

Grow with the Standards



Nebraska Association of Teachers of Mathematics
Fall Conference
Monday, September 19th, 2011
Kearney Holiday Inn

Schedule at a glance

7:30 – 8:30 a.m.	Registration
8:30 – 8:45 a.m.	Opening Meeting (in Ballroom 1)
8:45 – 9:50 a.m.	Keynote speaker: Deb Romanek
10:00-10:50 am	Session 1 (in rooms Ballroom 1, Executive Room,A, B, C, D, and E)
BREAK-	allow time to visit the vendors, visit
11:05-11:55 am	Session 2 (in rooms A, B, C, D, E and the Executive Room)
12:00pm-1:00pm	Lunch (in Ballroom 1)
12:40 -	recognition, awards and prizes
1:00-1:50pm	Session 3 (in rooms A, B, C, D, E, and Executive Room)
2:00-2:50pm	Session 4 (in rooms Ballroom 1, A, B, C, D, E and the Executive Room)

Opening Meeting: 8:30 a.m.-8:45 a.m. in Ballroom 1

Introductory Remarks by President Jill Edgren

Keynote Speaker : 8:45 - 9:50

Deb Romanek

Nebraska Department of Education

Deb Romanek has been central to the standards in the state of Nebraska and beyond. As she works diligently as a model for engaged mathematics education, having taught in the classroom with a variety of ages for over a decade, been a supervising teacher, survived substitute teaching and providing professional development through the department of education for over 20 years as the Director of Mathematics. We are fortunate to have Deb serve on the NATM board to keep us apprised of the happenings. As a proud mother of two she has developed much beyond and guided Nebraska tests and standards as well as provided feedback on the Common Core standards. She will be available for breakout sessions as well.



Session 1: 10:00 a.m.-10:50 a.m.

Ballroom 1

Standards in an upper level Classroom

Speaker: Deb Romanek: Nebraska Department of Education **Grade Level: 9-12**

Deb.Romanek@nebraska.gov

Go over the resources available through the NDE such as SIT and C4L as well as address questions you have surrounding NeSA. Targeted for 9-12 but if you could not make it to another session, stop in.

Room A

Mathlines ***note this is only from 10:00 – 10:30**

Speaker: Jane Anderson (ESU 10) **Grade Level: K-6**

janderson@esu6.org

This will be a demonstration of the BEST supplemental math device, MATHLINES. This instrument is very strong on place value, regrouping and long division.

Room B * note this is intended to be a 2 hour workshop*

Developing Algebraic Habits of Mind

Speaker: Teresa Auldridge and Allison Bauers (School Specialty Math) **Grade Level: K-6**

tauldridge@gmail.com

Beginning with “any-order, any grouping” Participants will learn how to help students develop the concept of mathematical properties and understand the true meaning of the equal sign. Participants will do mental mathematics, solve magic squares and use arrays to see how those strategies lead into the concepts of inverse operation and the distributive property. They will use balance scale problems, “guess my rule” games and number puzzles to see how elementary students can use graphic illustration and “working backwards” logic to tackle basic equations and =inequalities.

Room C

Strategies for Vocabulary Acquisition

Speaker: Lenny Vermaas (ESU 6) **Grade Level: All**

lennyvermaas@gmail.com

Students who understand and can apply a wide vocabulary will do better on the NeSA-M. Learning vocabulary in September will not be evident in April unless teachers make a commitment for distributive practice. A wide variety of strategies to practice and deepen students’ understanding of mathematics vocabulary will be shared.

Room D

Defend Your Castle! Using an Open-Middle Problem to Foster Reasoning and Sense Making

Speaker: Shleby Aaberg (Scottsbluff High School) **Grade Level: 9-12**

saaberg@sbps.net

The presenter will offer a complete lesson centered around one problem for high school learners. Audience participation is an expectation for this workshop. The workshop will center on an open middle problem requiring learners to solve right triangles. The workshop will have heavy emphasis on posing questions to students in a way that transfers mathematical authority to the student.

Room E

Making Math Meaningful

Speakers: Nicholas Kleve (EN Sweet Elementary in Sioux City)

Grade Level: K-8+

nicholas.kleve@sccardinals.org

Through an interactive presentation, Nicholas will share why and how to make math meaningful. You will learn how to bring energy and excitement into the world of math education. He will show how learning is enhanced when instruction connects the body and mind. You will learn how creativity is a must with math education. Nicholas will show how effective math methods must be interactive, practical, and make students think. You will also learn the importance of having parents and community member active in student learning.

Executive Room

E³

**Speaker: Vickie Johnson, Stefanie Edwards and Jana Kaelin
(Broken Bow Middle School)**

Grade Level: 5-10

How to encourage, engage and empower your students in math with the use of technology. Will be using a document camera, clickers, mobi and MIMIO.

VENDORS

Aitken Educational Specialties

Community Action Partnership

Cord Communications

C R Toys: Connie Hoeft

Engaging Technologies

Glencoe

Holt McDougal

Houghton Mifflin Harcourt

Lesley University

NebraskaMATH

NCTM: Jeanette Zweiner

Pearson

School Specialtv – Math:

Texas Instruments

Session 2: 11:05 a.m.-11:55 a.m.

Room A

Standards in the Elementary Classroom

Speaker: Deb Romanek (Nebraska Department of Education)

Grade Level: 3-5

Deb.Romanek@nebraska.gov

Go through the SIT and C4L resources available through the department and address questions about NeSA. Targeted for grades 3-5 but if you could not make it to another session, stop in.

Room B

Developing Algebraic Habits of Mind

Speaker: Teresa Auldridge (School Specialty Math)

Grade Level: K-6

tauldridge@gmail.com

Continuation of session 1 workshop.

Room C

How Did You Do That? Number Tricks and Algebra

Speaker: Lenny Vermaas (ESU 6)

Grade Level: All

lennyvermaas@gmail.com

Use the mystery behind why a number trick works to help students develop skills in algebra and problem solving. In addition to being motivating, number tricks help students learn to manipulate symbolic expressions as well as formulate and reformulate generalized solution patterns. Come and learn how to be a mathematical magician.

Room D

Math Club: How to Use Competitive Mathematics to Boost Student Achievement and Efficacy

Speaker: Shleby Aaberg (Scottsbluff High School)

Grade Level: 9-12

saaberg@sbps.net

Mathematics is about knowing how to proceed when one does not know what to do. Math contest problems are great for giving students experience in problem solving and reasoning. Contest problems help students develop strategies to try when they are unsure how to proceed. This presentation will offer suggestions and strategies to both novice and experienced math contest sponsors to maximize student achievement and efficacy. Presenters will provide resources for teachers of all experience levels..

Room E

Shifting Mathematical Authority in the Geometry classroom.

Speakers: Reetu Singh and Aaron Burgoa (Lincoln North Star High School, Lincoln) **Grade Level: 9-12**

With the state standards having a big emphasis on problem solving, allowing students to play a part in their learning is very important. We can shift the classroom authority to the students by providing geometric habits of mind problems that encourage deep thinking and problem solving strategies. Combining these problems with cooperative learning strategies, we have a formula for success!

Executive Room

Engaging Kids in Math

Speaker: Dustin Frank (Engaging Technologies)

Grade Level: All

dustin@engaging-technologies.com

Having taught Math for 10 years, using technology daily. Come see strategies on how not to be the sage on the stage with clickers, tablets and Interactive White Boards in everyday Math classes.

Lunch: 12:00 p.m.-1:00 p.m. in Ballroom 1

Awards starting at 12:40

1. Recognition of Board Members
2. Rookie of the Year Award – Casey Fries
3. Milton W. Beckman Lifetime Achievement Award – David Fowler
4. Don Miller Distinguished Service Award – Larry Hummel
5. Presidential Teaching Awards – Shelby Aaberg and David Hartman

Session 3: 1:00 pm-1:50 pm

Room A

Review games – making learning fun

Speakers: Alicia Davis (Hastings Middle School)

Grade Level: 6-12

Edie Ronhovde (Fremont Middle School)

adavis@esu9.org and edieronhovde@gmail.com

This session focuses on math review games that engage the middle school student. We will show several different games that can be adapted to a variety of content and that require every student to participate. The best way to learn the games is to play the games, so bring your competitive spirit!

Room B

This is intended to be a double session but may be attended separately*

A Tree of Celebration

Limited to 35 participants

Speakers: Betty Teter and Polly Amstutz (University of Nebraska at Kearney) Grade Level: K-6+

teterb@unk.edu and amstutzp@unk.edu

The workshop will be activity driven, where we will initially use five concentric circles to create a tree—maybe/probably Christmas. The workshop will be composed of cutting, gluing, folding and most importantly, interjected appropriate circle content/ vocabulary. During Session 4 more follow up and spin off activities will be explored.

Room C

How Hot Can You Make It?

Speakers: Daniel Schaben (Arapahoe High School), Jeff Depue (Gretna High School) Grade Level:10-12

dschaben@esu11.org, jdepue@gretnadragons.org

Students design and build a parabolic receiver or solar collector to learn how a parabola directs the sun's rays to the focus. Activities like this reinforce concepts, create relevance and connections for students, and will be remembered for a long time. Participants will receive ideas about how to do this activity with your students.

Room D

C3: Creating a Collaborative Classroom

**Speaker: Danielle Burhman (Grand Island Senior High) and
Kelly Gomez-Johnson (Papillion LaVista South**

Grade Level: Middle School

dburhman@gips.org and kgomez@paplv.org

Warning: This is not a powerpoint lecture. Be prepared to interact, have some fun, and come away with easy ideas for your classroom.

Room E

Using GeoGebra to graph functions in Algebra

Speaker: Jerel Welker (University of Nebraska at Lincoln)

Grade Level: K-12

jwelker2@unl.edu

An introduction to GeoGebra (free software for mac or windows) to graph functions in algebra. This session is designed for individuals who are beginning users of the software.

Executive Room

No Country for Old Pens

Speaker: Dustin Frank (Engaging Technologies)

Grade Level: All

dustin@engaging-technologies.com

Notes, samples, homework, problems will never be the same. Check out how the Livescribe pen converts standard ink into digital pen casts that can easily be posted and shared for easy access from anywhere.

Session 4: 2:00 p.m.-2:50 p.m.

Ballroom 1

Knights at the NATM Round Table

Jill Edgren (Wood River Rural Schools, NATM President)

Any Teacher

Round table discussions with available board members to learn more about becoming involved and provide feedback to better serve the membership.

Room A

Standards in the Classroom

Speaker: Deb Romanek: Nebraska Department of Education

Grade Level: -6-8+

Deb.Romanek@nebraska.gov

Go through the SIT and C4L resources available through the department and address questions about NeSA. Targeted for 6-8 but if you could not make it to another session, stop in.

Room B

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A Tree of Celebration

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Speakers: Betty Teter and Polly Amstutz (University of Nebraska at Kearney) **Grade Level: K-6+**

teterb@unk.edu and amstutzp@unk.edu

Follow up and spin off activities from the session 3 constructions.

Room C

Math That Surrounds Us and the State Standards. Finding the Bridge between them.

Speaker: Daniel Schaben (Arapahoe High School),

Grade Level: 7-12

dschaben@esu11.org

In this presentation I will show several problems developed with a video camera and local resources. Then tie them to the State Standards. The four problems I am looking at exploring are, the toaster problem, Stacking bales problem, the center pivot and water problem, and the finding my location problem.

Room D

When will I (or someone) Use This?

Speaker: Kathy Niedbalski (Kearney Catholic High School)

Grade Level: Middle

With topics such as “math meets Literature” and “Be an Engineer”, independent quarter projects help students find out when it is useful. Included are example of projects with start-up tips on grading and project rubrics.

Room E

Using GeoGebra to perform constructions in Geometry

Speaker: Jerel Welker (University of Nebraska at Lincoln)

Grade Level: K-12

jwelker2@unl.edu

An introduction to GeoGebra (free software for mac or windows) to perform constructions in Geometry. This session is designed for individuals who are beginning users of the software.

Executive Room

Teaching Students to Invest in their future

Speaker: Tricia Buchanan

Grade Level: 10-12

In this session I will show you what I do as a unit in my Trigonometry class after we have learned about Compounded Interest. This could be used in lower level classes as well with some alteration of the formula use. I use it as an end of the year unit to try to keep students involved in the mathematics they have learned, but also let them see how it is used in the real world. We discuss different types of investing options, how interest rate and time effect their investments, and even the use of credit cards and how easy it is to get into trouble with them.

Save the dates:

NATM Pre-Professionals Conference: Saturday, October 22nd, 2011 at Lincoln North Star High School in Lincoln
contact Amy Nebesniak

2012 NATM Fall Conference: September 18, 2012 at the Embassy Suites in Lincoln NE
Contact Pari Ford if you would like to be a speaker and Amy Nebesniak to be a vendor

Join: National Council of Teachers of Mathematics

Visit www.nctm.org/membership to sign up for membership, or renew your membership, and designate NATM to receive special rebate rewards, at no additional cost to you!



My Take-Home IDEAS

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Time	Ball	A	B	C	D	E	F
8-9:50	Intro and keynote Deb Romanek						
10-10:50	Deb Romanek – high school	Jean Anderson (half)	Teresa Auldrige Developing Algebraic Habits of Mind	Lenny Vermaas Strategies for vocabulary Acquisition	Shelby Aaberg Defend Your Castle	Nicholas Kleve Making Math Meaningful	Vicki Johnson & Edwards & Kaelin Math & Technology
11:05 – 11:55		Dustin Frank Engaging Kids in Math	Teresa Auldrige (Workshop continued)	Lenny Vermaas How Did You Do That?	Shelby Aaberg Math Club	Rheetu Singh & Aaron Burgoa Shifting Mathematical Authority in Geometry	Deb Romanek – Elementary
12-1	LUNCH Awards						
1 – 1:50		Dustin Frank No Country for Old Pens	Betty Teter and Polly Amstutz A Tree of Celebration	Jeff Depue and Dan Schaben How Hot Can You Make It?	Danielle Burhmann & Kelly Gomez-Johnson C3: Creating a Collaborative Classroom	Jerel Welker GeoGEBRA – using it with aGEBRA	Alicia Davis & Edie Ronhovde Review Games
2-2:50	NATM Board Round table discussions	Tricia Buchanan Statistical Investments	Betty Teter and Polly Amstutz	Dan Schaben- Math that Surrounds Us and the Standards	Kathy Niedbalski When Will I Use this?	Jerel Welker GEOgebra:using it with GEOmetry	Deb Romanke – middle or mix

NATM Fall Conference Evaluation
 September 19, 2011
 Kearney, NE

Thanks for your participation today. We hope it was a valuable experience for you.

In order for us to deliver the best product, we would appreciate your evaluation of today's conference. Please return it to the box at the registration desk on your way out and pick up your **parting gift**. Thank you again for your attendance and helping us to make next year's conference even better.

Teaching Level: Elementary Middle High School College
 Student

Please rate the following.	Excellent	Very Good	Good	Fair	Poor
1. Conference Overall Quality	5	4	3	2	1

Comments:

2. Conference Location/Hotel	5	4	3	2	1
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Comments:

3. Keynote	5	4	3	2	1
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Comments:

4. Session 1 title (10-10:50am):	5	4	3	2	1
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Comments:

5. Session 2 title (11:05-11:55am):	5	4	3	2	1
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Comments:

6. LUNCH / AWARDS	5	4	3	2	1
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Comments:

7. Session 3 (1- 1:50)	5	4	3	2	1
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Comments:

8. Session 4 (2 – 2;50	5	4	3	2	1
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Comments:

9. Organization of Conference	5	4	3	2	1
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Comments:

General Comments/Suggestions

NATM is considering taking our newsletter online. Do you prefer online, paper, or the availability of both?

What would you like to see NATM do in the coming year?