Program for 2008 Joint Conference

Thursday 7 pm

7:00-9:00 pm  Session: 1  Feb. 7, 2008
Dakota C
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  Feb. 7, 2008
Dakota G
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 am  Session: 3  Feb. 8, 2008
Dakota A
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.

Friday 8:30 am

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

Next Year’s Conference is  
February 5, 6, & 7, 2009
Friday 8:30 am
8:30-10:20 am  Session:  6
Dakota D  Feb. 8, 2008
Grade Level:  6-12
Speaker(s):  Lonnie Bellman
CPM Educational Program
Title:  Exploring a Standards-Based, Research-Based Curriculum: CPM 6-12
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 problem-solving skills, but a better understanding of the basics. The learning is long-term because of the mastery over time feature.

Friday 8:30 am
8:30-9:20 am  Session:  7
Dakota E  Feb. 8, 2008
Grade Level:  6-12+
Speaker(s):  Matthew L. Miller & others
Sioux Valley ACS/SDSU
Title:  South Dakota Chemistry Day Demonstrations
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.

Next Year’s Conference is
February 5, 6, & 7, 2009
**Friday 8:30 am**

8:30-9:20 am  
Dakota H  
Grade Level: K-5  
Feb. 8, 2008  

**Speaker(s):** Brenda Danielson  
Scottland 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.

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**Friday 9:30 am**

9:30-10:20 am  
Prairie A  
Repeat of 79  
Grade Level: 3-12  
Feb. 8, 2008  

**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!

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9:30-11:20 am  
Prairie B  
Grade Level: K-12+  
Feb. 8, 2008  

**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.

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**Friday 9:30 am**

9:30-10:20 am  
Prairie C  
Grade Level: K-8  
Feb. 8, 2008  

**Repeat of 85**  
**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.

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9:30-11:20 am  
Prairie B  
Repeat of 85  
Grade Level: K-12+  
Feb. 8, 2008  

**Featured Speaker**  
**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.

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**Next Year’s Conference is**  
February 5, 6, & 7, 2009
Friday  9:30 am

9:30-11:20 am  Session:  15
Dakota B  Feb. 8, 2008
Grade Level:  3-8
Repeat of 75

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.

Friday  9:30 am

9:30-10:20 am  Session:  17
Dakota E  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.

9:30-10:30 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.
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 am</td>
<td>20</td>
<td>Dakota H</td>
<td>3-8</td>
<td>Anne Lewis SD Discovery Center</td>
<td>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.</td>
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<tr>
<td>9:30-10:20 am</td>
<td>21</td>
<td>Symposium</td>
<td>9-C</td>
<td>A. S. Elkhader, facilitator NSU</td>
<td>College Forum: Transition from High School to College Mathematics</td>
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<tr>
<td>10:30 am</td>
<td>22</td>
<td>Prairie A</td>
<td>9-12+</td>
<td>Marlys J. Brimmer Ridgeview HS, Bakersfield, CA</td>
<td>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.</td>
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<tr>
<td>10:30-11:20 am</td>
<td>23</td>
<td>Prairie C</td>
<td>6-12</td>
<td>Brenda Robertson &amp; Julie Erickson SD DOE/State Library</td>
<td>SD State Library: &quot;We're Here to Help!&quot;: 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.</td>
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<td>10:30-11:20 am</td>
<td>24</td>
<td>Dakota C</td>
<td>6-12</td>
<td>Kristi G. Lutgen Deubrook Area Schools</td>
<td>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.</td>
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<tr>
<td>10:30-11:20 am</td>
<td>25</td>
<td>Dakota D</td>
<td>7-C</td>
<td>SDSU Science Ed Students SDSU</td>
<td>Q &amp; A—Help Us Out: SDSU student teachers would like to discuss first-year teacher issues, concerns, and preparation. Bring your thoughts and advice for these young professionals.</td>
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</tbody>
</table>
Friday 10:30 am
10:30-11:20 am Session: 26
Dakota F  Feb. 8, 2008
Grade Level: 7-C
Speaker(s): SDSU Math Ed Students
Title: Q & A--Help Us Out
Ashley Van Maanen, Bill Alsaker, Steve Beckler, Adam Doss, Paul Durbahn, Brittany Postma, John Steams, 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.

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

Friday 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 The Flying Circus of Physics and Fundamentals of Physics 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.

Friday 10:30 am
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.

Friday 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 1:30 pm

1:30-2:20 pm  Session:  32
Prairie C   Feb. 8 2008
Grade Level:  9-12+

Speaker(s):  Bob Schuh & Marie Nehl
McIntosh High School

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

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.

Friday 1:30 pm

1:30-3:20 pm  Session:  33
Dakota A   Feb. 8, 2008
Grade Level:  K-5

Speaker(s):  Jill M. Helvig
& Christina H. Miller
Meade School District
& Apple Valley/Fagan/Rosemount

Title:  Can Math Recovery Save Children Before They Fail?

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.

Friday 1:30 pm

1:30-2:20 pm  Session:  34
Dakota B   Feb. 8, 2008
Grade Level:  3-8
Repeat of 96

Speaker(s):  Angelo Casaburri
& Arnie Lund
Aerospace Education Services Project
& 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 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.

Friday 1:30 pm

1:30-2:20 pm  Session:  35
Dakota C   Feb. 8, 2008
Grade Level:  6-12+

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

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

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!

Next Year’s Conference is
February 5, 6, & 7, 2009
Friday 1:30 pm

1:30-2:20 pm Session: 36  
Dakota D  Feb. 8, 2008
Grade Level: K-5  
Repeat of 90
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**

2:30-3:20 pm  
Prairie A  
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  
Prairie B  
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.

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**Friday**

2:30-4:20 pm  
Prairie C  
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  
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.

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Next Year’s Conference is  
February 5, 6, & 7, 2009
Friday  2:30 pm

2:30-4:20 pm  Session:  47
Dakota D  Feb. 8, 2008
Repeat of 88
Grade Level:  9-12+

Speaker(s):  Jensl 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 Courage to Teach and A Hidden Wholeness. 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  Session:  50
Dakota G  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.
### Friday 2:30 pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
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<tbody>
<tr>
<td>2:30-3:20 pm</td>
<td>53</td>
<td>6-12+</td>
<td>Chad R. Tussing</td>
<td>WILD about ELK--Secondary</td>
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<td></td>
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<td>SD GFP-Project Wild</td>
<td>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.</td>
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### Friday 3:30 pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
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<tbody>
<tr>
<td>3:30-4:20 pm</td>
<td>54</td>
<td>K-5</td>
<td>Jill M. Helvig &amp; Christina H. Miller</td>
<td>Putting Some Structure to Number</td>
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<td>Meade School District &amp; Apple Valley/Fagan/Rosemount</td>
<td>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.</td>
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<tr>
<td>3:30-4:20 pm</td>
<td>56</td>
<td>9-12+</td>
<td>Justin J. Jessop &amp; Jim Faulstich</td>
<td>Goal Setting</td>
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<td>SD Grasslands Coalition</td>
<td>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.</td>
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<tr>
<td>3:30-4:20 pm</td>
<td>57</td>
<td>8-C</td>
<td>SD-AAPT Officers</td>
<td>AAPT Meeting</td>
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<td>American Association of Physics Teachers</td>
<td>Meeting of the South Dakota chapter of the American Association of Physics Teachers.</td>
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### Friday 3:30 pm

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<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
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<tbody>
<tr>
<td>3:30-4:30 pm</td>
<td>58</td>
<td>Dakota H</td>
<td>6-12</td>
<td>Ramona R. Lundberg</td>
<td>Reptiles, Insects &amp; Mammals in the Classroom</td>
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<td>Deuel School District</td>
<td>Come and see some of the creatures we keep in the science classroom and hear how students’ learning is enhanced.</td>
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<tr>
<td>3:30-4:20 pm</td>
<td>59</td>
<td>Symposium</td>
<td>6-12+</td>
<td>Brenda Murphey &amp; Nicole Keegan</td>
<td>It Is the Little Things That Matter the Most</td>
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<td>Rapid City Academies &amp; Dakota Middle School</td>
<td>Math or Science teachers can join this session to discuss the &quot;little things&quot; 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.</td>
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### Friday 6:00 pm

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<th>Speaker(s)</th>
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<tr>
<td>6:00-7:00 pm</td>
<td>62</td>
<td>Pre-Function Area</td>
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<td>RECEPTION</td>
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<td>Sponsored by Holt, Rinehart, Winston</td>
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### Friday 7:00 pm

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<th>Time</th>
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<th>Location</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
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<tbody>
<tr>
<td>7:00 pm</td>
<td>63</td>
<td>Prairie A, B, C</td>
<td>6-12+</td>
<td>Bill Gripentrog &amp; Micheline Hickenbotham</td>
<td>Banquet</td>
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<td>Featured Speaker</td>
<td>Speaker(s): Jearl Walker</td>
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<td>Cleveland State University</td>
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<td>The Flying Circus of Physics</td>
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### Friday 4:30 pm

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<th>Time</th>
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<th>Location</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30-5:30 pm</td>
<td>60</td>
<td>Dakota C</td>
<td>K-12+</td>
<td>Larry Browning &amp; Judy Vondruska</td>
<td>Star Party</td>
</tr>
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<td></td>
<td>SDSU</td>
<td>Weather permitting, the presenters will facilitate an observing session AFTER the Friday Night Banquet.</td>
</tr>
</tbody>
</table>

### Friday 4:30-5:30 pm

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Grade Level</th>
<th>Speaker(s)</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:30-5:30 pm</td>
<td>61</td>
<td>Dakota G</td>
<td>6-12</td>
<td>Micheline Hickenbotham</td>
<td>SDSTA Business Meeting</td>
</tr>
</tbody>
</table>

Next Year’s Conference is February 5, 6, & 7, 2009
### Saturday 7:00 am

**Session: 65**  
Feb. 9, 2008  
Grade Level: **K-12**  

**Speaker(s):**  
Diana McCann  
& Ramona Lundberg  
Presidential Award Coordinators  

**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

**Session: 68**  
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.

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### Saturday 8:30 am

**Session: 66**  
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.

**Session: 67**  
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 hands-on, inquiry-based lessons. The lessons also include trade books and writing activities. South Dakota Math Standards are incorporated.

---

### Saturday 8:30-9:20 am  
Session: 69  
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.

---

### Saturday 8:30-9:20 am  
Session: 70  
Feb. 9, 2008  
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**

**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.

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**8:30-9:20 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.

---

**9:30 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.

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**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.

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**9:30-10:20 am**  
Session: 75

**Dakota B**  
Feb. 9, 2008  
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.
Saturday

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.

Next Year’s Conference is
February 5, 6, & 7, 2009
**Saturday 9:30 am**

9:30-11:20 am Session: 80  
Symposium  
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  
Grade Level: K-12+  
Speaker(s): Ramona Lundberg & Becky Umethum  
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  
Grade Level: 9-12+  
Speaker(s): Julie Olson  
Mitchell HS  
**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: 86**

Salon  
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.

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Saturday 12:00 NOON

**12:00-1:00 pm Session: 87**

Prairie A, B  
Grade Level: All

Speaker(s): Bill Gripentrog  
& Micheline Hickenbotham  
Presidents of SDSTA & SDCTM

**Title: LUNCH**

Door Prizes galore!

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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): Jens 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.

Next Year's Conference is  
February 5, 6, & 7, 2009
Saturday 1:00 pm

1:00-1:50 pm Session: 91
Dakota E
Grade Level: K-5
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.

Saturday 1:00 pm

1:00-1:50 pm Session: 92
Dakota F
Grade Level: 9-12+
Feb. 9, 2008

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.

Saturday 1:00 pm

1:00-2:50 pm Session: 93
Dakota G
Grade Level: 9-12+
Feb. 9, 2008

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

Title: A.P. Statistics Activities

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

Saturday 1:00 pm

1:00-1:50 pm Session: 94
Symposium
Grade Level: K-C
Feb. 9, 2008

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
Grade Level: K-8
Feb. 9, 2008

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.
Saturday 2:00 pm
Dakota B  Feb. 9, 2008
Repeat of 34
Grade Level:  3-8
Speaker(s):  Angelo Casaburri & Arnie Lund
Aerospace Education Services Project & 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.

Saturday 2:00 pm
Dakota E  Feb. 9, 2008
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!

Saturday 2:00 pm
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 pm
Dakota F  Feb. 9, 2008
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.
<table>
<thead>
<tr>
<th>Session: 100</th>
<th>Session: 101</th>
<th>Session: 103</th>
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<tbody>
<tr>
<td>Dakota C</td>
<td>Dakota D</td>
<td>Dakota H</td>
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<tr>
<td>3:00 pm</td>
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<td>Feb. 9, 2008</td>
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<td>Grade Level: 9-12+</td>
<td>Grade Level: K-12+</td>
<td>Grade Level: K-5</td>
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</tbody>
</table>

**Dakota C**

**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.

**Dakota D**

**Speaker(s):** Marcy Farrand  
*Rapid City Schools*

**Title:** Waking Up Your Brain

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

**Dakota H**

**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.

**Dakota H**

**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**

**Board Room**

**Session: 104**

**Speaker(s):** Joint Conference Board

**Title:** Joint Board Meeting