South Dakota Science Teachers Association
South Dakota Council of Teachers of Mathematics

February 4, 5, & 6, 2016
Crossroads Hotel-Huron Event Center
Huron, SD

Table of Contents

Featured Speakers ............................................................ Inside Cover
Conference Overview ............................................................ 1
Conference Planner ............................................................. 2
PROGRAM ............................................................................. 3-28
Credit information ............................................................ 29
Sales Representatives & Exhibitors ........................................ 29
Current Officers .................................................................. 30
Conference Evaluation Form ................................................ 31
2016 Conference Committee Special Thanks........................ 33
Map of Conference Rooms ................................................ Back Cover

Graduate Credit is available through DWU-Mitchell.

Next year’s conference will be February 2, 3, & 4, 2017.
Featured Speakers

BANQUET SPEAKER — Sam Kean as a kid, spent years collecting mercury from broken thermometers in South Dakota, and now he’s a writer in Washington, D.C. His stories have appeared in The Best American Science and Nature Writing, The Atlantic, The New York Times Magazine, Mental Floss, Slate, and Psychology Today, among other places, and his work has been featured on “Radiolab” and NPR’s “All Things Considered,” among other shows. His books The Disappearing Spoon and The Violinist’s Thumb were national bestsellers, and both were named an Amazon “Top 5” science books of the year. The Disappearing Spoon was nominated by the Royal Society for one of the top science books of 2010, while both The Violinist’s Thumb and The Dueling Neurosurgeons were nominated for PEN’s literary science writing award. He earned a master’s degree in library science that he “will probably never use”. Sean is a fast reader but a very slow eater. Come get your books signed after the banquet.

OTHER FEATURED SPEAKERS

Tom Reardon - taught mathematics for thirty-five years at Fitch High School and for thirty-four years at Youngstown State University in Ohio. He has been doing Professional Development in mathematics technology for school districts across the U.S. and internationally since 1995. His specialties are graphing technologies (T³ national instructor), iPads, SMART Boards, integrating multiple technologies, problem solving, and pedagogy. He has earned numerous teaching awards including the Presidential Award for Mathematics Teaching. Tom regularly speaks at NCTM and T³ national and regional conferences. He is currently developing activities and technologies to assist teachers and students better understand Transformational Geometry in middle and high school.

Benjamin Losby - is the owner of Precision Microscope Sales, a full service laboratory supply company specializing in microscope sales, service and repair. After receiving his B.S. in Physics with an emphasis in Geology and a minor in Mathematics at Montana State University – Bozeman, Ben began a career in the energy industry running remote sensing operations in Montana, North & South Dakota, Wyoming and Alaska. In 2014 he decided to leverage his experience in diagnostic technologies and assumed ownership of Precision Microscope Sales. Based in Billings, MT, Ben travels from Oregon to Minnesota servicing & repairing microscopes for the medical, veterinary and educational industries. Ben can be contacted by phone (800-848-4824), email (blosby@precisionmicroscopesales.com) or online via the company website (www.PrecisionMicroscopeSales.com).

Don Balka – a former middle school and high school mathematics teacher, is a Professor Emeritus in the Mathematics Department at Saint Mary’s College, Notre Dame, Indiana. During his career as an educator, Balka has presented over 2,000 workshops on the use of manipulatives with elementary and secondary students at national and regional conferences of the National Council of Teachers of Mathematics, state mathematics conferences, and at inservice training for numerous school districts in the United States. He has taught classes and worked with teachers in schools throughout the world, including Ireland, Scotland, England, Saudi Arabia, Italy, Greece, Japan, and Mariana Islands in the South Pacific. Balka has written over 50 books on the use of manipulatives for teaching K-12 mathematics and is a coauthor of the Macmillan K-5 elementary mathematics series, My Math. He has also co-authored books on coaching, leadership, visible thinking in mathematics, and most recently rigor in the mathematics classroom.

Texas Instruments has been working with South Dakota teachers for several years. Former SD science teacher Jeff Lukens has been writing content and delivering workshops for TI throughout his career and during his retirement. Recently, Sanford Research partnered with TI to create the STEM Behind Health series of activities related to careers and science in healthcare and biomedical research. As featured speakers TI will be represented at the conference with a team of experts in science and math education and their various devices. Their sessions will highlight the varied nature of the activities designed for both science and math classes.

Visit  www.sdctm.org or www.sdsta.org  for complete Program and Hotel Information.
2016 Joint Professional Development Conference
South Dakota Science Teachers Association
South Dakota Council of Teachers of Mathematics

The meeting rooms for all sessions are in
The Crossroads Hotel/Huron Events Center

Program
Thursday, February 4, 2016

7:00 PM - 9:00 PM  Evening Sessions  (See Program)

Friday, February 5, 2016

7:00 AM - 4:20 PM  Registration Open  Pre-Function Area

8:00 AM - 5:00 PM  Exhibits Open  Pre-Function Area

8:30 AM - 11:20 AM  Morning Sessions  (See Program)

11:45 AM - 1:10 PM  Friday Luncheon  Prairie A, B, C
(cost included in the registration fee)

1:30 PM - 4:20 PM  Afternoon Sessions  (See Program)

4:30 PM  SDCTM Business Meeting  Dakota C
SDSTA Business Meeting  Dakota G

5:30-6:45 PM  Social Hour  Pre-Function Area
CASH BAR-Hors d’oeuvres sponsored by SDCTM & SDSTA

7:00 PM  Friday Evening Banquet  Prairie A, B, C
(Cost is $25)

Saturday, February 6, 2016

7:00 AM - 11:20 AM  Registration Open  Pre-Function Area
7:00 AM - 8:00 AM  Breakfast Meeting  Salon
Presidential Awardees (Past & Present)

8:00 AM - 2:00 PM  Exhibits Open  Pre-Function Area
8:30 AM - 12:20 PM  Morning Sessions  (See Program)

12:30 PM - 1:20 PM  Saturday Luncheon  Prairie A, B, C
(cost included in the registration fee)

1:30 PM - 3:20 PM  Afternoon Sessions  (See Program)

4:00 PM  Joint SDCTM & SDSTA Executive Board Meeting  Boardroom
# SDSTA/SDCTM Joint Conference 2016 Planner

## Thursday, Feb. 4, 2016

<table>
<thead>
<tr>
<th>Time</th>
<th>First Choice</th>
<th>Second Choice</th>
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<tbody>
<tr>
<td>7:00 PM</td>
<td>Session #: Location: Sharing Session</td>
<td>Session #: Location:</td>
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## Friday, Feb. 5, 2016

Remember to visit the exhibits in the Lobby and Hallways of the Crossroads Hotel.

<table>
<thead>
<tr>
<th>Time</th>
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<tbody>
<tr>
<td>8:30 AM</td>
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<td>9:30 AM</td>
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<td>10:30 AM</td>
<td>Session #: Location: Title:</td>
<td>Session #: Location: Title:</td>
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<tr>
<td>Noon</td>
<td>Friday Noon Luncheon in Crossroads Hotel – Prairie A, B, C</td>
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<tr>
<td>1:30 PM</td>
<td>Session #: Location: Title:</td>
<td>Session #: Location: Title:</td>
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<td>2:30 PM</td>
<td>Session #: Location: Title:</td>
<td>Session #: Location: Title:</td>
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<tr>
<td>3:30 PM</td>
<td>Session #: Location: Title:</td>
<td>Session #: Location: Title:</td>
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<tr>
<td>4:30 PM</td>
<td>SDCTM BUSINESS MEETING in Dakota C  SDSTA BUSINESS MEETING in Dakota G 5:30 – 6:45 SOCIAL Hour</td>
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<tr>
<td>7 PM</td>
<td>Friday Night Banquet in Prairie Ballrooms A, B, C  (Banquet Tickets Required-Cost is $25)</td>
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## Saturday, Feb. 6, 2016

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<td>12:30 PM</td>
<td>Saturday Noon Luncheon in Crossroads Hotel – Prairie A, B, C</td>
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<td>1:30 PM</td>
<td>Session #: Location: Title:</td>
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<td>2:30 PM</td>
<td>Session #: Location: Title:</td>
<td>Session #: Location:</td>
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<tr>
<td>4:00 PM</td>
<td>SDCTM &amp; SDSTA JOINT BOARD MEETING IN THE BOARDROOM</td>
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**Program for 2016 Joint Conference**

*Special thanks for goes to TIE for the projectors*

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<th>Thursday</th>
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<tr>
<td>7:00-9:00 pm</td>
<td>Session: 1</td>
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<tr>
<td>Prairie B</td>
<td>Feb. 4, 2016</td>
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<tr>
<td>Grade Level: All</td>
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**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!

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<th>Thursday</th>
<th>7:00-9:00 pm</th>
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<tr>
<td>Prairie C</td>
<td>Session: 2</td>
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<td>Feb. 4, 2016</td>
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<tr>
<td>Grade Level: All</td>
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**Presenter:** Cindy Kroon  
SDCTM  
Cindy.Kroon@k12.sd.us  
http://www.sdctm.org

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<th>Friday</th>
<th>8:30 am</th>
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<tr>
<td>8:30-9:20 am</td>
<td>Session: 3</td>
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<tr>
<td>Prairie A</td>
<td>Feb. 5, 2016</td>
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<tr>
<td>Grade Level: K-5</td>
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**FEATURED SPEAKER**  
Tom Reardon  
TEXAS INSTRUMENTS

**Integrate Creative Problem Solving Strategies With and Without Technology Part 1**
Being able to solve problems is the cornerstone of learning and using mathematics. We will illustrate ways to give your students the power of cleverly using problem solving strategies. We will incorporate ideas from George Polya, the father of Problem Solving, and Marilyn Burns. Take away several ready-to-use activities.

**Do you have your banquet Ticket?**
You can still buy one from Steve until Noon
$25.00
Speaker - Sam Kean  
7 pm Friday
FEATURED SPEAKER

Don Balka
Saint Mary’s College; Didax
donbalka@sprintmail.com
http://www.mathleadership.com

Archimedes Box
Over 2000 years ago, Archimedes created the Stomachion or “stomach turner”, a puzzle consisting of 14 polygons that can be arranged in a 12 x 12 square such that all the vertices are integer points. Rather than creating bellyaches, teachers can use it to present and explore topics to increase geometric understanding.

Ti-Nspire: STEM Behind Health
Sanford Research and Texas Instruments have partnered to create STEM Behind Health, a series of activities designed to introduce students to the science and math in various STEM careers in healthcare. Activities are based around type 1 diabetes, breast cancer, clinical and laboratory research. Participants can explore activities on the Ti-Nspire hand-holds in this session.

Making the Connection…CTE and Science
Join us to learn about Project Lead The Way (PLTW) and Curriculum for Agricultural Science Education (CASE). Both provide curriculum and professional development for teachers that promote rigorous and relevant student learning opportunities. Courses designed by these programs can be taken for science or CTE credit and offer opportunities for students to explore high-wage, high-demand careers.
Some Technology Resources for the Classroom
My observation is that students love technology. Why not incorporate some technology in your classroom? I would like to share some of the technology resources I have used in my classroom and if you have technology ideas to use, please share.

Algebraic Skills Using the Four-pan Balance
The presenter will demonstrate activities that teachers can use to help middle-school students develop algebraic skills using a four-pan balance. Topics include: solving equations, adding integers, systems of equations, and inequalities.

Connecting Sanford Lab Science to the Classroom
The E & O Department at Sanford Lab is piloting curriculum units featuring Sanford Lab science and aligned with the new state science standards. The units are hands-on and inquiry-based. This workshop will feature activities from two 10-day high school units: "Perplexing Puddles" and "We are Made of Starstuff".
### Friday 9:30 am

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<thead>
<tr>
<th>9:30-10:20 am</th>
<th>Session: 13</th>
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<tbody>
<tr>
<td>Prairie A</td>
<td>Feb. 5, 2016</td>
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<td>Grade Level: 6-8</td>
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**FEATURED SPEAKER**  
Tom Reardon  
TEXAS INSTRUMENTS

**Immediately Investigate Transformational Geometry Activities for Middle and High School**  
The CCSS introduces Transformational Geometry in middle school and extends it into high school geometry. Get hands-on ideas and activities that have the students discovering the math in 15 seconds or fewer. Uses either a handheld, computer software, or iPad app. Access to these free activities will be shared.

### Friday 9:30 am

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<thead>
<tr>
<th>9:30-10:20 am</th>
<th>Session: 14.5</th>
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<tbody>
<tr>
<td>Prairie C</td>
<td>Feb. 5, 2016</td>
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<tr>
<td>Grade Level: 3-6</td>
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</tbody>
</table>

**Presenter:** Janet Wagner  
Bon Homme Schools  
Janet.Wagner@k12.sd.us  

**Elementary Rock Collection**  
This will be a make and take session. We will be building a rock collection of igneous, sedimentary and metamorphic rocks to take back to your classroom. This session is geared to 3-6 grade science. Limited to 20 participants.

### Friday 9:30 am

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<tr>
<th>9:30-10:20 am</th>
<th>Session: 15</th>
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<tr>
<td>Dakota A</td>
<td>Feb. 5, 2016</td>
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<tr>
<td>Grade Level: 9-12</td>
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**Presenter:** Julie Olson  
Mitchell Senior High/Sanford Research SERF  
Julie.Olson@k12.sd.us  

**An ELISA Simulation**  
Participants will conduct an ELISA simulation that doesn't require strict storage requirements or a plate reader. Antibody/antigen reactions and serial dilutions are covered. It uses a colorimeter or spectrophotometer and easily obtainable substance and can be adapted to any scenario you would like. The procedure was developed during a SERF (Sanford Educator Research Fellowship) internship.
Classroom Activities with Desmos
This session will explore classroom activities provided by Desmos (https://teacher.desmos.com). These activities utilize technology tools to allow students to experience problem solving and math modeling in an engaging environment. We will provide an overview of the activities, demonstrate how you could use these in your classroom, and talk about our experience using them with students.

Math/Science Integration for Earth’s Sake
Combine your math and science lessons with these engaging hands-on activities that build computational and measurement skills while teaching about ecosystems and our ecological footprints. Receive a CD-ROM of lesson plans matched to state standards.

Resources and Opportunities through SD EPSCoR
Maximizing efforts in interest and retention of students in pursuing STEM careers requires engaging students early to foster their interest in STEM. SD EPSCoR provides numerous resources and support to schools, teachers, and students. This session will outline the philosophy of the SD EPSCoR program, its current efforts, and its resources.

ARTsome Astronomy
Rocket through the solar system through the lens of an artist! Fuse science and the elements and principles of design to analyze the mysterious surfaces of planets, moons, comets, asteroids and our beautiful Earth. Gain a deeper understanding of their geologic story while creating art inspired by images of these celestial neighbors.
SLOs: Clearing the Mud
After practicing with their first SLOs, teachers may wonder how to take their SLO to the next level during the first year of full implementation. There may be areas that they are confused on, since many teachers haven't been trained over SLOs since the summer of 2014. This session would provide teachers with ideas from a math/science teacher and from the SD DOE.

DonorsChoose.org: How to Get FREE Stuff For Your Class
We all need supplies for our classrooms and labs. This session will show you how to get those supplies without spending a dime. Each attendee will leave the session registered on DonorsChoose.org with a project submitted for funding. Other sources for free supplies will be offered.

Understand your SDRS, SRP, and SPP Benefits
This presentation will provide you with a sound understanding of the retirement programs that are available to you, the importance of retirement planning, and how these plans work together. Whether you are new to SDRS, early in your career, or in mid or late career, you are encouraged to attend this informative presentation regarding your future benefits and savings options.

Soybean Science=Genetics & Biotechnology
Join us to experience three lesson plans that dive into the science in one of the largest commodities in South Dakota, soybeans! We will explore activities to help students understand how altering the genotype of a soybean can result in desired phenotypes, the technology to make these changes possible and the tradeoffs of these biotechnologies.
10:30 am   Session:  23
Dakota A   Feb. 5, 2016
Grade Level:  6-12

**Presenters:** Nathaniel Raak & Dr. Marvin Gamble
MTI & USD
Nathaniel.Raak@mitchelltech.edu

**Character Innovation**
See ways of using character and innovation to engage students and convey concepts.

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10:30-11:20 am   Session:  24
Dakota B   Feb. 5, 2016
Grade Level:  6-8

**Presenter:** Michelle Bartels
Hamlin School
Michelle.Bartels@k12.sd.us
https://sites.google.com/site/bartelsscience

**Getting Started with Science Fair**
Science fair takes a lot of time so starting early is a must. This session will focus on steps and a possible schedule for completing a science fair project. Examples and rubrics will be provided.

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10:30-11:20 am   Session:  25
Dakota C   Feb. 5, 2016
Grade Level:  9-12

**Presenter:** Tricia Neugebauer
Mitchell High School
Tricia.Neugebauer@k12.sd.us
http://mrsneugs.weebly.com

**Physics Challenges Challenge Physics Students**
Students in conceptual physics are required to use what they have learned to complete real-life challenges such as determining where projectiles will go, how to cushion a fall, the height a marble coaster will reach, where objects will balance, and how light will reflect.

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10:30-11:20 am   Session:  26
Dakota D   Feb. 5, 2016
Grade Level:  9-12

**Presenters:** Matthew Gill & Marcia Torgrude
SD DOE & TIE
Matthew.Gill@state.sd.us
http://doe.sd.gov

**Math Virtual Coaching Program**
The SDDOE is offering a virtual coaching program to all 6-12 math teachers that are interested. Participants will get coached by math experts. This breakout session will describe the online coaching process, as as give a description of the instructional practices the current participants are focusing on over the school year. They would also hear about future coaching opportunities.

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**Do you have your banquet Ticket?**
You can still buy one from Steve until Noon
$25.00
Speaker-Sam Kean
7 pm Friday

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Next year’s conference
February 2, 3, & 4, 2017
10:30-11:20 am  Session:  27
Dakota E  Feb. 5, 2016
Grade Level:  K-5

Presenter:  Marie Steckelberg
Steckelberg Consulting, LLC
marie@steckelbergconsulting.com
http://SteckelbergConsulting.com

Engineering Is Elementary:  What Is Engineering?
Ready for an engineering design challenge using simple materials?  This is your opportunity to be an engineer and relate your problem-solving strategies to the engineering design process.  Experience how engineering projects integrate other disciplines. Engaging students in hands-on, real world engineering experiences can enliven math and science and other content areas.

10:30-11:20 am  Session:  28
Dakota F  Feb. 5, 2016
Grade Level:  9-12

Presenter:  Kelly Brandt
T. F. Riggs HS
Kelly.Brandt@k12.sd.us

TRAC Program
We are running a pilot program with the DOT.  We will show and describe 2 modules we are doing to promote engineering in the state of South Dakota.

Friday  10:30 am
10:30-11:20 am  Session:  29
Dakota G  Feb. 5, 2016
Grade Level:  K-12

Presenters:  Jamie Tucker,  Mark Iverson, Mark Kreie, Mary Erickson, Larry Browning
SDSTA
Mkerickson@mmm.com

How to Write a Successful Donors Choose Proposal
This will be a panel discussion with successful Donors Choose applicants and a representative from 3M to give a donor’s perspective.

10:30-11:20 am  Session:  29.5
Dakota H  Feb. 5, 2016
Grade Level:  6--8

Presenter:  Beth Harrington
Andes Central District 11-1
Beth.Harrington@k12.sd.us

Using Stations in the Middle School Math Classroom
Stations are a great way to assess your students while keeping them engaged.  You will receive one set of stations for Solving Equations as well as ideas for other stations.  There will be time to share what you have used in your classroom.

Do you have your banquet Ticket?  You can still buy one from Steve until Noon
$25.00
Speaker-Sam Kean
7 pm Friday
**Friday NOON**

**Session: 30**

Noon-1:00 pm  
Prairie A, B & C  
Feb. 5, 2016  
Grade Level: All  

**Presenters:** Cindy Kroon & Julie Olson  
SDCTM & SDSTA Presidents

**LUNCH**

Door Prizes  
Tom Durkin-Awarding the Kelly Lane Earth & Space Science Grant and the Dan Swets Robotics Materials Award

**Friday 1:30 pm**

**Session: 32**

1:30-2:20 pm  
Prairie B  
Feb. 5, 2016  
Grade Level: 6-8

**FEATURED SPEAKER**

Don Balka  
Saint Mary's College; Didax  
donbalka@sprintmail.com  
http://www.mathleadership.com

**Transforming Mathematics Classrooms for Rigor**

In teaching good mathematics well, rigor plays a big part. What is mathematical rigor? What does it look like in mathematics classrooms? How can South Dakota mathematics teachers at all K-12 grade levels facilitate rigor in their classrooms? Can we note student progress towards rigor?

**Friday 1:30 pm**

1:30-2:20 pm  
Prairie A  
Feb. 5, 2016  
Grade Level: K-5

**FEATURED SPEAKER**

Tom Reardon  
TEXAS INSTRUMENTS

**Integrate Creative Problem Solving Strategies With and Without Technology Part 2**

Being able to solve problems is the cornerstone of learning and using mathematics. We will illustrate ways to give your students the power of cleverly using problem solving strategies. We will incorporate ideas from George Polya, the father of Problem Solving, and Marilyn Burns. Take away several ready-to-use activities.

**Friday 1:30 pm**

1:30-2:20 pm  
Prairie C  
Feb. 5, 2016  
Grade Level: 9-12  
Repeat as Session 63

**FEATURED SPEAKER**

Benjamin Losby  
Precision Microscope Microscope Sales  
blosby@PrecisionMicroscopeSales.com  
http://PrecisionMicroscopeSales.com

**Not Your Mother's Microscope**

Microscopes, and how they can be utilized in the classroom, have come a long way in the past decade. With advances in live digital imaging, what was once limited to 'one student at a time' can now be a classroom activity, sparking questions, and group discussion.
Science + Mathematics + SD History = Fun!
During this session participants will learn about an interesting project that incorporates SD history science, mathematics, and more into one resource. The activities will include, but are not limited to SD ecosystems, natural resources, physical science, mathematics, SD history and more. This session has something for everyone!

Hands-on Geometry - on a budget
I use straws, pasta noodles and even play dough in my Geometry classes. In this session, I will share (cheap) ideas for making manipulatives that help students visualize concepts from high school geometry.

Changing the Way We Teach
With the adoption of the framework for education and new South Dakota Standards comes a new way to teach science. Students are required to gather, explain, and communicate information more now than ever before. Join me to learn some activities that will change the way that you teach and ultimately change the way that students think.
**Friday**  
1:30-2:20 pm  
**Session: 38**  
**Dakota E**  
Feb. 5, 2016  
**Grade Level: K-5**  

**Presenter:** Anne Lewis  
South Dakota Discovery Center  
annelewis@sd-discovery.com  
http://www.sd-discovery.com

**Become a Nat Geo Certified Educator**  
National Geographic invites you to participate in its pilot certification program. In this interactive session, share ideas on how you teach and learn about National Geographic’s new Learning Framework. This session counts as phase 1 of certification, and you will be invited to be among the first cadre of Nat Certified Educators. Certification is free and at your own pace.

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1:30-2:20 pm  
**Session: 39**  
**Dakota F**  
Feb. 5, 2016  
**Grade Level: k-12**  

**Presenters:** Lindsey Brewer, NBCT, Lori Keleher, NBCT & Allen Hogie, NBCT  
Huron High School  
Lori.Keleher@k12.sd.us

**Is National Board Certification for You?**  
Join us to learn more about National Board Certification as offered through the National Board of Professional Teaching Standards. The mission of this board is to advance the quality of teaching and learning. The National Board believes higher standards for teachers means better learning for students. There are currently 106 National Board Certified Teachers in South Dakota. Become one of them!

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1:30-2:20 pm  
**Session: 40**  
**Dakota H**  
Feb. 5, 2016  
**Grade Level: 9-12**  

**Presenters:** Larry Browning, Matt Miller & Madhav Nepal  
SDSU  
Larry.Browning@sdstate.edu

**STREAM Follow-Up**  
Participants in the STREAM summer workshop are invited to share stories of successes and challenges with themselves and anyone interested in Vertical Hydroponic Systems (VHS), Sustainable Habitat Engineering (SHE), or Solar Understanding Nexus (SUN -- solar observatory). This is part of a NCLB/Title II grant and paperwork will be part of this.

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1:30-2:20 pm  
**Session: 40.5**  
**Symposium**  
Feb. 5, 2016  
**Grade Level: 9-12**  

**Presenters:** Rebecca Diischer & Donna Flint  
SDSU  
Donna.Flint@sdstate.edu  
http://sdstate.edu/math

**Dual Credit in Mathematics-a Dual Challenge!**  
University faculty and high school math teachers together support and encourage the success of dual credit/concurrent enrollment students in distinct ways. In this presentation, SDSU faculty will discuss choosing an appropriate dual credit course, on-line course design and how high school teachers can support students as they complete online dual credit mathematics courses.
Friday  2:30 pm

2:30-3:20 pm  Session:  41
Prairie A  Feb. 5, 2016
Grade Level:  9-12

FEATURED SPEAKER
Tom Reardon
TEXAS INSTRUMENTS

Valuable Tips and Tricks for TI-84 and
TI-84CE(color)  Grades 7-12
For new and experienced users. Get 13 creative
essential ideas to utilize the TI-84 more effectively.
Develop your students’ conceptual understanding
of the mathematics better. Use color photos to
teach transformation graphing. Tips on how to fully
utilize the TI-SmartView graphing calculator
emulator and SmartPad app-with/without a SMART
Board.

2:30-3:20 pm  Session:  41.5
Prairie C  Feb. 5, 2016
Grade Level:  9-12

Presenter:  Deirdre Peck
Aberdeen Central HS
Deirdre.Peck@k12.sd.us

Classroom Projects for Earth Science
Keep students engaged with activities for earth
science concepts through hands-on activities for
weather, geology, and space. Projects and resources
include time scales and distance scales, weather
cycles and 3D constellations will be presented.

Friday  2:30 pm

2:30-3:20 pm  Session:  42
Dakota A  Feb. 5, 2016
Grade Level:  9-12

Presenter:  Sam Glantzow
Selby Area HS
Sam.Glantzow@k12.sd.us

The Atomic Hotel, and other Analogies
The Atomic Hotel is my way of helping chemistry
students understand the concepts involved in how
electrons enter orbitals. I use analogies to help
chemistry students understand other concepts, and
I will present a few of them here.

2:30-3:20 pm  Session:  43
Dakota B  Feb. 5, 2016
Grade Level:  9-12

Presenters:  Sharon Vestal & Matt Miller & Dan Van
Peursem
SDSU & USD
Sharon.Vestal@sdstate.edu

Meet the Future Teachers
Prospective science and math teachers from all
South Dakota institutions will be invited to
engage in conversation with veteran science and
math teachers attending the conference. The goal is
to provide support and encouragement for future
teachers by having veteran teachers share advice,
success stories, and useful strategies.
Student Discourse Made Easier
Are you tired of talking too much? Do you feel like your students are not hearing what you are saying? Do you want your students talking and learning from each other? Learn tips today that you can implement in your classroom on Monday morning which will help your students learn how to discuss math concepts together.

Motivation, Mindset, and Math!
Let’s collaborate on how to change the mindset of our students in math by valuing student’s mistakes and engaging them in powerful mathematical conversations. Join us in learning about the importance of student discourse and differentiation for both our “deep thinkers” and higher level learners!

Next year's conference
February 2, 3, & 4, 2017
2:30-3:20 pm  
**Dakota G**  
**Grade Level:** 6-8  
**Presenter:** Mark Iverson  
Watertown Middle School  
Mark.A.Iverson@k12.sd.us

**Earth Science Lessons That Rock!**  
Are you stuck between a rock and a hard place with your archaic lessons in Earth Science? Ready-to-use lessons, from the American Geosciences Institute, will provide teachers with Earth science content, hands-on activities, resources and field experiences to create meaningful experiences for their students.

2:30-3:20 pm  
**Dakota H**  
**Grade Level:** 6-8  
**Presenter:** Cassie Soeffing  
IGES/NASA  
cassie_soeffing@strategies.org

**Create your own NASA portal to NGSS with NASA Wave**  
Wavelength, NASA’s dynamic website, is a repository of classroom resources focused on Earth and Space Science. NASA Wavelength allows you to create a customized path to resources to teach a broad range of topics including climate, weather, magnetism, engineering design, the solar system, and astrobiology to name just a few. Wavelength allows easy access to NASA science data, images and apps.
Math Fair
Have fun with math! We've all heard of Science Fairs...but what about a Math Fair. Come and get some ideas for a math fair that you can easily customize to your school.

Magical Numbers 4 & 5 and Pythagorean Triples
I will show ways to find Primitive Pythagorean Triples and why the numbers 4 and 5 are magic numbers associated with Pythagorean Triples. An explanation will be given for each number.

Have you checked out “Share the Classroom Treasures”? Stop in Salon I and see what is there. At 2:30 pm Saturday, these treasures become trash!
Friday 3:30 pm
3:30-4:20 pm   Session:  54
Dakota H   Feb. 5, 2016
Grade Level:  9-12

Presenters: James Stearns & Larry Browning
Aberdeen School District & SDSU
James@SDSTA.org
http://SDAAAPT.SDSTA.org

SD-AAPT Photo Contest & Annual Meeting
All Physics and/or Physical Science teachers are
invited to the annual meeting for the final voting
and judging of the photos and essays that have
been submitted. Check out the photos in the hall
Thursday night and/or Friday and put in your two
cents worth. Vote by putting in a penny for your top
choice or two.

Friday 4:30 pm
4:30-5:30 pm   Session:  55
Dakota C   Feb. 5, 2016
Grade Level:  All

Presenter: Cindy Kroon
SDCTM President
SDCTM
Business Meeting

Friday 5:30 pm
5:30-6:30 pm   Session:  57
Vendor Area   Feb. 5, 2016
Grade Level:  All

Presenter: Social Hour
Cash Bar

Friday 7:00 pm
7:00 pm   Session:  58
Prairie A, B, & C   Feb. 5, 2016
Grade Level:  All

Presenter: Banquet
Sam Kean

3:30-4:20 pm   Session:  54.5
Symposium   Feb. 5, 2016
Grade Level:  6-8

Presenters: Liz McMillan & friends
Sanford Research
elizabeth.mcmillan@sanfordhealth.org
http://www.sanfordresearch.org

Notebooks & Lab Journals in Science & in the
Classroom
Scientists use lab journals in various, authentic ways
to track their thoughts, data, and experiments.
New trends in classroom techniques include the use
of notebooks and lab journals. Explore some
successes and challenges of this trend with regional
colleagues.
Saturday  7:00 am
7:00-8:00 am  Session:  59
Library
Grade Level:  All Awardees
Presenter:  PAEMST
Breakfast
Presidential Awardee Breakfast

Saturday  8:00 am
8:00-8:30 am  Session:  59.5
Dakota F  Feb. 6, 2016
Grade Level:  9-12
Presenters:  Judy Vondruska & Suzette Burckhard
SDSU
Judy.Vondruska@sdstate.edu
http://etfworkshop.wikispaces.com

Engineering the Future Follow-up
This is a closed session for participants who took part in "Engineering the Future 2015" this past summer. Participants will discuss their experiences in implementing activities from this summer into their classroom, describe modifications and share new ideas.

Saturday  8:00 am
8:00-8:30 am  Session:  60
Dakota H  Feb. 6, 2016
Grade Level:  9-12
Presenters:  Sharon Vestal & Chris Larson
SDSU
Sharon.Vestal@sdstate.edu
Follow-up Housekeeping for UMP 2015

This is a closed session for participants of the summer 2015 UMP Workshop at SDSU. Session participants will share their experiences implementing activities from this summer as well as sharing new ideas.

Saturday  8:30 am
8:30-9:20 am  Session:  62
Prairie B  Feb. 6, 2016
Grade Level:  6-8

FEATURED SPEAKER
Don Balka
Saint Mary's College; Didax
donbalka@sprintmail.com
http://www.mathleadership.com

Algebra Tiles: Representing the Big Ideas
Visualizing major concepts in algebra for Grades 6-9 aids in understanding. Participants will be actively involved with algebra tiles for working with operations and algebraic expressions, solving equations and inequalities, and playing games for reinforcing the big ideas.

8:30-9:20 am  Session:  63
Prairie C  Feb. 6, 2016
Grade Level:  9-12  Repeat of Session 33

FEATURED SPEAKER
Benjamin Losby
Precision Microscope Sales
blosby@PrecisionMicroscopeSales.com
http://PrecisionMicroscopeSales.com

Not Your Mother’s Microscope
Microscopes, and how they can be utilized in the classroom, have come a long way in the past decade. With advances in live digital imaging, what was once limited to 'one student at a time' can now be a classroom activity, sparking questions, and group discussion.
Saturday

8:30-9:20 am  Session:  64
Dakota A  Feb. 6, 2016
Grade Level:  9-12  Repeat of Session 50
Presenter:  Samra Trask
   Wall HS
   Samra.Trask@k12.sd.us
Paperless Math Classrooms? You Bet!!
Explore and share methods of going paperless in math classrooms using tools such as tablets, OneNote, TI-Calculators, Planbook, and more. LOVE this session! This session grows with every new group due to myriad tricks shared by educators.

8:30-9:20 am  Session:  65
Dakota B  Feb. 6, 2016
Grade Level:  9-12
Presenters:  Marcia Torgrude, TIE  &  Sam Shaw, DOE
   mtorgrude@tie.net
   http://mtorgrude.tie.wikispaces.net
3D Understanding of the New Science Standards
Participate in a 3-D Student Performance to develop an understanding of the core ideas, cross-cutting concepts and science and engineering practices. Learn how all three dimensions intersect to allow students to engage in science through gathering, reasoning and communicating. Hear what a cohort of SD teachers are doing.

Saturday

8:30-9:20 am  Session:  66
Dakota C  Feb. 6, 2016
Grade Level:  K-5
Presenters:  Lori Stverak & William Kliche
   Rapid City Schools
   Lori.Stverak@k12.sd.us
Classroom Activities to Teach Fractions
This hour long workshop will be filled with activities and lessons to provide students with a deeper understanding of fractions. This workshop will go beyond simple answer getting. It will give teachers ideas to help teach understanding fractions and give a why and how to operations with fractions.

8:30-9:20 am  Session:  67
Dakota D  Feb. 6, 2016
Grade Level:  9-12
Presenters:  Carl Fellbaum & Sen Subramanian
   SDSU
   Carl.Fellbaum@sdstate.edu
Search "RhizoDive" on Facebook
RhizoDive Right in! Study Bacteria with SDSU!
This NSF funded hands-on project will use DNA sequencing and bioinformatics to examine rhizobial diversity in legumes throughout SD. Educators and students will participate in a summer 2016 two day workshop at SDSU where they will isolate/prep DNA for next-generation sequencing. An additional lesson plan demonstrating plant stem cell division into specialized tissue is provided.

Please fill out your evaluation of the conference. We want next year's to be even better.
ARTsome Astronomy  
Rocket through the solar system through the lens of an artist! Fuse science and the elements and principles of design to analyze the mysterious surfaces of planets, moons, comets, asteroids and our beautiful Earth. Gain a deeper understanding of their geologic story while creating art inspired by images of these celestial neighbors.

Heavy Lifting: A NASA Design Squad Challenge 1  
In Part 1 of this session participants will be challenged to construct, test and evaluate a working model of a crane to be used on the Moon for mining activities. This project helps students explore engineering design principles and learn about the scientific concepts of simple machines and Newton's Laws of Motion.

UMP: FUNctions--Inverses, Logs, & Exponentials  
This session is part of the Using Mathematical Practices follow-up workshop funded by a SD Board of Regents Title II grant. We will investigate properties of inverse functions, focusing on logarithmic and exponential functions.

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.
### Saturday 9:30 am

<table>
<thead>
<tr>
<th>Session: 72</th>
<th>Dakota A</th>
<th>Feb. 6, 2016</th>
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<tbody>
<tr>
<td>Grade Level: 6-8</td>
<td>Feb. 6, 2016</td>
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<tr>
<td><strong>FEATURED SPEAKER</strong></td>
<td>Tom Reardon</td>
<td>TEXAS INSTRUMENTS</td>
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#### Building Concepts in Grades 6-8: Fractions, Expressions, Equations
We will explore a set of interactive lessons designed to engage students and introduce new ways to think about and discuss important mathematical concepts. Get hands-on experience with interactive activities that illustrate a developmental trajectory of fractions, expressions, and equations. In color! Access to these free activities will be shared.

### Saturday 9:30 am

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<tr>
<th>Session: 73</th>
<th>Prairie C</th>
<th>Feb. 6, 2016</th>
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<tbody>
<tr>
<td>Grade Level: 9-12</td>
<td>Feb. 6, 2016</td>
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</tr>
<tr>
<td><strong>Presenters:</strong> Liz McMillan &amp; Jeff Lukens</td>
<td>The Sanford PROMISE</td>
<td><a href="mailto:SanfordOutreach@sanfordhealth.org">SanfordOutreach@sanfordhealth.org</a></td>
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<td><a href="http://stembehindhealth.com">http://stembehindhealth.com</a></td>
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#### TI-Nspire: STEM Behind Health
Sanford Research and Texas Instruments have partnered to create STEM Behind Health, a series of activities designed to introduce students to the science and math in various STEM careers in healthcare. Activities are based around type 1 diabetes, breast cancer, clinical and laboratory research. Participants can explore activities on the Ti-Nspire hand-helds in this session. Math teachers welcomed!

### Saturday 9:30 am

<table>
<thead>
<tr>
<th>Session: 74</th>
<th>Dakota B</th>
<th>Feb. 6, 2016</th>
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<tr>
<td>Grade Level: 6-12</td>
<td>Feb. 6, 2016</td>
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</tr>
<tr>
<td><strong>Presenter:</strong> Jamalee Stone</td>
<td>BHSU</td>
<td><a href="mailto:jami.stone@bhsu.edu">jami.stone@bhsu.edu</a></td>
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</table>

#### Principles to Action in a 7-12 Math Methods Class
**Principles to Actions: Ensuring Mathematical Success for All** clarifies the conditions, structures, and policies needed to promote conditions for all students to be successful in mathematics. Learn how this book can be used as a resource to foster secondary pre-service math teachers' competency in teaching, learning, and other essential elements of education.

### Saturday 9:30 am

<table>
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<tr>
<th>Session: 75</th>
<th>Dakota C</th>
<th>Feb. 6, 2016</th>
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<tbody>
<tr>
<td>Grade Level: 6-12</td>
<td>Feb. 6, 2016</td>
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<tr>
<td><strong>Presenter:</strong> Julie Olson</td>
<td>Mitchell Senior High/Sanford Research SERF</td>
<td><a href="mailto:Julie.Olson@k12.sd.us">Julie.Olson@k12.sd.us</a></td>
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#### Phenomena to Engage Students in Argumentation
Learn techniques to engage students in the scientific process of argumentation--found in the SD Science Standards.

### Saturday 9:30 am

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<th>Dakota C</th>
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<tr>
<td>Grade Level: 6-8</td>
<td>Feb. 6, 2016</td>
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<tr>
<td><strong>Presenter:</strong> Michelle Bartels</td>
<td>Hamlin School</td>
<td><a href="mailto:Michelle.Bartels@k12.sd.us">Michelle.Bartels@k12.sd.us</a></td>
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<td><a href="http://sites.google.com/site/bartelsscience/">http://sites.google.com/site/bartelsscience/</a></td>
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</table>

#### Some Technology Resources for the Classroom
My observation is that students love technology. Why not incorporate some technology in your classroom? I would like to share some of the technology resources I have used in my classroom and if you have technology ideas to use, please share.
Math Fair
Have fun with math! We've all heard of Science Fairs...but what about a Math Fair. Come and get some ideas for a math fair that you can easily customize to your school.

Students Learning English as a New Language
Math and science teaching strategies for students learning English as a new language.

Heavy Lifting: A NASA Design Squad Challenge 2
In Part 2 of this activity participants will compare crane designs from the previous session in terms of the scientific principles and engineering practices involved. Participants will also have the opportunity to work with K'NEX kit models of simple machines.
Saturday  
10:30 am  
Session:  78.3  
Prairie C  
Feb. 6, 2016  
Grade Level:  
Presenter:  Sonya McNamara  
Project Lead the Way  
sonyakmcnamara@WestCentralPLTW  

PLTW-Launch-Elementary STEM  
Learn about this exciting new STEM hands-on program addressing the new Next Generation Science Standards and other national and state standards. Through hands-on learning (project and problem-based learning) for kindergarten through fifth grade, students learn important, future-changing lessons. Taking risks, making mistakes, and employing critical thinking.

10:30-11:20 am  
Session:  78.5  
Dakota A  
Feb. 6, 2016  
Grade Level:  9-12  

Presenters:  Peggy Norris & June Apaza  
Sanford Underground Research Facility/BHSU  
pnorris@sanfordlab.org  
http://www.sanfordlab.org  

Connecting Sanford Lab Science to the Classroom  
The E & O Department at Sanford Lab is piloting curriculum units featuring Sanford Lab science and aligned with the new state science standards. The units are hands-on and inquiry-based. This workshop will feature activities from two 10-day high school units: “Perplexing Puddles” and “We are Made of Starstuff”.

Did you miss a handout?  
The presenter may have posted it on our Conference Wiki  

Saturday  
10:30 am  
Session:  79  
Dakota B  
Feb. 6, 2016  
Grade Level:  K-5  

Presenter:  Julie Olson  
Mitchell HS  
Julie.olson@k12.sd.us  

Squishy Circuits/Paper Circuits  
Learn how to teach basic electricity with play dough, paper, LED’s and button batteries.

10:30-11:20 am  
Session:  80  
Dakota C  
Feb. 6, 2016  
Grade Level:  9-12  

Presidential Series  
Jay Berglund  
Gettysburg High School  
Jay.Berglund@k12.sd.us  

Barbie Bungee Jumping  
Participate in a classroom activity to create a mathematical model needed to design a bungee jump for a Barbie doll using rubber bands for the bungee cord.

10:30-11:20 am  
Session:  80.5  
Dakota D  
Feb. 6, 2016  
Grade Level:  9-12  

Presenter:  Liz McMillan  
The Sanford PROMISE  
SanfordOutreach@sanfordhealth.org  
http://www.sanfordresearch.org/education  

Private Session: Genetics Ed Workshop Follow-up  
Participants in the summer 2015 Ed Enrichment Workshop at Sanford Research will meet to discuss the implications of receiving their direct to consumer genetic information of their classroom practice in genetics.
**Saturday**

**10:30 am**

**10:30-11:20 am** Session: 81
**Dakota E**
**Feb. 6, 2016**
**Grade Level: 9-12**

**Presenters:** Jeff Schneider & Mary EK Schneider & Heather Kellert
SD Innovation Lab
jschneider@sdinnovationlab.org
http://sdinnovationlab.org/

Science, Math and Humanities? Sure why not?
Blending 4 content areas using SD Science Standards and common core in a demonstration of a Hybrid Teacher Model designed to provide credits to students in Humanities, Math, and Science via Transdisciplinary Problem Based Learning. The class is innovative, standards driven, and customized. Session will include a demonstration of the virtual presence robot (Double) and class-flipping tool, Swivl.

10:30-11:20 am Session: 81.5
**Dakota F**
**Feb. 6, 2016**
**Grade Level: 9-12**

**Presenters:** Judy Vondruska & Suzette Burckhard
SDSU
Judy.Vondruska@sdstate.edu
http://etfworkshop.wikispaces.com

Cooking with the Sun-Creating a Solar Oven Part 1
Solar ovens are used worldwide, providing fuel-free cooking and water decontamination especially in remote and poor regions of the world. In Part 1 of this session, participants will design and build a solar oven. This activity will utilize the scientific concepts of heat transfer and materials science.

10:30-11:20 am Session: 82
**Dakota G**
**Feb. 6, 2016**
**Grade Level: 6-8**

**Presenters:** Chris Larson & Sharon Vestal
SDSU
Christine.Larson@sdstate.edu

Using Mathematical Practices:
FUN with Fractions 1
This session is part of the Using Mathematical Practices follow-up workshop funded by a SD Board of Regents Title II grant. We will explore activities that can be used to develop a deeper conceptual understanding of fractions and decimals, focusing on addition & subtraction.

Have you checked out “Share the Classroom Treasures”?
Stop in Salon I and see what is there. At 2:30 pm today, these treasures become trash!
11:30-12:20 pm  
Session:  85  
Feb. 6, 2016  
Grade Level:  9-12  
Repeat of Session 18  

Presenters:  Dr. James Rice & Phillip Huebner  
SD EPSCOR  
Phillip.Huebner@sdstate.edu  
http://sdepscorg.org  

Resources and Opportunities through SD EPSCoR  
Maximizing efforts in interest and retention of students in pursuing STEM careers requires engaging students early to foster their interest in STEM.  SD EPSCoR provides numerous resources and support to schools, teachers, and students.  This session will outline the philosophy of the SD EPSCoR program, its current efforts, and its resources.

11:30-12:20 pm  
Session:  86  
Feb. 6, 2016  
Grade Level:  9-12  

Presidential Series  
Jay Berglund  
Gettysburg High School  
Jay.Berglund@k12.sd.us  

Programming the TI-84  
Basic programming on the TI-84 calculator.  Use programming to reinforce logical thinking, formula usage, and a deeper understanding of algorithmic calculations.  Using TI Connect for programming will also be included.

11:30-12:20 pm  
Session:  87.5  
Feb. 6, 2016  
Grade Level:  6-12  

Presenters:  Judy Vondruska & Suzette Burckhard; SDSU  
Judy.Vondruska@sdstate.edu  
http://etworkshop.wikispaces.com  

Cooking with the Sun-Creating a Solar Oven Part 2  
In Part 2 of this session participants will test previously created solar ovens for thermal loss, heat-up time, and heat concentration. The scientific principles of radiation, conduction, convection and insulation will be used to better understand the efficiency of the various designs.

11:30-12:20 pm  
Session:  88  
Feb. 6, 2016  
Grade Level:  6-8  

Presenter:  Mark Iverson  
Watertown Middle School  
Mark.A.Iverson@k12.sd.us  

Weather Ballooning:  
Taking Your Teaching Out of this World  
If you have ever wanted to start a weather balloon project with your class this session is for you. I am by no means an expert but will offer my experience, resources, fails and accomplishments and get you in contact with the experts that guided me.

11:30-12:20 pm  
Session:  89  
Feb. 6, 2016  
Grade Level:  6-8  

Presenters:  Chris Larson & Sharon Vestal; SDSU  
Christine.Larson@sdstate.edu  

Using Mathematical Practices:  
FUN with Fractions 2  
This session is part of the Using Mathematical Practices follow-up workshop funded by a SD Board of Regents Title II grant. We will explore activities that can be used to develop a deeper conceptual understanding of fractions and decimals, focusing on addition & subtraction.
Saturday  12:30 pm

12:30-1:30 pm  Session:  90
Prairie A, B, & C  Feb. 6, 2016
Grade Level:  All

Presenters:  Julie Olson & Cindy Kroon
SDSTA  &  SDCTM

LUNCH

Saturday  1:30 pm

1:30-2:20 pm  Session:  90.5
Prairie C   Feb. 6, 2016
Grade Level:  9-12   Repeat of Session 36

Presenter:  Sheila McQuade
O’Gorman HS
smcquade2@sfcss.org

Hands-on Geometry - on a budget
I use straws, pasta noodles and even play dough in my Geometry classes. In this session, I will share (cheap) ideas for making manipulatives that help students visualize concepts from high school geometry.

1:30-2:20 pm  Session:  91
Dakota A   Feb. 6, 2016
Grade Level:  6-8

Presenter:  Steven Rokusek
South Dakota Public Broadcasting
Steven.Rokusek@state.sd.us
http://sdpb.org/learn

Science:  In the Classroom. At Home...Everywhere!
During this session participants will learn about five science activities that will encourage the children in their care to think about (live) science in the classroom and at home. The activities covered during the session will focus on both life and physical science topics. Your students will love these interactive activities.

1:30-2:20 pm  Session:  92
Dakota C   Feb. 6, 2016
Grade Level:  6-8

Presenter:  Gary T. Nelson
Georgia Gwinnett College
garynelson@hotmail.com

Teach with Passion, Manage with Compassion
Time, it has been said, is the coin of learning, yet every teacher has known the frustration of losing valuable learning time to matters of discipline. For some teachers and students, the amount of time lost is great. The presenter will share strategies that are proven to restore that lost time to teachers and students in a way that is simple, fair, and mutually respectful.

1:30-2:20 pm  Session:  94
Dakota E   Feb. 6, 2016
Grade Level:  K-5

Presenter:  Denise Heisinger
John Paul II Elementary
Denise.Heisinger@k12.sd.us
http://mrsheisinger.weebly.com

Prodigy Math
Prodigy is an online program that provides students with grade level math questions in a gaming based format. Prodigy also provides teachers the ability to assign standard based questions aligned to Common Core State Standard. Prodigy also allows teachers to monitor student progress through several different report features.

1:30-2:20 pm  Session:  94.5
Dakota F   Feb. 6, 2016
Grade Level:  9-12

Presenters:  Judy Vondruska & Suzette Burckhard; SDSU
Judy.Vondruska@sdstate.edu
http://etfworkshop.wikispaces.com

Using a 3D Printer
This session is intended for participants who took part in the "Engineering the Future 2015" workshop at SDSU this past summer. Participants will learn how to design and program a 3D printer and ways to incorporate 3D printing into their classrooms.
Saturday  

1:30 pm

1:30-2:20 pm  
Dakota G  
Feb. 6, 2016  

Grade Level: 9-12

Presenters: Matt Miller & Larry Browning  
SDSU  
Matt.Miller@sdstate.edu

Demos to Spark Their Interest?!
From burning carpets and chocolate, to melting plastic and oxygen accelerated explosions, we never know what will go wrong. Bring your safety glasses, hearing protection, and fire extinguishers just in case we have another disaster (honestly, it’s Matt’s fault ;-).

Saturday  

2:30 pm

2:30-3:20 pm  
Dakota C  
Feb. 6, 2016  

Grade Level: All

Presenter: Cindy Kroon  
SDCTM

Conference Wrap up
Math Round Table to discuss the conference

Saturday  

4:00 pm

4:00 pm-  
Board Room  
Feb. 6, 2016  

Session: 98

Presenter: Jean Gomer  
SDSTA/SDCTM

Joint Board Meeting
This last session is for Science and Math Officers to review/discuss the comments, presenters, vendors, and other events of the conference.

Participants:
Thank you for helping us make this conference great!

2:30-3:20 pm  
Dakota A  
Feb. 6, 2016  

Grade Level: All

Presenter: Julie Olson  
SDSTA

Conference Wrap UP
Science Round Table to discuss the conference.
Representatives will be exhibiting on Friday from 8:00 AM until 5:00 PM. These include:

- AEOP (NSTA) Cheryl Long
- Core Educational Solutions Randy Brooks
- CPM Educational Program Sharon Rendon Bob Petersen
- Division of Career and Technical Education Michelle Nelson Jane Gubrud
- Go Inspire! Nerd Nook Carrie Leopold
- Great Minds Tanika Majette
- McGraw-Hill Carol Heisel
- National Science Teachers Association Mary Colson
- NCSM Math Ed Leadership Sharon Rendon
- ORIGO Education Vikki Lange
- RhizoDive: Carl Fellbaum
- Sanford Health Andrew Cardillo
- SDSU Mathematics Dept Donna Flint
- SD Department of Transportation TRAC Program Ann Campbell Naomi Fossum
- South Dakota Discovery Center Anne Lewis
- Technology and Innovation in Education Marcia Torgrude LuAnn Lindskov

*Thanks to all Vendors for their donations of door prize, including Carolina Biological’s $100 gift certificate

*Name Tag Lanyards are compliments of Sanford PROMISE

*Thank you to Educational Innovations for the UV zipper pulls

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South Dakota Science Teachers Association Business Meeting will be held in Dakota G at 4:30 pm on Friday, February 5, 2016

SD Council of Teachers of Mathematics Business Meeting will be held in Dakota C at 4:30 pm on Friday, February 5, 2016

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**Graduate Credit**

Conference credit will be offered through Dakota Wesleyan University. You may register for one hour of credit at the 499 or 599 level. Attendance at a sharing session is required to earn graduate credit from Dakota Wesleyan University. There will be personnel available to register you for the credit on Thursday night from 7:00 to 9:00 pm, and on Friday morning from 7:30 to 8:30 am. Check in the hotel lobby for the DWU table. A syllabus listing course requirements will be available at the time of registration. For more information, contact Rocky Von Eye at (605) 995-2625.

Next year’s conference will be **February 2, 3, & 4, 2017**
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2016 Mathematics and Science Conference  
SDSTA & SDCTM

Please take time to respond to the following questions concerning the conference. This information will help the program committee take steps to improve future conferences. Circle one in each group:

Content Area:       Math   Science   Both
Grade Band:         Elementary   Middle School   High School

What presentation or presentations did you feel were the most useful or helpful?

What made it (or them) good?

Were there any presentations that disappointed you?

Please give us your overall assessment of the conference along with any comments you would like to share.

Detach and fill in the following for a final prize to be sent after the conference. To register for the prize turn in this entry along with your evaluation form.

___________________________________________________  
Name

___________________________________________________  
Address

___________________________________________________  
City, State, Zip Code
Please fill out your evaluation of the conference. We want next year’s to be even better.

Do you use Twitter.com? Use #SDCTMandSDSTA to see other tweets or to make your own.

Did you miss a handout? The presenter may have posted it on our Conference Wiki.

https://2016-sdctm-sdsta-pdc.wikispaces.com/
The 2016 Conference Committee would like to offer a Special Thanks to …

Dakota Weslyan University and Rocky Von Eye for handling the credit.

Coke for helping provide refreshments throughout the conference.

All speakers for their dedication to the future of mathematics and science education.

All exhibitors for their enthusiastic participation.

The Huron Area Chamber of Commerce, The Huron Convention and Visitors Bureau for a great deal of help and cooperation.

The Huron Events Center & Crossroads Hotel for their help and generous hospitality.

All the conference participants who make all of our efforts worthwhile and without whom there would be no conference.

A SPECIAL THANKS GOES TO THE FOR HELPING US WITH PROJECTORS!

Next year’s conference will be February 2, 3, & 4, 2017.

The 2016 Spring Conference is a joint venture of the South Dakota Science Teachers Association (SDSTA) and the South Dakota Council of Teachers of Mathematics (SDCTM)

Note: There is a common registration form for the conferences. One form is used to register for all activities, including SDSTA and SDCTM memberships.

<table>
<thead>
<tr>
<th></th>
<th>SDSTA or SDCTM</th>
<th>Non-members</th>
<th>Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>ONE-day</td>
<td>$75</td>
<td>$100</td>
<td>$25</td>
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<tr>
<td>TWO-day</td>
<td>$125</td>
<td>$125</td>
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The Friday Night Banquet is NOT included in the registration fee. A ticket for the banquet may be obtained at an additional cost of $25.

Because of a limited printing budget, the program was available in advance at the SDCTM website [www.sdctm.org] or SDSTA web site [www.sdsta.org]. Printed programs were not mailed, but were distributed on site with the registration materials.