense, patterning, operations, place value, and problem solving. Receive game boards and ideas to use Monday morning, excellent for centers, backpacks, and after-school, regular, English as a second language, and Title 1 programs.

Allison Riddle

Davis School District, Salt Lake City, Utah

Enchantment (Albuquerque Convention Center)

143

Engaging All Children with Number Sense and Problem Solving (Pre-K-5) Gallery Workshop

The speaker will offer strategies, including manipulative use, to develop number-sense and problem-solving skills. She will demonstrate the power of mathematical discourse to develop concepts, reasoning, and vocabulary. She will engage attendees in activities to develop place value, patterns, estimation, fractions and problem solving.

Donna L. Knoell

Consultant, Shawnee Mission, Kansas

Aztec (Albuquerque Convention Center)

144

Math Activities for the Special Student in the Regular Classroom (Pre-K-5) Gallery Workshop

Are you having difficulty teaching computation to your students with special needs? Do you need alternative strategies? Using the NCTM Math Computation Standard, this session will actively involve you with games and activities that develop concepts. You will then practice these concepts and apply them to solve problems.

Shirley H. Bradsby

Jefferson County Schools, Lakewood, Colorado

Tesuque (Albuquerque Convention Center)

145

Stories That Count: Children's Literature in Math Class

(Pre-K-5) Gallery Workshop

A good story captures children's interest, adds to their understanding, connects mathematics to their experiences or imagination, and demonstrates how math applies to everyday situations. The speaker, a children's author, will explore the combination of sound math concepts and good literature and highlight books that fill both requirements.

M. W. Penn

Author, New Haven, Connecticut

Ballroom A (Albuquerque Convention Center)

8:30 A.M.-10:00 A.M.

146

Building Math Skills with Daily Workouts in Grades 3–5

(3–5) Gallery Workshop

Bring focus to building math skills through 15–20 minute, daily workouts from the Math Learning Center. The lessons complement other curricula. Participants will work with calendar patterns, computational fluency, data collection and analysis, problem solving, number grids, money, and more, and they can access all activities online.

Dennis E. Adams

The Math Learning Center, Salem, Oregon

Ballroom B (Albuquerque Convention Center)

147

Oh No, Not Another Story (3–8) Gallery Workshop

Mathematics can and should be fun. This session will give participants stories, poems, mnemonics, foldables, and other activities that build students' conceptual knowledge and cover number sense, measurement, and geometry standards.

Sheila J. Allen

Medina City Schools, Medina, Ohio

Ruidoso (Albuquerque Convention Center)

148

Probability with Native American Game Sticks

(3-8) Gallery Workshop

Come learn how to play a traditional Native American game. Hear a bit of history, design your own sticks, toss them in the air to generate data while playing, and analyze the game using probability and fraction concepts accessible to upper elementary school students.

Dave Kennedy

Shippensburg University, Shippensburg, Pennsylvania

Grand Pavilion V (Hyatt)

149

Math Snacks: Address Middle School Math Misconceptions Using Fun Animations and Games

(6-8) Gallery Workshop

Middle school math teachers and profession development specialists will watch and play with various math snacks. The speakers will discuss how they can use these short animations and games in class and at home to address students' misunderstandings in topics like ratios, scale factor, numberline concepts, and more. Walk away with ideas you can use tomorrow.

Karen M. Trujillo

New Mexico State University, Las Cruces, New Mexico

Milos Savic

New Mexico State University, Las Cruces, New Mexico Picuris (Albuquerque Convention Center)

150

My 20 Favorite Olympiad Problems, and 50 More

(6-8) Gallery Workshop

Challenge young minds with these rich classic problems. Deepen and strengthen their understanding of math while you excite their imagination and empower them through discovery, collaboration, and mastery. Present math as a way of thinking rather than as a skill set.

Nicholas Restivo

Mathematical Olympiads for Elementary and Middle Schools, Bellmore, New York

La Cienega (Albuquerque Convention Center)

151

Activities to Help the Lower 50 Percent of Students Learn Algebra (6–12) Gallery Workshop

Looking for methods and activities that will engage and reach the reluctant learner? Then this workshop is for you. You will receive several activities that will engage your students as they learn difficult algebraic concepts, such as solving equations, writing linear equations from data, and systems of equations.

Paul J. Weisse

Appleton Area School District, Appleton, Wisconsin

Thomas Strauss AMME, Inc., Fond du Lac, Wisconsin

Pecos (Albuquerque Convention Center)

8:30 A.M.-10:00 A.M.

152

Interesting Ideas, Manipulatives, and Activities for Teaching Geometry Topics (6–12) Gallery Workshop

Participants will use hinged mirrors, rubber bands, patty paper, paper plates, other manipulatives, and interesting problems to develop and apply geometry concepts and review vocabulary—similarity, triangle height, transformations, central angles, polygons, polyhedra, area, and more.

Christine Mikles

College Preparatory Mathematics Educational Program, Sacramento, California

Fiesta (Hyatt)

153

From Wikki Stix to Graphing Calculators (9–12) Gallery Workshop

Participants will engage in technology-rich activities designed to lead students through discovering relationships and rules covering fundamental topics in Algebra I through precalculus. Learn how use graphing calculators, and discuss ways to incorporate technology and manipulatives in order to make lessons more meaningful.

Deedee Stanfield

Oxford City School System, Oxford, Alabama

Dona Ana (Albuquerque Convention Center)



9:30 A.M.-10:30 A.M.

155

Learning from the Program for International Student Assessment (PISA): Challenging Tasks, Informative Results

(General Interest) Session

In PISA, 15-year-old students solve problems that one might encounter outside school. The mathematics tasks used in this international assessment, and the results obtained, are relevant to teachers in grades 6–11 and a resource for teacher educators and professional developers.

Edward A. Silver

University of Michigan, Ann Arbor, Michigan

Grand Pavilion IV (Hyatt)

156

Teaching Math to Struggling Learners, Including Special Education Students (General Interest) Session

The speakers will discuss strategies to use with students who are experiencing difficulties in mathematics and the reasons those difficulties might exist. Some reasons could include perceptual deficits, memory problems, integrative disorders, or language.

Tori Gilpin

Gadsden Independent School District, Santa Teresa, New Mexico

Tomas Diego

Gadsden Independent School District, Santa Teresa, New Mexico

Grand Pavilion I-II (Hyatt)

157

Fire Away with Finger Patterns: A Key to Early Mathematics (Pre-K-2) Session

Finger patterns are a key to early childhood development and structuring numbers. The presenter will discuss finger patterns and early counting and introduce a novel, researchbased approach to teaching the patterns. She will share her instructional sequence and give take-away tools for teachers for use with individuals, groups, and classrooms.

Kellie Merrill

ArithmaKids, Albuquerque, New Mexico

Mesilla (Albuquerque Convention Center)

FRIDAY

9:30 A.M.-10:30 A.M.

(158

Making Sense of Number: Transforming Grades K–2 Math Instruction

(Pre-K–2, Preservice and In-Service) Session

The Common Core Math Standards are moving into grades K–2 classrooms nationwide—and for good reason! Global expectations for number sense are increasing, and early childhood classrooms lay a crucial foundation for later learning. Join us for engaging activities, practical tips, and lively discussions to support this important transition.

Chris Confer

Associates for Educational Success, Tucson, Arizona

San Miguel (Albuquerque Convention Center)

(159

Essential, Immediate Actions to Implement the Common Core State Standards (CCSS)

(Pre-K-5) Session

What are the most important actions to take now to implement the CCSS content and mathematical practices, even though the related assessments will not be in place until 2014? Learn about crucial differences between CCSS and current practice, and how to modify your instruction to meet these new expectations.

Diane J. Briars

National Council of Supervisors of Mathematics, Pittsburgh, Pennsylvania

Ballroom C (Albuquerque Convention Center)

160

Make Math Vocabulary Come to Life (3–5) Session

Learn to work with a diverse population using differentiated materials and instruction. Brain research supports using color, mnemonic devices, and pictures that show meaning. Inspire active learning and increase students' confidence with songs and creative vocabulary games. Help students anchor and retain new vocabulary to improve comprehension.

Linda Cardwell

Lone Star Learning, Lubbock, Texas

Grand Pavilion III (Hyatt)

161

A Mathematical Roadtrip: Revisiting the Familiar and Exploring the New

(6-8) Session

This talk will take a fresh look at familiar concepts such as fractions and explore new concepts from higher mathematics. Every teacher gets a free, unique fraction manipulative that can visually demonstrate fraction division. This zany, lively talk will use fruits, food processors, fun video clips, and games with prizes to keep audience members engaged.

Frank Wang

Alexander Dawson Foundation, Las Vegas, Nevada

Grand Pavilion VI (Hyatt)

162

Bridging the Gap from Elementary to Middle School Computation

(6-12) Session

Are you concerned about your students' whole-number arithmetic and its effect on fractions, decimals, and percents? Engage in lessons with models and problem strings that help students build sophisticated computation strategies to bridge from inefficient, invented strategies to rationalnumber computation. Classroom activities will be provided.

Pamela Weber Harris

Consultant, Kyle, Texas

Taos (Albuquerque Convention Center)

(163

Refocusing our Classrooms: New Opportunities for Students' Learning (6–12) Session

The Common Core State Standards suggest mathematical practices students should learn. These standards can offer opportunities, guided by research and supported by technology, to make our classrooms places where students do mathematics in ways that motivate and engage them and that lead to deeper understanding and success for more students.

Gail Burrill

Past President, National Council of Teachers of Mathematics; Michigan State University, East Lansing, Michigan

Brazos (Albuquerque Convention Center)

9:30 A.M.-10:30 A.M.

164

High School Mathematics Curricula and College-Level Performance

(9–12, Higher Education, Research) Session

The speakers will discuss results of five longitudinal studies examining the relationship between high school mathematics curricula, NSF-funded and not, and college performance. In general, the studies showed that high school curriculum is not a determining factor in students' subsequent college performance.

Thomas R. Post

University of Minnesota—Twin Cities, Minneapolis, Minnesota

William S. Bush University of Louisville, Louisville, Kentucky

Enchantment C-D (Hyatt)

Do Word Problems Scare the Daylights Out of Your Students?



(165

Teaching Algebra Concepts to Students with Special Needs

(9–12, Preservice and In-Service) Session

With appropriate strategies, resources, and pedagogy, students with special needs are very capable of learning algebra concepts. This session will explore those strategies, resources, and pedagogy for several important concepts in algebra in middle and high school. The speaker will also discuss particular learning difficulties in algebra.

Mary Lou Metz

Indiana University of Pennsylvania, Indiana, Pennsylvania

Enchantment A-B (Hyatt)

10:00 A.M.-11:00 A.M.

ew 166

Conquer Times Tables in ONLY 3 WEEKS - Guaranteed!

(K-8) Exhibitor Workshop

This research-based, *multisensory* program teaches times tables in three weeks, guaranteed! If your class average isn't 90 percent on the final test, get a 100-percent refund. Addresses all four learning styles; regular, special, and gifted education; and Response to intervention. Tons of fun! *No* training! Visit www.rhymesntimes.com and www.clockwisemath.com.

Rhymes 'n' Times Lewisville, Texas

Isleta-Jemez (Albuquerque Convention Center)

ew 167

Do Word Problems Scare the Daylights Out of Your Students? (4-9) Exhibitor Workshop

Find out how Hands-On Equations[®] enables students to represent and solve word problems, including age and consecutive-number problems, visually using game pieces. Grades 4–9.

Borenson and Associates

Allentown, Pennsylvania

Navajo-Nambe (Albuquerque Convention Center)

FRIDAY

10:30 A.M.-12:00 P.M.

(168

Mathematically Powerful Students *Know* Numbers and Recognize Relationships: Do Yours?

(Pre-K-2) Gallery Workshop

Engage in activities designed to address the essential understanding of numbers that the Common Core State Standards require. Experience activities in counting, number relationships, and problem solving including games, stations, and electronic links that address the needs of all, including English as a second language and special-needs students.

Nora G. Ramirez

TODOS: Mathematics for ALL, Tempe, Arizona

Tesuque (Albuquerque Convention Center)

168.1

Don't Just Improve Math Skills: Develop Both Skills and Understanding

(Pre-K-5) Gallery Workshop

Important secret ingredients are stirring up classrooms. Fun math games not only improve math skills but also develop skills and understanding, engage students in mathematical experiences, and increase their desire to learn. All activities will be available electronically and ready to use on Monday morning.

Mary Alice Hatchett

Texas Council of Teachers of Mathematics, Austin, Texas

Sage (Hyatt)

169

Inquiry-Based Approaches for English Language Learners (ELLs) (Pre-K-5) Gallery Workshop

The speaker will discuss one of three components (inquiry in math) of a math teacher professional development model for working with ELLs. The session will demonstrate various ideas associated with an inquiry approach, including a social constructivist lens on math learning and using best practices for ELLs in math.

Maria D. Mercado

New Mexico State University, Las Cruces, New Mexico

Rocio Benedicto

New Mexico State University, Las Cruces, New Mexico

Fiesta (Hyatt)

170

Outsmarting Your SMART Board (Pre-K-5) Gallery Workshop

Explore the many ways to create seamless lessons by integrating interactive technology with low-tech manipulatives. Reach all learners using whole-class lessons, differentiated instruction, learning centers, and students' assessments. No SMART Board? No problem?

Shelly Moses

San Diego Jewish Academy, San Diego, California

Kelli Cox

San Diego Jewish Academy, San Diego, California

Dona Ana (Albuquerque Convention Center)

172

Dealing with Diversity: Math Games That Suit All Learners

(3-8) Gallery Workshop

Are you looking for ways to include, motivate, and engage all students in your math program? Come play card and dice games that help students master the operations, numeration concepts, and more. Experience first-hand the power of games for delivering curriculum, reaching all styles of learners. and promoting active participation by all.

Joanne Currah

Box Cars & One-Eyed Jacks, Edmonton, Alberta, Canada

Ballroom A (Albuquerque Convention Center)

173

Fractions, Decimals, Percents, Oh My! (3–8) Gallery Workshop

Fractions underpin the development of proportional reasoning and are important for success in algebra and probability, but they can be difficult to teach and learn. We will explore strategies for teaching conceptual understanding of fractions, decimals, and percents. It doesn't take a "wizard" to teach fractions, just a brain, heart, and courage!

Reneé Smith

Educational Services and Staff Development Association of Central Kansas, Hutchinson, Kansas

Enchantment (Albuquerque Convention Center)

10:30 A.M.-12:00 P.M.

174

Unpacking Geometry Problems from Boxes You Make

(3-8) Gallery Workshop

Participants will transform old greeting cards into useful boxes—useful for small-item storage, but more important, helpful in discovering challenging, real-life geometry concepts, making conjectures, and answering lingering questions. Prepare to be challenged!

Nicholas J. Restivo

Mathematical Olympiads for Elementary and Middle Schools, Bellmore, New York

La Cienega (Albuquerque Convention Center)

(176

What Does It *Mean* to Be Average? (6-8) Gallery Workshop

When you ask your students what the mean is, they say it's the average. When you ask students what an average is, they tell you to add all the numbers and divide by the total number of items. But what does *average* really mean? This session will explore hands-on activities that develop the concepts of mean, median, mode, and range.

Kristi Grande

Love of Learning Educational Services, LLC, Anchorage, Alaska

Pecos (Albuquerque Convention Center)

177

Make Spherical Geometry Fun and Engaging: Tessellate a Sphere (9–12) Gallery Workshop

Participants analyze platonic solids for shapes to tessellate a sphere, construct their shapes, and glue them to a sphere.

Thomas P. Taney Las Cruces Public Schools, Las Cruces, New Mexico Ruidoso (Albuquerque Convention Center)

178

Using Algebra Tiles from Polynomials to Factoring

(9–12) Gallery Workshop

Learn how to make factoring into a concrete, visual experience for your students. Explore algebra tiles, and learn how to use them to show both algebraic multiplication and factoring.

Barbara Reed

El Camino High School, Oceanside, California

Christine Mikles

College Preparatory Mathematics Educational Program, Sacramento, California

Grand Pavilion V (Hyatt)

179

We See Mathematics Everywhere, But How Can We Use It?

(9–12, Preservice and In-Service) Gallery Workshop

Textbook examples and chapter projects often refer to math in the world around us, yet restrict it to two-dimensional photographs and static representations. Participants will develop lessons based on photographs and videos taken during this conference, using technologies that superimpose the mathematics directly onto images.

Amber Branch

Fort Worth Independent School District, Plano, Texas

Picuris (Albuquerque Convention Center)



10:30 A.M.-12:00 P.M.

180

New and Preservice Teachers' Workshop

(Preservice and In-Service) Gallery Workshop

Find answers to your questions on topics such as classroom management, parents, motivation, and keeping your sanity. Connect with other new teachers, learn from experienced professionals, and find resources to engage you and your students. You might even win a prize!

Sarah Marie DeLeeuw

National Council of Teachers of Mathematics, Reston, Virginia

Aztec (Albuquerque Convention Center)

11:00 A.M.-12:00 P.M.

(181

NCTM and Issues around Implementing and Assessing the Common Core

(General Interest) Session

This session will give current information on NCTM's work with teachers, schools, and districts implementing the Common Core State Standards in Mathematics (CCSSM) and on CCSSM's upcoming assessment. It will discuss NCTM's related professional development work, publications, and joint work with other organizations, including the two Assessment Consortia.

Matt Larson

Board of Directors, National Council of Teachers of Mathematics; Lincoln Public Schools, Lincoln, Nebraska

Debbie Duvall

Board of Directors, National Council of Teachers of Mathematics; Elk Island Public Schools, Sherwood Park, Alberta, Canada

J. Michael Shaughnessy

President, National Council of Teachers of Mathematics; Portland State University, Portland, Oregon

Ballroom C (Albuquerque Convention Center)

182

Technological Tools for Conceptual Understanding

(General Interest) Session

Discover revolutionary tools that make mathematics come to life as a dynamic, interactive experience. Engage with new in-classroom technology and computer games that enable elementary, middle, and high school students to build conceptual understanding and test mathematical conjectures. Discuss research, implementation strategies, and data.

Nigel Nisbet

Mind Research Institute, Santa Ana, California

Grand Pavilion VI (Hyatt)

183

What's Changing Here? Is There a Rule or Relationship?

(General Interest) Session

Understanding change is the cornerstone of understanding mathematics. The speakers will use a number of activities to analyze the nature of change in mathematical reasoning and problem solving.

Patti Ann Ancell

Mathematically Connected Communities (MC²), Las Cruces, New Mexico

Bill Schrandt

Mathematically Connected Communities (MC²), Las Cruces, New Mexico

Enchantment A-B (Hyatt)

184

Mathematical Reasoning in Problem Solving; Access for All

(Pre-K-2, Preservice and In-Service) Session

Using Cognitively Guided Instruction's research, the speaker will analyze levels of mathematical reasoning that students use as they solve story problems. She will show videos of a classroom lesson and students' interviews. Participants will gain insights into supporting struggling students and extending their more advanced students' thinking.

Tanya Vik Blais

Consultant, Las Cruces, New Mexico

Grand Pavilion III (Hyatt)

Membership Questions? We've got answers! Visit the NCTM Member Showcase onsite. FRIDAY

11:00 A.M.-12:00 P.M.

185

Activities for Students' Success (Pre-K-5) Session

This session will include mathematics activities for elementary school students. All activities are problem-based and engage students in doing mathematics. You will leave this session with materials needed for students' success.

Janet Stramel

Fort Hays State University, Hays, Kansas

Grand Pavilion IV (Hyatt)



Jointly sponsored by the MAA, SIAM and AMATYC

NCTM is a founding member of Mu Alpha Theta Mu Alpha Theta 601 Elm Ave, Room 1102 Norman, OK 73019-3103 Phone: 405-325-4889 Fac: 405-325-7184 matheta@ou.edu www.mualphatheta.org

186

Teaching Basic Operations to Diverse Students Using the Model Method (Pre-K-5) Session

Singapore Math's model-method approach derives from the concrete-representation-abstract technique for teaching mathematics. Participants will learn how to implement the model method for teaching basic computation to students with diverse learning needs.

Joseph Sencibaugh Truman State University, Kirksville, Missouri

Angela Sencibaugh

Valley Park School District, Valley Park, Missouri

Taos (Albuquerque Convention Center)

187

Bridging Understanding in Math Using GeoGebra: Exploring Quadrilaterals and Measurement

(3–5) Session

The speakers will present geometry activities on quadrilaterals and measurement for elementary grades math using geoboards and GeoGebra. GeoGebra, an emerging technology in the United States, has become a dynamic tool for teaching mathematics, and will it help develop a deeper understanding of geometric concepts in grades 3–5 classrooms.

Joseph Michael Furner

Florida Atlantic University, John D. MacArthur Campus, Jupiter, Florida

Carol Marinas

Barry University, Miami Shores, Florida

Lisa Herron

Cypress Bay High School, Weston, Florida

San Miguel (Albuquerque Convention Center)

(188

Developing Students' Algebraic Thinking and Reasoning

(6–12) Session

This presentation will discuss mathematical practices' role in the Common Core State Standards in developing students' algebraic reasoning and understanding. Engaging in specific algebraic tasks and examining classroom discourse, look at a promising organizing theme for the algebra curriculum that promotes deep understanding and reasoning.

Elizabeth A. Phillips

Michigan State University, East Lansing, Michigan

Brazos (Albuquerque Convention Center)

11:00 A.M.-12:00 P.M.

189

Making Groupwork Work in the Secondary School Mathematics Classroom

(6-12) Session

Research indicates collaboration in the math classroom contributes to students' learning gains as well as strengthened preparation for twenty-first-century professions. Facilitating it with teenage students, however, can prove challenging. Come explore strategies for implementing powerful cooperative learning, and leave with new tools for teaching.

Kasi Allen

Lewis and Clark College, Portland, Oregon

Deborah Barany

Lewis and Clark College, Portland, Oregon

Enchantment C-D (Hyatt)

190

Lessons from New America Schools (NAS) in Colorado and New Mexico (9–12) Session

The NAS model emphasizes English language acquisition and work toward a high school diploma. NAS targets newimmigrant students not already enrolled in, and English language learners not succeeding in, traditional high schools. Explore how to teach math to this unique population.

Susan Holloway

New America School, Littleton, Colorado

Mesilla (Albuquerque Convention Center)

191

Technology as Lever for Reasoning and Sense Making in Mathematics

(9–12) Session

Technology can offer new opportunities for reasoning and sense making. The speakers will draw example from throughout secondary school mathematics, including numbers and operations, algebra, geometry, functions and modeling, statistics, and probability. They will discuss guidelines for choosing and using classroom technology effectively.

Thomas P. Dick Oregon State University, Corvallis, Oregon

Karen F. Hollebrands

North Carolina State University, Raleigh, North Carolina Grand Pavilion I-II (Hyatt)

11:30 A.M.-12:30 P.M.

ew 192

Do You Have the "Right Stuff" for Science, Technology, Engineering, and Mathematics (STEM) Leadership?

(General Interest) Exhibitor Workshop

See if you have the "right stuff". Join Dr. Meghan Marrero, director of curriculum for U.S. Satellite Lab, in an activity from Math Connections to STEM Education, a course in Endeavor, a 100-percent online professional development experience that offers a STEM education certificate endorsed by NASA and Teachers College, Columbia University.

Houghton Mifflin Harcourt

Boston, Massachusetts

Navajo-Nambe (Albuquerque Convention Center)

ew 193

Mental Math with Fractions, Decimals, Percents, and Degrees (K-8) Exhibitor Workshop

This research-based, *multisensory* program connects fractions, decimals, percents, and degrees on a clock face! Do mental math in a snap,compare fractions, convert them to decimals, add or subtract in your head, and master pie charts! Discover real-world applications. Supports all four learning styles for regular, special, and gifted education;and Response to Intervention. Tons of fun! *No* training! www. clockwisemath.com

ClockWise Fractions

Lewisville, Texas

Isleta-Jemez (Albuquerque Convention Center)

12:30 P.M.-1:30 P.M.

194

Are These the Right Standards for Preparing Future Mathematics Teachers? (General Interest) Session

NCTM is currently revising the standards for mathematics teacher education programs, for use as part of the NCATE program review process as well as in other venues. Come hear about the draft standards and help shape the final revisions through your feedback.

NCTM NCATE Program Standards Task Force

National Council of Teachers of Mathematics, Reston, Virginia

Grand Pavilion III (Hyatt)

12:30 P.M.-1:30 P.M.

(195

Developmentally Appropriate Practice versus a Practice That Develops Young Mathematicians

(General Interest) Session

Mathematicians thrive on inquiring and defending their solutions in communities of discourse and reflection. The speaker will use multiplication and its development as an example, with connections made to formative assessment, differentiation, and the Common Core State Standards.

Cathy Fosnot

Mathematics in the City, City College of New York, New York, New York

Ballroom C (Albuquerque Convention Center)

196

Math + Adreneline = The Roller Coaster (General Interest) Session

It's a little bit of algebra, geometry, statistics, and measurement, but all roller coaster. Come explore the mathematics of these amazing machines, including a peak at using the video game *Roller Coaster Tycoon* and data-collection devices for teaching math concepts.

Mike Long Shippensburg University, Shippensburg, Pennsylvania

Nathan Barr Shippensburg University, Shippensburg, Pennsylvania

Grand Pavilion IV (Hyatt)

(196.1

Developing Number Sense in the Primary Grads

(Pre-K-2) Session

Experience a variety of rich mathematical tasks that help students to develop number sense in K-2. Practical ideas for classroom use as well as connections to the Common Core will be included.

Linda M. Gojak

NCTM President-Elect; John Carroll University, Willowick, Ohio

San Miguel (Albuquerque Convention Center)

197

Preservice Teachers' Beliefs about Constructivist Mathematics Education (Pre-K-2, Preservice and In-Service) Session

This presentation will focus on preservice teachers' knowledge of constructivism, explore their views on constructivist practices' efficacy in mathematics education, discuss respondent attitudes toward constructivism, and examine the role of respondents' age, program, academic level, and teacher preparation experiences.

Anne George

Saint Xavier University, School of Education, Chicago, Illinois

Enchantment C-D (Hyatt)

198

Teaching Young Children in the Digital Age: Online Resources

(Pre-K–2, Preservice and In-Service, Research) Session

Today's youngest students are digital natives, having handled electronic devices for as long as they can remember. They look to the Web to accomplish tasks. Pre-K–grade 2 teachers are often digital immigrants, perhaps unaware of online materials that can enhance their students' learning. Find out more about free Web resources for this age group.

Jane Moore

National-Louis University, Chicago, Illinois

Taos (Albuquerque Convention Center)

199

Finally! Math for Your SMART Board™ (3–8) Session

Getting the most out of your board used to mean drawing a big circle and tapping it in the middle. New math tools with prepared lessons and activities for the SMART interactive whiteboard are changing this. Now classes are coming full circle, with no tapping in the middle.

Kathy Robinson

Miss Sally School, Durant, Oklahoma

Brazos (Albuquerque Convention Center)

FRIDAY

12:30 P.M.-1:30 P.M.

200

Flip It Over and Multiply? What's That? (3-8) Session

The speaker will share strategies for conceptual development where one might say, "I know *how* to do it, but not *why*." Concepts include multiplying fractions and twodigit numbers, subtracting a negative, area of a trapezoid, algebraic thinking, and more. A CD and lesson plans will be distributed.

Rudy V. Neufeld

Neufeld Learning Systems, Inc.; Thames Valley Schools, London, Canada

Grand Pavilion I-II (Hyatt)

201

Strategies That Increase "Aha" Moments for Fractions, Decimals, and Percents

(6-8) Session

Students struggle with solving problems involving fraction and decimal operations. Come explore how combining visual representations, manipulatives, and multiple instructional strategies will increase success for all students. Each participant will receive a preview CD and sample lesson plans.

Brenda J. Morgan

Houston Independent School District, Houston, Texas

Mesilla (Albuquerque Convention Center)

202

Reasoning and Sense Making in Algebra: It's about Good Problems!

(6–12) Session

This presentation will develop reasoning and sense making in the context of important content. The speaker will examine rich problems that connect to common algebra lessons—slope, solutions to equations, functions transformation—and show classroom videos and students' work.

Laurie A. Boswell

Riverside School, Lyndonville, Vermont

Grand Pavilion VI (Hyatt)

203

Teachers' Outreach: Math Mondays and Recruiting Students—STEM Girls (Higher Education) Session

Discover a set of collaborative seminars for grades K–12 teachers. Earn continuing education unit credits while learning math across disciplines. Share details of STEM Girls, a one-day, university-sponsored conference for grade 7 girls to promote mathematics, science, and interest in science, technology, engineering, and mathematics careers.

Margaret Wirth

East Carolina University, Greenville, North Carolina

Enchantment A-B (Hyatt)

12:30 P.M.-2:00 P.M.

(204

Strengthening Computational Problem Solving through Multiple Meanings for Operations

(Pre-K–2, Preservice and In-Service) Gallery Workshop

Addition and subtraction are more than put together and take away. Learn about the four categories of addition and subtraction problems and their subtypes through seasonal themes. Using rich, varied contexts and problem types will insure stronger problem-solving skills and deeper understanding of addition, subtraction, and number sense.

Patty E. Smith

Educational Resources Group, Inc., Charleston, South Carolina

Picuris (Albuquerque Convention Center)

205

Math for Young Astronauts (Pre-K-5) Gallery Workshop

Learn how NASA resources can use space travel's excitement to engage students in learning. Using hands-on, electronic, and real-world connections between math and NASA, the activities will help you keep your students involved in the class.

Michael A. McGlone

NASA Aerospace Education Services Project, Houston, Texas

Pecos (Albuquerque Convention Center)

12:30 P.M.-2:00 P.M.

206

Transform Your Students into Active Thinkers and Engaged Learners (Pre-K-5) Gallery Workshop

Highly engaged students equals students' increased achievement. Participants will learn how to boost levels of engagement and foster active thinking in all students. Receive a detailed handout and participate in many strategies that will cultivate engagement in any classroom.

Erika Simono

Houghton Mifflin Harcourt, Austin, Texas

Ruidoso (Albuquerque Convention Center)

207

Fractions without Distractions (3–5) Gallery Workshop

Learn to eliminate "fraction phobia" using mnemonic devices, number lines, tortillas, and more. Walk away with tips and techniques to master fractions you'll wish someone had shared with you long ago! Do fun, effective, researchedbased activities, and use unique teaching tools for differentiated instruction modeled by a master teacher.

Sandra White

Lone Star Learning, Lubbock, Texas

Fiesta (Hyatt)

208

Math in Motion: Origami in the Grades K–8 Classroom

(3-5) Gallery Workshop

Discover how to teach the big ideas of basic math skills, geometry, and more! Learn the most proven, practical techniques to build a deeper understanding of math concepts and vocabulary. Unfold teacher-friendly strategies to motivate students and bring out the joy and wonder of learning mathematics, where every child counts!

Barbara E. Pearl

La Salle University, Philadelphia, Pennsylvania

Francis Collins

La Salle University, Philadelphia, Pennsylvania

Dona Ana (Albuquerque Convention Center)

209

Finding the Mean: Not Just an Application of Long Division (3–8) Gallery Workshop

Participants will learn three hands-on approaches to finding the mean of small data sets. The leveling-of-the-data interpretation derives the familiar formula, whereas variations of the balance-point interpretation develop properties of the mean. Come see how see-saws, number lines, and blocks help your students make sense of the mean.

Robin O'Dell

Buffalo State College, Buffalo, New York

Grand Pavilion V (Hyatt)

210

How Muddy Is Your Windshield? Downand-Dirty, Formative Assessments (3-8) Gallery Workshop

Formative assessments hold the key to unlocking students' potential for learning mathematics in middle school. This presentation will give attendees strategies for assessing students' mathematical content knowledge quickly in order to make on-the-spot instructional decisions such as grouping, tiering assignments, and moving forward in the curriculum.

Tiffany P. Barnett

East Jackson MIddle School, Commerce, Georgia

Rachael W. Parr

East Jackson MIddle School, Commerce, Georgia

Ballroom A (Albuquerque Convention Center)

211

Math Jazz: Problem-Solving Games That Develop Improvisational Strategies (6–8, Preservice and In-Service) Gallery Workshop

Strategy games can teach important mathematical concepts and skills while also developing improvisational thinking. Like jazz, such reasoning teaches crucial problem-solving characteristics of flexibility, persistence, and inventiveness.

John C. Del Regato

Pentathlon Institute, Indianapolis, Indiana

Sage (Hyatt)

12:30 P.M.-2:00 P.M.

212

Reasoning and Sense Making in Data Analysis and Probability

(6-12) Gallery Workshop

Most students do not understand what variability means. Interactive, dynamic software offers opportunities for students to make sense of data, explore correlation, simulate probability questions, and investigate the behavior of random variables, developing an understanding of fundamental statistical concepts in the process.

Gail Burrill

Past President, National Council of Teachers of Mathematics; Michigan State University, East Lansing, Michigan

Ballroom B (Albuquerque Convention Center)

213

Shuffleboard, Racecars, and Reaction Times: Find the Algebraic Connection (6-12) Gallery Workshop

Participants will set up a playing field and write an equation that represents the possible points scored in the game; conduct time trials, predict who would win a hypothetical car race, and then have a race to see if the prediction comes true; and measure their reaction time, calculate measures of central tendency, and create a histogram.

Claudia D. Maness

CORD Communications, Inc., Waco, Texas

Tesugue (Albuquerque Convention Center)

214

The Development of the Pythagorean Musical Scale

(6–12) Gallery Workshop

Participants will learn how math, science, music, and history intertwined in developing our modern musical scale. Trace the scale's roots to discoveries made by the Pythagorean school of philosophy, and use the math and a few common objects to build your own one-stringed, guitar-like instrument.

Kalle V. Jorgensen

Mathematically Connected Communities (MC²), Las Cruces, New Mexico

Aztec (Albuquerque Convention Center)

215

Making Functions in Algebra 2 Active and Interesting

(9–12) Gallery Workshop

Participants will try several activities concerning functions, including using a human graph to explore functions, domain, range, and asymptotes; a function carousel; a silent board game; and some work on parent graphs and what investigating functions means. We will end with a function treasure hunt.

Christine Mikles

College Preparatory Mathematics Educational Program, Sacramento, California

Enchantment (Albuquerque Convention Center)

216

Learning to Listen and Listening to Learn (Preservice and In-Service) Gallery Workshop

How teachers and students listen to one another while learning math matters! This session will describe different kinds of listening that are mathematically productive for teachers and students, expand your repertoires for listening, and show how to help your students learn how to listen for understanding.

Kersti Tyson

University of New Mexico, Albuquerque, New Mexico

La Cienega (Albuquerque Convention Center)

1:00 P.M.-2:00 P.M.

ew 217

Mathematical Practices in the National Science Foundation's Grades K–5 Think Math! Program

(K-5) Exhibitor Workshop

Mathematical practices in *Think Math!* pervade the entire program appropriately by age. The program articulates the mathematical habits of the mind t that develop precisely the kind of mathematical practices described in the Common Core State Standards. This workshop will illustrate examples of the eight mathematical practices and provide a resource packet.

School Specialty Math and Intervention Nashua, New Hampshire

Isleta-Jemez (Albuquerque Convention Center)

1:00 P.M.-2:00 P.M.

ew 218

iPads, Tablets, Mobile Devices; New Tech for the Math Classroom! (6–12) Exhibitor Workshop

The secondary school math classroom of the future is here now. How do these devices fit into math instruction? Why do they appeal to the current generation of students? Come explore real-life applications, modeling, and problem solving using iPads and mobile devices in the classroom.

Houghton Mifflin Harcourt

Boston, Massachusetts

Navajo-Nambe (Albuquerque Convention Center)

2:00 P.M.-3:00 P.M.

219

A Critical Look at the Rumored Math Gene

(General Interest) Session

The speakers will explore the rumored math gene by analyzing the history of viewpoints on learning and doing math, including the shift from the "math mind" perspective to cognition and cognitive bases for learning, as well as why certain math topics are difficult and what might be done to overcome the challenges.

Sarah Gilchrist Ohio State University, Columbus, Ohio

Candace D. Joswick Ohio State University, Columbus, Ohio

Enchantment A-B (Hyatt)

220

Can Students' Standardized Test Scores Determine Teachers' Effectiveness?

(General Interest) Session

National, state, and local educational policymakers currently promote, and are implementing, systems that use students' test scores to determine a teacher's effectiveness. Does this method achieve valid comparisons of teachers? What are the barriers to using students' data to find statistically significant differences among individual teachers?

Ruth L. Wunderlich

Huston-Tillotson University, Austin, Texas

Taos (Albuquerque Convention Center)

221

Fostering Adaptive Expertise: Helping Create Successful Problem Solvers

(General Interest) Session

Helping students become successful problems solvers is every teacher's goal and at mathematics education's heart. This session will discuss specific ways teachers can combine procedural and conceptual knowledge to foster problemsolving skills. Receive information that will benefit you and your students for years to come.

Richard J. M. Robinson

Tennessee Governor's Academy for Mathematics and Science, Knoxville, Tennessee

Grand Pavilion III (Hyatt)

(222

From Standards to Actions: Implementing the Common Core State Standards

(General Interest) Session

Learn about the latest NCSM resources that support implementing the Common Core State Standards for Mathematics (CCSS-M). Resources include example tasks and instruction that promote students' proficiency in the mathematical practices and a tool for analyzing instructional materials with respect to CCSS-M content and mathematical practices.

Diane J. Briars

National Council of Supervisors of Mathematics, Pittsburgh, Pennsylvania

Ballroom C (Albuquerque Convention Center)

223

Sociocultural Dynamics of Indian Mathematics Education: What Can We Learn?

(General Interest) Session

In India, sociocultural dynamics play important role in mathematics teaching and learning practices. United States schools often lack an intentional effort to help culturally and linguistically different students (CLDs). Lessons learned from Indian mathematics education would enrich mathematics teaching strategies for CLDs.

Rupam Saran

City University of New York, New York, New York

Grand Pavilion IV (Hyatt)

2:00 P.M.-3:00 P.M.

224

Talking with Children about Mathematical Ideas

(Pre-K-2, Research) Session

What do teachers learn about number concepts when they invite children in first and second grades to share their thinking? The speaker will share how conversations in mathematics assessment give opportunities for children to illustrate their deep thinking and for teachers to learn.

Florence Glanfield

University of Alberta, Edmonton, Alberta, Canada

Mesilla (Albuquerque Convention Center)

225

The Equal Sign: Deepening Students' Understanding of this Symbol

(Pre-K-5) Session

The equal sign expresses a mathematical relationship. Yet, many students believe it directs them to find an answer. View videos of lessons and students that highlight the four stages in understanding the equal sign. Generate true/false and open-number sentences that can help students reason through the equal sign's meaning.

Tanya Vik Blais

Consultant, Las Cruces, New Mexico

Grand Pavilion I-II (Hyatt)

226

Yes, We Can: Overcoming Students' Math Anxiety

(3-8) Session

Once students hit an obstacle in learning mathematics, they develop math anxieties that research shows may plague them for life! The speaker will explore the most common sources of anxiety in grades 3–8. She will discuss emotional learning tools to help your students change their attitudes and move forward.

Jennifer Rising

Nueva School, Hillsborough, California

Grand Pavilion VI (Hyatt)

227

Geometry Concepts Applied to Physics Problem Solving in Mathematics Classrooms

(6–12) Session

This session will present examples integrating geometric and algebraic concepts to applied physics appropriate for use in the mathematics classroom. Topics, adaptable to various age levels and knowledge depths, include vector application, angle relationships, similar triangles, and trigonometric ratios.

Sherrie L. Wisdom

Lindenwood University, Saint Charles, Missouri

San Miguel (Albuquerque Convention Center)

228

Making Students' Thinking Visible (6–12) Session

Research on effective classrooms shows that visible thinking weaves throughout teachers' planning and presentation, giving teachers a variety of teaching strategies. What are visible thinking's benefits? What classroom activities make students' thinking visible? Creating such activities is crucial to closing the achievement gap.

Don Balka

Saint Mary's College, Notre Dame, Indiana

Brazos (Albuquerque Convention Center)

229

Make Equity Part of Your Mathematics Classroom: Teachers in Action

(Preservice and In-Service) Session

Expand your toolbox on how to engage all your students in meaningful mathematical learning that considers their rich—but different—cultural, linguistic, and ethnic backgrounds. Use this presentation's activities to grow as an equity leader in mathematics teaching committed to students' success.

Vessela Ilieva

Utah Valley University, Orem, Utah

Enchantment C-D (Hyatt)

2:30 P.M.-3:30 P.M.

ew 230

Transitioning to the Common Core with GO Math!

(K-6) Exhibitor Workshop

Hit the ground running and never look back! *GO Math!@2012* is the program of choice for teachers across the country. Come learn more about how the Common Core State Standards will affect what you teach in grades K–6. Come see how *GO Math!@2012* addresses the Common Core both in content and in mathematical practices. Through specific examples in the workshop, learn strategies for developing mathematical practices in your students, and receive a set of concept readers.

Houghton Mifflin Harcourt

Boston, Massachusetts

Navajo-Nambe (Albuquerque Convention Center)

2:30 P.M.-4:00 P.M.

231 Strengthening Number Sense, Grades Pre-K-2

(Pre-K-2) Gallery Workshop

Target the Common Core State Standards (CCSS) with activities, word problems, and games that foster using CCSS process standards. Differentiate instructions with formative and summative assessment. Practice methods that help students acquire new vocabulary. Free CD with samples.

Ann McMahon

Oregon Council of Teachers of Mathematics, Portland, Oregon

Winnie Miller

Oregon Council of Teachers of Mathematics, Portland, Oregon

Fiesta (Hyatt)

Thank you to all of the volunteers who have helped make this conference a success!

232

The Most Powerful Model You've Probably Never Heard Of

(Pre-K–2, Preservice and In-Service) Gallery Workshop

Are you frustrated with your students' lack of number sense? A tool from the Netherlands is starting to make its way into the United States that can help you and your students. This interactive session will focus on using a rekenrek, or arithmetic rack, to help teachers facilitate students' development of number sense.

Christina D. Tondevold

Mathematically Minded, Orofino, Idaho

Aztec (Albuquerque Convention Center)

233

Developing Concepts of Number: Steffe's Learning Stages (Pre-K-5) Gallery Workshop

This session focuses on learning stages children go through as they develop conceptual understanding to support solving addition and subtraction tasks. The speaker will discuss transitions from stage to stage and use video of students solving problems to support each stage's description. Participants will practice identifying the stages.

Megan Kidwell

Albuquerque Public Schools, Albuquerque, New Mexico

Ballroom B (Albuquerque Convention Center)

234

Explore Teacher-Developed, Hands-On Materials for Important Elementary School Math Concepts

(3-5) Gallery Workshop

This "make and take" session involves interactive games for the basic facts, model making for capacity, multiple representation that develops number sense, and a unique geometry puzzle for squares, trapezoids, parallelograms, and rectangles. Learn about how to implement new ideas developed from recent brain research on how children learn.

Mary Kay Bacallao

Mercer University, Macon, Georgia

Picuris (Albuquerque Convention Center)

54

FRIDAY

2:30 P.M.-4:00 P.M.

235

Math Chats: Strategies That Enrich Mathematical Understanding

(3–5, Preservice and In-Service) Gallery Workshop

Participants will explore and practice mathematical discourse strategies for the classroom. Structured conversations that require students to communicate their thinking in math not only deepens students' understanding of math concepts, but also develops meaningful use of math vocabulary.

Yanira Vazquez

Espanola Public Schools, Espanola, New Mexico

Melissa Salazar

Northern New Mexico Math and Science Academy, Los Alamos National Laboratory, Los Alamos, New Mexico

Enchantment (Albuquerque Convention Center)

236

Know When to Fold 'em to Measure Up in Math

(3-8) Gallery Workshop

Come out of the textbook and into the fold in this fastpaced, hands-on workshop as you learn to make and use measurement-focused, 3–D, graphic organizers aimed at helping your students "measure up in math." Depart with practical, evidence-based, kinesthetic, and integrative ideas that are ready to use immediately.

Nancy Wisker

Dinah Zike Academy, Comfort, Texas

Ruidoso (Albuquerque Convention Center)

237

Aerospace Mathematics (6-8) Gallery Workshop

From aeronautics to astronautics, mathematics is an essential component of NASA's missions. This session will have educators use free, hands-on NASA materials to bring the excitement of space exploration into the classroom and help students see mathematics's relevance to real-world situations.

Michael A. McGlone

NASA Aerospace Education Services Project, Houston, Texas

Pecos (Albuquerque Convention Center)

238

Applying Quality Instructional Strategies to Interactive Whiteboard Math Lessons (6–8) Gallery Workshop

Participants will act as students completing an interactive whiteboard math lesson. Concurrently, they will learn about quality instructional strategies for the successfully implementing math with interactive whiteboards. They will then apply those strategies to modify a math lesson to meet quality standards using MimioClassroom products.

Alyssa F. Porter

DYMO/Mimio, Cambridge, Massachusetts

Dona Ana (Albuquerque Convention Center)

(239

Exceptional, Free Online Resources for the Middle Grades Classroom

(6–12) Gallery Workshop

Illuminations (http://illuminations.nctm.org) has new, improved resources for middle school. Participants will play Deep Sea Duel, on online game based on a *Mathematics Teaching in the Middle School* journal article; explore discrete mathematics with the recently improved Graph Creator; attempt a brainteaser from our newsletter, *Bright Ideas;* and explore other lessons and activities.

G. Patrick Vennebush

National Council of Teachers of Mathematics, Reston, Virginia

Julia Zurkovsky

National Council of Teachers of Mathematics, Reston, Virginia

Grand Pavilion V (Hyatt)

240

Multiple Representations of Motion: Mellow Yellow Works Out with Sketchpad®

(6-12) Gallery Workshop

Deep understanding of motion involves representing time, distance, velocity, acceleration, and the motion itself. We'll analyze and plan Mellow Yellow's cross-country workouts, shifting between written plan, motion, table, and graphs of distance, rate, and acceleration. Bring a laptop and take home four classroom-ready activities. No calculus needed.

Scott Steketee

Key Curriculum Press Technologies, Emeryville, California

Tesuque (Albuquerque Convention Center)

2:30 P.M.-4:00 P.M.

241

Geometric Proof: Finally, a Logical Approach

(9–12) Gallery Workshop

Participants will learn how to work with some nongeometric games and concepts that help students develop logical thought and strategies, draw conclusions, think logically, communicate, and justify their reasoning. The speakers will develop proofs that emphasize the need to have students use oral and written arguments.

Roy B. Dean

Jefferson County Schools R-1, Arvada, Colorado

Christine Mikles

College Preparatory Mathematics Educational Program, Sacramento, California

La Cienega (Albuquerque Convention Center)

242

There She Rolls! We Have the Data: Now What?

(9–12) Gallery Workshop

The mathematics that students learn from activities determines the activities' true value. Using two TI-Nspires and two Calculator Based Ranger 2s, collect data from each end of a ramp as we roll a can up the ramp and allow it to return. Then, discuss what questions we can ask students that will engage them in significant mathematical thinking.

Michael Lutz

California State University Bakersfield, Bakersfield, California

Ballroom A (Albuquerque Convention Center)

A big thank you to our exhibitors, sponsors, and speakers

243

New Paradigms in Grades K-12 Mathematics Professional Development: Ir-Rational Numbers Institute

(Preservice and In-Service) Gallery Workshop

Members of the LANL Math and Science Academy, a professional development program for teachers in Northern New Mexico, will model the skills and concepts grades K–12 teachers learn in the Academy's newest program, the Ir-Rational Numbers Institute.

Lorenzo Gonzales

Northern New Mexico Math and Science Academy, Los Alamos National Laboratory (LANL), Los Alamos, New York

Melissa Salazar

Northern New Mexico Math and Science Academy, Los Alamos National Laboratory (LANL), Los Alamos, New Mexico

Richard Kitchen

University of New Mexico, Albuquerque, New Mexico

Sage (Hyatt)

3:30 P.M.-4:30 P.M.

244

Historical Topics in Mathematics: Patterns on Pascal's Triangle

(General Interest) Session

The Chinese knew Pascal's triangle some 400 years before Pascal lived. Patterns continue to be discovered. The speakers will explore rows; columns; diagonals; powers of eleven and two; binomial expansions with positive and negative integer exponents; probability; hexagons; square, cubic, triangular, Fibonacci, and Catalan numbers; palindromes; and Eüler's triangle.

Jim Fulmer

University of Arkansas at Little Rock, Little Rock, Arkansas

Lowell Lynde

University of Arkansas at Monticello, Monticello, Arkansas

Grand Pavilion IV (Hyatt)

FRIDAY

3:30 P.M.-4:30 P.M.

244.1

Public School and University Partnerships for Learning

(General Interest) Session

This session is about creating and maintaining partnerships supporting research, development, and learning between universities and public schools. The speaker will highlight several projects, discuss realistic expectations and ideas for sustainability, and emphasize practical lessons and tools for designing and maintaining successful partnerships.

Cathy J. Kinzer

New Mexico State University, La Cruces, New Mexico

Karin Wiburg

New Mexico State University, La Cruces, New Mexico

Lisa Virag

New Mexico State University, La Cruces, New Mexico Grand Pavilion III (Hyatt)

244.2

Emergent Mathematics: Mathematics Instruction Based on How Children Naturally Learn

(Pre-K-2) Session

Children begin to learn mathematics as young as birth. This session will allow participants to explore the developmental sequence of mathematics; to analyze current teaching practices based on what we know about how children learn and the new findings of neuroscience; and to develop a plan of instruction based on this knowledge.

Eugene Geist

Ohio University, Athens, Ohio

Taos (Albuquerque Convention Center)



246

The Whole-Brain Approach to Mathematics Learning for Children

(Pre-K–2, Preservice and In-Service, Research) Session

Learn about research on developing perception, language, concepts, procedures, and attitudes related to mathematics. These components of learning naturally permit us to use and speak about mathematics. Participants will leave with a sense of how perception, attention, autonomy, and trust all support optimal learning experiences.

Daniel J. Franklin

Six Red Marbles, Charlestown, Massachusetts

San Miguel (Albuquerque Convention Center)

247

Oh, Now I Get It!

(3-5) Session

You'll be amazed at what your students can remember! Discover brain-compatible methods for learning and remembering mathematical concepts through songs, graphic organizers, and daily, interactive bulletin board programs. Learn methods of teaching problem solving, vocabulary, and various concepts through active learning.

Bettye Wilson

Lone Star Learning, Lubbock, Texas

Mesilla (Albuquerque Convention Center)

248

Using Games to Support Mathematics Learning

(3–8) Session

If you are looking for strategies that use serious games in your mathematics classrooms, come participate in this session. The speakers will discuss strategies for using games, as well as examples of them. You will have the opportunity to play the games and see the strategies.

Jesus Trespalacios

New Mexico State University, Las Cruces, New Mexico

Michelle Garza

New Mexico State University, Las Cruces, New Mexico

Rachel Gallagher

New Mexico State University, Las Cruces, New Mexico

Ballroom C (Albuquerque Convention Center)

3:30 P.M.-4:30 P.M.

249

Let $X = \dots$ Huh? Challenging Students' Misconceptions of Variables

(6-8) Session

Variables and conventions for their use are complex concepts fundamental to students' success in algebra. This session will explore students' possible misconceptions involving variables. Participants will takeaway ideas for challenging these misconceptions, ultimately leading to students' improved understanding of algebra's complex symbolization.

Kimberly Markworth

Western Washington University, Bellingham, Washington

Jessica S. Cohen

Western Washington University, Bellingham, Washington

Grand Pavilion VI (Hyatt)

250

Open Your Eyes and Visualize: A Visual Vocabulary Strategy

(6-8) Session

Do you wonder if your students truly understand the material? Are you looking for another way to assess vocabulary? This session is for you! Learn how to assess students' knowledge without worrying if they have memorized the lesson.

Alicia Holland-Johnson

Realistic Measures & Consulting, Pflugerville, Texas

Grand Pavilion I-II (Hyatt)

251

Making Algebraic Thinking Visible (6–8, Preservice and In-Service) Session

This session will look at tasks that foster deep thinking about school algebra. The speaker will recommend manipulative modeling tasks for algebra teacher education; describe provocative, algebra-tile modeling tasks to stimulate teachers' and students' thinking; and share algebra insights that preservice teachers report from these tasks.

Barbara Kinach

Arizona State University, Phoenix, Arizona

Enchantment C-D (Hyatt)

252

Quadrilateral Hierarchies and Making Sense of Definitions in Geometry

(9–12, Preservice and In-Service) Session

Participants will explore quadrilateral hierarchies and how they can vary based on different definitions of quadrilaterals. The speaker will focus on kites and trapezoids and discuss the importance of definition. Participants will leave the session with access to electronic resources on quadrilaterals.

Ewelina Suchacka McBroom

Texas State University, San Marcos, Texas

Brazos (Albuquerque Convention Center)

253

Understanding Elementary School Preservice Teachers' (PTs') Mathematical Reasoning

(Preservice and In-Service) Session

This session will examine PTs' arguments as they engaged in mathematical inquiry over a semester. Using a guiding framework, attendees will identify important features of PTs' arguments, compare them over time, and discuss how their reasoning methods changed.

Michael H. Perkowski

University of Missouri—Columbia, Columbia, Missouri

Enchantment A-B (Hyatt)

Join us at the 2012 Regional Conferences:

Dallas, Texas — October 10–12 Hartford, Connecticut — October 24–26 Chicago, Illinois — November 28–30

58



This certificate is presented to

in recognition of attendance and participation at the 2011 NCTM Regional Conference and Exposition

Albuquerque, New Mexico • November 2-4, 2011

g. Williad Mianghung

J. Michael Shaughnessy

President, NCTM



NCTM Regional Conference and Exposition November 2–4, 2011 Albuquerque, New Mexico

Name of Provider: National Council of Teachers of Mathematics

Educator's Name: _____

Description of Professional Development Activity: This is a two-day regional conference sponsored by the National Council of Teachers of Mathematics. More than 200 presentations are offered for teachers of prekindergarten through college. Topics range from administration to geometry, precalculus to statistics.

Note: PD time earned should be the time actually spent in sessions and/or workshops.

Date	Session #	Session Title	Presenter(s) Name(s)	Start/End Time	PD Time earned
TOTAL Professional Development Hours Accrued:					

I certify that the above named educator accrued the indicated number of Professional Development hours.

Kichoon Yang Executive Director, NCTM

> J. Michael Shaughnessy President, NCTM

Please check with your state education agency and local administration to determine if these conference hours can be used for professional development credits.

NCTM Individual Membership Application

visit www.inctin.org/ inclinership to learn more and joins	Visit www.nctm.org/	/membership to	learn more and	join!
--	---------------------	----------------	----------------	-------

First Name*	Last Name*
Plage check ONE box for preferred mailing address, but plages serve	uot hand
Institution*	
	-
Address*	_ Address*
City*	City*
State/Prov* ZIP/PC*	_ State/Prov* ZIP/PC*
Country*	_ Country*
Phone*	_ Phone*
Primary E-mail*	
 Your grade level interest (check all that apply)*: DPrek-2 D3-8 I was referred by an NCTM Member: Check here to remove your name from rental lists (companies renting lists) Standing Yearbook Order Plan: Check this box to receive each NCTM Yearb within 30 days and you may cancel your plan at any time. 	Member ID: must obtain approval from NCTM before using lists). wook as it becomes available. Yearbooks may be returned in resalable condition
NOTE: Membership pricing valid through May 31, 2012. Visit www.nctr	n.org/membership for up-to-date pricing.
OPTION 1	OPTION 2
Full Individual Membership Includes a print subscription to one NCTM journal (<i>print version</i> <i>includes online access</i>). Select ONE journal below:	E-Membership Includes full online access, including online archives to one NCTM school journal. E-Membership does not include a print journal or the research journal. Select ONE journal below:
 Teaching Children Mathematics (PreK-6) Mathematics Teaching in the Middle School (5–9) Mathematics Teacher (8–14) \$105 Journal for Research in Mathematics Education 	\$66 Teaching Children Mathematics (PreK-6) □ Mathematics Teaching in the Middle School (5-9) □ Mathematics Teacher (8-14)
Additional Print Journals: May be selected to enhance your membership for as little as \$33 (print version includes online access).	Additional Online Journals: May also be included with Option 1. May be selected to enhance your membership for as little as \$21.
 \$33 Teaching Children Mathematics (PreK-6) \$33 Mathematics Teaching in the Middle School (5-9) \$33 Mathematics Teacher (8-14) \$60 Journal for Research in Mathematics Education 	 \$21 Teaching Children Mathematics (PreK-6) \$21 Mathematics Teaching in the Middle School (5-9) \$21 Mathematics Teacher (8-14)
PAYMENT SUMMARY	
Membershin Dues (Ontion 1 or 2)	\$
Additional Print Journals (if choosing Option 1)	· · · · · · · · · · · · · · · · · · ·
Additional Online Journals (if choosing Option 1 or 2)	· · · · · · · · · · · · · · · · · · ·
Membership and Additional Journals Total.	\$
For 2-year membership, multiply by 2 and deduct 10%	\$
For 3-year membership, multiply by 3 and deduct 15%	· · · · · · · · · · · · · · · · · · ·
Foreign Postage (if applicable): For mailings outside the U.S., add \$2 additional print journal subscription per year. For multiyear membershi add to payment line at right. Note: Multiyear and auto-renew discounts Mathematics Educational Trust (MET) Support (<i>Your contribution is ta</i>)	18 for the first journal subscription and \$4 for each p, please multiply foreign postage by 2 or by 3 and s do not apply to foreign postage
□ AUTOMATIC RENEWAL: Check box to auto-renew your membershi is due to expire, NCTM will renew it annually using the credit card info transaction. Visit www.nctm.org/autorenew for details	ip each year and SAVE 5% off. When your membership prmation provided for your most current membership
TOTAL Payment to NCTM in U.S. Dollars	\$
	Money order □ AMEX □ MC □ VISa □ P.O. #
$(\dot{\mathbf{v}})$	

NATIONAL COUNCIL OF NCTM TEACHERS OF MATHEMATICS

TEL: (800) 235-7566 | (703) 620-9840 FAX: (703) 476-2970 | WWW.NCTM.ORG

1906 ASSOCIATION DRIVE | RESTON, VA 20191-1502

Credit Card Number

Exp. Date

RPM11

Signature (required for credit card payments)

AFFILIATE MEMBERSHIP

Join an NCTM Affiliate Today!

Once you have joined NCTM, membership in an NCTM Affiliate is a terrific way to round out your professional involvement. Affiliates offer you an opportunity to link with teachers in your state, region, or city for support, professional development opportunities, community outreach, political advocacy, and information sharing. A list of Affiliates in the conference's region and the Affiliates-at-Large appears below. To join one of these groups, e-mail the Affiliate contact for membership information. NCTM has more than 230 Affiliates throughout the United States and Canada. For a list of all organizations affiliated with NCTM and information on how to join, please see the Affiliate Directory on the NCTM Web site at www.nctm.org/affiliates.

AFFILIATE INFORMATION

Alaska

Alaska Council of Teachers of Mathematics Frances Shillington

Arizona

Arizona Association of Teachers of Mathematics Nicole Kooiman

California

California Mathematics Council Mike Contino California Mathematics Council, Central Section Mike Contino California Mathematics Council, Northern Section Mike Contino California Mathematics Council, Southern Section Mike Contino Stanislaus Mathematics Council (California) Carol Vieira

Colorado

Colorado Council of Teachers of Mathematics Laurie Hillman

Hawaii

Hawaii Council of Teachers of Mathematics Deborah Kula

Idaho

Idaho Council of Teachers of Mathematics Leora White

Montana

Montana Council of Teachers of Mathematics Pam Koterba

Nevada

Nevada Mathematics Council Martha Robertson Northern Nevada Mathematics Council Jenny Salls

New Mexico

New Mexico Council of Teachers of Mathematics Sheila Hills

Oregon

Oregon Council of Teachers of Mathematics Ralph Schubothe

Texas

Rio Grande Valley Council of Teachers of Mathematics Lucy Munoz Texas Association of Supervisors of Mathematics Anthony Martinez Texas Council of Teachers of Mathematics Kathy Gillespie

Utah

Utah Council of Teachers of Mathematics Travis Lemon

Washington

Puget Sound Council of Teachers of Mathematics Lynn Adsit Washington State Mathematics Council Paula Paris

Wyoming

Wyoming Council of Teachers of Mathematics David Petersen

AFFILIATE MEMBERSHIP

AFFILIATES-AT-LARGE

Adult Numeracy Network Lynda Ginsburg

Association of Mathematics Teacher Educators Sandra Cooper

Benjamin Banneker Association, Inc. Roni Ellington

Council for Technology in Mathematics Education Stephanie Cooperman

Council of Presidential Awardees in Mathematics Sharon Baca

North American Study Group on Ethnomathematics Blidi Stemn

National Council of Supervisors of Mathematics Terri Belcher

Society of Elementary Presidential Awardees Martha Short

TODOS: Mathematics for ALL Maria Torres

Women and Mathematics Education Dorothy Buerk

NCTM's 2012 Annual Meeting is Coming Up! Philadelphia, Pennsylvania April 25 – 28, 2012

OFFICERS AND COMMITTEES

NCTM BOARD OF DIRECTORS

J. Michael Shaughnessy President: Portland State University, Oregon

Linda M. Gojak President-Elect: John Carroll University, Ohio

Kichoon Yang Executive Director, NCTM

Robert Q. Berry, III University of Virginia

Dane R. Camp New Trier High School, Illinois

Anne M. Collins Lesley University, Massachusetts

Barbara J. Dougherty University of Missouri—Columbia

Debbie Duvall Elk Island Public Schools, Alberta

Mark W. Ellis California State University—Fullerton

Latrenda Knighten East Baton Rouge Parish School System, Louisiana

Diana V. Lambdin Indiana University, Bloomington

Matthew R. Larson Lincoln Public Schools, Nebraska

David K. Masunaga Iolani School, Hawaii

Kimberly Mueller Florence L. Walther School, New Jersey

Judith Zawojewski Illinois Institute of Technology NCTM wishes to thank our 2011 Albuquerque Regional Conference Committees for their generous support and dedication in planning this year's Regional Conference.

ALBUQUERQUE PROGRAM COMMITTEE

Terry Palmer, Program Chair Placitas, New Mexico

Rocio Benedicto El Paso, Texas

Sandi Cooper Waco, Texas

Theresa Hopkins Knoxville, Tennessee

Bob McDonald Tempe, Arizona

Sara Normington Portland, Oregon

Marlene Robinson Charlottesville, Virginia

ALBUQUERQUE LOCAL ARRANGEMENTS COMMITTEE

Peggy Foos, Local Arrangements Chair Becky Cook Ronda Davis Heidi Draper Margaret Farrell Sheila Hills Torii Jenkins Helen Maloney Linda Martin Diane Waller

NEW BOOKS from NCTM SAVE 25%!

Conference attendees receive a 25% discount off the NCTM list price on all purchases made in the Bookstore.*



NEW Adding Math, Subtracting Tension A Guide to Raising Children Who Can Do Math Prekindergarten through Grade 2

By Frances Stern

Stock# 13786 | List Price: \$24.95 | NCTM Member Price: \$19.96 CONFERENCE PRICE: \$18.71



NEW Using Classroom Assessment to Improve Student Learning Math Problems Aligned with NCTM and Common Core State Standards By ANNE COLLINS

Stock# 13593 | List Price: \$36.95 | NCTM Member Price: \$29.56 CONFERENCE PRICE: \$27.71



NEW

Motivation and Disposition Pathways to Learning Mathematics – 73rd Yearbook (2011) DANIEL J. BRAHIER, VOLUME EDITOR AND WILLIAM R. SPEER, GENERAL EDITOR

Stock# 13864 | List Price: \$55.95 | NCTM Member Price: \$44.76 CONFERENCE PRICE: \$41.96

Visit the NCTM Bookstore in the Exhibit Hall

Wed.	5:00 pm – 7:00 pm
Thurs.	7:00 am – 4:00 pm
Fri.	8:00 am – 4:00 pm

*Conference discount not valid on sale items. Offer valid only on onsite bookstore sales during the conference.

NEW TITLES in the Essential Understanding Series



Developing Essential Understanding of Algebraic Thinking for Teaching Mathematics in Grades 3-5

By Maria Blanton, Linda Levi, Terry Crites, and Barbara Dougherty

Stock# 13796 List Price: \$30.95 | NCTM Member Price: \$24.76 CONFERENCE PRICE: \$23.21



Developing Essential Understanding of Multiplication and Division for Teaching Mathematics in Grades 3-5 BY ALBERT OTTO, JANET CALDWELL, CHERYL ANN LUBINSKI, AND SARAH WALLUS HANCOCK Stock# 13795 List Price: \$30.95 | NCTM Member Price: \$24.76 CONFERENCE PRICE: \$23.21

Developing Essential Understanding of Addition and Subtraction for Teaching Mathematics in Pre-K-Grade 2 By JANET CALDWELL, KAREN KARP AND JENNIFER M. BAY-WILLIAMS

Stock# 13792 List Price: \$30.95 | NCTM Member Price: \$24.76 CONFERENCE PRICE: \$23.21

NEW TITLES in Focus in High School Mathematics Series

Focus in High School Mathematics: Fostering Reasoning and Sense Making for All Students

Edited by Marilyn E. Strutchens and Judith Reed Quander

Stock# 13989 List Price: \$29.95 | NCTM Member Price: \$23.96 CONFERENCE PRICE: \$22.46



Focus in High School Mathematics: Technology to Support Reasoning and Sense Making By THOMAS P. DICK AND KAREN F. HOLLEBRANDS Stock# 14287

NEW TITLE in Curriculum Focal Points Series



Focus in Grade 2 Teaching with Curriculum Focal Points Stock# 13790 List Price: \$36.95 | NCTM Member Price: \$29.56 CONFERENCE PRICE: \$27.71



NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS *Visit* **www.nctm.org/catalog** for tables of content and sample pages. For more information or to place an order,

please call (800) 235-7566 or visit www.nctm.org/catalog.

FLOOR PLANS

Hyatt Regency Albuquerque



Convention Center Directory and Special Locations



November 2–4, 2011 • Albuquerque, New Mexico

EXHIBIT HALL FLOOR PLAN



PHILADELPHIA, PA | APRIL 25–28, 2012 Annual Meeting & Exposition

Hear the latest from math education experts on hot topics such as Intervention, Differentiated Instruction, Technology, Common Core State Standards, and much more.

Whether you're a classroom teacher, coach, administrator, preservice teacher, or math specialist there's something for you. Attendees will:

- Develop strategies to relate the Common Core to your curriculum.
- Explore different learning styles and intervention strategies.
- Refine your **assessment** techniques.
- Discover new ways to use technology in your classroom.
- And more!



NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS (800) 235-7566 | WWW.NCTM.ORG

Visit www.nctm.org/meetings for up-to-date information.

EXHIBITOR DIRECTORY

(as of August 15, 2011)

A ALEKS Corporation

Booth: 501 Irvine, California PH: 714-245-7191 x152 www.gleks.com

ALEKS is a web-based program that provides precise mathematics assessment and personalized learning correlated to all 50 states' standards and the Common Core State Standards. Using artificial intelligence and adaptive questioning, ALEKS accurately assesses a student's knowledge and delivers individualized instruction on the exact topics the student is ready to learn.

Apperson Prep

Booth: 607

Charlotte, North Carolina PH: 800-438-0162 FX: 704-394-3780 www.oppersonprep.com/go/nctmwl1

Apperson Prep is an online supplemental teaching tool that provides value to teachers and their students through rich lessons, engaging and informative animated videos, goal-based progress reports, and comprehensive assessment and reporting. Come see why Apperson Prep is a smart shift in learning.

Arcademics Inc.

Booth: 301 Lawrence, Kansas www.arcademics.com

Arcademics creates educational games that engage students in learning! Try our researchedbased, standards-aligned multiplayer games for free at www.arcademics.com.

В

Borenson and Associates, Inc.

Booth: 412 Allentown, Pennsylvania PH: 800-993-6284 FX: 610-398-7863 www.borenson.com

Hands-On Equations[®] demystifies the learning of algebra for students in grades 3 - 9. Since 1990 more than 50,000 teachers have attended the Making Algebra Child's Play workshop. Visit our website www.borenson.com for a FREE introductory webinar and public workshop schedule.

Box Cars & One-Eyed Jacks

Booth: 509 Edmonton, Alberta PH: 780-440-6284 FX: 780-440-1619 boxcarsandoneeyedjacks.com

Award winning math game resources and workshops. K - 10 game books, the widest selection of dice, multi-sided dice, cards and more. come to our workshops!

Cambium Learning- Voyager

Booth: 313 Dallas, Texas PH: 913-669-2420 FX: 877-962-1579 http://www.voyagerlearning.com/

Voyager is a member of Cambium Learning^{*} Group (Nasdaq: ABCD), the leading educational company focused primarily on serving the needs of at-risk and special student populations. Dedicated to the success of every student, Voyager provides strategic and intensive comprehensive interventions that are adaptive to the needs of diverse populations. Voyager& instructional materials, support services, and educational technology help accelerate struggling students to grade-level proficiency, preventing unnecessary referrals to special education.

Carnegie Learning, Inc.

Booth: 706 Pittsburgh, Pennsylvania PH: 888-851-7094 FX: 412-690-2444 www.carnegielearning.com

Carnegie Learning, Inc. is a leading publisher of innovative, research-based math curricula for middle school, high school, and post-secondary students. Providing differentiated instruction to schools across the United States, Carnegie Learning is helping students to succeed in math, creating a gateway to graduation and preparing them for the 21st century.

CASIO AMERICA, INC.

Booth: 705

Dover, New Jersey PH: 973-361-5400 FX: 973-537-8964 www.casioeducation.com CASIO EDUCATION: PUT VALUE BACK IN THE EQUATION - Schools, Educators, and Administrators have a choice. When you choose CASIO for your technology solution, the decision is backed by industry-best savings, FREE support programs and the advanced functionality of our products. For more information visit www.casioeducation.com or call 1-800-582-2763.

Classroom Products Warehouse

Booth: 701 Vernon Hills, Illinois PH: 888-271-8305 FX: 888-280-6110 www.shopcpw.com

Premium brand Math and Science products at the guaranteed lowest discount prices!

Coastline Graphics

Booth: 405 Carson, California PH: 310-830-1190 FX: 310-834-6745 coastlinepromotion.net, shirts2order.com

We provide screen printed and novelty items for schools, athletic leagues, and corporate events. No order is too small! Please mention that you learned about us at NCTM when calling.

CORD Communications, Inc.

Booth: 207 Waco, Texas PH: 800-231-3015 FX: 254-776-3906 www.cordcommunications.com

CORD Communications specializes in providing contextual-based math and science learning tools that enable a majority of students to succeed. Application, activities and action allow students to achieve deeper understanding and long-lasting learning. With curricula developed by CORD, this is math your students will use. Now Common Core compliant!

CPM Educational Program

Booth: 305 Sacramento, CA PH: 209-745-2055 FX: 209-745-7655

www.cpm.org

CPM is a comprehensive, standards based mathematics program for grades 6 through calculus that provides professional development workshops and individual mentoring so that teachers can effectively implement problem-based lessons in student-centered settings. CPM also offers curriculum materials that are based on the methods taught in the workshops. CPM courses meet the 2010 Common Core State Standards.

Creative Mathematics

Booth: 615 Arcata, California PH: 800-841-5193 FX: 707-826-1780 www.creativemathematics.com

Curriculum Associates

Booth: 401 North Billerica, Massachusetts

PH: 800--225-0248 FX: 800-366-1158 www.CurriculumAssociates.com

Curriculum Associates publishes high quality, yet affordable, supplemental materials for reading, writing, language arts, mathematics, science, test prep, and special education assessment programs that are guaranteed to help students succeed. Programs are designed to affordably meet the needs of today's diverse classrooms. Researchbased and classroom-proven, they deliver content aligned with national and state standards.
EXHIBITOR DIRECTORY

D

Dinah-Might Adventures

Booth: 700 San Antonio, Texas PH: 800-993-4624 FX: 210-698-0095 www.dinah.com

Dinah-Might Adventures is an educational publishing and consulting company owned by Dinah Zike, Author/Speaker. Her books are known for their innovative ways to use ØFoldables® in teaching all subjects and grade levels. She also offers professional development at the Dinah Zike Academy, a unique trainer of trainers facility.

E

EAI Education

Booth: 309 Oakland, New Jersey PH: 800-770-8010 ext. 7600 FX: 201-891-5689 www.EAleducation.com

EAI line includes over 5,000 items for grades K-12 in Mathematics and grades K-6 in Literacy and Science. Including proprietary products such as: CalcPal® calculators, CalcSafe® storage, SmartPal® sleeves and guidebooks, QuietShape® manipulatives, Flip Charts, Centers, GeoModel® folding shapes, I have, Who Has game plus a full line of manipulatives, resource books, tradebooks, interactive whiteboard software, games, puzzles and calculators for all grade levels.

Effective Math

Booth: 708 Pueblo, Colorado

ETA/Cuisenaire

Booth: 614 Vernon Hills, Illinois PH: FX: 888-659-9957 www.etacuisenaire.com

For over forty-five years, ETA/Cuisenaire* supplemental math products have helped teachers boost student learning and achievement. Combined with our customized professional learning services, ETA/Cuisenaire&s hands-on math resources support educators in their commitment to captivate learners, promote productive partnerships with families, and generate positive results.

ExploreLearning

Booth: 413

Charlottesville, Virginia PH: 866-882-4141 FX: 434-220-1484 www.explorelearning.com

ExploreLearning develops online solutions to improve student learning in math and science. Gizmos are the world's largest library of interactive simulations for math and science in grades 3-12; Reflex is the most powerful solution available for math fact fluency development. Gizmos and Reflex bring research-proven instructional strategies to classrooms around the world.

F

First In Math~Suntex International

Booth: 415

Easton, Pennsylvania PH: 610-253-5255 FX: 610-258-2180 www.firstinmath.com

Suntex's First In Math Online Program complements any curriculum. Minutes a day, in the classroom or at home, gives K-12 students the "deep practice" necessary for skill retention and improved test scores. Engaging, substantive, selfpacing content enables students to take ownership of the learning process—with not additional load teachers.

FROG PUBLICATIONS

Booth: 307 San Antonio, Florida PH: 800-777-3764 FX: 352-588-0863 www.frog.com

Systematic reinforcement programs, IEP, RtI, DI, ready-to-use learning centers, take-home parental involvement program, daily review, critical thinking, dual language, math, reading/ language arts.

Η

Heinemann

Booth: 514

Portsmouth, New Hampshire PH: 603-431-7894 FX: 603-431-7840 www.heinemann.com Publisher of professional development resources, services and classroom materials.

Houghton Mifflin Harcourt

Booth: 200 Boston, Masachusetts PH: 800-225-5425 www.hmhco.com

Houghton Mifflin Harcourt represents Educational Consulting Services - Enterprise Solutions -Heinemann - Holt McDougal - The Leadership and Learning Center - Riverside - Saxon - SkillsTutor - Specialized Curriculum Group: Great Source, Rigby, Saxon, Steck-Vaughn.

Imagine Education

Booth: 507 Salt Lake City, Utah PH: 801-657-1035 www.imagineeducation.org

K

Kendall Hunt Publishing Co.

Booth: 407 Dubuque, Iowa PH: 563-589-1000 FX: 563-589-1163 www.kendallhunt.com

Kendall Hunt publishes inquiry-based, CCSSaligned curricula for grades Pre-K-12 and supplemental programs for gifted and talented students. Explore We Discover Math and Math Trailblazers for Pre-K-5, our digital middle grades curriculum, Math Innovations, and our six new high school programs, including the Discovering Mathematics series for algebra and geometry.

Kens Math

Booth: 316 San Diego, California PH: 800-231-9774

Key Curriculum Press

Booth: 206 Emeryville, California PH: 510-595-7000 FX: 510-595-7040 www.keypress.com

Key Curriculum Press develops effective, highquality mathematics and science instructional materials and software. In addition, Key Curriculum Press offers professional development workshops, online courses and webinars to provide educators with the training, experience and support they need to incorporate effective teaching strategies. For more information, call 800-995-MATH or visit www.keypress.com.

L

Lakeshore Learning Materials

Booth: 201 Carson, California PH: 310-537-8600 FX: 310-900-2190 www.lakeshorelearning.com

Lakeshore is one of the nation's premier manufacturers of K-6 math materials—including exclusive, interactive software that gets students excited about learning! Lakeshore develops a wide range of math materials for students of all interests and abilities—with materials that support RTI, meet Common Core State Standards and teach real-world math applications.

EXHIBITOR DIRECTORY

The Learning Carpet – TLC, Inc.

Booth: 209 Huntsville, Ontario PH: 705-789-8912 FX: 705-789-8016 www.thelearningcarpet.com

Through the use of a large 100 square floor grid, children from K-6 and special education are able to develop a stronger and more confident understanding of math and language concepts through kinesthetic learning. Thinking, reflecting and problem-solving skills are fostered through regular exploration on this large classroom manipulative.

Learning Wrap-ups, Inc.

Booth: 515 Layton, Utah PH: 800-992-4966 FX: 801-497-0050 www.learningwrapups.com

Learning Wrap-ups, Inc. is a supplemental publisher of Learning Wrap-ups, which is designed to build Fact Fluency and develop Automaticity of Basic Math Skills and Learning Palette, which creates Standard Based Learning Centers.

Lone Star Learning

Booth: 303 Lubbock, Texas PH: 806-281-1424 FX: 806-281-1407 LoneStarLearning.com

Teacher resources development company offering unique-easy-to-use visuals and user friendly software that give students specific practice needed to achieve mastery in math, science, and language arts.

Μ

M Folz

Booth: 312 Tijeras, New Mexico PH: 800-950-9573 www.mfolz.com

The Markerboard People

Booth: 512 Lansing, Michigan PH: FX: 888-379-3727 www.dryerase.com Student Dry Erase Markerboards and Response Boards in class sets of 30. Unbeatable Prices! Double- and Single-sided available. Perfect for Graphing, Handwriting, Math and Science. Long-lasting, non-toxic ultra-low odor markers too!

The Math Learning Center

Booth: 205 Salem, Oregon P: 503-370-8130 FX: 503-370-7961 www.mathlearningcenter.org

The Math Learning Center is a nonprofit organization that offers innovative, standards-based grades K-5 curriculum, professional development, supplemental materials, and resources to osupport learning and teaching.

Math Teachers Press, Inc.

Booth: 601 Minneapolis, Minnesota PH: 800-852-2435 FX: 952-546-7502 www.movingwithmath.com

The Moving with Math^{*} Pre-K–12 intervention math programs are research-based, integrating manipulatives, problem solving and games with scripted lesson plans. Built-in assessment monitors achievement, measures progress and differentiates instruction for RTI. Results are scientifically based. Web-based technology and professional development are available. Programs meet the needs of Special Ed.

McGraw-Hill Education

Booth: 212 Columbus, Ohio PH: 614-430-4400 FX: 614-430-7242 https://www.mheonline.com/

McGraw-Hill Education is a leading grades pre-K-12 publisher, providing comprehensive instructional programs to meet the Common Core State Standards in mathematics. With products from Glencoe, Macmillan/McGraw-Hill, SRA, and Wright Group, our programs offer dynamic digital solutions, are research and standardsbased, have proven efficacy, and provide extensive support and professional development for educators.

MIND Research Institute

Booth: 506 Santa Ana, California

Santa Ana, California PH: 714-751-5443 FX: 714-751-5915 http://www.mindresearch.net/

The MIND Research Institute is a neuroscience and education research based, non-profit corporation, based in Santa Ana, CA. MIND applies its distinctive visual approach to illustrating math concepts and building problem-solving skills as the basis for innovative, research-proven math education programs for elementary and secondary schools. MIND is committed to helping all children, particularly those living in poverty or with limited language skills, achieve success in school and in life. With more than 10 years of strong results, MIND offers schools costeffective solutions and a powerful tool to improve the educational outcomes of students. MIND's programs currently reach over 320,000 students and 13,000 teachers in more than 1,000 schools in 19 states. Visit http://www.mindresearch.net.

Mountain Math/Language, LLC

Booth: 504 Ogden, Utah PH: 801 475-1963 FX: 801 475-1995 www.mtmath.com

Our company provides supplemental spiral review programs in math, language, science, and U.S. history. They are available as bulletin boards, centers, and online. We also provide review games.

Ν

Nasco

Booth: 403 Modesto, California PH: 800-558-9595 FX: 209-543-1244 www.encsco.com

Nasco provides the latest teaching material for primary through pre-algebra and geometry programs. This catalog includes manipulatives; calculators; games; resource books and audiovisuals including drawing equipment, and software programs. Many aids are packaged in classroom sets. Custom math kits are available to meet your specific classroom needs.

National Council of Supervisors of Mathematics (NCSM)

Booth: 613

Denver, Colorado PH: 303-758-9611 FX: 303-758-9616 mathedleadership.org NCSM is an international mathematics leadership organization that provides professional learning opportunities and resources for leaders to support and sustain student achievement. If you're an informal or formal leader at any level—district, school, department, grade level, classroom (chairs, coaches, teachers, etc.)—stop by and see how NCSM supports your leadership work.

NEUFELD LEARNING SYSTEMS INC

Booth: 612 London, Ontario PH: 866-429-6284 FX: 519-657-3220 www.neufeldlearning.com

Neufeld Learning Systems Inc provides a combination of browser-based technology solutions and customized professional development for reaching all learners of mathematics. The Understanding Math Series of programs provide teachers and students with the support and resources to meet and exceed proficiency levels as defined by the Common Core mathematics standards.

The New York Times

Booth: 603 Weston, Massachusetts www.ontheavenuemarketing.com

Regional Conferences ALLAS, TX | OCTOBER 10-12 HARTFORD, CT | OCTOBER 10-12

height

(h,k)

υ

Join the Best & Brightest **Math Educators**

NCTM's Regional Conferences have the professional development opportunities you need to help your students succeed. Join the best and the brightest and immerse yourself in the latest topics in math education. By attending you and your colleagues will:

- Learn more about and test the latest technology
- Discover new and effective intervention methods
- Learn practices central to teaching the **Common Core State Standards**
- Refine your assessment techniques
- And more!

Whether you're a classroom teacher, coach, administrator, preservice teacher, or math specialist, this conference has something for you.



NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS

Visit www.nctm.org/meetings for up-to-date information.

 $\left(\frac{-1}{2}\mathbf{r},\frac{\sqrt{3}}{2}\mathbf{r}\right)$

Y PIER

EXHIBITOR DIRECTORY

O

ORIGO Education

Booth: 400 St. Charles, Missouri PH: 1-888-674-4601 FX: 1-888-674-4604 www.origoeducation.com

ORIGO Education is an international mathematics education company dedicated to moving students forward with a deep understanding of mathematics. We strive to create innovative teaching resources and offer dynamic professional learning sessions. Educators own our company, author our products and present our professional learning workshops.

Ρ

Pearson

Booth: 606

Upper Saddle River, New Jersey www.PearsonSchool.com Pearson, the global leader in education content, services and technology, provides innovative print and digital solutions for Pre-K through college, school improvement strategies, student information systems and learning management systems, teacher professional development, career certification programs, and testing and assessment products that set the standard for the industry.

R

Renaissance Learning

Booth: 300

Wisconsin Rapids, Wisconsin PH: 715-424-3636 FX: 715-424-4242 www.renlearn.com

Daily and periodic progress-monitoring assessments for math provide teachers with vital information about each student's math skills development by combining Renaissance Learning[™] software, such as Accelerated Math[™], MathFacts in a Flash™, and STAR Math™, and classroom-proven best-teaching practices. The result: dramatically improved math skills for every grade-1-12 student.

Rhymes 'n' Times **ClockWise Fractions**

Booth: 304 Lewisville, TX PH: 888-684-6376 FX: 888-684-6177 www.rhymesntimes.com www.clockwisemath.com

Rhymes 'n' Times is a research-based, MULTI-SENSORY program to teach the Times Tables in ONLY 3 WEEKS-Guaranteed! If the class average isn't 90% on the final test, we offer a 100% refund. This program addresses all 4 learning styles to meet the needs of ALL students, regular/ Special Needs/Gifted. Sister products: Fishin' for Addition, Subtraction in Action, Divide 'n' Slide, ClockWise Fractions. RtI-optimized.

S

Scholastic

Booth: 315 New York, New York www.scholastic.com

School Specialty Math & Intervention

Booth: 306 Nashua, New Hampshire PH: 603-579-3467 FX: 603-821-2979 www.schoolspecialty.com

School Specialty Math and Intervention is the EXCLUSIVE publisher of Think Math!, a comprehensive NSF core curriculum K-5 as well as web-based Intervention for grades 2-12 through Academy of Math.

SingaporeMath.com, Inc.

Booth: 513 Oregon City, Oregon PH: 503-557-8100 FX: 503-557-8103 www.SingaporeMath.com

SingaporeMath.com, Inc. has been providing Singapore Math materials to schools and homeschools in the United States and Canada since 1998. Stop by our booth or visit our Web site to learn more.

Sourcebooks

Booth: 605 Naperville, Illinois PH: Phone: (800) 43-BRIGHT FX: 630-961-2168 www.sourcebooks.com

Т

Texas Instruments Incorporated

Booth: 600 Dallas, Texas

PH: 1-800-TI-CARES (842-2737) FX: 972-917-0747 www.education.ti.com

Supporting each educator's vision of student success in math, TI's versatile education technology, curricular support materials and professional development can help enhance teaching and learning. Learn how the latest TI-Nspire[™] CX handhelds and software can deepen understanding and how the wireless TI-Nspire™ CX Navigator[™] system enables real-time assessment.

W

Western Governors University

Booth: 704 Salt Lake City, UT PH: 801-274-3280 FX: 801-274-3305 www.wgu.edu

The Teachers College at Western Governors University (WGU) offers regionally & nationally accredited, online competency-based master's degrees in mathematics education. Our students enjoy modest tuition rates, unbelievable flexibility, and unmatched student support. Scholarships and financial aid are available. WGU is the nation's only non-profit, NCATE-approved, all-online university

SPEAKER INDEX

A

Aceves, Carlos 18
Adams, Dennis E 77,146
Allen, Kasi 114,189
Allen, Sheila J 147
Ames, Denise 112
Ancell, Patti Ann 183
Anderson, John A 67
Anhalt, Cynthia O 4
Archuleta, HollyDee 105
Ayers,Katrina2.1

В

Bacallao, Aldo 41
Bacallao, Mary Kay 234
Balka, Don15,228
Barany, Deborah 140
Barger, Rita 136
Barnett, Tiffany P 210
Beyers, James E. R 45
Bezuk, Nadine 8
Blais, Tanva Vik 184.255

Blueher, Francesca 120
Bolz, Joseph 87
Boswell, Laurie A 202
Bradford, Nick B 125
Bradsby, Shirley H 144
Branch, Amber 179
Briars, Diane J 159,222
Buck, Mary 34
Burks, Phyllis 32
Burrill, Gail

С

Cohen, Jessica S. 11 Confer, Chris 82,158 Corbett, Jonathan 128 Cuevas, Peggy 5 Cuevas, Gilbert 102 Culbertson, Kathryn 130 Currah, Joanne 172

D

Davis, Donna 73
Dean, Roy B 241
Del Regato, John C 211
DeLeeuw,
Sarah Marie 97,117,180
Dick, Thomas P 191
Draper, Cathy 113
Duran, Reynaldo L 48
Duvall, Debbie 99
F

E

Espinoza, Emma	nι	ıe	1.	A			.1	111	
Evenson, Amber								70	

F

G

Geist, Eugene
Gelakis, Perry 100
George, Anne 197
Gilchrist, Sarah 219
Gilfeather, Mary 20
Gillespie, Janet G 80
Gilpin, Tori 156
Glanfield, Florence 224
Glee, William J 35
Gojak, Linda
Gonzales, Lorenzo 243
Grande, Kristi 176

New Professional Development Books from NCTM FIND THESE AND MORE TITLES AT THE NCTM BOOKSTORE.

SAVE 25% on all purchases!*



NEW 5 Practices for Orchestrating Productive Mathematics Discussions

By MARY KAY STEIN AND MARGARET SMITH "[This book] provides teachers with concrete guidance for engaging students in discussions that make the mathematics in classroom lessons transparent to all." —CATHERINE MARTIN, Mathematics and Science

Director, Denver Public Schools

Stock # 13953 | List Price: \$29.95 | Member Price: \$23.96 CONFERENCE PRICE: \$22.46



NEW Motivation Matters and Interest Counts

Fostering Engagement in Mathematics By AMANDA JANSEN AND JAMES MIDDLETON "This is one that you will want to read."

–GLENDA LAPPAN, Professor, Michigan State University, Past President, NCTM (1998–2000)

Stock # 13787 | List Price: \$37.95 | Member Price: \$30.36 CONFERENCE PRICE: \$28.46

NEW

Achieving Fluency Special Education and Mathematics By FRANCIS (SKIP) FENNELL

"This book is an "all in one," giving both general and special educators a condensed, concise bestpractices manual for mathematics instruction."

HEATHER C. DYER, Math Support Teacher, Running Brook Elementary School (Columbia, Maryland)

Stock #13783 | List Price: \$34.95 | Member Price: \$27.96 CONFERENCE PRICE: \$26.21



R NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS



NEW Disrupting Tradition

Research and Practice Pathways in Mathematics Education By William F. Tate, Karen D. King,

AND CELIA ROUSSEAU ANDERSON Stock # 13515 | List Price: \$37.95 | Member Price: \$30.36

CONFERENCE PRICE: \$28.46

*Conference discount not valid on sale items.

Go to www.nctm.org/catalog to view tables of contents and sample pages.

For more information or to place an order, please call (800) 235-7566 or visit www.nctm.org/catalog. Offer valid only on onsite bookstore sales during the conference. FIND US ON for the conference of the confer

RADITIO

SPEAKER INDEX

Н

Hakansson, Susie 86
Hammett III, John E 29
Hanna, John E 63
Hardy, Michael 47
Harris, Pamela Weber 162
Hatchett, Mary Alice 168.1
Hensberry, Karina K. R 54
Herron, Lisa 101
Hill, Wendy E 17
Holland-Johnson, Alicia 250
Holloway, Susan 126,190
Holmstrom, Annette S 123
Houtz, Lynne E 19
Hunt, Carla J
Hynes, Carol A

Ilieva,	Vessela						229
Irons,	Calvin .						133

J

Jaffe, Cheryl	83
Johnson, Gwendolyn	76
Johnson, Raymond 1	16
Jones, Connie C 1	32
Jorgensen, Kalle V 119,2	14
Judd, Kevin D 2	45

Κ

Kearns, James W					115
Kelly, Catherine					 94.2

Kennedy, Dave 148 Kepner, Henry 118 Kidwell, Megan 233 Kinach, Barbara 251 King, Nancy L 21 Kinzer, Cathy J. 27,244.1 Kitchen, Richard 92 Knoell, Donna L. 58,143 Kosheleva, Olga 43 Kubina, Gary. 26

L

Lancaster, Ron 74
Larson, Matt
Lee, PingHsiu 13
Leinwand, Steven J 55
Lim, Kien H 10
Long, Donna 42
Long, Mike 196
Lott, Johnny 93
Lutz, Michael 242
Lynn, James 37

Μ

Maness, Claudia D 213
Markworth, Kimberly 249
Masunaga, David K 52
Matthews, James R 25
McBroom, Ewelina Suchacka 252
McGlone, Michael A. 205,237
McMahon, Ann 231
McManus, Laurie K 64

Advertisers Guide

Apperson Prep	
Borenson & Associates	Inside Front Cover, 17, 26, 42
Heinemann	Inside Back Cover
Houghton Mifflin Harcourt	Outside Back Cover
Mu Alpha Theta ad	
Origo Education	

National Council of Teachers of Mathematics

Bookstore—New Books	65
Member Showcase	. 8
Philadelphia Annual Meeting 2012	69
Professional Development Books	75
Regional Conferences 2012	73

Mercado, Maria D 169
Merrill, Kellie 157
Metz, Mary Lou 165
Metzler, David S 139
Mikles, Christine 152,215
Mitchell, Suzanne 124
Mittag, Kathleen 89
Moore, Carolyn M 110
Moore, Jane 198
Morgan, Brenda J 109,201
Moses, Shelly 170

Ν

Nakamaye, Michael 82.1
Neikirk, Mary M 49
Neufeld, Rudy V96,200
Nickerson, Rob 106
Nisbet, Nigel 182
Normington, Sara 2,129

0

O'Dell, Robin					2	209
Odenwald, Sten						62

Ρ

Palmer, Jeanne M 23
Pearl, Barbara E 208
Penn, M. W 145
Perkowski, Michael H 253
Phillips, Elizabeth A 188
Pierson, Caryl K 44
Podleski, Ann 138
Porter, Alyssa F 238
Post, Thomas R 164
Price, Kathy 107

R

Ramirez, Nora G 168
Reardon, Tom 53
Reed, Barbara 178
Restivo, Nicholas 150,174
Richgels, Glen W 9
Riddle, Allison 142
Rising, Jennifer 226
Robinson, Kathryn 79
Robinson, Kathy 199
Robinson, Richard J. M. 221

S

Saran, Rupam
Schwartz, David M 94
Scruggs, Debbie 16
Seeley, Cathy 127

Sencibaugh, Joseph 186			
Shaughnessy, J. Michael 60			
Sherman, Richard H 98			
Shivvers, Melvin D 7			
Silver, Edward A 155			
Simono, Erika 206			
Smith, Reneé 173			
Smith, Patty E 204			
Smitherman, Kay 85			
Sorto, M. Alejandra 75			
Standards Task Force, NCTM			
NCATE Program 194			
Stanfield, Deedee 153			
Steketee, Scott			
Stooksberry, Lisa 121			
Stramel, Janet 185			
Sutton, Kim			

Т

Taney, Thomas P 177
Tang, Greg
Tapetillo, Socorro H 78
Terrell, Karen 88
Tondevold, Christina D 232
Trespalacios, Jesus 248
Trujillo, Adrian 66
Trujillo, Karen M 149
Tyson, Tim 1
Tyson, Kersti 216

V

Vazquez, Yanira	235
Vennebush, G. Patrick	239

W

Wang, Frank 135,161
Wasserman, Nicholas H. 38
Weisse, Paul J 151
White, Sandra 207
Williams, Rhonda L 22
Wilson, Bettye 247
Wirth, Margaret 203
Wisdom, Sherrie L. 137,227
Wisker, Nancy
Woodward, David 69
Wootton, Karen 12
Wray, Jonathan 6
Wunderlich, Ruth L 220

Ζ

Zurkovsky,	Julia						51

Practical resources Heinemann makes it all make sense.



Connecting Arithmetic to Algebra

Strategies for Building Algebraic Thinking in the Elementary Grades Susan Jo Russell, Deborah Schifter, and Virginia Bastable

Gr 1-6/978-0-325-04191-9/176pp est./\$23.00 est.



Building Powerful Numeracy for Middle and High School Students Pamela Weber Harris Gr 6–10/978-0-325-02662-6/176pp est./\$21.00 est.



Extending Children's Mathematics: Fractions and Decimals Innovations in Cognitively **Guided** Instruction Susan B. Empson and Linda Levi Gr 1-6/978-0-325-03053-1/240pp /\$24.00



Accessible Mathematics 10 Instructional Shifts That Raise Student Achievement **Steven Leinwand** Gr K-12/978-0-325-02656-5/128pp/\$17.00



Math Misconceptions From Misunderstanding to Deep Understanding Honi Bamberger, Christine Oberdorf and Karren Schultz-Ferrell

Gr PreK-5/978-0-325-02613-8/224pp/\$21.00



Mastering the Basic Math Facts in Addition and Subtraction Strategies, Activities, and Interventions to Move Students **Beyond Memorization** Susan O'Connell and John SanGiovanni Gr K-3/978-0-325-02963-4/192pp/\$25.00



Mastering the Basic Math Facts in Multiplication and Division Strategies, Activities, and Interventions to Move Students **Beyond Memorization** Susan O'Connell and John SanGiovanni

Gr 2-6/978-0-325-02962-7/192pp/\$25.00



Young Mathematicians at Work: **Constructing Algebra Catherine Twomey Fosnot** Gr K-8/978-0-325-02841-5/224pp/\$25.00

Heinemann

Dedicated to Teachers

ORDER TODAY! CALL: 800.225.5800 • FAX: 877.231.6980 • WEB: Heinemann.com

Bridging the Gap for Grades K–12 with



On Core

On Core

Mathematics

athematics

Houghton Mifflin Harcourt

•n Core Mathematics

On Core Mathematics is a complete companion for transitioning to the Common Core State Standards, with interactive, real-world applications that help students deepen their understanding of crucial math concepts, while addressing the Common Core Curriculum and the Standards for Mathematical Practice.

Discover how **On Core Mathematics** is a cost-effective resource that can supplement your existing program and provide the standards coverage you need.

For more information, visit us in **Booth #200** at the NCTM Regional Conference in Albuquerque.

Call 800.462.6595 or visit hmheducation.com



