Program for 2007 Joint Conference

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 Thursday night sharing session is required to earn 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.

Thursday 7 pm Friday 8:30 am

7:00-9:00 pm Session: 1 Peb. 1, 2007

Grade Level: K-C

Speaker (s): Micheline Hickenbothem

SDSTA President

Title: Science Sharing Sesion

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

7:00-9:00 pm Session: 2 Dakota C Feb. 1, 2007

Grade Level: K-C

Speaker (s): Bill Gripentrog

SDCTM President

Title: Math Sharing Session

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

8:30-4:20 Session: 3 Mobile Science Lab Feb. 2, 2007

Grade Level: K-12

Speaker (s): Jerry Opbroek

SD Mobile Science Lab

Title: Mobile Science Lab

The SD Mobile Science Lab will be available for walk-through visits on Friday (all day) and Saturday (morning). Teachers can observe some of the equipment and lab activities available on the MSL. Teachers can also obtain information about getting the MSL to their school.

8:30-9:20 Session: 4 Dakota B Feb. 2, 2007

Grade Level: K-C

Speaker (s): Mike Barondeau Edmunds Central School

Title: BB Board Molecular
Demonstrator for Science

This is a Make-It and Take-It session where you construct an acrylic BB-Board demonstrator for atomic/molecular motion demonstrations. This session is limited to 12 and will cost each participant \$15 at the door for materials. Go to http://mb045.k12.sd.us/Ideas/Bbboard.htm to see what you will make.

Friday 8:30 am

8:30-9:20 Session: 5 Dakota C Feb. 2, 2007

Repeat of #108

Grade Level: K-2

Speaker (s): Marcy Farrand

Wilson Elementary-Rapid City

Title: How to Quickly and Easily Assess a Child's Working Number

This session will present a quick and easy way to find out where a primary child is with working with basic facts. Activities with little prep time or materials will be shown that help improve this newly found working number.

8:30-9:20 Session: 6 Dakota D Feb. 2, 2007

Grade Level: 5-7

Speaker (s): Betsy L. Schamber

Madison Middle School

Title: Spectacular Cells!

A compilation of hands-on, student & teacher friendly activities that can be used to teach about cells.

8:30-9:20 Session: 7 Dakota E Feb. 2, 2007

Grade Level: 8-12

Speaker (s): Lonnie Bellman

CPM Educational Program

Title: Looking for a Standards-**Based Curriculum? CPM** May Be Your Answer.

Participants will explore one of the US Department of Education "Exemplary" programs. Philosophy, professional development and hands-on activities will make up the presentation.

Friday 8:30 am

8:30-9:20 Session: 8 Dakota F Feb. 2, 2007

Grade Level: 6-12

Speaker (s): Lisa Gustafson

Holt, Rinehart, & Winston

Title: Holt Mathematics and TI-Navigator/TI-Smartview

A hands-on session making it even easier to use TI Technology in your classroom: Lesson Quizzes with TI-Navigator, Tech-lab prep files and Graphing Calculator Tutorials.

8:30-10:20 Session: 9 Dakota G Feb. 2, 2007

Grade Level: 6-C

Speaker (s): Janet Briggs

BHSU

Title: Beyond the Solar System

This program addresses middle-and highschool level astronomy concepts and includes hands-on activities, video descriptions of key concepts, and student interviews highlighting misconceptions. Janet will share part of the "Beyond the Solar System" program from a summer 2006 institute held at the Harvard-Smithsonian Center of Astrophysics. A free DVD will be provided for the first 30 participants.

8:30-9:20 Session: 10 Feb. 2, 2007 Dakota H

Grade Level: 6-8

Speaker (s): Chris Larson

SDSH

Title: Fraction Activities for **Elementary Teachers**

Come explore fractions with activities that would be appropriate for elementary children.

Friday 9:30 am

9:30-10:20 Session: 11 Feb. 2, 2007

Grade Level: 9-12

Speaker (s): Bob Schuh & Marie Nehl

McIntosh High School

Title: Graphing Special Functions on the TI-84

The session will demonstrate how to use the TI-84 logical operators to graph piecewise functions, linear functions on the number line, and unusual functions. Calculators will be provided.

9:30-10:20 Session: 12 Dakota A Feb. 2, 2007

Repeat of #93

Grade Level: K-1

Speaker (s): Cynthia C. Chandler

BHSU

Title: Why Do Young Children Count Funny?

An explanation of how children develop number sense. I will use videos of young children to show how children construct number over time.

9:30-10:20 Session: 13 Dakota B Feb. 2, 2007

Repeat of #79

Grade Level: K-8

Speaker (s): Angelo Casaburri

& Arnie Lund

NASA/NES School-Kadoka

Title: Make the Sky Your Classroom

Learn how to fly and control airplanes, aircraft, lighter-than-air aircraft and kites by constructing them from locally obtainable and inexpensive materials. Educator's Guide included.

Friday 9:30 am

9:30-10:20 Session: 14 Dakota C Feb. 2, 2007

Grade Level: 2-5

Speaker (s): Steven Rokusek
SD Public Broadcasting

Title: Math & Science Activities for Elementary Students

This presentation will cover science and math activities using resources from SD Public Broadcasting. Multimedia materials will be provided for 20 teachers.

9:30-10:20 Session: 15 Dakota D Feb. 2, 2007

Grade Level: 7-C

Speaker (s): Prospective Math Teachers SDSU Students

Carla Roth, facilitator SDSU Students

Title: Q & A--Help Us Out

SDSU Students Joshua Stoebner, Eric Swanson, Shannon Waltner, Podney Palo, Arend Kuyper, Michael Loney, and others would like to discuss first year teacher issues, concerns, and preparation. Bring your thoughts and advice for these young professionals.

Friday 9:30 am

9:30-10:20 Session: 16 Dakota E Feb. 2, 2007

Grade Level: 5-12

Speaker (s): Lisa Dorschner

SD Agriculture in the Classroom

Title: What the Heck Is Biotech?

Join us as we take a closer look at this everchanging field. We will bring biotechnology to life and share with you the strategies and activities utilized in our middle school teacher workshop by the same title. Starting with cells and working up to extracting DNA, you will experience a wealth of interactive and hands-on activities. This is a sampling of our workshop funded by a 2005 Monsanto/AITC Consortium grant.

9:30-10:20 Session: 17 Dakota F Feb. 2, 2007

Grade Level: 8-C

Speaker (s): Larry Browning

SDSU

Title: Vernier's Wireless Dynamics Sensor System

The WKSS measures altitude, force, and accelerations in three dimensions and instantly transfers the data to a computer using Bluetooth technology.

Friday 9:30 am

9:30-10:20 Session: 18 Dakota H Feb. 2, 2007

Repeat of #83

Grade Level: K-8

Speaker (s): Dianne Miller

SD Project Learning Tree Inc.

Title: No Child Left Inside

PLT has been helping bring quality environmental education into classrooms for over 30 years. Attend this session and access complete online resources to gain a state-of-the-art curriculum resource packed with 96 multi-disciplinary activities each tailored to specific grade levels and learning objectives. Our new guide incorporates the latest innovations in education: reading strategies are embedded within activities, technology connections, assessment strategies, and suggestions for differentiated instruction helping reach students with varying needs and talents.

9:30-11:20 Session: 19 Symposium Feb. 2, 2007

Grade Level: 9-C

Speaker (s): Gary Hagerty & others

SD Universities

Title: College Forum: Transition from High School to College

Representatives from the mathematics departments of the higher education institutions will discuss topics relating to the transition from high school to college. This year's topics will include: Math requirements for different majors at the various universities, curriculum alignment for college prep classes, and a state math competition for high school students.

Friday 9:30 am

9:30-11:20 Session: 20 Salon Feb. 2, 2007

Grade Level: 7-C

Speaker (s): Judy Vondruska

SĎSU

Title: AstroMath: Sizing the Solar System

Have students use astronomy to learn number sense, ratios, and scaling! This session will focus on developing scalemodels of the planets and a scaled representation of the distances in the solar system. These activities are appropriate in both math and science classes. Weather permitting, part of the activity will be done outdoors.

9:30-11:20 Session: 21 Tour Bus Feb. 2. 2007

Grade Level: K-C

Speaker (s): Micheline Hickenbotham

BHSU

Title: Field Trip to the Ethanol Plant

Guided tour of the Ethanol Plant to learn about the process of making biodiesel. Limited to 20 participants. Tickets available at the registration table. Transportation provided.

10:30-11:20 Session: 22 Prairie A Feb. 2, 2007

Grade Level: 11-12

Speaker (s): Darwin Daugaard Dell Rapids Public HS

Title: Doc's Master Plan-Chemistry

Doc's Master Plan is used to find electron configuration, notation, quantum numbers and help with orbital notation of the elements.

10:30 am Friday

10:30-11:20 Session: 23 Feb. 2, 2007 Prairie B

Grade Level: K-12

Speaker (s): Samra Trask Wall School

Title: Literature in Math

Children's books are not just for children any more! Explore fun new ways to incorporate picture books into your math class.

10:30-11:20 Session: 24 Prairie C Feb. 2, 2007

Grade Level: 10-C

Speaker (s): Harlan J. Heitz Presentation College

Title: Electron Configuration Bingo

Join us to share in a very simple game of Bingo using electron configurations. You will receive two dozen Bingo cards, complete with configurations.

10:30-11:20 Session: 25 Dakota A Feb. 2, 2007

Grade Level: 2-4

Speaker (s): Brenda Danielson

Scotland Elementary School

Title: Let's Think About Math

Problem solving strategies and thinking skill activities for the math class.

Friday 10:30 am

10:30-11:20 Session: 26 Peb. 2, 2007

Repeat of #71

Grade Level: K-12

Speaker (s): Angelo Casaburri

& Arnie Lund

NASA/NES School-Kadoka

Title: Engineering Design
Challenges: Spacecraft
Structures and Thermal
Protection Systems

The NASA Engineering Design Challenges connects students with the challenges of NASA engineers as they design the next generation of aerospace vehicles. With simple and inexpensive materials, students engage in related design challenges in their classrooms by designing, building, and testing models that meet specified criteria.

10:30-11:20 Session: 27 Dakota C Feb. 2, 2007

Grade Level: 6-10

Speaker (s): Cheryl Thaler

Wagner Community School

Title: Middle School Minds in Motion

Enhance student learning through movement! Get your students up and moving while reinforcing the core content standards of students 6-8. Students are physically active, more alert and have better concentration. With over 100 activities, Minds in Motion will energize your classroom, enhance fine and large motor coordination and improve the overall learning environment. Attend this session and be one of the first to receive this valuable resource.

Friday 10:30 am

10:30-11:20 Session: 27.5 Peb. 2, 2007

Grade Level: K-5

Speaker (s): Chris Larson

SDSU

Title: Geometry Activities for Elementary Teachers

A variety of activities that explore geomtry will be presented. Lots of fun ways to introduce young children to various concepts in geometry.

 10:30-11:20
 Session: 28

 Dakota E
 Feb. 2, 2007

Grade Level: 8-12

Speaker (s): Lonnie Bellman

CPM Educational Program

Title: "I See Another Way!": How Multiple Representations Make Algebra Accessible

Participate in activities that help students find the connection between a rule, graph, table and context, enabling them to develop the ability to solve problems multiple ways.

10:30-11:20 Session: 29 Peb. 2, 2007

Repeat of #75

Grade Level: 3-12

Speaker (s): Kenneth Graupmann
White River School District

Title: Science & Math Education Using NASA Materials

Learn how to use NASA websites to add technology to both math and science classes.

Friday

10:30 am

10:30-11:20 Dakota G

Session: 30 Feb. 2, 2007

Session: 31

Feb. 2, 2007

Grade Level: 9-C

Speaker (s): Larry Browning

& Chris Larson

SDSU

Title: Math in Motion: Parabolas

and Projectiles

How do the values of the coefficients in a quadratic equation change the way the graph changes? This will be explored. A digital camera will then be used to capture the motion of a ball and show the connections between the math and the motion

Friday 12:00 Noon

12:00-1:00 pm Prairie A, B, C Grade Level:

Presiders: Micheline Hickenbotham & Bill Gripentrog

Title: LUNCH

Angelo Casaburri-NASA

 Presentation of the first annual Kelly Lane Earth and Space Science Grant

Door prizes

Friday

1:30 pm

Prairie A

Feb. 2, 2007

Repeat of #77

Grade Level: K-12

Featured Speaker Speaker (s): Richard T. Sherman

Oglala Sioux Parks & Rec.

Title: Ethnobotany: Great Plains
Plants through the Lakota
Lens on Learning

This presentation will impart an introduction to plants traditionally important to Indian tribes of the Great Plains. Participants will learn about a few of the common plants native to the Great Plains region and their cultural significance to American Indians, including their uses for food, medicinal and ceremonial purposes. The presentation will include information on how to identify and harvest wild plants, and how to avoid poisonous look-alikes.

1:30-4:20 Session: 33 Feb. 2, 2007

Grade Level: K-6

Featured Speaker Judith Hankes University of Wisconsin-Oshkosh

Title: CGI: A Culturally
Responsive Approach to
Teaching Mathematics

This session focuses on the content of Cognitively Guided Instruction. CGI is an extensively researched approach for teaching elementary level mathematics. CGI is also recognized as being a culturally responsive approach for teaching mathematics to Native American students. The session will include discussion of developing mathematical reasoning through story problems, developing base ten understanding, and NCTM standards-based methods of instruction. Research has shown that implementation of CGI will help teachers prepare students for reform-based state assessments.

Friday 1:30 pm

1:30-2:20 Session: 34 Prairie C Feb. 2, 2007

Repeat of #82

Grade Level: K-C

Speaker (s): Tony Morrow

Education Technology Partners

Title: Automated Data-Driven Math Intervention with Individualized Instruction for K-Adult

Learn how students are achieving average gains of 2 grades in math in 10 hours--without detracting from other studies! Explore effective technology interventions and FREE scientifically based, web delivered professional development resources from the US DOE. Observe the impact on teaching and learning plus the acceleration of math skills acquisition.

1:30-2:20 Session: 35 Peb. 2, 2007

Grade Level: 7-C

Speaker (s): Jay H. Berglund Gettysburg HS

Title: Introduction to TI-Smart View

Learn how to use TI-Smart View, the TI-84 Plus Graphing Calculator Emulator. TI-SmartView is not just for SMART Boards. Everyone attending will receive a trial version of Smart View. One free copy of Smart View will be given away as a door prize.

Friday 1:30 pm

1:30-2:20 Session: 36 Dakota B Feb. 2, 2007

Repeat of #86

Grade Level: 1-12

Speaker (s): Angelo Casaburri

& Arnie Lund

NASA/NES School-Kadoka

Title: Robonautics--Humans & Robots

Learn about the robotics features on NASA's Space Shuttle and International Space Station. Explore design challenges for making and using robotic components such as robotic arms, hands, and fingers from inexpensive materials. Education Briefs included.

1:30-2:20 Session: 37 Dakota C Feb. 2, 2007

Grade Level: K-3

Speaker (s): Jan Deuter
Miller Area School

Title: Math in Motion: Using a White Board

Come see how the white board can be used to demonstrate some difficult math concepts to students by the motion of objects. The demonstrations shown are based on the SD Mathematics Standards for kindergarten through 3rd grade. Handouts, demonstrations, and question/answer time will provide help in the understanding of how powerful this technology is for our 21st century students.

Friday 1:30 pm

 1:30-3:20
 Session: 38

 Dakota D
 Feb. 2, 2007

Grade Level: 4-8

Speaker (s): Becky Umenthum

Dakota Middle School, Rapid City

Title: Using Problems to Encourage Algebraic Thinking

Come prepared to work on engaging problems that can be solved in more than one way. Students of different ages and/or abilities will find success with these problems. You'll also learn different ways of putting students in groups and setting up behavior norms.

1:30-2:20 Session: 39 Dakota E Feb. 2, 2007

Grade Level: 6-8

Speaker (s): Patrick Wenzl

Holt, Rinehart & Winston

Title: Holt High School Science 2008 Launch

Come for the launch of the new 2008 editions of Holt, Rinehart & Winston's high school biology and physical science programs. See a demonstration of Live Ink, a new technology tool for improving reading comprehension in science. Also pick up a new lab idea or two! Complimentary materials! Door prizes!

Friday 1:30 pm

1:30-2:20 Session: 40 Dakota F Feb. 2, 2007

Grade Level: 9-12

Speaker (s): Jensi Kellogg-Andrus & Lori

Keleher

Watertown HS & CORD Communications

Title: PSI-SIM: Simulations for Biology, Chemistry & Physics

Try out 5 new software modules designed to immerse students in a dynamic learning environment that places them in control of their own success. Also enter to win one of the 5 modules to be given away this session.

1:30-2:20 Session: 41 Peb. 2, 2007

Grade Level: 6-C

Speaker (s): Larry Browning

SDSU

Title: Pinhole Cameras and Some Simple Math

Construct and use simple pinhole cameras to illustrate proportional and inverse proportional relationships. This is suitable for both math and science (from AstroMATH 2006 workshop.)

1:30-2:20 Session: 42 Dakota H Feb. 2, 2007

Grade Level: K-5

Speaker (s): Nancy Barondeau

NSU

Title: K-W-L to T-H-C (and other science writing ideas)

The K-W-L framework has been modified to enhance the scientific learning environment. Other science writing examples will be shared.

Friday 1:30 pm

1:30-2:20 Session: 43 Symposium Feb. 2, 2007

Repeat of #91

Grade Level: K-C

Speaker (s): Chuck Holmstrom
SDRS Board of Trustees

Title: Your Retirement

Information, questions, and maybe some answers

1:30-4:20 Session: 44 Salon Feb. 2, 2007

Grade Level: 4-C

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

Title: WILD about Mountain Lions

Come experience some hand-on activities about South Dakota's largest predator. Participants will receive a copy of the mountain lion curriculum guide and CD.

Friday 2:30 pm

2:30-3:20 Session: 45 Feb. 2, 2007

Repeat of #68

Grade Level: K-12

Featured Speaker

Speaker: Carol Greco

MESSENGER Fellow Educator

Title: Solar System Science/
MESSENGER Mission to
Mercury

Workshop attendees will receive training on MESSENGER Education Modules, inquiry-based, hands-on lessons for grades K-12 and receive suggestions on how to use these lessons in the classroom.

Friday 2:30 pm

2:30-3:20 Session: 46 Prairie C Feb. 2, 2007

Repeat of #89

Grade Level: K-C

Speaker (s): Tony Morrow

Education Technology Partners

Title: Math & Science--Formative Instruction with Technology for K-Adult

Learn how students are achieving rapid gains in all subject areas with the A+nyWhere Learning System -- http://www.amered.com/ This affordable, proven Integrated Learning System provides formative instruction based on diagnostic and prescriptive--SD content standards-aligned assessment. Delivers K-Adult comprehensive content with flexible delivery. Explore effective technology interventions and FREE scientifically-based, webdelivered professional development resources from the US DOE.

2:30-3:20 Session: 47 Dakota A Feb. 2, 2007

Grade Level: K-4

Speaker (s): Brenda Danielson Scotland Elementary School

Title: Let's Sing Science

A collection of songs, poems, and activities to correlate with your science curriculum.

Friday 2:30 pm

2:30-3:20 Session: 48 Peb. 2, 2007

Repeat of #94

Grade Level: K-12

Speaker (s): Angelo Casaburri

& Arnie Lund

NASA/NES School-Kadoka

Title: What's Cooking Onboard the International Space Station

Eating and drinking are favorite everyday activities on Earth. However, how they are packaged and eaten is greatly affected by the unique microgravity environment of space. Learn about food preparation and menu development for space flight. Educator's Guide included.

2:30-4:20 Session: 49 Dakota C Feb. 2, 2007

Repeat of #102

Grade Level: 8-12

Speaker (s): Sheila McQuade

O'Gorman HS

Title: Hands-on Geometry
Activities

Who says Play-Doh is for pre-school? In this session, I will share ideas for using Play-Doh and other easily acquired (& affordable) "toys" for Geometry.

2:30-4:20 Session: 49.5 Dakota E Feb. 2, 2007

Grade Level: 6-8

Speaker (s): Patrick Wenzl

Holt, Rinehart & Winston

Title: Classroom Forensics & Scientific Inquiry

Enjoy the experience of real-world forensics and experience forensic science techniques designed for the middle school classroom. Complimentary materials! Door Prizes!

Friday 2:30 pm

2:30-3:20 Session: 50 Dakota F Feb. 2, 2007

Grade Level: 6-12

Speaker (s): Lori Keleher

CORD Communications

Title: Math at Work

Challenge students' mathematics skills with real-life simulations. Receive a free demodisk and enter to win one of the 5 interactive CD-ROMs to be given away this session!

2:30-3:20 Session: 51 Dakota G Feb. 2, 2007

Grade Level: 9-C

Speaker (s): James Stearns

SD AAPT

Title: SD-AAPT Photo Contest

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

2:30-3:20 Session: 52 Dakota H Feb. 2, 2007

Grade Level: 5-12

Repeat of #87

Speaker (s): Clark Bennett

USD

Title: South Dakota Science Olympiad

An introduction to South Dakota Science Olympiad. Information about participating in the South Dakota Science Olympiad State Tournament.

Friday

2:30-3:20 Session: 53 Symposium Feb. 2, 2007

2:30 pm

Grade Level: 7-12

Speaker (s): Richard A. Reid

SDSU

Title: Connecting Math to Careers: SDSU Youth Programs

This presentation will provide an overview of the camps and programs at SDSU designed to expose students to college majors in the Science, Technology, Engineering, and Math disciplines (STEM) and connect those majors to challenging and exciting careers.

Friday 3:30 pm

3:30-4:20 Session: 54 Prairie A Feb. 2, 2007

Grade Level: 4-12

Speaker (s): Kenneth Graupmann

White River School District

Title: Hands-on Plastic

Learn how to use a free kit of activities from the American Plastics Council. Attendees will be able to order the kit online.

3:30-4:20 Session: 55 Prairie C Feb. 2, 2007

Repeat of #99

Grade Level: 5-C

Speaker (s): Brant Miller & Robb Winter

SDSM&T

Title: Receive \$5000 to Participate in Research Activities at SDSM&T This Summer

Come get information about the SDSM&T Research Experience for Teachers (RET) program and hear participant accounts of the program's impact on their professional practice.

Friday 2:30 pm

3:30-4:20 Session: 56 Dakota B Feb. 2, 2007

Repeat of #101

Grade Level: K-12

Speaker (s): Angelo Casaburri

& Arnie Lund NASA/NES School-Kadoka

Title: Rocketry-Flight Testing Newton's Laws

Learn about the history, scientific principles, and mathematics of rockets. Instructional techniques for constructing straw rockets, industrial-strength paper rockets, and two-liter water rockets using inexpensive materials will be investigated. Educator's Guide included.

3:30-4:20 Session: 57 Dakota D Feb. 2, 2007

Grade Level: 6-12

Speaker (s): Cindy Kroon Montrose HS

Title: Metric Day Madness

Each October 10th the geeks of the world celebrate Metric Day. (10-10 get it?!?) Join us for a round of Metric Olympics, an activity to celebrate the day with estimation, measurement, and metric calculations. Activities will be hands-on (and feet-on).

Friday 3:30 pm

3:30-4:20 Session: 59 Dakota F Feb. 2, 2007

Grade Level:

Speaker (s): Janet Kawecki

Scott Foresman Publishing Co.

Title: "Investigations 2009" - Make an Impact!

Come and see "Investigations in Number, Data and Space 2009." A complete comprehensive mathematics curriculum will make an impact through challenging investigations, student understandings and assessment.

3:30-4:20 Session: 60 Dakota G Feb. 2, 2007

Grade Level: 8-C

Facilitators: AAPT Officers

American Association of Physics Teachers

Title: AAPT Meeting

This is a meeting of the South Dakota chapter of the American Association of Physics Teachers.

3:30-4:20 Session: 61 Peb. 2, 2007

Grade Level: 9-C

Speaker (s): Gary Hagerty BHSU

Title: Using History to Improve Outcomes in a Math Course

Beginning in the fall of 2003, BHSU College Algebra faculty have been developing history modules and using these modules to increase both learning outcomes and the students' perceptions of mathematics. This presentation will highlight the implementation and the results.

Friday 4:30 pm

4:30-5:30 Session: 62 Dakota C Feb. 2, 2007

Grade Level: All

Facilitator: Bill Gripentrog,

President SDCTM

Title: SDCTM Business Meeting

4:30-5:30 Session: 63 Peb. 2, 2007

Grade Level: All

Facilitator: Micheline Hickenbotham,

President SDSTA

Title: SDSTA Business Meeting

Friday 5:00 pm

6:00-7:00 Session: 64 Pre-function area Feb. 2, 2007

Grade Level: All

Title: RECEPTION

Sponsored by Holt, Rinehart, Winston

Friday 7:00 pm

7:00-9:00 pm Session: 65 Prairie A, B, C Feb. 2, 2007

Grade Level: K-C

Featured Speaker Cathy Seeley, Speaker Past President, NCTM

BANQUET

Saturday 7:00 am

7:00-8:00 am Session: 66 Library Feb. 3, 2007

Grade Level: K-12

Speaker (s): Diana McCann

& Ramona Lundberg
Presidential Award Coordinators

Title: Presidential Award Breakfast

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

Saturday 8:30 am

8:30-11:20 Session: 66.5 Mobile Science Lab Feb. 3, 2007

Grade Level: K-12

Speaker (s): Jerry Opbroek

SD Mobile Science Lab

Title: Mobile Science Lab

The SD Mobile Science Lab will be available for walk-through visits on Saturday (morning). Teachers can observe some of the equipment and lab activities available on the MSL. Teachers can also obtain information about getting the MSL to their school.

Saturday 8:30 am

8:30-11:30 Session: 67 Prairie A Feb. 3, 2007

Repeat of #33

Grade Level: K-6

Featured Speaker Judith Hankes University of Wisconsin-Oshkosh

Title: CGI: A Culturally
Responsive Approach to
Teaching Mathematics

This session focuses on the content of Cognitively Guided Instruction. CGI is an extensively researched approach for teaching elementary level mathematics. CGI is also recognized as being a culturally responsive approach for teaching mathematics to Native American students. The session will include discussion of developing mathematical reasoning through story problems, developing base ten understanding, and NCTM standards-based methods of instruction. Research has shown that implementation of CGI will help teachers prepare students for reform-based state assessments.

8:30-9:20 Session: 68 Prairie B Feb. 3, 2007

Repeat of #45

Grade Level: K-12

Featured Speaker Carol Greco

MESSENGER Fellow Educator

Title: Solar System Science/
MESSENGER Mission to
Mercury

Workshop attendees will receive training on MESSENGER Education Modules, inquiry-based, hands-on lessons for grades K-12 and receive suggestions on how to use these lessons in the classroom.

Saturday 8:30 am

8:30-10:20 Session: 69 Prairie C Feb. 3, 2007

Grade Level: 7-C

Speaker (s): Dr. Rocky VonEye

& Dr. Michael Catalano

Title: What Do You Do with **Notebook Computers in the** Mathematics Classroom?

This session will concentrate on Dr. Catalano's NSF grant and how we acquired our mobile laptop (notebooks) lab. We will also discuss how we incorporate the computers into our daily lesson plans for everything from note taking to application usage and demonstrations. Dr. Catalano will also discuss applications from his College Algebra book that is in the second draft.

8:30-9:20 Session: 70 Dakota A Feb. 3, 2007

Grade Level: K-8

Speaker (s): Gary Hagerty

Title: Curriculum Focal Points: Why Is This Document Needed?

In September 2006, NCTM published a document entitled Curriculum Focal Points for Pre-Kindergarten through Grade 8--A Quest for Coherence. This document is designed to build on the Principles and Standards document (2000). This presentation will be a discussion of why items like guick recall and fluency with standard algorithms are returning to prominence. The discussion will be supported with views from educational psychology.

Saturday 8:30 am

8:30-9:20 Session: 71 Dakota B Feb. 3, 2007

Repeat of #26

Grade Level: K-12

Speaker (s): Angelo Casaburri

& Arnie Lund

NASA/NES School-Kadoka

Title: Engineering Design **Challenges: Spacecraft** Structures and Thermal **Protection Systems**

The NASA Engineering Design Challenges connects students with the challenges of NASA engineers as they design the next generation of aerospace vehicles. With simple and inexpensive materials, students engage in related design challenges in their classrooms by designing, building, and testing models that meet specified criteria.

8:30-9:20 Session: 72 Dakota C Feb. 3, 2007

Grade Level: 6-8

Speaker (s): Jeremiah Dibley

Pulluin Software

Title: Videogames in Science Class?

Find out how teachers can harness the power of videogames to help studens learn science. Get access to 4 videogames designed specifically for the middle school science classroom.

Saturday 8:30 am

8:30-10:20 Session: 73 Dakota D Feb. 3, 2007

Grade Level: 7-12

Speaker (s): Dave Martin

Cheyenne-Eagle Butte HS

Title: Ornamental Geometry-A Capital Experience

Often students struggle with visualizing 3-dimensional objects when viewed as a 2-dimensional net. A way to make the concept concrete for students is to construct ornaments for decorating Christmas trees. The session will allow participants to build some basic shapes and get ideas for developing activities for creating more elaborate constructions. Student ornaments and the final products of their work will be shared.

8:30-9:20 Session: 74 Dakota E Feb. 3, 2007

Grade Level: 4-6

Speaker (s): Julie Olson

Mitchell HS

Title: Elementary Crime Scene

Come investigate a crime scene. Materials are appropriate for upper elementary students. Handouts provided.

8:30-9:20 Session: 75 Dakota G Feb. 3, 2007

Repeat of #29

Grade Level: 3-12

Speaker (s): Kenneth Graupmann White River School District

Title: Science & Math Education Using NASA Materials

Learn how to use NASA websites to add technology to both math and science classes.

Saturday 8:30 am

8:30-9:20 Session: 76 Library Feb. 3, 2007

Grade Level: K-12

Speaker (s): Diana McCann

& Ramona Lundberg
Presidential Award Coordinators

Title: Tips for Winning Money

Would you like to receive \$10,000? Every year, South Dakota is 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. Come to this session to be assigned a mentor and/or to learn how to complete an application.

Saturday 9:30 am

9:30-10:20 Session: 77 Prairie B Feb. 3, 2007

Repeat of #32

Grade Level: K-12

Featured Speaker Richard T. Sherman Oglala Sioux Parks & Rec.

Title: Ethnobotany: Great Plains Plants through the Lakota Lens on Learning

This presentation will impart an introduction to plants traditionally important to Indian tribes of the Great Plains. Participants will learn about a few of the common plants native to the Great Plains region and their cultural significance to American Indians, including their uses for food, medicinal and ceremonial purposes. The presentation will include information on how to identify and harvest wild plants, and how to avoid poisonous look-alikes. This is part of an effort to reeducate young people to become more connected with their local environment.

Saturday 9:30 am

9:30-10:20 Session: 78 Dakota A Feb. 3, 2007

Grade Level: 1-4

Speaker (s): Brenda Danielson

Scotland Elementary School

Title: Do the Math

A series of math activities adaptable to various curriculum skills designed to have children moving and active as they practice math.

9:30-10:20 Session: 79 Dakota B Feb. 3, 2007

Repeat of #13

Grade Level: K-12

Speaker (s): Angelo Casaburri

& Arnie Lund NASA/NES School-Kadoka

Title: Make the Sky Your Classroom

Learn how to fly and control airplanes, aircraft, lighter-than-air aircraft and kites by constructing them from locally obtainable and inexpensive materials. Educator's Guide included.

9:30-10:20 Session: 80 Dakota C Feb. 3, 2007

Grade Level: 9-C

Speaker (s): Kurt Cogswell

SDSU

Title: SDSU Calculus Gateway Exam: What and Why?

The Head of the SDSU Math/Stat Department will explain the Gateway Exam that will be required of all Calculus I students starting Fall 2007. The test is designed to test for elementary algebra and trigonometry skills.

Saturday 9:30 am

9:30-11:20 Session: 81 Feb. 3, 2007

Grade Level: K-C

Speaker (s): Chad R. Tussing

SD GFP-Project Wild

Title: Project WILD

Take part in some hands-on, fun-filled activities from the award-winning Project WILD curricula. Project WILD was designed to teach about fish & wildlife conservation using proven methods that your students will love. Participants who opt to extend their participation to 6 hours via WebCT will receive the free curriculum. Or extend to 15 hours and receive one college credit for \$40.

9:30-10:20 Session: 82 Dakota F Feb. 3, 2007

Repeat of #34

Grade Level: K-12

Speaker (s): Tony Morrow

Education Technology Partners

Title: Automated Data-Driven Math Intervention with Individualized Instruction for K-Adult

Learn how students are achieving average gains of two grades in Math in 10 hours-without detracting from other studies! Explore effective technology interventions and FREE scientifically-based, web delivered professional development resources from the US DOE. Observe the impact on teaching and learning plus the acceleration of math skills acquisition.

Saturday 9:30 am

9:30-11:20 Session: 83 Pakota H Feb. 3, 2007

Repeat of #18

Grade Level: K-8

Speaker (s): Dianne Miller

SD Project Learning Tree Inc.

Title: No Child Left Inside

PLT has been helping bring quality environmental education into classrooms for over 30 years. Attend this session and complete online resources to gain a state-of-the-art curriculum resource packed with 96 multi-disciplinary activities each tailored to specific grade levels and learning objectives. Our new guide incorporates the latest innovations in education: reading strategies are embedded within activities, technology connections, assessment strategies, and suggestions for differentiated instruction helping reach students with varying needs and talents

9:30-10:20 Session: 84 Symposium Feb. 3, 2007

Grade Level: K-12

Speaker (s): Shannon Kortan 2006 JFMF Awardee

Title: Japan Fulbright Memorial Fund Award

Want to go to Japan for free? JFMF Award recipients travel with all expenses paid to study the Japanese culture and educational system. Come for more information about applying and for details from my trip in November. The JFMF is open to all K-12 educators.

Saturday 10:30 am

10:30-11:20 Session: 85 Dakota A Feb. 3, 2007

Grade Level: K-5

Speaker (s): Jan Martin

SD Dept. of Education

Title: SD Counts-Best Practices at Work

The session will provide a brief overview of SD Counts, a K-5 math professional development project. The focus will be on research-based strategies that any teacher can implement in the classroom, so that students can be active learners of mathematics.

10:30-11:20 Session: 86 Peb. 3, 2007

Repeat of #36

Grade Level: 1-12

Speaker (s): Angelo Casaburri & Arnie Lund

NASA/NES School-Kadoka

Title: Robonautics--Humans & Robots

Learn about the robotics features on NASA's Space Shuttle and International Space Station. Explore design challenges for making and using robotic components such as robotic arms, hands, and fingers from inexpensive materials. Education Briefs included.

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Saturday 10:30 am

10:30-11:20 Session: 87 Peb. 3, 2007

Repeat of #52

Grade Level: 5-12

Speaker (s): Clark Bennett

USD

Title: South Dakota Science Olympiad

An introduction to South Dakota Science Olympiad. Information about participating in the South Dakota Science Olympiad State Tournament.

10:30-11:20 Session: 88 Feb. 3, 2007

Grade Level: 8-C

Speaker (s): Marvin Gamble

USD

Title: Multiplying Mentally

Different techniques will be discussed on multiplying mentally.

10:30-11:20 Session: 89 Dakota E Feb. 3, 2007

Repeat of #46

Grade Level: K-12

Speaker (s): Tony Morrow

Education Technology Partners

Title: Math & Science--Formative Instruction with Technology for K-Adult

Learn how students are achieving rapid gains in all subject areas with the A+nyWhere Learning System -- http://www.amered.com/ This affordable, proven Integrated Learning System provides formative instruction based on diagnostic and prescriptive--SD content standards-aligned assessment. Explore effective technology interventions and FREE scientifically-based, web-delivered PD resources from the US DOE.

Saturday 10:30 am

10:30-11:20 Session: 90 Feb. 3, 2007

Grade Level: 4-8

Speaker (s): Sheila McQuade O'Gorman High School

Title: Algebra Tiles

Algebra Tiles are a great tool for teaching algebra. In this session, we will focus on their use in teaching basic algebra skills in upper elementary and junior high.

10:30-11:20 Session: 91 Symposium Feb. 3, 2007

Repeat of #43

Grade Level: K-C

Speaker (s): Chuck Holmstrom
SDRS Board of Trustees

Title: Your Retirement

Information, questions, and maybe some answers.

Saturday 12:00 Noon

12:00-1:00 pm Session: 92 Prairie A, B Feb. 3, 2007

Grade Level:

Speaker (s): Bill Gripentrog

& Micheline Hickenbotham

Title: LUNCH

Door prizes

Saturday 1:00 pm

1:00-1:50 Session: 93 Prairie B Feb. 3, 2007

Repeat of #12

Grade Level: K-1

Speaker (s): Cynthia Chandler

BHSU

Title: Why Do Young Children Count Funny?

An explanation of how children develop number sense. I will use videos of young children to show how children construct number sense over time.

Saturday 1:00 pm

1:00-1:50 Session: 94 Dakota B Feb. 3, 2007

Repeat of #48

Grade Level: K-12

Speaker (s): Angelo Casaburri

& Arnie Lund

NASA/NES School-Kadoka

Title: What's Cooking Onboard the International Space Station

Eating and drinking are favorite everyday activities on Earth. However, how they are packaged and eaten is greatly affected by the unique microgravity environment of space. Learn about food preparation and menu development for space flight. Educator's Guide included.

Saturday 1:00 pm

1:00-1:50 Session: 95 Dakota C Feb. 3, 2007

Grade Level: K-12

Speaker (s): Lori Keleher, NBCT

Wolsey-Wessington HS

Title: Moving Education Forward . . Through National Board Certification

National Board Certification, offered through the National Board for Professional Teaching Standards evaluates and encourages quality teaching. Learn more here!

1:00-1:50 Session: 96 Dakota D Feb. 3, 2007

Grade Level: 7-12

Speaker (s): G-Trog & K-Dog

No affiliation listed to protect their schools

Title: Mathematical Idol: Command Performance

Following on the heels of a "Standing Room Only" crowd last year, this infamous duo returns. In their words, "We've made fools of ourselves in front of our students for years. Now it's time to do it in front of our colleagues." The ability to carry a tune, sing, or have rhythm is NOT a requirement for this session.

 1:00-1:50
 Session: 97

 Dakota E
 Feb. 3, 2007

Grade Level: 9-12

Speaker (s): Julie Olson Mitchell HS

Title: Technology in the Science Classroom

What works? Ideas--favorite websites--bring your ideas to share too!

Saturday 1:00 pm

1:00-1:50 Session: 98 Peb. 3, 2007

Grade Level: 6-8

Speaker (s): Dr. Sharon Vestal

SDSU

Title: Problem Solving in Grades 6-8

I will present information gathered from an NCTM e-workshop.

1:00-1:50 Session: 99 Dakota G Feb. 3, 2007

Repeat of #55

Grade Level: 5-C

Speaker (s): Brant Miller & Robb Winter

SDSM&T

Title: \$5000 to Participate in Research Activities at SDSM&T This Summer

Come get information of the SDSM&T Reasearch Experience for Teachers (RET) program and hear participant accounts of the program's impact on their professional practice.

Saturday 2:00 pm

2:00-3:50 Session: 100 Dakota A Feb. 3, 2007

Grade Level: K-5

Speaker (s): Jan Martin

SD Dept. of Ed

Title: Algebra--Not Me!!

The session will be focused on strategies which promote and develop algebraic thinking at the elementary level. Ways of representing student thinking and assessing growth will be explored.

Saturday 2:00 pm

2:00-2:50 Session: 101 Dakota B Feb. 3, 2007

Repeat of #56

Grade Level: K-12

Speaker (s): Angelo Casaburri

& Arnie Lund

NASA/NES School-Kadoka

Title: Rocketry-Flight Testing Newton's Laws

Learn about the history, scientific principles, and mathematics of rockets. Instructional techniques for constructing straw rockets, industrial-strength paper rockets, and two-liter water rockets using inexpensive materials will be investigated. Educator's Guide included.

2:00-3:50 Session: 102 Dakota C Feb. 3, 2007

Repeat of #49

Grade Level: 8-12

Speaker (s): Sheila McQuade
O'Gorman HS

Title: Hands-on Geometry Activities

Who says Play-Doh is for pre-school? In this session, I will share ideas for using Play-Doh and other easily acquired (& affordable) "toys" for Geometry.

Saturday 2:00 pm

2:00-2:50 Session: 103 Dakota D Feb. 3, 2007

Repeat of #57

Grade Level: 6-12

Speaker (s): Cindy Kroon Montrose HS

Title: Metric Day Madness

Each October 10th the geeks of the world celebrate Metric Day. (10-10 get it?!?) Join us for a round of Metric Olympics, an activity to celebrate the day with estimation, measurement, and metric calculations. Activities will be hands-on and feet-on.

2:00-2:50 Session: 104 Dakota E Feb. 3, 2007

Grade Level: 9-12

Speaker (s): Julie Olson

Mitchell HS

Title: Fitness-the Scientific Way

Use science to encourage students to be more fit. Labs and technology used. Hands-on!

2:00-3:50 Session: 105 Dakota F Feb. 3, 2007

Grade Level: 7-12

Speaker (s): Dianne Miller

SD Project Learning Tree Inc.

Title: Burning Issues

Attend this session and you will receive a DVD called Burning Issues offering over 14 hours of interactive media for teaching about ecosystems and fire ecology. Five "Ecoventures" include forest, prairie, urban and wildlife habitats. This DVD includes a photo glossary of mammals, plants, reptiles and more.

Saturday 3:00 pm

3:00-3:50 Session: 106 Pakota B Feb. 3, 2007

Grade Level: 7-12

Speaker (s): Jean Gomer

Deubrook Area Schools

Title: Reading in the Math

Classroom

It is time to "teach" reading instead of assign it in the math classroom. Several strategies for improving student comprehension of reading material will be shared.

Saturday

3:00 pm

3:00-3:50 Session: 107 Pakota D Feb. 3, 2007

Grade Level: 7-12

Speaker (s): Molly TenBroek

McIntosh HS

Title: Circuit Boards--Constructing Inexpensive But Durable Circuit Boards

The standards demand that we teach all students the basics of electricity. This presentation will show teachers how to build an inexpensive but very complete and durable circuit board for teaching the concepts of series and parallel circuits and Ohm's Law. I have used these with 7-12 graders

Saturday 3:00 pm

3:00-3:50 Session: 108 Peb. 3, 2007

Repeat of #5

Grade Level: K-2

Speaker (s): Marcy Farrand

Wilson Elementary-Rapid City

Title: Quickly and Easily Assess a Child's Working Number

This session will present a quick and easy way to find out where a primary child is while working with basic facts. Activities with little prep time or materials will be shown that help improve this newly found working number.

3:00-3:50 Session: 109 Dakota G Feb. 3, 2007

Grade Level: 6-12

Speaker (s): Ramona Lundberg

Deuel HS, Clear Lake

Title: Exploration of American Physiological Society's

Website

This session will provide an overview of the teacher-developed and teacher-friendly resources provided by the American Physiological Society. Special emphasis will be on the Web-based/hands-on Taste and Hearing units. Freebies provided.

4:15-- Session: 110 Board Room Feb. 3, 2007

Speaker (s): Joint Conference Board

Title: Joint Board Meeting