

Program for 2012 Joint Conference

Special thanks for helping with our technology needs go to : TIE for the projectors, Connecting Point for the Promethean Equipment and Workplace-AVI Systems for the SmartBoard Equipment.

Thursday

7 pm

Friday

8:30 am

**7:00-9:00 pm
Dakpta C**

**Session: 1
Feb. 2, 2012**

**8:30-9:20 am
Dakota A**

**Session: 3
Feb. 3, 2012**

Grade Level: All

Grade Level: K-12

Facilitator: Jay Berglund

SDCTM President
<http://www.sdctm.org>

Presenter: Nola Redmond

Connecting Point

Math Sharing Session

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

Promethean Curriculum

Learn about the new wave of Interactive White Board curriculum now available. Experience Channel One Interactive grades 6-12 and Channel One Interactive Junior grades 3-5. Explore existing online resources and possibility of combining different resources. BYOD? Bring Your Own Device is the current buzz in education circles. School budget dollars are shrinking and being able to have the students and teachers use their Smart phones, Ipads, Droids would help cut costs. Formative Assessments with Promethean's Engage Mobile could be part of the answer! Come and see for yourself!

**7:00-9:00 pm
Dakota G**

**Session: 2
Feb. 2, 2012**

Grade Level: All

Facilitator: Brenda Murphey

SDSTA President-elect
<http://www.sdsta.org>

Science Sharing Session

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

Friday

8:30 am

8:30-9:20 am
Dakota B

Session: 4
Feb. 3, 2012

Grade Level: All

Presenter: Brian Lee
Workplace-AVI Systems

What's new with the SmartBoard?

A representative from Workplace-AVI Systems will show off what is new with the SmartBoard. There will be an opportunity for you to ask questions about the SmartBoard and its uses in the classroom.

8:30-9:20 am
Dakota C

Session: 5
Feb. 3, 2012

Grade Level:

Presenter: Jamalee Stone
BHSU

South Dakota Advanced Placement Program (Project APPLE)

Come learn about Project APPLE, the newest SD initiative funded through the Advanced Placement Incentive Program through a grant from the US DOE to TIE, Rapid City, SD.

Friday

8:30 am

8:30-9:20 am
Dakota D

Session: 6
Feb. 3, 2012

Grade Level: 6-8

Presenter: Shawn P. Cutler
Wall School
<http://sc087.k12.sd.us>

Blackboard Learn-Digital Platform for Learning

Free!! Available through SD Data Center, this platform allows for message boards, wikis, online assessments, journals, and more! Secure and private, helps increase participation and reflection in any classroom.

8:30-9:20 am
Dakota E

Session: 7
Feb. 3, 2012

Grade Level: K-8

Presenter: Micheline A. Nelson
BHSU

A Few of My Favorite Things: Natural Resources

How many natural resources do we depend on in our day-to-day lives? What are they made of? From identifying the natural resources to integration in the curriculum: ideas for math, science, economics, art, and more.

Friday

8:30 am

8:30-9:20 am
Dakota F

Session: 8
Feb. 3, 2012

Grade Level: 9-12

Presenter: Lindsey L. Brewer
Huron HS

Technology Smorgasbord

Participants will leave this session with technology skills they can use in their classrooms on Monday . I will share how I use technology in my math classroom, but these skills can be used in most content areas. While not required, bring your tablet/laptop if you have one.

8:30-9:20 am
Dakota G

Session: 9
Feb. 3, 2012

Grade Level: All

Presenter: Larry M. Browning &
Arnie Lund
SDSU

**Telescope Make and Take I--
Construction**

Materials and instruction to make 20 telescopes with eyepieces will be provided. These telescopes have a 70 mm aperature adjustable focus and stands. Bring a jump drive if you want an electronic version of the instructions.

Friday

8:30 am

8:30-9:20 am
Dakota H

Session: 10
Feb. 3, 2012

Grade Level: K-5

Presenter: William J. Kliche
SD DOE

**Subtraction Is More Than Taking
Away**

Provide strategies to better understand the concept of subtraction as finding the difference between values and not simply "take away."

**DO YOU HAVE A
BANQUET TICKET?**

**The Speaker is Jon Richards from
the SETI Institute in Mountain
View, California.**

**See Steve Caron to purchase a ticket.
Buy by noon today!**

Friday

9:30 am

**Featured speaker's sessions are
scheduled in the Prairie Ballrooms!**

**9:30-10:20 am Session: 11
Prairie A Feb. 4, 2012**

Repeat of #93

Grade Level: All

Featured Speaker

Jon Richards

The SETI Institute
[Http://setiquest.org](http://setiquest.org)

Lab: Kepler Spacecraft

NASA's Kepler spacecraft is now in operation concentrating on 150,000 stars in a 10x10 degree area of the sky. This session will be a review of NASA's Kepler Mission, how it works, and the related teaching materials from the SETI Institute. The Kepler mission seeks Earth-size planets around other stars. The mission's job is to find places where life, as we know it, is possible. This presentation will excite educators about the very active search for habitable planets. There is not much that is cooler than planet hunting! Educators will be able to carry this excitement into the classroom. There will be several hands-on activities that illustrate how Kepler detects planets orbiting stars that are hundreds of light years from earth.

Friday

9:30 am

**9:30-10:20 am Session: 12
Prairie B Feb. 3, 2012**

Grade Level: K-5

Featured Speaker

Lesa M. Clarkson

University of Minnesota

**One Hundred (or so) Uses
of the 100 Grid**

The 100 grid has important patterns and uses for developing number sense in the intermediate and early middle school classrooms.

**9:30-10:20 am Session: 13
Prairie C Feb. 3, 2012**

Repeat of #71

Grade Level: 9-12

Featured Speaker

Robert V. Stack

Chadron State College

**"Real" Data Comparisons:
Game Theory and Operations
Research in the Game of Softball**

During this session, game theory in the sports of softball and baseball will be discussed.

Friday

9:30 am

9:30-10:30 am
Dakota A

Session: 14
Feb. 3, 2012

Grade Level: All

Facilitator: Kristi Lutgen
Deubrook Area HS

Promethean Math Share Session

Come share your best ideas for using a Promethean Board in the math classroom.

9:30-10:20 am
Dakota B

Session: 15
Feb. 3, 2012

Grade Level: 6-12

Facilitator: Paul R. Kuhlman
Avon School

SmartBoard Science Share Session

Come share your best ideas for using a SmartBoard in the science classroom!

Friday

9:30 am

9:30-10:20 am
Dakota C

Session: 16
Feb. 3, 2012

Repeat of #49

Grade Level: 6-12

Presenter: Steven Rokusek
SD Public Broadcasting
<http://www.sdpb.org/edu/>

NEW Science and Math Resources from PBS & SDPB

During this session participants will learn about PBS LearningMedia. It is your destination for easy, instant access to thousands of classroom-ready, digital resources including videos and interactives perfect for the Interactive Whiteboard, plus audio and photos, and even in-depth lesson plans. Best of all, it is free for educators.

9:30-10:20 am
Dakota D

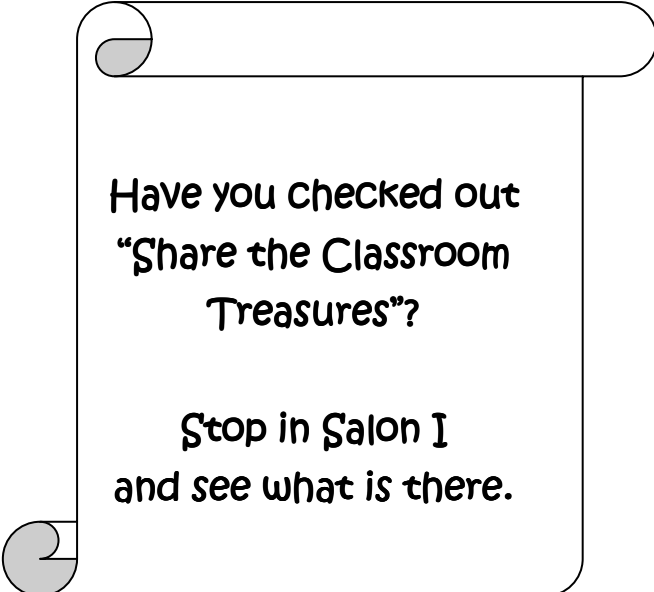
Session: 17
Feb. 3, 2012

Grade Level: 9-12

Presenter: Erin N. Larsen
SD DOE
<http://doe.sd.gov/oats/SDAP.asp>

Using the South Dakota Assessment Portal for Classroom Assessments

The South Dakota Assessment Portal is a new online resource to help educators create, deliver and track formative, interim, and summative assessments. This session will detail how the SDAP can be used in the math and science classroom.



**Have you checked out
"Share the Classroom
Treasures"?**

**Stop in Salon I
and see what is there.**

Friday

9:30 am

9:30-10:20 am
Dakota E

Session: 18
Feb. 3, 2012

Grade Level: K-8

Presenter: Pat Wenzel
Holt McDougal

Get to the STEM of Learning

Project Based Learning is a great way to engage students! Holt McDougal's video-based projects and STEM activities engage students and build 21st century skills such as creativity and innovation. Join us and experience it for yourself! Door prizes and complimentary materials.

9:30-10:20 am
Dakota F

Session: 19
Feb. 3, 2012

Grade Level: 9-12

Presenter: Bob Schuh
McIntosh HS

A Brief Look at the TI-nspireCX CAS

The session will demonstrate some of the basic features of the new color model calculator and the improvements made from the former models. Several new functions will be demonstrated.

Remember the Banquet
starts at 6:30 pm

Friday

9:30 am

9:30-10:20 am
Dakota G

Session: 20
Feb. 3, 2012

Grade Level: All

Presenter: Larry M. Browning
& Arnie Lund
SDSU

Telescope Make and Take II-Activities

Advice on how to get support and build telescopes as a classroom activity (see Telescope Make and Take I) will be discussed. Several activities will also be provided such as measuring field of View (FOV), magnification, focal length, etc.

9:30-10:20 am
Dakota H

Session: 21
Feb. 3, 2012

Grade Level: 6-12

Presenter: Liz McMillan
The Sanford PROMISE
<http://sanfordresearch.org>

Understanding Enzymes

Hands-on activity to explore enzyme function using a model of a lysosomal storage disorder: Batten Disease.

Next Year's Conference is
February 7, 8, and 9, 2013!

Friday

9:30 am

**9:30-10:20 am
Symposium**

**Session: 22
Feb. 3, 2012**

Grade Level: 9-12

**Presenter: Dan Van Peurse
and others**
USD and others

Board of Regents Math Panel
Math professors will discuss what K-12 teachers can do to make the transition to college easier for their students.

Friday

10:30 am

**10:30-11:20 am
Prairie A**

**Session: 23
Feb. 3, 2012**


Repeat of #69

Grade Level: All

**Featured Speaker
Gene Bormann**
US Army Corps of Engineers

**Affects of the 2011
Missouri River Flood**
Several aspects of the 2011 flood will be discussed with special emphasis placed on the effects on wildlife.

The Sanford PROMISE
Program for the Midwest Initiative in Science Exploration



Inspiring the next generation of scientists

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**10:30-11:30 am
Dakota A**

**Session: 24
Feb. 3, 2012**

Grade Level: All

Facilitator: James Stearns
Aberdeen Central HS

Promethean Science Share Session
Come share your best ideas for using a Promethean Board in the science classroom.

**Please visit
our vendors!**

Friday 10:30 am

**10:30-11:30 am Session: 25
Dakota B Feb. 3, 2012**

Grade Level: All

Facilitator: Allen Hogie
Brandon Valley HS

SmartBoard Math Sharing

Come share your best ideas for using a SmartBoard in the math classroom.

**10:30-11:20 am Session: 26
Dakota C Feb. 3, 2012**

Grade Level: 9-12

Presenter: Pat Wenzel
Holt McDougal

Going Digital in High School Science

Looking for digital resources for your eReaders (iPad, Kindle, Nook) and interactive Whiteboards? Check out Holt McDougal digital offerings including project-based learning resources, STEM activities and problem solving support. Door prizes and complimentary resources.

Do you have a Banquet Ticket?

**Special honorees will be the
current Presidential State
Finalists.**

Friday 10:30 am

**10:30-11:20 am Session: 27
Dakota D Feb. 3, 2012**

Grade Level: K-12

Presenter: Barbara K. Olson
Time to Teach

**Increase Your Teaching Time
Exponentially**

Learn respectful and effective strategies for establishing and sustaining a productive classroom community. Imagine the increased learning possible--and probable--when you have an additional 2-3 hours of instructional time, unhindered by multiple requests and threats for productive behavior.

**10:30-11:20 am Session: 28
Dakota E Feb. 3, 2012**

Grade Level: K-5

Presenter: Mike Limmer
Pearson Education

**Envision? Investigations?
You Choose**

Now there is a real choice when implementing CGI thanks to Pearson Education. This session will provide all the information you need to make an informed decision when choosing a math program that meets your district's unique needs, while transitioning to the Common Core Standards. Come take a look at the embedded mathematical practices and 21st century technology.

Friday 10:30 am

10:30-11:20 am Session: 29
Dakota F Feb. 3, 2012

Repeat of #89

Grade Level: 9-12

**Facilitators: Matt Miller
& Larry M. Browning**
SDSU

Meet the New Teachers

Prospective science and math teachers will engage veteran teachers in a conversation about teaching and what they can do to prepare.

10:30-11:20 am Session: 30
Dakota G Feb. 3, 2012

Grade Level: 6-8

Presenter: Arnold Lund
Retired Jones & Jackson Cty Schools

Rainbows (Spectrum)-Telegraph of the Universe

Introduction to spectrum & element identification using an overhead projector and spectroscopic papers/glasses. Hands-on and suited for Earth Science (8th), Physical Science (9th), and Chemistry. Absorption and photosynthesis is also introduced with color filters

Friday 10:30 am

10:30-11:20 am Session: 31
Dakota H Feb. 3, 2012

Grade Level: 9-12

Presenter: Deborah Snook
Philip HS

Quadratic Functions

Educators will be provided a variety of ideas that will help students retain concepts studied within a unit on quadratic functions.

10:30-11:20 am Session: 32
Symposium Feb. 3, 2012

Grade Level: 9-12

Presenter: Tina Keller and others
USD and others

Board of Regents Science Panel

Science professors will discuss what K-12 teachers can do to make the transition to college easier for their students.



Friday

NOON

Noon-1:00 pm **Session: 33**
Prairie A, B, C **Feb. 3, 2012**

Grade Level: All

Facilitators: Jay Berglund
& Molly TenBroek
SDCTM President & SDSTA President

LUNCH

Presidential Awardees
Mathematics—Constance Ahrens
Rapid City Area Schools
Science—Deborah Thorpe
Lead-Deadwood Middle School

Friday

1:30 pm

1:30-2:20 pm **Session: 34**
Prairie A **Feb. 3, 2012**

Grade Level: All

Featured Speaker
Michael B. Gillespie
National Weather Service-Sioux Falls
<http://www.weather.gov/siouxfalls>

Flood Operations in the National Weather Service

A review of the 2011 flooding in SD and along the Missouri River, as well as an outlook for flooding in 2012. Educational materials that are available on-line and in classroom and ways to get students involved in projects that will help understanding hydrology and NWS operations.

**Next Year's Conference is
February 7, 8, and 9, 2013!**

**Have you considered being a
presenter?**

**Everyone here has something
that they do well!**

**Please think about sharing with
other South Dakota teachers.**

1:30-3:20 pm **Session: 35**
Prairie B **Feb. 3, 2012**

Repeat of #70

Grade Level: K-8

Featured Speaker
Lesa M. Clarkson
University of Minnesota

Accessing Algebra

Participants will explore algebraic thinking through the investigation of patterns. Activities will focus on transitioning students from arithmetic to algebra.

Friday

1:30 pm

**1:30-2:20 pm
Prairie C**

**Session: 36
Feb. 3, 2012**

Grade Level: 9-12

Featured Speaker

Robert V. Stack
Chadron State College

**M-M-Modeling: Using M & Ms to
Model Mathematics**

M & Ms are more than just to eat. Enjoy this session of candy, modeling, and fun.

**1:30-2:20 pm
Dakota B**

**Session: 37
Feb. 3, 2012**

Grade Level: 6-12

Presenter: Judy Vondruska

SDSU
<http://www.sdstate.edu/phys/index.cfm>

**The Mayan 2012 Prophecy-
Using Superstition
to Teach Math and Science**

Learn the story behind the "end of the world" prophecy and how to use this popular myth to teach about science vs superstition. Also learn the mathematics behind the Mayan calendar round.

Friday

1:30 pm

**1:30-2:20 pm
Dakota B**

**Session: 38
Feb. 3, 2012**

Grade Level: 6-8

Presenter: Marie Nehl

McIntosh PSD 15-1

Algebra Tiles and the SMART Board

Participants will be shown how to integrate the use of the SMART Board when teaching integers, expressions and solving equations.

**1:30-2:20 pm
Dakota C**

**Session: 39
Feb. 3, 2012**

Grade Level: 6-12

**Presenter: Dr. Miles Koppang
& Paul R. Kuhlman**

USD & Avon School

**Strategies and Activities for
Sustainability of Math and
Science Teacher Enhancement
Efforts**

This session is intended for the participants of the USD Title II Science and Math Teacher Enhancement courses administered through grants by the South Dakota Board of Regents. We will explore the sustainability of these programs as well as the long term effects of these courses and their impact on the classroom.

Friday 1:30 pm

1:30-2:20 pm Session: 40
Dakota D Feb. 3, 2012

Grade Level: 9-12

**Presenter: Dr. Janeen J. Outka
& Jodi Stoddardherber**
EDEC/MidCentral Coop

When Will I Ever Use This Stuff?

If you've heard this from your students, this session is for you. Participants will discover how to relate math and science courses to real world success by using SDMyLife to showcase careers associated with math and science skills. Lesson plans included, so you'll be ready to do this at home.

1:30-2:20 pm Session: 41
Dakota E Feb. 3, 2012

Repeat of #98

Grade Level: K-5

Presenter: Mary A. Graupmann & Nancy J. Weller
Kadoka Area Schools

Learning Math Through Dot Cards

Dot cards are a fun and exciting tool to use every day in the classroom. They have been scientifically proven to develop a visual understanding of numbers.

Friday 1:30 pm

1:30-2:20 pm Session: 42
Dakota F Feb. 3, 2012

Grade Level: 6-8

Presenter: Jan Martin
SD DOE

Are South Dakota's 8th Graders Still at the Head of the Class in Math?

2011 NAEP results for grade 8 Math will be shared along with student and teacher questionnaires data. Comparisons between NAEP and DSTEP will be discussed. Time will be spent on released items and their use for classroom instruction along with connections to Common Core.

1:30-2:20 pm Session: 43
Dakota G Feb. 3, 2012

Repeat of #88

Grade Level: All

Presenter: Samuel D. Shaw
SD DOE

Next Generation Science Standards (K-12)

This session will provide an understanding of the Framework for K-12 Science Education developed by the NRC. Also, an update will be given on the development of the Next Generation Science Standards.

Friday

1:30 pm

1:30-2:20 pm
Dakota H

Session: 44
Feb. 3, 2012

Grade Level: 6-12

Presenter: Sharon Rendon,
Sally Heberlein,
& Becky Umentum
Rapid City Area Schools

Using Performance Tasks to Assess Student Learning

Learn how to use performance tasks to assess student learning in both mathematical content and practices. Come ready to complete performance tasks and analyze student work samples at the middle and high school levels.

Special Thanks go to our technology partners:

TIE
Connecting Point
Workplace Tech-
nology Center

Friday

2:30 pm

2:30-3:20 pm
Prairie A

Session: 45
Feb. 3, 2012

Repeat of #82

Grade Level: All

Featured Speaker

Jon Richards

The SETI Institute
<http://setiquest.org>

SETI (Search for Extraterrestrial Intelligence) Education Program

The SETI institute was founded with a mission to explore, understand and explain the nature of prevalence of life in the universe. This will be an overview of the educational outreach resources the SETI Institute can provide. The ASSET program--Six days of instruction and activities in Astrobiology, with travel, room and board provided. 3 graduate credits through San Francisco State University are available. Kepler Ambassador Program--SOFIA is an airborne observatory that will study the universe in the infrared spectrum. The ambassador program funds educators from all over the country to come to California and fly on a science mission. Voyages Through Time is a one-year high school integrated science curriculum centered on the theme of evolution, comprised of six modules. The Life in the Universe curriculum is a unique set of resources, for elementary and middle school teachers, designed to bring the excitement of searching for life beyond Earth into the classroom.

Friday

2:30 pm

**2:30-3:20 pm
Prairie C**

**Session: 46
Feb. 3, 2012**

Grade Level: 9-12

Featured Speaker

Robert V. Stack
Chadron State College

**E = mc²: Experimenting with
Measurement, Cookies and Counting**

This session will tempt your tastebuds while giving some delicious methods for data analysis and counting.

**2:30-3:20 pm
Dakota A**

**Session: 47
Feb. 3, 2012**

Grade Level: All

Presenter: Nola Redmond
Beginning ActiveInspire

Promethean ActivInspire version 1.6 now supports formulaes. Come and see the new features! Also, find out about the Houghton Mifflin – Promethean math partnership. Questions welcome.

**Next Year's Conference is
February 7, 8, and 9, 2013!**

Friday

2:30 pm

**2.30-3.20 pm
Dakota B**

**Session: 48
Feb. 3, 2012**

Grade Level: K-5

Presenter: Marie Nehl
McIntosh PSD 15-1

**Quick Set-up and Use of the SMART
Board Smart Response System**

If you don't think you have the time to use a SMART Response system, I'll show you how to set up and be using it in the classroom in under an hour.

**2:30-3:20 am
Dakota C**

**Session: 49
Feb. 3 2012**

Repeat of #16

Grade Level: 6-12

Presenter: Steven Rokusek
SD Public Broadcasting
<http://www.sdpb.org/edu/>

**NEW Science and Math Resources
from PBS & SDPB**

During this session participants will learn about PBS LearningMedia. It is your destination for easy, instant access to thousands of classroom-ready, digital resources including videos and interactives perfect for the Interactive Whiteboard, plus audio and photos, and even in-depth lesson plans. Best of all, it is free for educators.

Friday

2:30 pm

2:30-3:20 pm
Dakota D

Session: 50
Feb. 3, 2012

Grade Level: 6-8

Presenter: Christine L. Larson
SDSU

A Deeper Understanding of Fractions

Various activities will provide teachers with help in teaching adding, subtracting, multiplying, and dividing fractions, and to make these difficult concepts more concrete.

2:30-3:20 pm
Dakota E

Session: 51
Feb. 3, 2012

Grade Level: K-5

Presenter: Marie L. Steckelberg, EdD
& Kristie Maher
SD Discovery Center
<http://www.sd-discovery.com>

Direct Connect:

You, Your Students and NASA

Ever wanted to bring a NASA expert directly into your classroom? Now you can!! Experience the Digital Learning Network. It provides STEM activities and connects students and teachers with NASA experts and education specialists using online communication technologies like video/web conferencing and webcasting. A live connection will be made during the presentation.

Friday

2:30 pm

2:30-3:20 pm
Dakota F

Session: 52
Feb. 3, 2012

Grade Level: 6-8

Presenter: Curt Olson
Augustana College

Exploding Dots, Antidots, and Black Holes

We will explore several machines that enable us to represent positive integers and some other real numbers in interesting ways.

2:30-3:20 pm
Dakota G

Session: 53
Feb. 3, 2012

Grade Level: All

Presenter: Kenneth Emo and others
SDSU

K-12 Connections: Creating a Community of STEM Educators

Ken Emo, Larry Browning, Sharon Vestal, Matt Miller, Madhav Nepal, Judy Vondruska and David Cartrette will discuss the Institute for STEM Education Enhancement. It will outline a vision for collaborative efforts to strengthen STEM education in South Dakota. Join the conversation and provide your input in developing new partnerships.

Friday 2:30 pm

2:30-3:20 pm Session: 54
Dakota H Feb. 3, 2012

Grade Level: All

Presenter: William J. Kliche
SD DOE

Common Core State Standards

Progress

Overview of Common Core Standards and future expectations for implementation and assessment. Plus Q & A time.

2:30-3:20 pm Session: 55
Symposium Feb. 3, 2012

Grade Level: 9-12

Presenter: Dan Van Peurse
USD

Emporium Mathematics at USD

I'll describe and recap what any student taking Basic Algebra (Math 021). Intermediate Algebra (Math 101) & College Algebra (Math 102) will encounter at USD. Philosophies behind the model will also be discussed.



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www.blackhillsraptorcenter.org

Friday 3:30 pm

3:30-4:20 pm Session: 56
Prairie B Feb. 3, 2012

Repeat of #79

Grade Level: 9-12

Presenter: David C. Doherty
Bitwixt Software Systems
<http://www.bitwixt.com>

The Atomsmith Classroom: Using 3D Technology to Change the Way Students See Chemistry

As a chemistry teacher, you have images and "movies" of atoms and molecules in your head when teaching concepts such as atomic structure, bonding, periodic trends and the gas laws. The Atomsmith Classroom's physics-based 3D models bring these images to life and allow your students to conduct experiments on them.

3:30-4:20 Session: 56.5
Prairie C Feb. 3, 2012

Repeat of #103

Grade Level: K-5

Presenter: John Halverson
& Maggie Engler
Black Hills Raptor Center
<http://blackhillsraptorcenter.org>

Reading with Raptors

Integrate science, math, and reading using grade appropriate literature. Live birds of prey are present to help illustrate the stories.

Friday 3:30 pm

3:30-4:20 pm Session: 57
Dakota A Feb. 3, 2012

Grade Level: 9-12

**Presenter: Allison Hutchinson
& Christy Carlson**
CTE Academy PLTW

**Knowledge + Experience
= Project Lead the Way**

Give your students an experience by becoming a PLTW Innovation Zone. Come and learn more about this unique and challenging curriculum.

3:30-4:20 pm Session: 58
Dakota B Feb. 3, 2012

Grade Level: K-8

Presenter: Liz McMillan
The Sanford PROMISE
<http://sanfordresearch.org>

The Goo Inside You
Simple DNA extraction & identification technique to introduce students to DNA. Extraction from fruit and your cheek cells.

**Don't forget the business meetings: Science—Dakota G
Math-Dakota C**

Friday 3:30 pm

3:30-4:20 pm Session: 59
Dakota C Feb. 3, 2012

Repeat of #107

Grade Level: 9-12

Presenter: Cindy Kroon
Montrose HS

Fun and Games in Geometry!
Do your students love worksheets? (Then this session is not for you.) Sing, dance, and play games designed to maximize student learning. Come prepared to participate!

3:30-4:20 pm Session: 60
Dakota D Feb. 3, 2012

Grade Level: K-5

Presenter: Micheline A. Nelson
BHSU

Alternative Algorithms: Different Cultures-Different Procedures
Teachers and students often believe that algorithms are "the way" instead of "a way." Is there a better way? Who decides? Computation algorithms through cultures. Solving correctly and officially.

Friday 3:30 pm

3:30-4:20 pm **Session: 61**
Dakota E **Feb. 3, 2012**

Grade Level: 6-8

**Presenter: Marie L. Steckelberg, EdD
& Kristie Maher**

SD Discovery Center
<http://www.sd-discovery.com>

Direct Connect:

You, Your Students and NASA

Ever wanted to bring a NASA expert directly into your classroom? Now you can!! Experience the Digital Learning Network. It provides STEM activities and connects students and teachers with NASA experts and education specialists using online communication technologies like video/web conferencing and webcasting. A live connection will be made during the presentation.

3:30-4:20 pm **Session: 62**
Dakota F **Feb. 3, 2012**

Grade Level: 9-12

Presenter: Bob Schuh

McIntosh HS

Activities for the Advanced Algebra Classes

The session demonstrates organized factoring, using a flow chart to determine nature of roots of a quadratic equation, TI graph paper, Japanese quadratic formula and several TI-84 activities.

Friday 3:30 pm

3:30-4:20 pm **Session: 63**
Dakota G **Feb. 3, 2012**

Grade Level: All

Presenter: Molly TenBroek
SD AAPT

SD Section of the AAPT

All physics or physical science teachers are invited to this meeting. We will hold our annual meeting and also judge the 2012 photo contest entries.

3:30-4:20 **Session: 63.5**
Dakota H **Feb. 3, 2012**

Repeat of #111

Grade Level: K-8

Presenter: Tony Morrow

First in Math
<http://www.firstinmath.com>

Engage Students in Deep Practice to Accelerate Algebra Readiness

How do we get our students to practice what they've learned? Perhaps more importantly, practice better? Deep practice is the way; revealed in the book The Talent Code, we'll explore how technology can accelerate math skills acquisition to achieve algebra readiness through deep practice with First in Math. Free classroom team for attendees!

Friday

4:30 pm

Please attend one of the business meetings. If you aren't a member of either organization, you are welcome anyway. Maybe you will decide to join.

4:30-5:30 pm

Dakota C

Session: 64

Feb. 3, 2012

Grade Level: All

Facilitator: Jay Berglund

SDCTM President

SDCTM Business Meeting

This meeting is for all members of SDCTM and anyone interested in joining our organization.

4:30-5:30 pm

Dakota G

Session: 65

Feb. 3, 2012

Grade Level: All

Presenter: Molly TenBroek

SDSTA President

SDSTA Business Meeting

This meeting is for all members of the SDSTA and anyone interested in joining our organization.

Friday

6:30 pm

6:30-

Prairie A, B, C

Session: 66

Feb. 3, 2012

Grade Level: All

BANQUET

Speaker: Jon Richards

The SETI Institute

Is There Life in Outer Space?

Jon Richards works at the SETI Institute and the Allen Telescope Array (the ATA) in Northern California. His job is to aid the search for intelligent signals from outer-space. How does this all fit in with alien and UFO sightings? Jon will discuss how the ATA works and how it is used to search for signals. He will talk about what types of intelligent signals they are looking for, if any signals have been discovered and what happens if a signal is detected.

See you tomorrow for more great speakers.

Presidential Awardees—see you at breakfast. 7 am in the Salon.

Saturday 7:00 am

7:00-8:00 am **Session: 67**
Salon II **Feb. 4, 2012**

Grade Level: All Awardees

**Presenter: Diana McCann
& Ramona Lundberg**
Presidential Award Program Coordinators

Presidential Awardee Breakfast
All past and present math and science awardees including this year's finalists are invited to join us for breakfast.

Saturday 8:00 am

8:00-8:30 am **Session: 68**
Dakota G **Feb. 4, 2012**

COSMIC MATH

**Grade Level: Cosmic Math Summer
Participants only**

Facilitator: Larry M. Browning
SDSU

Cosmic Math I: Paperwork
This session is for participants of Cosmic Math 2011 to fill out some needed paperwork for this Title II sponsored summer institute.

**Next Year's Conference is
February 7, 8, and 9, 2013!**

Saturday 8:30 am

8:30-9:20 am **Session: 69**
Prairie A **Feb. 4, 2012**

Repeat of #23

Grade Level: All

**Featured Speaker
Gene Bormann**

US Army Corps of Engineers

**Affects of the 2011 Missouri River
Flood**

Several aspects of the 2011 flood will be discussed with special emphasis placed on the effects on wildlife.

8:30-10:20 am **Session: 70**
Prairie B **Feb. 4, 2012**

Repeat of #35

Grade Level: K-8

**Featured Speaker
Lesla M. Clarkson**

University of Minnesota

Accessing Algebra

Participants will explore algebraic thinking through the investigation of patterns. Activities will focus on transitioning students from arithmetic to algebra.

Saturday 8:30 am

**8:30-9:20 am Session: 71
Prairie C Feb. 4, 2012**

Repeat of #13

Grade Level: 9-12

Featured Speaker

Robert V. Stack

Chadron State College

**"Real" Data Comparisons:
Game Theory and Operations
Research in the Game of Softball**

During this session, game theory in the sports of softball and baseball will be discussed.

**8:30-9:20 am Session: 72
Dakota A Feb. 4, 2012**

Grade Level: All

Presenter: Gary L. Yarrow
SDSU

**A Primer on the Safe Handling: Use
and Storage of Hazardous Chemicals**

The SDSU Environmental Health & Safety Office is responsible for guidelines and regulations on the safe handling, storage and use of hazardous chemicals. The safe use of such materials will be discussed emphasizing how K-12 schools may apply such guidelines.

Saturday 8:30 am

**8:30-9:20 am Session: 73
Dakota B Feb. 4, 2012**

Grade Level: 6-12

**Presenter: Sharon Rendon
& Julie Jackson**
Rapid City Area Schools

Algebra Tiles I

This session will offer a journey through a middle and secondary curriculum illustrating AREA is the foundation model for whole number multiplication, fractions, and polynomials. Participants will use algebra tiles and the generic rectangle as a basis for multiplying and factoring polynomials.

**8:30-9:20 am Session: 74
Dakota C Feb. 4, 2012**

Grade Level: 6-12

Presenter: Steven Rokusek
SD Public Broadcasting
<http://www.sdpb.org/edu/>

Science Demonstrations II

During this session participants will review classic science demonstrations and activities, including the mapping of the cones in the eye and the effect of weight variation on terminal velocity. The demonstrations are accompanied by video segments and online interactives. The activities are designed for multiple learning styles and are available free of charge.

Saturday 8:30 am

8:30-9:20 am Session: 75
Dakota D Feb. 4, 2012

Grade Level: 9-12

Presenter: **John D. Hollingsworth**
University Center-Sioux Falls

TaxiCab Geometry:

ICTM Oval Topic Class AA

Come for a ride with us as we explore Taxicab Geometry. This is a topic that requires the student to develop much of the material, based on Eugene F. Krause's book "Taxicab Geometry: An Adventure in Non-Euclidean Geometry. My talk will introduce the topic and share my experiences with the ICTM High School Math Contest. This would be a good topic for an Algebra II class as well as a high school precalc class.

8:30-9:20 am Session: 76
Dakota E Feb. 4, 2012

Grade Level: 9-12

Presenter: **Pandi Pittman**
Wall School District

Badlands National Park Steward

The National Park Service provides many opportunities for educators. One of them is the Park Steward Program. The presentation covers the curriculum projects that were developed for the Life Science students at Wall High School and Badlands National Park

Saturday 8:30 am

8:30-9:20 am Session: 77
Dakota F Feb. 4, 2012

Grade Level: K-5

Presenter: **Mary A. Graupmann
& Nancy J. Weller**
Kadoka Area Schools

Math Through Templates

Construct your daily math lesson through the use of templates. Makes your math lesson run smoother and allows for differentiated learning.

8:30-9:20 am Session: 78
Dakota G Feb. 4, 2012

COSMIC MATH

Grade Level: 6-12

Presenter: **Larry M. Browning
& Bob Schuh**
SDSU/McIntosh HS

Cosmic Math II: TI-Nspire CAS CX

Bring your TI-Nspire CAS CX to this session to learn how Bob Schuh has been using his in his classroom.

Have you met our featured speakers?

**Gene Bormann
Lesla Clarkson
Mike Gillispie
Jon Richards
Robert Stack**

Saturday 8:30 am

8:30-9:20 am Session: 79
Dakota H Feb. 4, 2012

Repeat of #56

Grade Level: 9-12

Presenter: David C. Doherty
Bitwixt Software Systems
<http://www.bitwixt.com>

The Atomsmith Classroom: Using 3D Technology to Change the Way Students See Chemistry

As a chemistry teacher, you have images and "movies" of atoms and molecules in your head when teaching concepts such as atomic structure, bonding, periodic trends and the gas laws. The Atomsmith Classroom's physics-based 3D models bring these images to life and allow your students to conduct experiments on them.

8:30-9:20 am Session: 80
Symposium Feb. 4, 2012

Grade Level: K-5

Presenter: William J. Kliche
SD DOE

Understanding the 8 Standards for Mathematical Practice in Common Core Standards

Provide a consolidated overview of the 8 Standards for Mathematical Practice workshops delivered statewide to expose math teachers to the 8SMP and Common Core.

Saturday 8:30 am

8:30-9:20 am Session: 81
Salon II Feb. 4, 2012

Grade Level: All

Presenter: Diana McCann
& Ramona Lundberg
SD PAEMST Coordinators

Tips for Winning Money

Would you like to receive \$10,000? Every year South Dakota is able to give 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.

Don't forget to fill out your evaluation of the conference!

We need your input to make next year even better!

Next Year's Conference is February 7, 8, and 9, 2013!

Saturday 9:30 am

9:30-10:20 am Session: 82
Prairie A Feb. 4, 2012

Repeat of #45

Grade Level: All

Featured Speaker

Jon Richards

The SETI Institute
<http://setiquest.org>

SETI (Search for Extraterrestrial Intelligence) Education Program

The SETI institute was founded in 1984 with a mission to explore, understand and explain the nature of prevalence of life in the universe. This talk will present an overview of the various educational outreach resources the SETI Institute can provide. The ASSET program--Six days of instruction and activities in Astrobiology, with travel, room and board provided. 3 graduate credits through San Francisco State University are available. Kepler Ambassador Program--SOFIA is an airborne observatory that will study the universe in the infrared spectrum. The ambassador program funds educators from all over the country to come to California and fly on a science mission. Voyages Through Time is a one-year high school integrated science curriculum centered on the theme of evolution, comprised of six modules. The Life in the Universe curriculum is a unique set of resources, for elementary and middle school teachers, designed to bring the excitement of searching for life beyond Earth into the classroom.

Saturday 9:30 am

9:30-10:20 am Session: 83
Prairie C Feb. 4, 2012

Grade Level: 9-12

Featured Speaker

Robert V. Stack

Chadron State College

Mathletics: Not for Spectators

Sports and math go hand-in-hand. This session will explore various applications of mathematics and sports as related to statistics, geometry, and trigonometry

9:30-10:20 am Session: 84
Dakota A Feb. 4, 2012

Grade Level: 9-12

Presenter: Gary L. Yarrow

SDSU

A Primer on the Safe Disposal of Hazardous Chemicals & Waste

The SDSU Environmental Health & Safety Office handles all campus hazardous chemical wastes, usually more than a semi-trailer amount each year. The methods that SDSU uses to characterize, handle and dispose of such materials will be discussed emphasizing ways that K-12 schools may be able to handle such waste materials.

Saturday 9:30 am

9:30-10:20 am **Session: 85**
Dakota B **Feb. 4, 2012**

Grade Level: 6-12

**Presenter: Sharon Rendon
& Julie Jackson**
Rapid City Area Schools

Algebra Tiles II

This is an extension of Algebra Tiles I where participants will continue to use algebra tiles to complete the square and develop an alternative to long division of polynomials.

9:30-10:20 am **Session: 86**
Dakota C **Feb. 4, 2012**

Grade Level: K-5

Presenter: Jan Martin
SD DOE

Grade 4 Students and Their Understanding of Science--Using NAEP Released Items for Classroom Research

The NAEP 2009 released items for grade 4 science can provide useful classroom information for grades 3-5. Results of a small research project done in 2011 with 4th graders reveal strengths as well as gaps in elementary science. Student work will be examined including student's perceptions of scientists.

Saturday 9:30 am

9:30-10:20 am **Session: 87**
Dakota D **Feb. 4, 2012**

Grade Level: 9-12

Presenter: Pat Wenzel
Holt McDougal

Going Digital in High School Math

Looking for digital resources for your eReaders (iPad, Kindle, Nook) and interactive Whiteboards? Check out Holt McDougal digital offerings including the Pad Fuse app for algebra, geometry & algebra 2. Door prizes and complimentary resources.

9:30-10:20 am **Session: 88**
Dakota E **Feb. 4, 2012**

Repeat of #43

Grade Level: All

Presenter: Samuel D. Shaw
SD DOE

Next Generation K-12 Science Standards

This session will provide an understanding of the Framework for K-12 Science Education developed by the NRC. Also, an update will be given on the development of the Next Generation Science Standards.

Saturday 9:30 am

9:30-10:20 am Session: 89
Dakota F Feb. 4, 2012

Repeat of #29

Grade Level: 9-12

Facilitators: Matt Miller
& Larry Browning
SDSU

Meet the New Teachers

Prospective science and math teachers will engage veteran teachers in a conversation about teaching and what they can do to prepare.

9:30-10:20 am Session: 90
Dakota G Feb. 4, 2012
COSMIC MATH

Grade Level: 6-12

Presenter: Christine L. Larson
SDSU

Cosmic Math III: Using Algebra Tiles for a Better Understanding of Algebra

Teachers will explore using Algebra Tiles to teach various algebraic concepts. Manipulatives provide students with a deeper understanding of algebra by making abstract concepts more concrete

Saturday 9:30 am

9:30-10:20 am Session: 91
Dakota H Feb. 4, 2012

Grade Level: K-5

Presenter: Lori L. Stverak
& Jaime M. Bell
Sioux Falls School District

Teaching the Common Core through Cognitively Guided Instruction

The Common Core contains 8 Standards for Mathematical Practice. We will demonstrate how to use Cognitively Guided Instruction (CGI) to teach these standards. CGI increases teachers' understanding of the knowledge that students bring to the math learning process. We will also provide classroom-ready activities.

9:30-10:20 am Session: 92
Symposium Feb. 4, 2012

Grade Level: 6-12

Presenter: William J. Kliche
SD DOE

Understanding the 8 Standards for Mathematical Practice in Common Core Standards

Provide a consolidated overview of the 8 Standards for Mathematical Practice workshops delivered statewide to expose math teachers to the 8SMP and Common Core.

Saturday 10:30 am

10:30-11:20 am Session: 93
Prairie A Feb. 4, 2012

Repeat of #11

Grade Level: All

Featured Speaker

Jon Richards

The SETI Institute

<http://setiquest.org>

Lab: Kepler Spacecraft

NASA's Kepler spacecraft is now in operation concentrating on 150,000 stars in a 10x10 degree area of the sky. This session will be a review of NASA's Kepler Mission, how it works, and the related teaching materials from the SETI Institute. The Kepler mission seeks Earth-size planets around other stars. The mission's job is to find places where life, as we know it, is possible. This presentation will excite educators about the very active search for habitable planets. There is not much that is cooler than planet hunting! Educators will be able to carry this excitement into the classroom. There will be several hands-on activities that illustrate how Kepler detects planets orbiting stars that are hundreds of light years from earth.

Saturday 10:30 am

10:30-11:20 am Session: 94
Dakota A Feb. 4, 2012

Grade Level: 6-12

Presenter: Carla L. Diede

LWC Middle School

<http://sites.google.com/site/diedemath>

Flipped Instruction

What could you do with more time in your classroom? When students watch lectures at home, they come to class prepared to interact with the new concepts they are learning. Come see how one teacher makes flipped instruction work and gain ideas for how to utilize this form of instruction.

10:30-11:20 am Session: 95
Dakota B Feb. 4, 2012

Grade Level: 6-12

Presenter: Joan M. Hegerfeld-Baker

SDSU Extension

<http://www.sdsu.edu/hns/outreach/food-safety/food-safety-science.cfm>

Food Safety-Teach Science Concepts & Techniques Using Virtual Labs with Food Safety Applications

Explore an on-line curriculum-includes interactive virtual labs with a real life application of food safety to teach basic science concepts and expose students to related career paths. Research regarding effectiveness of using the labs in SD classrooms conducted by Science & Ag teachers in SD and SDSU.

Saturday 10:30 am

10:30-11:20 am **Session: 96**
Dakota C **Feb. 4, 2012**

Grade Level: 6-8

Presenter: Helen L. Schwarting
White River Middle School

Many Ways to Introduce Integers

Introducing of integers and demonstrating different ways to ensure concrete learning. Use of manipulatives, technology and activities will address several learning modalities and address skills to reach lower level students.

10:30-11:20 am **Session: 97**
Dakota D **Feb. 4, 2012**

Grade Level: 9-12

Presenter: Dave Martin
Cheyenne-Eagle Butte HS

Is the Die Fair?

The participants will use experimental and theoretical probabilities to determine the "fairness" of dice. They will use patterns to create "unfair" dice.

Saturday 10:30 am

10:30-11:20 am **Session: 98**
Dakota E **Feb. 4, 2012**

Repeat of #41

Grade Level: K-5

Presenter: Mary A. Graupmann
& Nancy J. Weller
Kadoka Area Schools

Learning Math Through Dot Cards

Dot cards are a fun and exciting tool to use every day in the classroom. They have been scientifically proven to develop a visual understanding of numbers.

10:30-11:20 am **Session: 99**
Dakota F **Feb. 4, 2012**

Grade Level: 6-12

Presenter: Pete Vitiello
The Sanford PROMISE
<http://sanfordresearch.org>

South Dakota and the Biotech Future

A discussion of South Dakota's Biotech industry, innovations, and growth of the research workforce.

Saturday 10:30 am

10:30-11:20 am Session: 100
Dakota G Feb. 4, 2012
COSMIC MATH

Grade Level: 6-12

Presenter: Larry M. Browning
SDSU

Cosmic Math IV: Building Angle Bows

During this session, participants will build angle bows to measure angles subtended by various objects. Radians and degrees will be discussed.

10:30-11:20 am Session: 101
Dakota H Feb. 4, 2012

Grade Level: K-5

Presenter: Julie Olsen
Mitchell HS

Zoom Science: Chemistry

Made a color changing chameleon, slime, and a secret cola recipe.

**Next Year's Conference is
February 7, 8, and 9, 2013!**

Saturday 10:30 am

10:30-1120 am Session: 102
Symposium Feb. 4, 2012

Grade Level: 9-12

Presenter: Janelle A. Anderson
SDSU

Combining Science and Music

Not all students are logical scholars naturally drawn to the scientific field. How do we as teachers cross into a creative mind to instil logical thinking too? This presentation is an in depth analysis on connecting students to science who are not naturally inclined to do so.

Saturday NOON

Noon-1:00 pm Session: 103
Prairie A, B, C Feb. 4, 2012

Grade Level: All

**Facilitators: Molly TenBroek
& Jay Berglund**
SDSTA President & SDCTM President

LUNCH
Announcements Door Prizes

Saturday 1:00 pm

1:00-1:50 pm Session: 103.5
Prairie B Feb. 4, 2012
Repeat of #56.5

Grade Level: K-5

**Presenter: John Halverson
& Maggie Engler**
Black Hills Raptor Center
<http://blackhillsraptorcenter.org>

Reading with Raptors

Integrate science, math, and reading using grade appropriate literature. Live birds of prey are present to help illustrate the stories.

1:00-1:50 pm Session: 104
Dakota A Feb. 4, 2012

Grade Level: 6-12

Presenter: Marvin E. Gamble
USD
<http://www.usd.edu/~mgamble>

Mental Math: Exercising the Mind

My secrets in making mental math easier and using the difference of squares to multiply. How to encourage students to use mental math.

Saturday 1:00 pm

1:00-1:50 pm Session: 105
Dakota B Feb. 4, 2012

Grade Level: 6-12

**Presenter: Liz McMillan
& Pete Vitiello**
The Sanford PROMISE
<http://sanfordresearch.org>

The Sanford Promise: Opportunities for students & teachers

Learn about biomedical research in the region and how you and your students can participate in learning the techniques of scientific research. Educator workshops in PBL & research and student programs including the Life Science Discovery Program at the Washington Pavilion.

1:00-1:50 pm Session: 106
Dakota C Feb. 4, 2012

Grade Level: K-5

Presenter: Jan Martin
SD DOE

How Do South Dakota's 4th Graders Compare to the Nation in Math?

2011 NAEP results for grade 4 Math will be shared along with student and teacher questionnaires data. Comparisons between NAEP and DSTEP will be discussed. Time will be spent on released items and their use for classroom instruction along with connections to Common Core.

Saturday 1:00 pm

1:00-1:50 pm Session: 107
Dakota D Feb. 4, 2012

Repeat of #59

Grade Level: 9-12

Presenter: **Cindy Kroon**
Montrose HS

Fun and Games in Geometry!

Do your students love worksheets? (Then this session is not for you.) Sing, dance, and play games designed to maximize student learning. Come prepared to participate!

1:00-1:50 pm Session: 108
Dakota E Feb. 4, 2012

Grade Level: All

Presenter: **Anne Lewis**
SD Discovery Center
<http://www.sd-discovery.com>

Environmental Literacy Plan Listening Session

Environmental literacy is the ability to understand and act upon environmental issues. This session will capture your input as to what should go into a plan to develop the environmental literacy of South Dakota's pre-K to Grade 12 students.

Saturday 1:00 pm

1:00-1:50 pm Session: 109
Dakota F Feb. 4, 2012

Grade Level: 6-12

Presenter: **Robert J. McTaggart**
SDSU

Radiation Kits for Classroom Use

The North Central Chapter of the Health Physics Society offers a radiation kit to teachers that includes a 6 digital Vernier radiation monitors, Lab Pro interfaces, software, manual, and radiation sources.

1:00-1:50 pm Session: 110
Dakota G Feb. 4, 2012

COSMIC MATH

Grade Level: 6-12

Presenter: **Larry M. Browning**
SDSU

Cosmic Math V: Angles, Distances, Radii

Angle bows constructed in a previous session) will be used to measure length of cars, height of stairs, and separation of stars. Other methods will also be illustrated.

Saturday 2:00 pm

2:00-2:50 pm Session: 111
Dakota C Feb. 4, 2012
Repeat of #63.5

Grade Level: K-8

Presenter: Tony Morrow
First in Math
<http://www.firstinmath.com>

Engage Students in Deep Practice to Accelerate Algebra Readiness

How do we get our students to practice what they've learned? Perhaps more importantly, practice better? Deep practice is the way; revealed in the book *The Talent Code*, we'll explore how technology can accelerate math skills acquisition to achieve algebra readiness through deep practice with First in Math. Free classroom team for attendees!

2:00-2:50 pm Session: 112
Dakota D Feb. 4, 2012

Grade Level: 9-12

Presenter: Andrew Shiers
DSU

Using GeoGebra in the Algebra Classroom

GeoGebra is downloadable freeware that allows users to graph, analyze, and manipulate algebraic functions (among other things). This presentation will introduce basic GeoGebra graphing and manipulation tools for a high school algebra course. To get started, access GeoGebra.org.

Saturday 2:00 pm

2:00-2:50 pm Session: 113
Dakota E Feb. 4, 2012

Grade Level: 6-12

Presenter: Larry M. Browning & Matt Miller
SDSU

Demos at Your Own Risk

Lst year we melted the carpet. Come this year and see what we can melt.

2:00-2:50 pm Session: 114
Dakota G Feb. 4, 2012
COSMIC MATH

Grade Level: 6-12

Presenter: Judy Vondruska
SDSU
<http://www.sdstate.edu/phys/index.cfm>

Cosmic Math VI: Building and Using a Sundial

Learn about the motions of the sun throughout the year and how those motions can be used to create a time-telling device called a sundial.

Check out the "Sharing the Classroom Treasures" in the Salon I

At 4:30 all *treasures* will become *trash*.

Saturday 3:00 pm

3:00-3:50 pm **Session: 115**
Dakota C **Feb. 4, 2012**

Grade Level: All

Facilitator: Jay Berglund
SDCTM President
<http://www.sdctm.org>

Math Follow Up

This is a chance to share your reflections on the sessions you attended at the conference.

3:00-3:50 pm **Session: 116**
Dakota G **Feb. 4, 2012**

Grade Level: All

Facilitator: Molly TenBroek
SDSTA President
<http://www.sdsta.org>

Science Follow Up

This is a chance to share your reflections on the sessions you attended at the conference.

Saturday 4:00 pm

4:00-???? **Session: 117**
Board Room **Feb. 4, 2012**

Facilitator: Jean Gomer
Conference Coordinator

Joint Board Meeting

**Next Year's Conference is
February 7, 8, and 9, 2013!**