Program for 2008 Joint Conference

Thursday 7 pm Friday 8:30 am

7:00-9:00 pm Session: 1 Dakota C Feb. 7, 2008

Grade Level: K-C

Speaker(s): Bill Gripentrog

SDCTM President

Title: Math Sharing Session

Sharing lessons and activities will be the focus of this session. Bring 25 copies of your favorite activity or lesson.

7:00-9:00 pm Session: 2 Dakota G Feb. 7, 2008

Grade Level: K-C

Speaker(s): Ramona Lundberg

SDSTA President-Elect

Title: Science Sharing Session

Sharing lessons and activities will be the focus of this session. Bring 25 copies of your favorite activity or lesson.

Friday 8:30 am

8:30-9:20 Session: 3 Dakota A Feb. 8, 2008

Grade Level: 6-12+

Speaker(s): Lorie W. Johnston

Newell HS

Title: Do the Math with a Tablet

Discover techniques for graphing with a tablet computer. Emphasis will be on graphing equations and inequalities on a coordinate plane using several different programs available on the tablet computer. Newell HS is in the second year of the laptop initiative. Find out what works for doing math with a laptop.

8:30-9:20 am Session: 4 Dakota B Feb. 8, 2008

Grade Level: 3-12+

Speaker(s): Steven Rokusek
SD Public Broadcasting

Title: What's Up with Finance

SDPB will highlight two new television programs about finance. Your high school students will love "What Up with Finance." This upbeat new program comes complete with lesson plans and an interactive website. In addition, we have developed a new Kid's Quest for elementary children about counting back change. Each participant will receive 2 DVD's and accompanying teachers guides.

8:30-9:20 am Session: 5
Dakota C Feb. 8, 2008

Grade Level: 6-8

Speaker(s): Patrick Wenzl
Holt, Rinehart & Winston

Title: Whiz-Bang Demonstrations

"Wow! Why did that happen? Can we do it again?" Fill your bag with practical, exciting demonstrations and discrepant events that are guaranteed to get your students' attention on Monday morning! There will be door prizes and give-aways.

8:30 am

Friday

8:30 am

8:30-10:20 am Dakota D

Session: 6 Feb. 8, 2008

Dakota F Grade Level: 9-12+

8:30-9:20 am

Session: 8 Feb. 8, 2008

Session: 9

Feb. 8, 2008

Grade Level: 6-12

Speaker(s): Lonnie Bellman **CPM Educational Program** Speaker(s): Sheila McQuade O'Gorman High School

Title: Exploring a Standards-Based, Research-Based Curriculum: CPM 6-12

Title: What is TI-Nspire?

Participants will explore activities from one of the Exemplary Programs, College Preparatory Mathematics, When students work through the problems in CPM, they develop not only problemsolving skills, but a better understanding of the basics. The learning is long-term because of the mastery over time feature.

This session will provide you with the opportunity to see and play with the newest member in TI's family of calculators. TI-Nspire technology helps your students see math in different ways with multiple representations of a concept on a single screen. The TI-Nspire handheld lets you keep using familiar TI-83+ and TI-84+ functionality with its interchangeable TI-84 + Keypad.

8:30-9:20 am Session: 7 Dakota E

Dakota G Grade Level: 9-12

8:30-9:20 am

Feb. 8, 2008

Grade Level: 6-12+

Speaker(s): Larry Browning, P. Kurtenbach,

J. Krueger & M. Miller SDSU

Speaker(s): Matthew L. Miller & others Sioux Valley ACS/SDSU

Title: OPIS: Our Place in Space

Title: South Dakota Chemistry Day **Demonstrations**

OPIS engages teachers in activities to provide support for educationally disadvantaged students so that they can excel in math and science. The activities in 2007 included multicultural and financial aid discussions, science-based industry field trips and content-specific activities. Activities for 2008 will be introduced during this session.

On Tuesday, October 23rd, universities and high schools across South Dakota participated in demonstrations to celebrate National Chemistry Week. Pictures from these shows will be exhibited and participating teachers will present their favorite demonstrations. A discussion of how these demonstrations relate to state standards will ensue.

8:30 am

8:30-9:20 am Session: 10 Dakota H Feb. 8, 2008

Grade Level: K-5

Speaker(s): Brenda Danielson

Scotland Elementary School

Title: Do the Math

My class of first graders appreciate songs and out of seat activities to practice math skills. K-2 activities that can be tweaked to 3-5 will be shared.

Friday

9:30 am

9:30-10:20 am Session: 11 Prairie A Feb. 8, 2008

Repeat of 79

Grade Level: 3-12

Featured Speaker

Speaker(s): Marlys J. Brimmer Ridgeview HS, Bakersfield, CA

Title: Easy Origami With Geometry **Standards**

Three or four high-interest geometric projects will be completed in an hour, emphasizing geometry standards across the grade levels. Easy-to-follow handouts provided!

9:30-11:20 am Session: 12 Prairie B Feb. 8, 2008

Grade Level: K-12+

Featured Speaker

Speaker(s): Ben Sayler SD CAMSE/BHSU

Title: A Deep Underground Laboratory at Homestake

This session will begin with a brief overview of scientific questions that are motivating the creation of the Deep Underground Laboratory at Homestake.

Friday

9:30 am

9:30-10:20 am Session: 13 Prairie C Feb. 8, 2008

Repeat of 85

Grade Level: K-8

Speaker(s): Penny L. Hammrich Sisters in Science, LLC

Title: Sisters in Science Equity Reform **Project**

Science instruction is typically based on prescriptive texts that do not allow children to be inquisitive. This presentation will discuss the three national award-winning science programs for grades K-8. The programs engage the scientist in children through fun and innovative methods, encouraging children to learn science through exploration and inquiry.

9:30-10:20 am Session: 14 Dakota B Feb. 8, 2008

Grade Level: 6-12+

Speaker(s): Brant Miller, facilitator

U of MN

Title: SDSM&T RET Program Research **Showcase**

South Dakota School of Mines and Technology Research Experience for Teachers program participants will present highlights of research and discuss classroom implications. Professional practice and student impact derived from the program will also be discussed.

9:30 am

9:30 am

9:30-11:20 am Dakota B

Session: 15 Feb. 8, 2008

Repeat of 75

Grade Level: 3-8

Speaker(s): Angelo Casaburri

& Arnie Lund

Aerospace Education Services Project &

Jones County HS

Title: Engineering Using Education **Robotics Tools: LEGO Simple**

Machines

Introduce elementary and middle school students to engineering using robotics education. An introduction to the LEGO Simple Machines Kit. Construct projects that are simple (un-motorized) and motorized machines that are under human control. Strategies on classroom teaching, conducting after-school activities, and how to host, coach, and mentor EARLY ROBOTICS competitions.

9:30-10:20 am Session: 16 Dakota C Feb. 8, 2008

Grade Level: K-12+

Speaker(s): Nola Redmond

Connecting Point

Title: Promethean Resources

This will be a session on Promethean resources. Questions about the Promethean Boards will be welcomed. We will also provide equipment for Kristi Lutgen to present curriculum uses of the Promethean Board.

9:30-11:20 am Dakota E

Friday

Session: 17 Feb. 8, 2008

Grade Level: K-5

Speaker(s): Marcia Torgrude & Sherry Gettemy

TIE-ESA 7 & Meade School District

Title: Multiplying and Dividing with Base Ten Blocks

Do your students struggle with large number multiplication? What does the mention of division do to your students? Do they really understand multiplication and division? In this session, you will experience concrete understanding of these operations through the use of base ten blocks. Take your "aha's" back to your students.

9:30-10:20 am Session: 18 Dakota E Feb. 8, 2008

Grade Level: K-2

Speaker(s): Chris Larson

SDSU

Title: Mean, Median and Mode --Hands On!

Activities will demonstrate how to find the mean, median and mode. These activities were used in a second grade classroom and the students had fun.

9:30-10:30 am Session: 19 Dakota G Feb. 8, 2008

Grade Level: 3-12+

Speaker(s): Larry Browning

SDSU

Title: Build a Stand for Your Telescope

About 10 participants will build their own stand for a small telescope such as the one built during past conferences. Bring your telescope or binoculars. If the weather permits, these stands can be used at an observing session Friday night. Materials are provided in part by a NCLB/Title II grant.

9:30 am

9:30-11:20 am Session: 20 Dakota H Feb. 8, 2008 Grade Level: 3-8

Grado Lovon o o

Speaker(s): Anne Lewis
SD Discovery Center

Title: Project Webfoot

Fun, hands-on learning about wetlands using materials developed by Ducks Unlimited. First 10 teachers receive complete kit, next 10: WOW Resource Guide.

9:30-10:20 am Session: 21 Symposium Feb. 8, 2008

Grade Level: 9-C

Speaker(s): A. S. Elkhader, facilitator

NSU

Title: College Forum: Transition from High School to College Mathematics

Representatives from the mathematics departments of the higher education institutions will discuss topics relating to the transition from high school to college.

Friday

10:30 am

 10:30-11:20 am
 Session: 22

 Prairie A
 Feb. 8, 2008

Grade Level: 9-12+

Featured Speaker Speaker(s): Marlys J. Brimmer

Ridgeview HS, Bakersfield, CA

Title: A.P. Statistics for Newbies

Many helpful hints for teachers who are new to teaching A. P. Statistics or thinking of starting a class. Mnemonics, resources, websites, test-taking hints for students, pacing, textbook and review book recommendations, and much more! Packet of information provided.

Friday

10:30 am

 10:30-11:20 am
 Session: 23

 Prairie C
 Feb. 8, 2008

Grade Level: 6-12

Speaker(s): Brenda Robertson

& Julie Erickson SD DOE/State Library

Title: SD State Library: "We're Here to Help!"

Did you know the SD State Library provides electronic resources that support the SD Science Content Standards? Expand your teaching tools by attending this session that looks at the SD Science Content Standards along with demonstrating electronic resources that will support them! Handouts include the SD Science Content Standards and Electronic Resources Guides.

 10:30-11:20 am
 Session: 24

 Dakota C
 Feb. 8, 2008

Grade Level: 6-12

Speaker(s): Kristi G. Lutgen

Deubrook Area Schools

Title: Promethean Wonder Board

If you have or would like to have an interactive board in your classroom and wonder what you can do with it to enhance your teaching, then this presentation is for you.

 10:30-11:20 am
 Session: 25

 Dakota D
 Feb. 8, 2008

Grade Level: 7-C

Speaker(s): SDSU Science Ed Students

SDSU

Title: Q & A--Help Us Out

SDSU student teachers would like to discuss firstyear teacher issues, concerns, and preparation. Bring your thoughts and advice for these young professionals.

Dakota F

10:30 am

Session: 26 Feb. 8, 2008

Grade Level: 7-C

10:30-11:20 am

Speaker(s): SDSU Math Ed Students

SDSU

Title: Q & A--Help Us Out

Ashley Van Maanen, Bill Alsaker, Steve Beckler, Adam Doss, Paul Durbahn, Brittany Postma, John Stearns, Kim Weedman, and Heidi Werner would like to discuss first year teacher issues, concerns, and preparation. Bring your thoughts and advice for these young professionals.

10:30-11:20 am Session: 27 Dakota G Feb. 8, 2008

Grade Level: 3-12+

Speaker(s): Larry Browning

& Judy Vondruska

SDSU

Title: What's Up--Tools to Study the Night Sky

Participants will receive a planisphere and a Sky Gazer's Almanac© as well as instructions on how to use these tools to study the night sky. Weather permitting, these can be used at an observing session Friday night. Support for this presentation is provided in part by a NCLB/Title II grant.

10:30-11:20 am Session: 28 Salon Feb. 8, 2008

Grade Level: K-8

Speaker(s): Chad R. Tussing SD GFP-Project Wild

Title: WILD about ELK--Elementary

Come learn ways you can teach your elementary students about one of South Dakota's largest hoofed animals. Note: attendees at all three WILD about ELK sessions will receive a copy of the WILD about ELK curriculum guide.

Friday

12:00 NOON

12:00-1:00 pm Prairie A, B, C Grade Level: All Session: 29 Feb. 8, 2008

Speaker(s): Micheline Hickenbotham & Bill Gripentrog

Presidents of SDSTA & SDCTM

Title: LUNCH

Presentation of 2nd annual Kelly Lane Earth and Space Science Grant Door Prizes will be given out.

Friday

1:30 pm

 1:30-2:20 pm
 Session: 30

 Prairie A
 Feb. 8, 2008

Grade Level: 9-12+

Featured Speaker

Speaker(s): Marlys J. Brimmer Ridgeview HS, Bakersfield, CA

Title: Math Competitions for Students

From classroom to county competitions, students enjoy the challenge and improve their problemsolving skills with various competitions. Learn a new game or two that all of your students will enjoy, and hear about a new AP Statistics/AP Calculus contest we are starting in central California that you are welcome to do, too!

1:30-2:20 pm Session: 31 Prairie B Feb. 8, 2008

Grade Level: K-12+

Featured Speaker Speaker(s): Jearl Walker

Cleveland State University

Title: 30 Years of Flying with the Flying Circus of Physics

Come meet Dr. Jearl Walker, author of <u>The Flying Circus of Physics</u> and <u>Fundamentals of Physics</u> with Halliday and Resnick as well as 13 years of "Amateur Scientist" sections of Scientific American. Dr. Walker is an expert in relating physics to everyday life.

1:30 pm

Friday

1:30-3:20 pm

1:30 pm

Session: 34

Feb. 8, 2008

1:30-2:20 pm Prairie C Grade Level: 9-12+

Session: 32 Feb. 8 2008

Feb. 8

Grade Level: 3-8

Dakota B

Speaker(s): Bob Schuh & Marie Nehl

Grade Level. 5

McIntosh High School

Speaker(s): Angelo Casaburri & Arnie Lund

Title: Making Pi on the TI-83/TI-84
Calculator

Aerospace Education Services Project & Jones County HS

The session will demonstrate how to develop a function that will calculate pi to a desired number of decimal places by finding the ratio of the perimeter of an n-gon to the diameter of its circumscribed circle.

Title: Engineering Using Education
Robotics Tools: NXT LEGO Mindstorm

Repeat of 96

1:30-2:20 pm Session: 33 Dakota A Feb. 8, 2008 Grade Level: K-5 Introduce middle and high school students to engineering using robotics education. An introduction to LEGO NXT construction, programming, and using sensors to interact the autonomous motorized robot with its environment. Strategies on classroom teaching, conducting after school activities, and how to host, coach, and mentor LEGO League competitions.

Speaker(s): Jill M. Helvig

1:30-2:20 pm Session: 35 Dakota C Feb. 8, 2008

& Christina H. Miller
Meade School District
& Apple Valley/Fagan/Rosemount

Grade Level: 6-12+

& Apple Valley/Fagan/Rosemoul

Speaker(s): Patrick Wenzl
Holt, Rinehart & Winston

Title: Can Math Recovery Save Children Before They Fail?

Title: From Chalkboard to Computer Screen: Technology that Motivates Your Students

Math Recovery provides an intervention framework for teachers working with elementary students to help in the construction of numeracy skills through assessment which incorporates a strong analysis component and individualized teaching. Math Recovery strategies can be applied as an individual intervention or used within the context of the whole class.

The computer is a great motivator for students! Learn about new technology for your classroom that makes learning more fun for students and helps you plan your lessons. From CD-ROM to online textbooks, Holt can take you from chalkboard to computer screen! Door prizes and give-aways!

Dakota D

1:30 pm

Session: 36 Feb. 8, 2008

Repeat of 90

Grade Level: K-5

1:30-2:20 pm

Speaker(s): Brenda Danielson

& Lorraine Morfeld Scotland Elementary School

Title: White Board (Bored) Magic

Do you have student-sized individual white boards in your classroom? These learning tools can be magic when added to your curriculum. Come learn a multitude of activities and practice strategies for white boards.

1:30-2:20 pm Session: 37 Dakota E Feb. 8, 2008

Grade Level: K-5

Speaker(s): Jan Martin

SD Dept. of Education

Title: Measuring Math

Measurement tends to be a weakness for our students on state and national assessments. Come and explore ideas for making measurement beyond the mundane.

1:30-2:20 pm Session: 38 Dakota F Feb. 8, 2008

Grade Level: 6-8

Speaker(s): Sharon S. Vestal

SDSU

Title: Exploring Three-dimensional Figures Using Nets

We will create polyhedra using nets and then explore properties of these polyhedra. Classify and discuss formulas such as Euler's formula. Classification of polyhedra will also be discussed.

Friday

1:30 pm

 1:30-2:20 pm
 Session: 39

 Dakota G
 Feb. 8, 2008

Grade Level: K-C

Speaker(s): Mike Barondeau

Edmunds Central School

Title: BB Board Molecular Demonstrator for Science

This is a Make-It and Take-It session where you construct an acrylic BB-Board demonstrator for atomic/molecular motion. This session is limited to 9 and will cost each participant \$15 at the door for materials. To see what you will make go to http://mb045.k12.sd.us/Ideas/Bbboard.htm

1:30-2:20 pm Session: 40 Dakota H Feb. 8, 2008

Repeat of 78

Grade Level: 6-12+

Speaker(s): Clark J. Bennett

USD

Title: An Introduction to SD Science Olympiad

Information about participating in the South Dakota Science Olympiad State Tournament will be presented. Recent examples of events run at the state tournament will be included in the presentation.

1:30-2:20 Session: 41 Symposium Feb. 8, 2008

Grade Level: K-12+

Speaker(s): Brenda Murphey Rapid City Academies

Title: Presidential Award Application Process

This will be an informal discussion about the Presidential Award application process. I have yet to receive a Presidential Award, but I have gone through the process, and could help someone understand some of the procedures.

2:30 pm

2:30-3:20 pm Prairie A

Session: 42 Feb. 8, 2008

Repeat of 102

Grade Level: 3-12+

Featured Speaker
Speaker(s): Marlys J. Brimmer

Ridgeview HS, Bakersfield, CA

Title: Steps and Slides with Standards

A review activity that looks like a game to students but has them practicing 75-100 problems in an hour! It is mental math (but I'll show elementary teachers and science teachers that they can easily use this in other courses too!) Students are actively engaged, and this can be used for any standard your students need to practice. They love it! You will leave with a setup to start using the activity Monday.

2:30-3:20 pm Session: 43 Prairie B Feb. 8, 2008

Grade Level: K-12+

Speaker(s): Mary Frederick

& Karen Gordon Mickelson Middle School

Title: Halloween Demonstrations

A scary story becomes a lesson in science. Come and see how to get students motivated in science and find a creative way to use science demonstrations in this Science with a Theme and Scheme Lesson.

> Next Year's Conference is February 5, 6, 47, 2009

Friday

2:30 pm

2:30-4:20 pm Prairie C Session: 44 Feb. 8, 2008

Grade Level: K-8

Speaker(s): Kristie L. Maher
SD Discovery Center

Title: Great Explorations in Math & Science

The SD Discovery Center will share great curriculum resources from the Great Explorations in Math & Science program. Participate in lots of hands-on activities. There will be something specifically for your grade level. Find out how you can access these outstanding resources.

2:30-4:20 pm Dakota A Session: 45 Feb. 8, 2008

Session: 46

Feb. 8, 2008

Repeat of 80

Grade Level: 9-12+

Speaker(s): Kris Baldwin

TIE

Title: Power Up for Math and Science Tech Integration

This presentation will highlight the work of 24 high school math and science teachers who are participating in the Power Up project. A brief review of the program components will be followed by hands-on practice in using some of the Web 2.0 tools featured in the project.

2:30-4:20 pm Dakota C

Repeat of 70

Grade Level: 9-12+

Speaker(s): Kim C. Kightlinger

Hoven HS

Title: Fido and Rover & Related Rates

This progression through related rate problems will make teaching this calculus topic much easier. Kim will also share his experience of being a 2007 AP Calculus Exam Reader.

2:30 pm

2:30-4:20 pm Session: 47 Dakota D Feb. 8, 2008

Repeat of 88

Grade Level: 9-12+

Speaker(s): Jensi L. Kellogg-Andrus

Watertown HS

Title: Instructional Strategies for the Science Classroom

This session will include strategies, activities, and labs you can use in science. These strategies will include literacy, problem solving, reinforcement, technology, and hands on activities. The examples used will be based on life science, but can easily be adapted to any science classroom. If you want to add to your teaching "toolbox," this is the session for you!

2:30-3:20 pm Session: 48 Dakota E Feb. 8. 2008

Grade Level: K-12+

Speaker(s): Marlene Rothermel

& Karen Taylor

TIE

Title: Connections: Ourselves, Our Subjects, Our Students

This session will incorporate insights from Parker Palmer's books <u>Courage to Teach</u> and <u>A Hidden Wholeness</u>. During this session we will examine the heart of good teaching through a brief 'Circle of Trust' experience.

2:30-3:20 pm Session: 49 Dakota F Feb. 8, 2008

Grade Level: 9-12+

Speaker(s): Sharon S. Vestal

SDSU

Title: The Calculus I Gateway Exam at SDSU-an Update

We have given the Gateway Exam to Calculus I students for two semesters, Spring 2007 and Fall 2007. We will share a preliminary analysis of the data.

Friday

2:30 pm

2:30-3:20 pm Dakota G Session: 50 Feb. 8, 2008

Grade Level: 9-C

Speaker(s): James Stearns

SD AAPT

Title: SD-AAPT Photo Contest

Final voting and judging will be taking place on the photos and essays submitted. (Check out the photos in the hall Thursday night and/or Friday and put in your two cents.)

2:30-3:20 pm Session: 51 Dakota H Feb. 8, 2008

Grade Level: 9-12+

Speaker(s): Steven Rokusek
SD Public Broadcasting

Title: Science Education SDPB

South Dakota Public Broadcasting will highlight new science programs and old favorites. Hints on where to locate accompanying resources will be covered.

2:30-3:20 pm Session: 52 Symposium Feb. 8, 2008 Grade Level: 3-8

Speaker(s): Jan Martin

SD Dept. of Education

Title: Exploring the National
Assessment of Educational
Progress (NAEP) Item Pool

The results of the 2007 4th and 8th grade NAEP have been released. While school or student results are not available, a wealth of information is available to teachers about NAEP items which can be used to plan instruction.

2:30 pm

Friday

3:30 pm

Session: 55

Feb. 8, 2008

2:30-3:20 pm Session: 53 Salon

Feb. 8, 2008

Repeat of 89

Grade Level: 6-12+

Grade Level: 6-8

Dakota B

3:30-4:20 pm

Speaker(s): Chad R. Tussing SD GFP-Project Wild

Speaker(s): Jolene K. Thompson

Mitchell MS

Title: WILD about ELK--Secondary

Title: Engineering, Architecture and Design

Want to give your high school students a chance to learn about a real-life issue in South Dakota? Learn how in this fun, informative session about elk. Note: attendees at ALL three WILD about ELK sessions will receive a copy of the WILD about ELK curriculum guide.

Students become enthusiastic for geometry and measurement through this unit. Hands-on activities include exploring polygons and designing and building toothpick bridges.

Friday

3:30 pm

3:30-4;20 pm Session: 56 Dakota D Feb 8, 2008

3:30-4:20 pm Session: 54 Prairie B Feb. 8, 2008

Grade Level: 9-12+

Grade Level: K-5

Speaker(s): Justin J. Jessop

& Jim Faulstich SD Grasslands Coalition

Speaker(s): Jill M. Helvig

& Christina H. Miller

Meade School District & Apple Valley/Fagan/Rosemount Title: Goal Setting

Faulstich will talk of how his ranch management has progressed in the last 30 years. Now he manages the ranch holistically and watches the water and mineral cycles.

Title: Putting Some Structure to Number

3:30-4:20 pm Session: 57 Dakota G Feb. 8, 2008

Why do children continue to use fingers when solving addition and subtraction problems? See how special patterns, finger patterns, and combining and partitioning numbers can impact students' success with addition and subtraction problem solving. We will look at basic facts as well as multi-digit addition and subtraction. Activities to take back to your classroom will be a part of this session.

Speaker(s): SD-AAPT Officers American Association of Physics Teachers

Title: AAPT Meeting

Grade Level: 8-C

Meeting of the South Dakota chapter of the American Association of Physics Teachers.

3:30 pm

Friday

6:00 pm

3:30-4:30 pm Dakota H

Session: 58 Feb. 8, 2008

Grade Level: 6-12

6:00-7:00 **Pre-Function Area**

Session: 62 Feb. 8, 2008

RECEPTION

Sponsored by Holt, Rinehart, Winston

Title: Reptiles, Insects & Mammals in the Classroom

Speaker(s): Ramona R. Lundberg Deuel School District

Come and see some of the creatures we keep in the science classroom and hear how students' learning is enhanced.

3:30-4:20 pm **Symposium** Grade Level: 6-12+ Session: 59

Feb. 8, 2008

Speaker(s): Brenda Murphey

& Nicole Keegan

Rapid City Academies & Dakota Middle School

Title: It is the Little Things That Matter the Most

Math or Science teachers can join this session to discuss the "little things" that happen in a classroom. Often time, it is not the content of the lesson, but the atmosphere of the classroom and sense of belonging that students feel that allow the most effective learning to take place. Let's put the heart back into learning.

Friday 4:30-5:30

4:30 pm

Session: 60 Dakota C Feb. 8, 2008

Title: SDCTM Business Meeting

Bill Gripentrog, President

4:30-5:30 Session: 61 Dakota G Feb. 8, 2008

Title: SDSTA Business Meeting

Micheline Hickenbotham, President

Friday

7:00 pm

7:00 pm Prairie A, B, C

Session: 63 Feb. 8, 2008

Banquet

Bill Gripentrog & Micheline Hickenbotham

Featured Speaker

Speaker(s): Jearl Walker Cleveland State University

The Flying Circus of Physics

After Banquet Lobby

Session: 64 Feb. 8, 2008

Grade Level: K-12+

Speaker(s): Larry Browning

& Judy Vondruska

SDSU

Title: Star Party

Weather permitting, the presenters will facilitate an observing session AFTER the Friday Night Banquet.

7:00-8:00 am Session: 65 Salon Feb. 9, 2008

Grade Level: K-12

Speaker(s): Diana McCann

& Ramona Lundberg
Presidential Award Coordinators

7:00 am

Title: Presidential Award Breakfast

All past and present awardees (math and science) are invited to join us for breakfast as guests of PAEMST.

Saturday 8:30 am

8:30-9:20 am Session: 66 Dakota B Feb. 9, 2008

Grade Level: 9-12+

Speaker(s): Molly TenBroek

McIntosh HS

Title: Where is YOUR Center of Mass (Gravity)?

Students use a long plank, a scale and their knowledge of translational equilibrium to calculate their center of mass (gravity) with their arms in different positions. I use this with my physics students, but it could also be used in Physical Science since the formula is very straightforward.

8:30-9:20 am Session: 67 Dakota C Feb. 9, 2008

Grade Level: K-5

Speaker(s): Sandy Ullrich

& Mary Jo Christensen

Aberdeen & Webster

Title: Marvelous Math

Come and learn activities that incorporate handson, inquiry-based lessons. The lessons also include trade books and writing activities. South Dakota Math Standards are incorporated. Saturday 8:30 am

8:30-9:20 am Session: 68 Dakota D Feb. 9, 2008

Grade Level: 3-8

Speaker(s): Becky Umenthum

Dakota Middle School, Rapid City

Title: Quilting in Mathematics

Learn how to use quilting to teach measurement, geometry, and fractions. (No sewing--just designing). I'll share activities I've used with both sixth and eighth graders and how to adapt them for younger or older students.

8:30-9:20 am Session: 69
Dakota E Feb. 9, 2008

Grade Level: 9-12+

Speaker(s): Paul R. Kuhlman

Avon HS

Title: Begin the year with a pop: I mean diet pop!

Participants will learn how to use the famous diet Coke-Mentos reaction as an introduction to the scientific method. Another activity on calculating the percentage of oxygen in air will also be presented.

8:30-9:20 am Session: 70 Dakota F Feb. 9, 2008

Repeat of 46

Grade Level: 9-12+

Speaker(s): Kim C. Kightlinger

Hoven HS

Title: Fido and Rover & Related Rates

This progression through related rate problems will make teaching this calculus topic much easier. Kim will also share his experience of being a 2007 AP Calculus Exam Reader.

Saturday 8:30 am

8:30-9:20 am Session: 71 Dakota G Feb. 9, 2008

Grade Level: 6-12+

Speaker(s): Jay H. Berglund
Gettysburg HS

Title: An overview of TI-InterActive and TI SmartView

An overview of Texas Instruments computer software TI InterActive and TI SmartView. TI InterActive brings the power of TI graphing calculators to your computer. It can be used to create interactive worksheets to enhance student learning. TI SmartView lets the teacher project an interactive representation of the calculator's display to the entire class.

Saturday 8:30 am

8:30-10:20 am Session: 72 Dakota H Feb. 9, 2008

Grade Level: 3-8

Speaker(s): Nancy Barondeau

NSU.

Title: Robots

After sharing a robot unit, working robots will be constructed using Robotix parts.

8:30-9:20 am Session:

73

Salon Feb. 9, 2008

Grade Level: K-12

Speaker(s): Diana McCann

& Ramona Lundberg
Presidential Award Coordinators

Title: Tips for Winning Money

Would you like to receive \$10,000? Every year South Dakota is eligible to make two \$10,000 awards, one in science and one in math. The Presidential Award is Sponsored by the White House and the National Science Foundation. Come to this session to be assigned a mentor and/or to learn how to complete an application.

Saturday 9:30 am

9:30-10:20 am Session: 74 Dakota A Feb. 8, 2008

Grade Level: K-12+

Speaker(s): Marlene Rothermel

TIE

Title: TakeOne! To Enhance Teaching and Learning

TakeOne! Is a unique offering from the National Board for Professional Teaching Standards (NBPTS) that provides a standards-based approach for improving teaching practice and links student learning to effective instruction. During the session you will learn how this program might benefit you and your teaching team.

Saturday 9:30 am

9:30-11:20 am Session: 75 Dakota B Feb. 9, 2008

Repeat of 15

Grade Level: 3-8

Speaker(s): Angelo Casaburri & Arnie Lund

Aerospace Education Services Project & Jones County HS

Title: Engineering Using Education Robotics Tools: LEGO Simple Machines

Introduce elementary and middle school students to engineering using robotics education. This session provides an introduction to the LEGO Simple Machines Kit. Construct projects that are simple (un-motorized) and motorized machines that are under human control. Strategies on classroom teaching, conducting after school activities, and how to host, coach, and mentor EARLY ROBOTICS competitions.

9:30 am

9:30-11:20 am Session: 76 Dakota C Feb. 9, 2008

Grade Level: K-2

Speaker(s): Renee Brooks

& Johnath L. Weber Frederick School District & NSU

Title: CGI in the Primary Grades! How Will It Fit with My Textbook?

The presenters share their experiences in changing a first grade classroom from a traditional mathematics environment to a Cognitively Guided Instructional environment. Presenters will share ideas and strategies that helped to create an engaging classroom atmosphere where all children had a chance to enjoy, succeed, and grow mathematically.

9:30-10:20 am Session: 77 Dakota D Feb. 9, 2008

Grade Level: 3-8

Speaker(s): Jan Martin & Dave Martin
SD DOE & Cheyenne Eagle-Butte HS

Title: Crafting Math

Explore ways various hobbies can assist in the teaching of geometry and measurement. If you have a particular craft or hobby you enjoy, bring samples to share. Focus will be on knitting, quilting and paper projects.

Saturday

9:30 am

9:30-10:20 am Session: 78 Dakota E Feb. 9, 2008

Repeat of 40

Grade Level: 6-12+

Speaker(s): Clark J. Bennett

USD

Title: An Introduction to SD Science Olympiad

Information about participating in the South Dakota Science Olympiad State Tournament will be presented. Recent examples of events run at the state tournament will be included in the presentation.

9:30-10:20 am Session: 79 Dakota G Feb. 9, 2008

Repeat of 11

Grade Level: 3-12

Featured Speaker

Speaker(s): Marlys J. Brimmer
Ridgeview HS, Bakersfield, CA

Title: Easy Origami With Geometry Standards

Three or four high-interest geometric projects will be completed in an hour, emphasizing geometry standards across the grade levels. Easy-to-follow handouts provided!

Saturday 9:30 am

9:30-11:20 am Session: 80 Symposium Feb. 9, 2008

Repeat of 45

Grade Level: 9-12+

Speaker(s): Kris Baldwin

TIE

Title: Power Up for Math and Science Tech Integration

This presentation will highlight the work of 24 high school math and science teachers who are participating in the Power Up project. A brief review of the program components will be followed by hands-on practice in using some of the Web 2.0 tools featured in the project.

Saturday 10:30 am

10:30-11:20 am Session: 81 Dakota A Feb. 9, 2008

Grade Level: K-12+

Speaker(s): Ramona Lundberg

& Becky Umenthum
Deuel HS & Dakota MS, Rapid City

Title: National Board for Professional Teaching Standards

This session will provide an overview of the process, resources available and a question and answer session. Both presenters are National Board Certified Teachers.

10:30-11:20 am Session: 82 Dakota D Feb. 9, 2008

Grade Level: 9-12+

Speaker(s): Julie Olson

Title: Bone Builders

Bioengineering of bone materials incorporates some physics, physiology, anatomy, and math. Build a paper bone according to certain specifications and test its strength.

Saturday 10:30 am

10:30-11:20 am Session: 83 Dakota E Feb. 9, 2008

Grade Level: K-C

Speaker(s): Charles Holmstrom SDRS Board of Trustees

Title: Your Retirement

Information, questions, and maybe some answers about retirement in SD.

 10:30-11:20 am
 Session: 84

 Dakota F
 Feb. 9, 2008

Grade Level: 3-5

Speaker(s): Penelope N. Smith

USD

Title: Fraction Action

Ideas for teaching fractions will be presented. Session includes: misconceptions, methods/strategies and assessment

10:30-11:20 am Session: 85 Dakota H Feb. 9, 2008

Repeat of 13

Grade Level: K-8

Speaker(s): Penny L. Hammrich Sisters in Science, LLC

Title: Sisters in Science Equity Reform Project

Science instruction is typically based on prescriptive texts that do not allow children to be inquisitive. This presentation will discuss the three national award-winning science programs for grades K-8. The programs engage the scientist in children through fun and innovative methods, encouraging children to learn science through exploration and inquiry.

Saturday 10:30 am

10:30-11:20 am Session: 86 Salon Feb. 9, 2008

Grade Level: 3-12+

Speaker(s): Chad R. Tussing

SD GFP-Project Wild

Title: WILD about ELK--Math

Want to learn about one of South Dakota's largest creatures and how you can use elk to teach math? Join this session for some great info and a fun activity. Note: attendees at all three WILD about ELK sessions will receive a copy of the WILD about ELK curriculum guide.

Saturday 12:00 NOON

12:00-1:00 pm Session: 87 Prairie A, B Feb. 9, 2007

Grade Level: All

Speaker(s): Bill Gripentrog

& Micheline Hickenbotham Presidents of SDSTA & SDCTM

Title: LUNCH

Door Prizes galore!

Next Year's Conference is February 5, 6, 47, 2009

Saturday 1:00 pm

1:00-2:50 pm Session: 88 Dakota A Feb. 9, 2008

Repeat of 47

Grade Level: 9-12+

Speaker(s): Jensi L. Kellogg-Andrus

Watertown HS

Title: Instructional Strategies for the Science Classroom

This session will include strategies, activities, and labs you can use in science. These strategies will include literacy, problem solving, reinforcement, technology, and hands-on activities. The examples used will be based on life science, but can easily be adapted to any science classroom. If you want to add to your teaching "toolbox," this is the session for you.

1:00-1:50 pm Session: 89 Dakota C Feb. 9, 2008

Repeat of 55

Grade Level: 6-8

Speaker(s): Jolene K. Thompson

Mitchell MS

Title: Engineering, Architecture and Design

Students become enthusiastic for geometry and measurement through this unit. Hands-on activities include exploring polygons and designing and building toothpick bridges.

1:00-1:50 pm Session: 90 Dakota D Feb. 9, 2008

Repeat of 36

Grade Level: K-5

Speaker(s): Brenda Danielson & Lorraine Morfeld

Scotland Elementary School

Title: White Board (Bored) Magic

Do you have student-sized individual white boards in your classroom? These learning tools can be magic when added to your curriculum. Come learn a multitude of activities and practice strategies for white boards.

1:00 pm

1:00-1:50 pm Dakota E Grade Level: K-5 Session: 91 Feb. 9, 2008

Speaker(s): Sandy Ullrich

& Mary Jo Christensen

Aberdeen & Webster

Title: Science for Everyone

Afraid to teach science? Come to this session for activities that will include hands-on, inquiry-based teaching, as well as trade books and writing activities. South Dakota Science Standards are also incorporated.

 1:00-1:50 pm
 Session: 92

 Dakota F
 Feb. 9, 2008

Grade Level: 9-12+

Speaker(s): Sheila McQuade

O'Gorman HS

Title: Using the TI-84 to Enhance Your Geometry Instruction

The TI-84 calculator comes pre-loaded with an interactive geometry application that can be used to verify or discover many geometry concepts. Use it to introduce a concept or as a means for students to investigate and write their "own" rules/formulas.

1:00-2:50 pm Session: 93 Dakota G Feb. 9, 2008

Grade Level: 9-12+

Featured Speaker

Speaker(s): Marlys J. Brimmer Ridgeview HS, Bakersfield, CA

Title: A.P. Statistics Activities

Two hours of activities from throughout the yearlong AP Statistics curriculum. Packet of activities provided! Bring your TI graphing calculator and link cable.

Saturday

1:00 pm

1:00-1:50 pm Symposium Grade Level: K-C

Session: 94 Feb. 9, 2008

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Speaker(s): Tracy L. Vik
Sioux Falls School District

Title: The Impact of Poverty on Our Schools

Poverty is on the rise in our state and in the nation. Understanding the hidden rules & norms of poverty can help educators help their students be successful in the classroom.

Saturday

1:00 pm

1:00-1:50 pm Session: 95 Salon Feb. 9, 2008

Grade Level: K-8

Speaker(s): Chad R. Tussing SD GFP-Project WILD

Title: No Child Left Inside

Don't let your kids wither away indoors, out of the sun (and wind and rain and snow). This session will provide you with some tried and true activities that will get your kids outdoors, learning about the natural world. Note: Come prepared to go outside.

2:00-3:50 pm Dakota B

Repeat of 34

Grade Level: 3-8

Speaker(s): Angelo Casaburri

& Arnie Lund

Aerospace Education Services Project

2:00 pm

Session: 96

Feb. 9. 2008

& Jones County HS

Title: Engineering Using Education Robotics Tools: NXT LEGO

Mindstorm

Introduce middle and high school students to engineering using robotics education. An introduction to LEGO NXT construction, programming, and using sensors to interact with the autonomous motorized robot with its environment. Strategies on classroom teaching, conducting after school activities, and how to host, coach, and mentor LEGO League competitions.

2:00-2:50 pm Session: 97 Dakota D Feb. 9, 2008

Grade Level: K-8

Speaker(s): Jan Martin

SD Dept. of Education

Title: Curriculum Focal Points--How Does South Dakota Measure Up?

Since the NCTM Curriculum Focal Points have been released, studies of state standards compared to the focal points have been conducted. Explore what the Focal Points have to tell us in South Dakota.

Saturday

2:00-3:50 pm Dakota E

Grade Level: 3-5

Speaker(s): Johnath L. Weber

NSU

Title: Getting Kids Excited about Problem Solving

Students often view problem-solving as the dreaded story problems at the end of a textbook lesson. Experience some engaging problems and strategies that will help students find mathematics both challenging and engaging and put "thinking" in the forefront!

2:00 pm

Session: 98

Feb. 9, 2008

2:00-3:50 pm Session: 99 Dakota F Feb. 9, 2008

Repeat of 11.5

Grade Level: 9-12+

Speaker(s): Cindy Kroon

Montrose HS

Title: Pi Day--the other math holiday

Experience the joy of pi as you participate in a variety of Pi Day activities. Celebrate the circle with activities for algebra, geometry, trig and pre-

calculus.

3:00 pm 3:00-3:50 pm Session: 100 Dakota C Feb. 9. 2008

Grade Level: 9-12+

Speaker(s): Julie Olson

Mitchell HS

Title: Science Webquests

We will discuss the various forms of webquests and their purpose. There will be several samples you will be able to take with you and use right away. Bring any you have to share.

3:00-3:50 pm

Session:

101

Dakota D Feb. 9,

2008

Grade Level: K-12+

Speaker(s): Marcy Farrand

Rapid City Schools

Title: Waking Up Your Brain

Ways to get your classroom ready for optimum learning and test taking.

3:00-3:50 pm Session:

102

Dakota G Feb. 9,

2008

Repeat of 42

Grade Level: 3-12+

Featured Speaker

Speaker(s): Marlys J. Brimmer Ridgeview HS, Bakersfield, CA

Title: Steps and Slides with Standards

A review activity that looks like a game to students but has them practicing 75-100 problems in an hour! It is mental math (but I'll show elementary teachers and science teachers that they can easily use this in other courses too!) Students are actively engaged, and this can be used for any standard your students need to practice. They love it! You will leave with a setup to start using the activity Monday.

Saturday

3:00-3:50 pm Session: 103 Dakota H Feb. 9, 2008

Grade Level: K-5

Speaker(s): Brenda Danielson

Scotland Elementary School

Title: Reading-'Riting & Arithmetic &

Health

We are always looking for connections. Using familiar literature for read-alouds, I will show math and health standard connections and activities.

Saturday

4:00 pm

3:00 pm

4:00--Session: 104 **Board Room** Feb. 9, 2008

Speaker(s): Joint Conference Board

Title: Joint Board Meeting