33rd

SD STEM Ed Conference

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

February 6, 7, & 8, 2025
Crossroads Hotel-Huron Event Center
Huron, SD

Sparking Curiosity, Fueling Motivation

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Map of Conference Rooms ..... **Back Cover**

Graduate Credit is available through BHSU-Dr. Deann Kertzman
Next year's conference will be **February 5, 6, & 7, 2026.**

Updated 2/5/2025

Banquet Speaker - Brett Moulding has spent his career as a science educator. In addition to 20 years of classroom experience, he has state-level administrative expertise and served as a member of the National Research Council's (NRC) Board on Science Education, National Assessment of Educational Progress Framework committee, NRC Framework for K-12 Science Education Committee, and Next Generation Science Standards writing team. He is also the co-author of Teaching Science is Phenomenal. Brett will be our keynote speaker at Friday evening's banquet and will be offering breakout sessions on motivating students to engage in discourse, summative science assessments, and more!

Dr. April Strom (she/her) is a mathematics professor at Chandler-Gilbert Community College in Arizona, where she has taught for over 26 years. April's passion for engaging students in active learning in mathematics, developing their conceptual understanding and sense-making abilities, and elevating the joy of learning mathematics shines through in all her work. April not only infuses Building Thinking Classroom practices into her own teaching, she also actively facilitates professional development in K-14 focused on BTC instructional practices. April's passion for teaching and love of mathematics is a perfect combination when working closely with mathematics teachers, leaders, and administrators at all levels.

Alyssa Weisenstein is an Earth & Space Science and Biology teacher who connects her loves of science and travel through curriculum design, NGSS storylines, professional development, and teacher travel through her brand, Teacher on a Trip! Alyssa loves designing science curriculum, using her travel as engaging phenomena for students. She also runs an excellent Facebook community where teachers can collaborate and ask NGSS-related questions. Check out her sessions on writing three-dimensional assessments and choosing meaningful phenomena, and give her a follow online!

Howie Hua is a math instructor at Fresno State where he teaches math to future elementary school teachers. He is on the journey to show students that everyone is a math person. In 2019, Howie was awarded Outstanding Lecturer for Fresno State's College of Science and Math and in 2024, he was awarded Fresno State's Provost Award for Outstanding Lecturer. He has given talks to organizations in 22 states and 4 countries and was the closing keynote speaker for NCTM's annual conference in 2024. One can find him on social media sharing math explainer videos, teaching tips, and math memes.

Sarah McAnulty, PhD, is a science communicator, squid biologist, and Executive Director of the nonprofit, Skype A Scientist! The mission of Skype a Scientist is simple, yet impactful: to make science accessible and fun through personal connections with scientists. You may remember Sarah McAnulty from SDSTA's Science Day Extravaganza in 2021, she ran a fun trivia session for us via Zoom. This year, she will have sessions on how to use Skype a Scientist, connecting real-world scientists with the students in your classroom, and more!

2025 SD STEM Ed Conference

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

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

Program

Thursday, February 6, 2025

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

Friday, February 7, 2025

7:00 AM - 4:20 PM	Registration Open	Pre-Function Area
8:00 AM - 5:00 PM	Exhibits Open	Pre-Function Area
8:00 AM – 8:30 AM	Opening Session & Keynote	Prairie A & B
8:30 AM - 11:20 AM	Morning Sessions	(See Program)
11:20 AM – 11:50 AM	Networking, Exhibitor	Exhibitor Hallway
11:50 AM - 12:50 PM	Friday Luncheon *(cost included in the registration fee - Taco Buffet)*	Prairie A, B, C
12:50 PM– 1:10 PM	Networking, Exhibitors	Exhibitor Hallway
1:10 PM - 4:20 PM	Afternoon Sessions	(See Program)
4:30 PM	SDSTA Business Meeting SDCTM Business Meeting	Dakota A Dakota E
5:30 PM-6:30 PM	Social Hour Sponsored by Imagine Learning - Thank you Chet Riddle	Pre-Function Area
6:30 PM	Friday Evening Banquet (Cost is $35 - *Stuffed pork chops {requires separate ticket})*	Prairie A, B, C

Saturday, February 3, 2025

7:00 AM - 11:20 AM	Registration Open	Pre-Function Area
7:00 AM - 8:00 AM	Breakfast Meeting Presidential Awardees (Past & Present)	Salon
8:00 AM - 10:50 AM	Morning Sessions	(See Program)
10:50 AM – 11:30 AM	Networking, Exhibitor	Exhibitor Hallway
11:30 AM - 12:30 PM	Saturday Luncheon *(cost included in the registration fee - Prime rib french dip)*	Prairie A, B, C
12:40 PM - 4:15 PM	Afternoon Sessions	(See Program)
4:30 PM	Joint SDCTM & SDSTA Executive Board Meeting	Prairie A & B

SD STEM Ed Conference 2025 Planner

Thursday, Feb. 6, 2025		
	First Choice	Second Choice
7:00 PM	Science Showcase Prairie B	Math PotLuck Prairie C

Friday, Feb. 7, 2025		
Remember to visit the exhibits in the Lobby and Hallways of the Crossroads Hotel.		
	First Choice	Second Choice
8:00 AM	Location: *Prairie B & C*	
	Title: *OPENING SESSION - Conference Welcome*	
8:30 AM	Location:	Location:
	Title:	Title:
9:30 AM	Location:	Location:
	Title:	Title:
10:30 AM	Location:	Location:
	Title:	Title:
11:50-12:50	**Friday Noon Luncheon in Crossroads Hotel – Prairie A, B, C**	
12:50-1:10	**Exhibitor Networking: Exhibitor**	
1:10 PM	Location:	Location:
	Title:	Title:
2:10 PM	Location:	Location:
	Title:	Title:
3:00 PM	**Exhibitor Networking: Exhibitor**	
3:30 PM	Location:	Location:
	Title:	Title:
4:30 PM	*SDSTA BUSINESS MEETING in Dakota A* *SDCTM BUSINESS MEETING in Dakota B*	
5:30	Social hour Sponsored by Imagine Learning - Thank you Chet Riddle	
6:30 PM	Friday Night Banquet in Prairie Ballrooms A, B, C ***Teachers Motivate Students to Learn*** (Banquet Tickets Required-Cost is $35) *Brett Moulding - speaker*	

Saturday, Feb. 8, 2025		
	First Choice	Second Choice
8:00 AM	Location:	Location:
	Title:	Title:
9:00 AM	Location:	Location:
	Title:	Title:
10:00 AM	Location:	Location:
	Title:	Title:
10:50 AM	**Exhibitor Networking**: Exhibitor Session	
11:30-12:30	**Saturday Noon Luncheon in Crossroads Hotel – Prairie A, B, C**	
12:40 PM	Location:	Location:
	Title:	Title:
1:40 PM	Location:	Location:
	Title:	Title:
2:40 PM	Location:	Location:
	Title:	Title:
3:30-4:15	Wrap-up and Reflect – Science in Dakota A	Wrap-up and Reflect – Math in Dakota B
4:30 PM	SDCTM & SDSTA JOINT BOARD MEETING in Prairie A & B	

Next Year's Conference February 5, 6 & 7, 2026

Presenter Materials

https://padlet.com/M_Bartels/2025-sd-stem-ed-conference-gr8lgfw1jlew

- Thursday 7:00 - 9:00 PM - Conference Kick Off -

Thursday, 7:00 PM **Science Showcase** **Prairie B**

SDSTA President Ally Bowers & President-Elect Leslie Sauder SDSTA

Bring an activity to share with colleagues that relates to your science classroom. Share your lesson by bringing copies to share or a link (or send an email to officers@SDSTA.org to post to their web). Pizza will be provided for those who attend!

Thursday, 7:00 PM **Math Potluck** **Prairie C**

SDCTM President Dan VanPeursem & President-Elect Sharon Vestal SDCTM

Network with other math teachers! Share your favorite activities and lessons! Swap teaching ideas! Sharing math teaching ideas will be the focus of this session. Bring 25 copies of your favorite activity to share. Leave with ideas from other great teachers. Pizza will be provided for those who attend!

Share the Classroom Treasures (free items)

Check the hall between the Salons and Prairie B & C

Available now till Saturday 2:40 PM

- Friday 7:00 AM -

Conference Onsite Registration Opens - Crossroads Lobby

- Friday 8:00 AM -

Conference Welcome for ALL

Friday, 8:00 AM **Prairie A, B, C**

Pres, Vice Pres, Registrar SD Public Schools

Opening Session – Conference Welcome for All

Pre-Service, Elementary, Middle School, High School, College **Math, Science, STEM**

Featured Speakers, SDCTM President Dan VanPeursem, SDSTA President Ally Bowers, and others will give you a Conference overview including, but not limited to introduction of Featured Speakers, Conference layout, and will answer any questions that arise.

- Breakout Sessions - Friday 8:30-9:20 AM -

Friday, 8:30 AM **Prairie A**

Denise Clemens, Landra Knodel, Seth Loofbourrow, Rise Jongeling and Quinnie Altura

BeeSTINGZ Curriculum

BeeSTINGZ Curriculum

Denise.Clemens@k12.sd.us Middle School, High School Science

A continuation of implementing and presenting a honey bee curriculum designed for middle school and high school science teachers. A free curriculum will be offered as a great resource for lesson plans, activities, and ideas!

Friday, 8:30 AM {Repeats on Saturday} **Prairie B**

Sarah McAnulty Featured Speaker Skype a Scientist

Squid on the Street: Using Art to Communicate Science

Sarahj.Mack@gmail.com Elementary, MS, HS, College, Pre-Service, Informal Science Education Science

Science education doesn't have to stop when students leave the classroom. Dr. Sarah McAnulty is a squid biologist, informal science educator, and street artist, using art as a way to reconnect people with science. She'll cover all the unconventional ways she engages people with marine biology using interactive art.

Friday, 8:30 AM **Prairie C**

Howie Hua Featured Speaker {Repeats on Saturday} Fresno State

Building Mathematical Confidence

howie820@mail.fresnostate.edu Middle School, High School, College, Pre-Service Math

As math teachers, a big part of our role is to help students see that they CAN do math. In this talk, I will share how I have helped build mathematical confidence in students in one course.

Friday, 8:30 AM **Dakota A**

Spencer Cody Edmunds Central School District

Totally Eclipsed: Space Science Content and Career Interest Activation Project

Spencer.Cody@k12.sd.us Elementary, Middle School, High School, College Interdisciplinary

Our proposal sought to inspire students to pursue future careers in space science, aerospace, and other STEM-related careers while informing staff on space science concepts and career opportunities taking advantage of the excitement surrounding the eclipse back in April thanks to generous support from the Kelly Lane Earth and Space Science grant.

At 4:30, both SDCTM and SDSTA will have their Business Meetings. Every member is invited to attend. This year is an election year for SDCTM. SDSTA will be in Dakota A and SDCTM will be in Dakota B. The social hour begins as the meetings end. The Banquet begins at 6:30 PM.

********** **Mini Session** **********

Friday, 8:30 AM **Dakota B**

Jeff Sebern, Malachi Nelson — Black Hills Special Services Cooperative

Robotics and Programming in Out-of-School Time

JSebern@bhssc.org; MNelson@bhssc.org — Elementary — STEM

Robotics and basic computer programming skills will be used to explore modules developed by BHSSC for out-of-school time programs. These activities are part of a robust STEM program designed to fill a content gap in South Dakota elementary schools by extending learning opportunities to the after-school environment.

Friday, 8:30 AM {Repeats on Saturday} **Dakota B**

Nicole Mehlhaff — Yankton Middle School

Coaching Science Olympiad

Nicole.Mehlhaff@k12.sd.us — Middle School, High School — Science, STEM

What is Science Olympiad, how to get a team started, what practice looks like, and any questions you might have. This is all from a coach's perspective.

Friday, 8:30 AM {Repeats on Saturday} **Dakota B**

Bree Oatman

Teacher Expeditions: Adventures in Antarctica

Bree.Oatman@lowerbruleschools.org — Elementary, Middle School, High School — Science, Math, STEM

Learn about the National Geographic Grosvenor Teacher Fellowship Program and explore how a teacher expedition can enhance your teaching.

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Friday, 8:30 AM **Dakota C**

Ashley Armstrong, Chad Ronish — Sanford Underground Research Facility

Illuminating the Invisible: Using SEPs & 3-Dimensional Instruction to Unravel the Mysteries of Dark Matter & Neutrinos

AArmstrong@sanfordlab.org; CRonish@sanfordlab.org — Middle School, High School — Science

How do scientists study phenomena like dark matter and neutrinos, which can't be directly observed? Learn how to bring this cutting-edge research into your classroom using sensemaking and SEPs, with strategies to help students explore the unseen through observable evidence and inquiry.

Friday, 8:30 AM **Dakota E**

Cindy Kroon — SDCTM

Family Math: Something Great

Cindy.Kroon@k12.sd.us — Elementary — Math

Explore a set of take-home activities designed to help families with young children discover the fun and engaging side of mathematics. Family math is not: flash cards, worksheets, or math homework. Family math is: puzzles, games, and engaging activities. Play around with math in a family-friendly environment and (hopefully) change perceptions about math. This session is hands-on! New activities every year! (Grades K-5)

Friday, 8:30 AM **Dakota F**

Sandra Shipley, Alisa Costello — Bison School

Using Modeling Clay & Salt Dough for Science

Sandra.Shipley@k12.sd.us Elementary, Middle School Science, Interdisciplinary, STEAM, Social Studies Geography

Break out your modeling clay for lessons in Second through Eighth grades. Use modeling clay to model animal families or use it to demonstrate earth layers. Salt dough is another tool to create landforms and volcanoes in a cross-curricular geography project. Hear about how students celebrate what they know with "mall walks".

Friday, 8:30 AM **Dakota G**

Betsy Schamber — Dakota State University

AI as Your EA: Using AI to Support You in Your Classroom

Betsy.Schamber@dsu.edu Elementary, MS, HS, College, Pre-Service Science, Math, STEM, Interdisciplinary, CTE

This session will show a variety of AI tools and their potential classroom uses. The presentation will highlight various ways to use AI for differentiation, assessment, lesson planning, personalization, and fun. This will be an interactive session where participants will be encouraged to try each tool and align it to their classroom needs.

Friday, 8:30 AM **Symposium**

Chad Hohwieler — Dakota Lions Sight & Health

Achieving Immortality

CHohwieler@dakotasight.org Middle School, High School, College Science

Everyone has the opportunity to achieve immortality - young and old alike. All it takes is a simple check mark and a conversation with your loved ones. It really is that simple! The good in you can live on simply by agreeing to be an organ, eye, and tissue donor. During the presentation I will highlight several donation stories and break down how much of the human body can be recovered and shared with someone else. It is truly amazing. I will also explain how donation and research work together, resulting in health-related breakthroughs all around the world.

Friday, 8:30 AM **Salon 1 & 2**

Crystal McMachen, Shannon Bren — Southwest Middle School

Student Engagement in the Middle School Classroom

Crystal.McMachen@k12.sd.us; Shannon.Bren@k12.sd.us Middle School Science

Getting middle school students to actively engage in the middle school math classroom can be tricky. Come learn and experience some easy to implement student engagement strategies that we have learned over the years. These are things you can learn about today and try on Monday.

Order & pay for Conference swag (shirts, bags, cups &/or cap) by January 26 for no shipping charge when you pick-up your order at the conference. Available with SD STEM Ed, SDCTM or SDSTA logo. Check SDCTM.org or SDSTA.org -or- https://https-sungoldsports-com.printavo.com/merch/sd-stem-2025/

- Breakout Sessions - Friday 9:30-10:20 AM -

Friday, 9:30 AM **Prairie A**

Shalese Stroup ExploreLearning

Enhancing STEM Education: Using out of this world 🚀 Literacy Skills with Gizmos

Shalese.Stroup@explorelearning.com Elementary Science

Infuse Literacy skills into scientific and mathematical instruction using Gizmos. Learn about how changes to the environment can impact different organisms. Using the scientific method, control the environmental conditions for an alien in order to learn how organisms respond to changes in conditions. 👽 SDDOE Science Educators have full free access to ExploreLearning Gizmos

Friday, 9:30 AM {Repeats on Saturday} **Prairie B**

Sarah McAnulty Featured Speaker Skype a Scientist

Bring Scientists into Your Classroom Virtually!

Sarahj.Mack@gmail.com Elementary, Middle School, High School Science

Join us for a practical walkthrough of using the free science program, Skype a Scientist. This program will match your classroom with a scientist for virtual Q&A sessions. In this session, we'll talk about how to get the most out of our program!

Friday, 9:30 AM {Repeats on Saturday} **Prairie C**

Howie Hua Featured Speaker Fresno State

My Favorite Math Tricks

howie820@mail.fresnostate.edu MS, HS Math

Math tricks are fun, but they should also be understandable. Here are my favorite math tricks and why they work. These will surely impress your students!

Friday, 9:30 AM **Dakota A**

Lisa Weier South Dakota Education Association

Magic School: AI 101

Lisa.Weier@sdea.org Elementary, Middle School Science, Math, STEM, Interdisciplinary, CTE

Join our breakout session designed for teachers new to using AI in the classroom. We'll cover the basics of using the Magic School AI tools, demonstrate practical applications for enhancing student learning, and provide hands-on activities to help you confidently integrate AI into your teaching practices at the student level and professional level.
****Please bring your electronic device to dive into the AI platform.**

Friday, 9:30 AM **Dakota B**

Cody Welu, Jenny Schulte — Dakota State University

Engaging STEM Learning: Micro:bit in the K-12 Classroom

Cody.Welu@dsu.edu; Jennifer.Schulte@dsu.edu Elementary, MS, HS STEM, Computer Science

This session explores how to integrate Micro:bits into K-12 classrooms to enhance STEM learning and provide an interactive outlet for coding activities. Attendees will learn about Micro:bit's capabilities, its benefits for student engagement, and practical classroom applications. The presentation will provide resources for teachers to incorporate Micro:bits into their curriculum.

Friday, 9:30 AM **Dakota C**

Chad Ronish — Sanford Underground Research Facility

K-12 Strategies to Facilitate Student Engagement in Science

CRonish@sanfordlab.org Elementary, Middle School, High School Science, STEM, Interdisciplinary

In this 1 hour workshop, participants will experience talking strategies and pedagogy that will provide access to the classroom learning environment for all students. Participants will leave with resources and skills that can be used all year in their classroom.

Friday, 9:30 AM **Dakota F**

Kara Schweitzer, Janeen Outka and Andrea Effling — SD Dept of Education, Teachwell and DOE

Free ACT Test Prep for all Students

Kara.Schweitzer@state.sd.us; Janeen.Outka@teachwell.org; Andrea.Effling@state.sd.us HS Science, Math, STEM

Are you preparing ALL your students for ACT success? Discover (or rediscover) Methodize, a free, online ACT preparation program currently available to all SD High School students. No new software platforms, no new logins, no materials or devices to purchase! Experience ACT prep activities ranging from 10 minutes to full-length subtests that provide instruction and IMMEDIATE feedback to students. Learn how Methodize can be incorporated into core content classes, stand-alone ACT prep programs, or individual instruction. It also highlights strategies for students taking the ACT the first time and those who are preparing for second or even third attempts.

Friday, 9:30 AM **Dakota G**

Kristine Heinen — South Dakota Discovery Center

Bring Your Students the Universe!

KristineHeinen@sd-discovery.org Elementary, Middle School, High School Science, STEM

Forget the flat screen, bring immiscible experiences to your students with the South Dakota Discovery Center's Journey Beyond the Known traveling planetarium. From how stars are formed to stories told around the world, together we can explore cosmic knowledge and understanding. This session gives you a glimpse into the possibilities.

Visit with Conference Exhibitors to be qualified to win valuable prizes at the noon meals and throughout the days.

Friday, 9:30 AM **Symposium**

Kelly Coates Douglas School District

Making Tests Meaningful

Kelly.Coates@k12.sd.us Middle School, High School Math

The session presents an idea for the day after test day to make test information meaningful for students, get them to take ownership of their learning, and provide differentiated, individualized activities to engage students.

Friday, 9:30 AM **Salon 1 & 2**

Benjamin Benson, Sadia Risse CSTA-SD; Bennett County Middle School

CSTA-SD Meet and Greet

Benjamin.Benson@sanfordhealth.org; Sadia.Risse@k12.sd.us

Elementary, Middle School, High School, College, Pre-Service, Administrative, Computer Science Science, Math, STEM, Interdisciplinary, CTE, Computer Science

Attend this session to meet some of the leadership of CSTA-SD and learn how you can get involved in activities to improve computer science education in the State of South Dakota. We will have a quick brief on the K-8 computer science standards and you can learn about some additional projects our members have been working on.

- Breakout Sessions - Friday 10:30-11:20 AM -

Friday, 10:30 AM **Dakota A**

Alyssa Weisenstein Featured Speaker Teacher on a Trip

Flipping Labs & Demos to Student-Driven Activities

teacheronatrip@gmail.com Middle School, High School Science

Don't completely reinvent the wheel - no one has time for that! Those "cookbook" labs and teacher demos you've worked hard to implement can be tweaked for student-driven learning. Follow a step-by-step method to revitalize traditional labs into rigorous, inquiry-based experiences. Pick a lab to "flip" and we'll get started together.

Friday, 10:30 AM **Dakota B**

Anne Lewis, Saikat Basu, Carrie Olson-Manning, Christopher Anderson

South Dakota Discovery Center, SDSU, Augustana University, USD

South Dakota Research Connections

AnneLewis@sd-discovery.org; Saikat.Basu@sdstate.edu; Carrie.Olsonmanning@augie.edu; Christopher.V.Anders@usd.edu

Elementary, Middle School, High School Science, Math

As a science or math teacher, you are an important part of the broader research "ecosystem." Learn about research happening here in South Dakota and how you can become involved through lightning talks by researchers. You will hear about the fluid dynamics of the respiratory system from Dr. Saikat Basu (SDSU), chameleon tongues from Dr. Christopher Anderson (USD) and species hybridization studied through milkweed from Dr. Carrie Olson-Manning (Augustana). All science areas are welcome. Each researcher offers more opportunities to become involved. The only requirement is curiosity!

Friday, 10:30 AM **Dakota C**

Raegan Kleinpeter South Dakota Discovery Center

Bring Exploration to Your Classroom

Science, Math, STEM, Interdisciplinary

RaeganKleinpeter@sd-discovery.org Elementary, Middle School, High School, Informal Education Staff

South Dakota Discovery Center presents an in-state resource for easy hands-on STEM exploration! Join this session for a demonstration of these flexible, curriculum enhancing resources that cover a variety of topics and grade levels.

Friday, 10:30 AM {Repeats on Saturday} **Dakota E**

Tasha Pravecek Todd County High School

Energizing Classrooms: Hands-on Models for Teaching Wind and Solar Power

Tasha.Pravecek@k12.sd.us Elementary, Middle School Science, Math, STEM, CTE

This workshop will introduce teachers to www.KidWind.org wind and solar energy curriculum, materials and instruments to teach wind/solar to 4th-12th grade students. KidWind will be providing FREE kits to those who attend the workshop ($79 value). Learn about teaching wind and solar energy and/or participating in the 2nd annual SD State Wind Competition, 7 March.

Friday, 10:30 AM {Repeats this afternoon} **Dakota F**

Jeff Sebern, Malachi Nelson Black Hills Special Services Cooperative

STEM in Afterschool: A Success Story

JSebern@bhssc.org MNelson@bhssc.org Elementary, Middle School Science, STEM

High-quality STEM experiences are offered after school through a collaborative approach between experienced teachers and Discovery Center staff in Rapid City Area Schools. They provide curriculum and support on early-release Fridays, bridging the gap between school and afterschool, and enhancing STEM education for elementary and middle school students.

Friday, 10:30 AM **Dakota G**

Mark Kreie, Colin Marsh Brookings High School, South Dakota State University

An Introduction to "Building Thinking Classrooms"

Mark.Kreie@k12.sd.us; Colin.Marsh@jacks.sdstate.edu Middle School, High School Math

Peter Liljedahl's research and book "Building Thinking Classrooms" is one of the hottest topics in mathematics education. Come learn about the fundamental pillars of "Building Thinking Classrooms" and the first steps you can take to build your classroom into a "thinking" classroom.

Friday, 10:30 AM **Symposium**

James Stearns, Larry Browning & Darwin Daugaard SD - AAPT

SD - AAPT Business Meeting & Photo Contest

James.Stearns@k12.sd.us; Larry.Browning@SDstate.edu; DDaugaard@ogknights.org HS, College Science

This is the annual meeting of the SD Section of the American Association of Physics Teachers (SD AAPT). The group will share experiences and classroom activities, and seek answers to questions and problems. Everyone is welcome to attend & bring their physics & physical science questions. Final voting on the Physics Photo Contest will take place.

Friday, 10:30 AM {Repeats on Friday afternoon} **Salon 1 & 2**

Brett Moulding Featured Speaker Partnership for Effective Science Teaching & Learning

Effective Use of Science Performance Tasks in Summative Assessments for Grades 3-12 *BrettdMoulding@gmail.com* Elementary, Middle School, High School Science, STEM

Three-dimensional assessment tasks provide an effective way to evaluate student learning. This session provides a pool of quality summative assessment tasks aligned to the South Dakota science standards and tools and strategies to build additional assessment tasks. The crosscutting concepts' role in focusing on performance tasks is modeled.

- Friday 11:20-11:50 AM -

Friday, 11:20 AM **Networking and Visit with the Exhibitors** **Exhibitor Hallway**

Conference attendees have the opportunity to network with each other and visit with Exhibitors and enter door prize drawings. Exhibitors have color coded tickets for drawings. These tickets will be given out in the exhibition hallway at the discretion of the exhibitors. Keep one half and place the other in the drawing buckets at the registration table. The more booths you visit, the better your chances to win a prize! Drawings for this session will be held during Friday lunch and you must be present to win.

LUNCH - Friday 11:50 AM-12:50 PM - Prairie A, B & C

Come for a meal, awards, recognitions, and raffle with swag from vendors and other amazing organizations! Hosted by the Presidents of SDCTM & SDSTA. Awards to be presented include Outstanding Biology Teacher, Outstanding Mathematics Teacher, Outstanding Physical Science Teacher, Outstanding Earth & Space Science Teacher, Outstanding Elementary STEM Teacher, Daniel Swets Robotics Materials Award and Kelly Lane Earth & Space Science Grants.

- Friday 12:50-1:10 PM -

Friday, 12:50 PM **Networking and Visit with the Exhibitors** **Exhibitor Hallway**

Conference attendees have the opportunity to network and visit with Exhibitors and enter door prize drawings. Exhibitors have color coded tickets for drawings. These tickets will be given out in the exhibition hallway at the discretion of the exhibitors. Keep one half and place the other in the drawing buckets at the registration table. The more booths you visit, the better your chances to win a prize! Drawings for this session will be held during the social hour and you must be present to win. Drawings will be posted around the Registration Table & winners may claim before they go to the Banquet.

- Breakout Sessions - Friday 1:10-2:00 PM -

Friday, 1:10 PM **Dakota A**

Brett Moulding Featured Speaker Partnership for Effective Science Teaching and Learning

Motivating Students to Read, Write, and Engage in Discourse

BrettdMoulding@gmail.com Elementary, Middle School Science, Interdisciplinary

Meaningful integration of science and language arts is essential to effective elementary science instruction. Well-designed hands-on scientific investigation can motivate students to read, write, and engage in academic discourse. This session provides science investigations for each South Dakota Science Standard K-5 and the integration with language arts.

Friday, 1:10 PM **Dakota B**

April Strom Featured Speaker Chandler-Gilbert Community College

Experiencing Building Thinking Classrooms through Non-Curricular Tasks (Part 1)

April.Strom@cgc.edu Middle School, High School, College Math

Engaging students in actively learning mathematics can be a challenging endeavor! Getting students excited about learning mathematics is equally challenging! Let's amp up our teaching with high-impact practices that support the building of a "thinking classroom". This is part 1 of 2 sessions.

Friday, 1:10 PM **Dakota C**

Ann Anderson, Allen Hogie PAEMST Science, PAEMST Math

Showcase Your Teaching Practice and Win Money

Ann.M.Anderson@k12.sd.us; Allen.Hogie@k12.sd.us

Elementary, Middle School, High School Science, Math, STEM, Interdisciplinary, CTE

Would you like to receive $10,000 for showcasing your teaching practice? Join us for an informational session on the Presidential Award for Excellence in Math and Science Teaching sponsored by the White House and National Science Foundation. South Dakota can give two awards, one in mathematics and one in science.

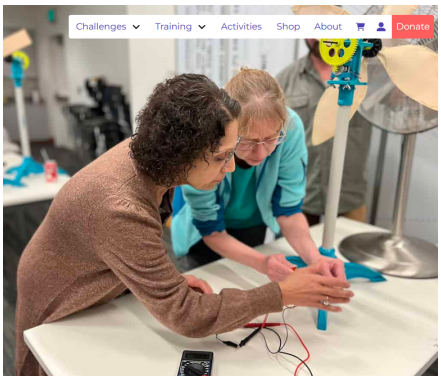
Friday, 1:10 PM **Dakota E**

Tasha Pravecek Todd County High School

South Dakota Wind and Solar Competition!

Tasha.Pravecek@k12.sd.us MS, HS Science, Math, STEM, CTE

This workshop will introduce teachers to www.KidWind.org wind and solar energy curriculum, materials and instruments to teach wind/solar to 4th-12th grade students. KidWind will be providing FREE kits to those who attend the workshop ($79 value). Learn about teaching wind and solar energy and/or participating in the 2nd annual SD State Wind Competition, 7 March.



Friday, 1:10 PM **Dakota F**

Nathaniel Raak — Mitchell Technical College

Squirrel Sabotage

Nathaniel.Raak@mitchelltech.edu — High School — Science, Math

An estimated 25% of power outages in the US are caused by squirrels. In this session, we will cover how, providing simple practical math applications involving electricity that can be used in your classrooms.

Friday, 1:10 PM **Dakota G**

Larry Browning, Steve Wignall — SDSU & Nebraska Center for Materials and Nanoscience

Feel the Force – Just don't touch!

Larry.Browning@sdstate.edu; SWignall4@unl.edu — High School, College — Science

Steve and Larry are exploring ways to demonstrate the electric field in the air around plasma balls, coils of wire, Van de Graaff generators, etc. The response of different colors of LEDs illustrates the energy contained in a quantum of light and how blue light has more energy than red.

Friday, 1:10 PM **Symposium**

Kara Schweitzer, Janeen Outka and Andrea Effling

South Dakota Department of Education, Teachwell and DOE

Free ACT Test Prep for all Students

High School — Science, Math, STEM

Kara.Schweitzer@state.sd.us; Janeen.Outka@teachwell.org; Andrea.Effling@state.sd.us

Are you preparing ALL your students for ACT success? Discover (or rediscover) Methodize, a free, online ACT preparation program currently available to all SD High School students. No new software platforms, no new logins, no materials or devices to purchase! Experience ACT prep activities ranging from 10 minutes to full-length subtests that provide instruction and IMMEDIATE feedback to students. Learn how Methodize can be incorporated into core content classes, stand-alone ACT prep programs, or individual instruction. It also highlights strategies for students taking the ACT the first time and those who are preparing for second or even third attempts.

Friday, 1:10 PM **Salon 1 & 2**

Katrina Donovan — South Dakota Mines - Materials and Metallurgical Engineering

Art + Engineering: Materials, Metal Clay, and More!

Katrina.Donovan@sdsmt.edu — ***sites.google.com/sdsmt.edu/art-and-engineering/home***

Middle School, High School, College — **Science, STEM, Interdisciplinary, Creativity, Entrepreneurial**

Kinesthetic learning is an important skill to have as an engineer or artist. Attendees will manipulate the metal clay while learning about the material's properties and how to integrate similar modules into a classroom setting, and they will have the opportunity to leave the conference with metallic art.

Thank You to all Speakers for your dedication to math & science education.
Thank you to all exhibitors for your enthusiastic participation!

- Breakout Sessions - Friday 2:10-3:00 PM -

Friday, 2:10 PM **Prairie A**

Chad Hohwieler — Dakota Lions Sight & Health

Achieving Immortality

CHohwieler@dakotasight.org — Middle School, High School, College — Science

Everyone has the opportunity to achieve immortality - young and old alike. All it takes is a simple check mark and a conversation with your loved ones. It really is that simple! The good in you can live on simply by agreeing to be an organ, eye, and tissue donor.

Friday, 2:10 PM **Prairie B**

Li Sun — Augustana University

Math and Science in Action: Building a Healthier Planet

LSun@augie.edu — Elementary — Science, Math, Interdisciplinary

Engage in memorable, hands-on activities that integrate elementary math with age-appropriate life and earth sciences to learn more about our environment. Build students' skills in working with fractions, ratios, large numbers, growth patterns, measurement, and graphing using real-world data. Receive standards-aligned lessons and background materials.

Friday, 2:10 PM **Prairie C**

Carrie Cox, Ally Bowers-SDSTA President, Ashley Armstrong-SDSTA Past President

Udderly Engaging Science: Mini Workshop (Part 1)

wblindert@midwestdairy.com Whitney Blindert- Midwest Dairy — Middle School, High School — Science, STEM

Join the South Dakota Science Teaching Association and Midwest Dairy for a mini workshop based on highlights from our professional development workshop this past summer. Expect hands-on learning activities where you walk in your students' shoes as we review portions of full units of instruction and assessment opportunities that align with Next Generation Science Standards. The resources are designed for high school life and earth science courses and use agriculture concepts as the mode of student engagement. Elevate your teaching, inspire your students, and enrich your curriculum with real-world agricultural phenomena centering on dairy production, sustainability, and nutrition.

Friday, 2:10 PM **Dakota A**

Brett Moulding — Featured Speaker — Partnership for Effective Science Teaching and Learning

Effective Use of Science Performance Tasks in Summative Assessments for Grades 3-12

BrettdMoulding@gmail.com — Elementary, Middle School, High School — Science, STEM

Three-dimensional assessment tasks provide an effective way to evaluate student learning. This session provides a pool of quality summative assessment tasks aligned to the South Dakota science standards and tools and strategies to build additional assessment tasks. The crosscutting concepts' role in focusing on performance tasks is modeled.

Friday, 2:10 PM **Dakota B**

April Strom Featured Speaker Chandler-Gilbert Community College

Experiencing Building Thinking Classrooms through Non-Curricular Tasks (Part 2)

April.Strom@cgc.edu Middle School, High School, College Math

Engaging students in actively learning mathematics can be a challenging endeavor! Getting students excited about learning mathematics is equally challenging! Let's amp up our teaching with high-impact practices that support the building of a "thinking classroom". This is part 2 of 2 sessions.

Friday, 2:10 PM **Dakota C**

Steve Gabriel Spearfish High School

Sanford Underground Environmental Monitoring (Introduction)

SGabriel@spearfish.k12.sd.us High School, College, Pre-Service, Administrative Science, STEM, CTE

Twelve years of underground environmental monitoring at the Sanford Underground Research Facility.

Friday, 2:10 PM **Dakota E**

Matt Miller South Dakota State University

Waste Disposal of TYPICAL Chemical Waste in the Classroom

Matt.Miller@sdstate.edu

Elementary, Middle School, High School, College, Pre-Service, Administrative Science, STEM

Science teachers often use exciting activities with a variety of chemicals. Have we thought carefully about the disposal of our materials? This session will be a hands-on activity to allow for practice in appropriate disposal techniques. Please bring questions about your waste disposal issues.

Friday, 2:10 PM **Dakota F**

Cassie Soeffing Institute for Global Environmental Strategies

Community Climate Chronicles

Cassie_Soeffing@strategies.org Middle School, High School Science, Interdisciplinary

Come learn about a research framework that explores local environmental change using GLOBE and remote sensing data.

Friday, 2:10 PM **Dakota G**

Larry Browning South Dakota State University

Making Math Meaningful with Coding

Larry.Browning@sdstate.edu High School, College Science, Math, STEM, Computer Science

Using MS Excel and Python you can provide a unique perspective on mathematical modeling. VPython, for example, will allow anyone to build 3-D simulations of motion. Bring your device and we will get started using this method by applying it to the kinematic equations of motion.

Friday, 2:10 PM **Symposium**

Michelle Crane Douglas High School

Full S.T.E.A.M.: Meaningful Art Integration in the Secondary Science Classroom

Michelle.Crane@k12.sd.us High School Science, Interdisciplinary

Students get hooked on developing a deeper understanding of fundamental concepts when they are provided a bridge between science and creative endeavors. Attend this session on how we integrated the materials engineering of ceramic glaze formulation into the high school chemistry classroom and found a honey pot of possibilities.

Friday, 2:10 PM **Salon 1 & 2**

Katrina J. Donovan South Dakota Mines - Materials and Metallurgical Engineering

STEM Materials Science Kits

Katrina.Donovan@sdsmt.edu *sites.google.com/sdsmt.edu/art-and-engineering/home*

Middle School, High School, College **Science, Math, STEM**

Seven hands-on modules for attendees to experience. The attendees will learn about Glass Fibers, Magic Color Beads and UV Light, Silly Putty Science, Shape Memory Alloy, Fiber Optics, Heated Aluminum Nails, and Fluorescence. Attendees will learn how to apply for their own free materials stem kits and materials stipends for their classroom.

Friday, 3:00 PM **- - Friday 3:00 PM-3:30 PM - -** **Exhibitor Hallway**

Networking and Visit with the Exhibitors

Drawings for this session will be held during the social hour and you must be present to win. Drawings will be posted around the Registration Table & winners may claim before they go to the Banquet.

At 4:30, both SDCTM and SDSTA will have their annual business meetings. Every member is invited to attend. This is an election year for SDCTM. SDSTA will be meeting in Dakota A and SDCTM will be meeting in Dakota B. The Social Hour begins as the meetings end. The Banquet begins at 6:30.

- Breakout Sessions - Friday 3:30-4:20 PM -

Friday, 3:30 PM **Prairie A**

Alyssa Weisenstein Featured Speaker Teacher on a Trip

Managing Students' Questions in Phenomenon-Based Learning

teacheronatrip@gmail.com High School Science

You've presented the phenomenon, and now students are asking lots of questions — what's next? In this interactive workshop, you'll explore an activity that helps students organize, edit, and prioritize their driving questions. And of course, you'll take the resource home with you!

Friday, 3:30 PM **Prairie B**

Li Sun Augustana University

Embodied Learning in Elementary Education

LSun@augie.edu Elementary Math

Elementary mathematics lays the foundation for children's numerical literacy and problem-solving skills. Embodied learning as a dynamic tool can help educators make mathematical concepts more tangible, relatable, and enjoyable.

Friday, 3:30 PM **Prairie C**

Carrie Cox, Ally Bowers-SDSTA President, Ashley Armstrong-SDSTA Past President

Udderly Engaging Science: Mini Workshop (Part 2)

wblindert@midwestdairy.com Whitney Blindert- Midwest Dairy Middle School, High School Science, STEM

Join the South Dakota Science Teaching Association and Midwest Dairy for a mini workshop based on highlights from our professional development workshop this past summer. Expect hands-on learning activities where you walk in your students' shoes as we review portions of full units of instruction and assessment opportunities that align with Next Generation Science Standards. The resources are designed for high school life and earth science courses and use agriculture concepts as the mode of student engagement. Elevate your teaching, inspire your students, and enrich your curriculum with real-world agricultural phenomena centering on dairy production, sustainability, and nutrition.

Friday, 3:30 PM **Dakota A**

Brett Moulding Featured Speaker Partnership for Effective Science Teaching and Learning

Using the Gather, Reason, and Communicate Reasoning Instructional Sequence for 5-12 teachers

BrettdMoulding@gmail.com Elementary, Middle School, High School, Pre-Service Science, STEM

The instructional sequence is a critical component of effective science teaching and learning. This session shares the Gather, Reason, and Communicate Reasoning (GRC) instructional sequence and a set of over 400 scientific investigations in standard lesson form with participants. The GRC is a science-specific adaptation of the 5E Instructional Sequence.

Friday, 3:30 PM {Repeats on Saturday} **Dakota B**

April Strom Featured Speaker Chandler-Gilbert Community College

Drop It Like It's Hot: A Thinking Task on Temperature

April.Strom@cgc.edu Middle School, High School, College Math

Come experience a building thinking classroom lesson – from launch to landing – that introduces an important big mathematical idea from the middle grades, but can also be extended into high school mathematics (and beyond)!

Thank You Exhibitors
for all the prizes donated
for the conference attendees!

Friday, 3:30 PM **Dakota C**

Cassie Soeffing Institute for Global Environmental Strategies

Community Climate Chronicles

Cassie_Soeffing@strategies.org Middle School, High School Science, Interdisciplinary

Come learn about a research framework that explores local environmental change using GLOBE and remote sensing data.

Friday, 3:30 PM **Dakota E**

Matt Miller South Dakota State University

RAMP: An American Chemical Society Approach to Safety in the Classroom

Matt.Miller@sdstate.edu

Elementary, Middle School, High School, College, Pre-Service, Administrative Science, STEM

All science teachers have the responsibility to ensure the safety of our students. This presentation is an overview of numerous issues of safety for a teacher including equipment failures, chemical exposure and laboratory activities. RAMP as a model for safety is introduced in this session.

Friday, 3:30 PM **Dakota F**

Jeff Sebern, Malachi Nelson Black Hills Special Services Cooperative

STEM in Afterschool: A Success Story

JSebern@bhssc.org; MNelson@bhssc.org Elementary, Middle School Science, STEM

High-quality STEM experiences are offered after school through a collaborative approach between experienced teachers and Discovery Center staff in Rapid City Area Schools. They provide curriculum and support on early-release Fridays, bridging the gap between school and afterschool, and enhancing STEM education for elementary and middle school students.

Friday, 3:30 PM **Dakota G**

Larry Browning, Rachel Scheet SDSU, University of Nebraska State Museum

Resources from Nebraska

Larry.Browning@sdstate.edu; RScheet2@unl.edu Middle School, High School Science

The University of Nebraska State Museum in Lincoln, NE, has many resources for educators. Rachel will guide participants through several science kits and Virtual Learning Programs that can be obtained for a small fee from the museum. Larry will have sample kits, while Rachel will explain from Lincoln.

Friday, 3:30 PM **Salon**

Julie Olson Dakota Wesleyan University

Using Yeast Spheres to Examine Respiration and Enzyme Action

Julie.Olson@dwu.edu High School, College Science

Attendees will learn how to make yeast spheres with sodium alginate. They will then use them to perform experiments on respiration and enzyme action.

Friday, 3:30 PM **Symposium**

Bev DeVore-Wedding NSTA

Indigenizing your Curriculum

bdevorewedding@gmail.com All Grade Levels All Content Areas

Indigenized curriculum that connects students to their cultural background and course content and includes Indigenous examples increases student engagement. But the Indigenized curriculum only scratches the surface. Using Indigenous pedagogy for instruction provides a richer, deeper learning experience for all students. These teaching strategies create a positive environment for learning and encourage students to share their histories related to the course content. This talk will focus on Indigenized pedagogy in secondary science courses but the strategies can be applied in any content area and grade level.

- Business Meetings, Social & Banquet -

Friday, 4:30 PM Dakota A

SDSTA SDSTA.org

Business Meeting

All members or interested members of the SD Science Teaching Association are invited to attend. This is the annual SDSTA business meeting and all members are eligible to attend.

Friday, 4:30 PM Dakota B

SDCTM SDCTM.org

Business Meeting

All members or interested members of the SD Council of Teachers of Mathematics are invited to attend this discussion about our organization and the state of Mathematics Education in South Dakota and across the country. This is the annual SDCTM business meeting and all members are eligible to attend and vote - this is an election year.

Saturday is Nerd T-shirt day or support your team day. Enjoy!

Friday 5:30-6:30 PM Lobby

Networking Social

Make new friends and renew old friendships! Join your colleagues for pre-banquet refreshments and professional networking.

Thank you Imagine Learning & Chet Riddle for sponsoring this.

Friday, 6:30 PM **SD STEM Ed Awards Banquet** **Prairie A, B & C**

Featured Speaker: Brett Moulding

Teachers Motivate Students to Learn

Session Description: Brett will be offering ways to motivate students to engage in discourse, summative assessments, and more!

PROMISE
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Education and Outreach

Sign up for our newsletter in the QR code below

About Us

Sanford PROMISE provides STEM education and outreach for Sanford Research. We're working to inspire the next generation of scientists, problem solvers, and thinkers. Have students interested in science? Have them sign up for the newsletter to stay up to date on all our academic year and summer programming.

Lesson Plans
Visit our website to find lesson plans, videos, printables and blogs as resources for your classroom.

Community Lab
Request a visit to our Community Lab or our educators can come visit your classroom.

Equipment Lending Library
Put real-world science equipment in the hands of your students.

Professional Development
Learn cutting-edge science techniques and concepts to share with your students.

Mailbox : SanfordOutreach@sanfordhealth.org
Website: promise.sanfordhealth.org

SOUTH DAKOTA Game, Fish & Parks

OUTDOOR CAMPUS

SIOUX FALLS, SOUTH DAKOTA

Share the Classroom Treasures (free items)

Check the hall between the Salons and Prairie B & C

Available now till Saturday 2:40 PM

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- Breakfast Meetings - Saturday 7:00-7:50 AM -

Saturday, 7:00 AM **Prairie A**

Ashley Armstrong, Julie Dahl, Chad Ronish, Nicol Reiner Sanford Underground Research Facility

Rise & Shine with SURF

AArmstrong@sanfordlab.org; JDahl@sanfordlab.org; CRonish@sanfordlab.org; NReiner@sanfordlab.org Elementary, MS, HS, College, Pre-Service, Administrative Science, Math, STEM, Interdisciplinary, CTE

Join us for a morning of great company and science! Whether you've experienced our presentations, field trips, curriculum, or professional development, we want to celebrate YOU! Bring your hotel breakfast {Crossroads breakfast is included only for persons registered at the hotel}, then swing by for coffee as we connect and share SURF stories. Scan the QR code to register – registration is required!

Saturday, 7:00 AM **Prairie C**

Allen Hogie, Ann Anderson
Brandon Valley HS, Belle Fourche MS

Breakfast for SD PAEMST State Level Finalists and Past Awardees

Allen.Hogie@k12.sd.us; Ann.M.Anderson@k12.sd.us
Elementary, Middle School, High School
Science, Math

A breakfast honoring 2021 - 2024 State Level Finalists & all Past Awardees.

- Breakout Sessions - Saturday 8:00-8:50 AM -

Saturday, 8:00 AM **Prairie A**

Kristen Gonsoir, Brittany Hubbart — Groton Area High School

South Dakota's First Educational SynDaver

Kristen.Gonsoir@k12.sd.us; Brittany.Hubbart@k12.sd.us Middle School, High School, College Science, STEM, CTE

Come meet Toni, South Dakota's first synthetic cadaver in an educational setting. See how a synthetic cadaver can enhance anatomy and physiology classes as well as CTE Health Science Classes. Also, learn more about technology to help expand/develop your district's Health Science CTE offerings.

Saturday, 8:00 AM **Prairie B**

April Strom Featured Speaker — Chandler-Gilbert Community College

Drop It Like It's Hot: A Thinking Task on Temperature

April.Strom@cgc.edu Middle School, High School, College Math

Come experience a building thinking classroom lesson – from launch to landing – that introduces an important big mathematical idea from the middle grades, but can also be extended into high school mathematics (and beyond)!

Saturday, 8:00 AM **Prairie C**

Bree Oatman — *Bree.Oatman@lowerbruleschools.org*

Growing Beyond Earth: Microgravity and Plants

Explore how to engineer a clinostat to mimic microgravity conditions to observe how gravity affects plant growth. Learn about how teachers and students can contribute to plant science research on the International Space Station.

Saturday, 8:00 AM **Dakota A**

Kristine Heinen — South Dakota Discovery Center

Bring Your Students the Universe!

KristineHeinen@sd-discovery.org Elementary, Middle School, High School Science, STEM

Forget the flat screen, bring immersive experiences to your students with the South Dakota Discovery Center's Journey Beyond the Known traveling planetarium. From how stars are formed to stories told around the world, together we can explore cosmic knowledge and understanding. This session gives you a glimpse into the possibilities.

Saturday, 8:00 AM **Dakota B**

Tracy Andersen, Keith Andersen — Hill City School District, Freeman School District

Why Do I Need To Know This? Connecting CTE to the NGSS

Tracy.Andersen@k12.sd.us; Keith.Andersen@k12.sd.us Middle School, High School Science, STEM, CTE

Students planning to enter the skilled trades often feel disconnected from science standards. In this session, we will provide connections between NGSS standards and practices and real-world CTE examples. Lesson plans and demonstrations will be included.

Saturday, 8:00 AM **Dakota C**

Alyssa Weisenstein Featured Speaker Teacher on a Trip

Selecting Meaningful Phenomena

teacheronatrip@gmail.com Middle School, High School Science

Here's the secret: phenomena don't have to be phenomenal! Learn to select impactful phenomena for your classroom using various resources, including travel experiences, online materials, and your existing resources. You'll use a simple checklist to evaluate potential phenomena and brainstorm connections to performance expectations.

Saturday, 8:00 AM **Dakota E**

Bertha Vazquez, Ally Bowers ScienceSaves & Lyman School District

Promoting Science Appreciation and a $15,000 High School Scholarship

BVazquez@centerforinquiry.org; Alison.Bowers@k12.sd.us Elementary, MS, HS Science, Math

ScienceSaves promotes the fact that science makes individual lives healthier and easier. Our free lessons teach graphing, data analysis, engineering practices, and more. They include teacher notes, standards, response sheets, rubrics, and lesson plans. Our resources are at www.sciencesaves.org, with a $15,000 scholarship opportunity for high school seniors.

Saturday, 8:00 AM **Dakota F**

Larry Browning South Dakota State University

da Vinci Bridges

Larry.Browning@sdstate.edu Middle School, High School, College Science

We will build and test Leonardo da Vinci's self-supporting bridge. Adding weights at different points on the bridge and resulting forces at the base will confirm Newton's Laws. This should be a useful activity to talk about Free Body Diagrams, torques, and statics. Materials will be available for participants.

Saturday, 8:00 AM **Dakota G**

Nicole Mehlhaff Yankton Middle School

STEM Flight -- "Up - Up - and AWAY!"

Nicole.Mehlhaff@k12.sd.us Elementary, Middle School Science, STEM

STEM Flight -- "Up - Up - and AWAY!" is a fun and engaging STEM challenge that includes multiple types of STEM builds all centered around flight. Come try one and see how much fun your students could have!

Saturday, 8:00 AM **Symposium**

Sarah McAnulty Featured Speaker Skype a Scientist

Squid on the Street: Using Art to Communicate Science

Sarahj.Mack@gmail.com Elementary, MS, HS, College, Pre-Service, Informal Science Education Science

Science education doesn't have to stop when students leave the classroom. Dr. Sarah McAnulty is a squid biologist, informal science educator, and street artist, using art as a way to reconnect people with science. She'll cover all the unconventional ways she engages people with marine biology using interactive art.

Saturday, 8:00 AM **Salon 1 & 2**

Shalese Stroup ExploreLearning

Gizmos in the Greenhouse: Photosynthesis Unleashed 👩🏾‍🔬 🔬

Shalese.Stroup@explorelearning.com High School, Pre-Service Science

Explore photosynthesis under diverse conditions, identify optimal environments, and analyze how limiting factors influence oxygen production. Join us to deepen your understanding of this vital process! 🌿 ✨ SDDOE Science Educators have full free access to ExploreLearning Gizmos

- Breakout Sessions - Saturday 9:00-9:50 AM -

Saturday, 9:00 AM **Prairie A**

Steve Gabriel Spearfish High School

Underground Environmental Data Visualization

SGabriel@spearfish.k12.sd.us High School, College, Pre-Service, Administrative Science, STEM, CTE

Hands on computer session analyzing underground environmental data.

Saturday, 9:00 AM **Prairie B**

April Strom Featured Speaker Chandler-Gilbert Community College

Transforming Textbook-y Tasks into Thinking Tasks

April.Strom@cgc.edu Middle School, High School, College Math

Engaging students in thinking tasks is the ultimate goal of teaching mathematics, but where can we find thinking tasks? We actually have many rich tasks in our textbooks, but not all are designed for thinking. Let's explore how to transform these traditional, textbook tasks into thinking tasks!

********** **Mini Session** **********

Saturday, 9:00 AM **Prairie C**

Susan Gilkerson Oldham-Ramona-Rutland School District

Talk to the Family and get Them Involved

Susan.Gilkerson@k12.sd.us Elementary, MS, HS Science, Math, STEM, Interdisciplinary, CTE

We all want families to be more involved in their kids' education. This workshop explains how our school reached out to families to have them come help in the classroom.

Saturday, 9:00 AM **Prairie C**

Bree Oatman

Teacher Expeditions: Adventures in Antarctica

Bree.Oatman@lowerbruleschools.org Elementary, Middle School, High School Science, Math, STEM

Learn about the National Geographic Grosvenor Teacher Fellowship Program and explore how a teacher expedition can enhance your teaching.

Saturday, 9:00 AM **Prairie C**

Beverly DeVore-Wedding NSTA

NSTA and You

BDevoreWedding@gmail.com All Levels Science, Math, STEM

Check out what's new at NSTA and their resources online!

Saturday, 9:00 AM **Dakota A**

John Williams University of South Dakota

Magnets on the Move: Elementary Engineering

John.Williams@usd.edu Elementary, Pre-Service Science, Math, STEM, Interdisciplinary

In this engineering module for early elementary, we will engage in a model lesson to build vehicles that can be propelled with magnetism. We will discuss considerations for facilitating engineering lessons with young learners and focus specifically on connecting science concepts to engineering instruction.

Saturday, 9:00 AM **Dakota B**

Stephanie Higdon, Mary Mitchell CIRCLES Alliance/Black Hills State University

Culturally Respectful Teaching Practices in Math and Science

Stephanie.Higdon@bhsu.edu; Mary.Mitchell@ohitika.com Elementary, MS, HS Science, Math, STEM

Join members of the CIRCLES Alliance for an inspiring session on culturally respectful teaching practices! Build your understanding in ways to ignite creativity and curiosity, foster a classroom community where collaboration is celebrated, and students share their experiences to learn from each other and find joy in learning math and science!

Saturday, 9:00 AM **Dakota C**

Alyssa Weisenstein Featured Speaker Teacher on a Trip

Writing 3-Dimensional Assessments That Are Easy to Grade

teacheronatrip@gmail.com Middle School, High School Science

With new teaching and learning approaches come new assessment strategies. Learn how to create 3-dimensional assessments that align with DCIs, SEPs, and CCCs, while remaining practical to grade. In this interactive workshop, you'll gain strategies for writing questions that assess student understanding across all three dimensions.

Saturday, 9:00 AM **Dakota E**

Bertha Vazquez, Ally Bowers

Education Director-The Teacher Institute for Evolutionary Science, Lyman School District

Evolution for Middle School Educators

BVazquez@centerforinquiry.org; Alison.Bowers@k12.sd.us Middle School Science

Receive free units on evolution content with hands-on activities, online resources, lesson plans, and ancillary materials. Monthly webinars for teachers and students are featured at www.tieseducation.org. A copy of our book, On Teaching Evolution, will be given to every attendee.

Saturday, 9:00 AM **Dakota F**

Larry Browning, Paul Markel, Brady Phelps South Dakota State University

Reactions – How We Respond

Larry.Browning@sdstate.edu; Paul.Markel@sdstate.edu; Brady.Phelps@sdstate.edu HS, College Science

We will start by studying how fast the nervous system responds and then explore the effects of sugar, nicotine, caffeine, and other substances on the nervous systems of flatworms (Planaria). Planaria and humans have similar nervous systems, but the Planaria are suitable for study in a classroom setting.

Saturday, 9:00 AM **Dakota G**

Nicole Mehlhaff — Yankton Middle School

STEM Boats - Whatever Floats Your Boat!

Nicole.Mehlhaff@k12.sd.us Elementary, Middle School Science, STEM

STEM BOATS -- "What Floats Your Boat?" is a fun and engaging STEM challenge that includes multiple types of STEM builds all centered around floating and boats. Come try one and see how much fun your students could have!

Saturday, 9:00 AM **Prairie B**

Sarah McAnulty Featured Speaker — Skype a Scientist

Bring Scientists into Your Classroom Virtually!

Sarahj.Mack@gmail.com Elementary, Middle School, High School Science

Join us for a practical walkthrough of using the free science program, Skype a Scientist. This program will match your classroom with a scientist for virtual Q&A sessions. In this session, we'll talk about how to get the most out of our program!

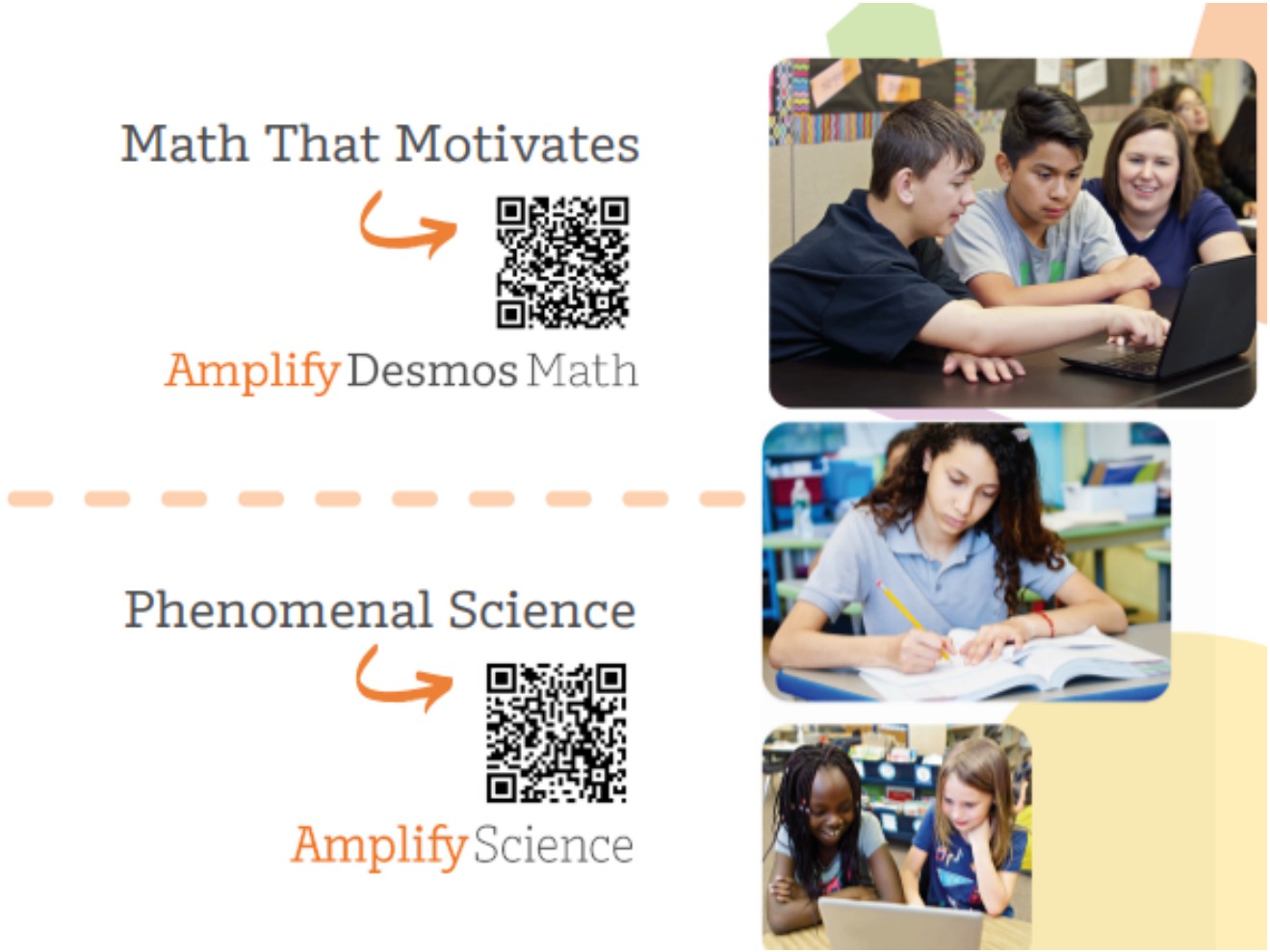
Saturday, 9:00 AM **Salon 1 & 2**

Shalese Stroup — ExploreLearning

Rain or Shine: Cleaner Skies with Gizmos STEM Cases ⛈️☂️🌤️

Shalese.Stroup@explorelearning.com Elementary, Middle School, High School, Pre-Service Science

Join us for an engaging STEM Case! A respiratory physiologist tackles rising asthma cases in kids. Develop system models, test solutions, and create a plan to reduce air pollution. Let's make our community healthier together! 🌟 SDDOE Science Educators have full free access to ExploreLearning Gizmos.



- Breakout Sessions - Saturday 10:00-10:50 AM -

Saturday, 10:00 AM **Dakota A**

John Williams University of South Dakota

Realizing the Promise of Integrative STEM Activities: Exploring 3 Active Learning Examples for K-8 Students

John.Williams@usd.edu Elementary, MS, Pre-Service Science, Math, STEM, Interdisciplinary

Integrative STEM activities are often seen as an unattainable ideal, the unicorn of STEM curricular design. In this session, we dispel that notion as we learn about 3 examples of truly integrative STEM activities for K-8 students. We also discuss the step-by-step process to generate your own integrative STEM activities.

Saturday, 10:00 AM **Dakota B**

Benjamin Benson, Louisa Otto Sanford Research Sanford Research

Elastic Thinking: What is it and What Should Students Know about it?

Benjamin.Benson@sanfordhealth.org; Louisa.Otto@SanfordHealth.org

High School, College, Pre-Service Science, Math, Interdisciplinary, CTE

Microscopy is a fascinating and rapidly evolving field, with modern microscopes pushing the boundaries on what we can observe, from the atomic level to intricate biological structures. By exploring the components and functionalities of a microscope, students can engage in three types of thinking: elastic, analytical, and automatic.

Saturday, 10:00 AM **Dakota C**

Julie Bruckner Kimball Elementary

Indi in the Classroom

Julie.R.Bruckner@k12.sd.us Elementary Math, STEM, Interdisciplinary

The robot for early learners (and older) that is driven by color. Speed into STEAM with indi — the most approachable entry-level learning robot for ages 4+. Indi inspires imaginative, play-based learning by empowering kids to design and build their own mazes while creating opportunities for students to learn the basics of coding, solve problems, and nurture computational thinking skills. In this session, you will get to be a student yourself and experience the fun of learning with indi!

Saturday, 10:00 AM **Dakota E**

Bertha Vazquez, Ally Bowers Generation Skeptics, Lyman School District

Don't Believe Everything You Believe

BVazquez@centerforinquiry.org; Alison.Bowers@k12.sd.us Elementary, MS, HS Critical Thinking

By 2025, it's estimated that 463 exabytes of data will be created daily; that's like 212,765,957 DVDs per day! How can our students know if the information they receive is credible? Generation Skeptics teaches the necessary skills with FREE lessons, guest speakers, and help with starting student GenSkeps clubs ($500 stipends).

Saturday, 10:00 AM **Dakota F**

Nathaniel Raak
Mitchell Technical College

Squirrel Sabotage

Nathaniel.Raak@mitchelltech.edu High School Science, Math

An estimated 25% of power outages in the US are caused by squirrels. In this session, we will cover how, providing simple practical math applications involving electricity that can be used in your classrooms.

Saturday, 10:00 AM **Dakota G**

Sharon Vestal, Dan Van Peursem, and Matt Miller
SDSU, USD, SDSU

Meet the Future Teachers

Middle School, High School Science, Math

Sharon.Vestal@sdstate.edu; Dan.VanPeursem@usd.edu; Matt.Miller@sdstate.edu

We would love for veteran teachers to come and share words of wisdom with the preservice teachers.

Saturday, 10:00 AM **Symposium**

Jeff Peterson
SD OBTA Director

Engaging Assessments and Standards-Based Grading Strategies

Jeff.Peterson@k12.sd.us Middle School, High School Science, Math

Participants in this session will explore examples of student work and assessment strategies that can be applied across all grade levels and subjects to boost student engagement. They will discuss and exchange ideas for efficiently identifying learning gaps using standards-based grading while maintaining traditional letter grades or a 1, 2, 3 proficiency scale. The demonstrated strategies have been proven to increase student motivation and foster a positive, competitive learning environment. While the student work samples shared are aligned with the SD Dakota High School Science Standards, this session is for those seeking efficient, standards-based assessments that reflect student learning and increase student engagement.

Saturday, 10:00 AM **Salon 1 & 2**

Shalese Stroup
ExploreLearning

Ecosystem Explorers: Unraveling Food Chains and Pyramids with Gizmos!

🌿 🦁 🔍

Shalese.Stroup@explorelearning.com Middle School, Pre-Service Science

Explore ecosystems with Gizmos! Model trophic levels, food chains, and energy pyramids to understand energy flow and dynamics in a fun, interactive session. Perfect for students, educators, and nature enthusiasts! 🌿 🌎 ✨ SDDOE Science Educators have full free access to ExploreLearning Gizmos.

- Saturday 10:50-11:30 AM -

Saturday, 10:50 AM **Exhibitor Hallway**

Networking and Exhibitor Session

Conference attendees have the opportunity to network and visit with Exhibitors and enter door prize drawings. Exhibitors have color coded tickets for drawings. These tickets will be given out in the exhibition hallway at the discretion of the exhibitors. Keep one half and place the other in the drawing buckets at the registration table. The more booths you visit, the better your chances to win a prize! Drawings for this session will be held during Saturday lunch and you must be present to win.

- Lunch - Saturday 11:30 AM-12:30 PM -

Saturday, 11:30 AM **Lunch** **Prairie B & C**

Come for a meal, networking with new friends, awards, recognitions, and raffle with swag from exhibitors and other amazing organizations! Hosted by Presidents of SDCTM and SDSTA.

- Breakout Sessions - Saturday 12:40-1:30 PM -

Saturday, 12:40 PM **Dakota A**

John Williams University of South Dakota

Science Olympiad for the Classroom – Taking Inspiration from Competition Events to Develop Engaging Inquiry and Engineering Lesson Plans.

John.Williams@usd.edu Middle School, High School Science, Math, STEM, Interdisciplinary

We examine a few Science Olympiad competition events and discuss how these events can form the foundation of fun and engaging science inquiry and engineering lessons. Participants then find an event that connects to their practice, and we work together to develop the event into a lesson or module.

Saturday, 12:40 PM **Dakota B**

Louisa Otto Sanford PROMISE

Exploring Antibody Applications

Louisa.Otto@sanfordhealth.org Middle School, High School Science

Antibodies aren't just key players in your immune system—they're also powerful tools in biomedical research! In this session, participants will dive into an engaging classroom lesson that introduces students to the role antibodies play in scientific discovery and research.

Saturday, 12:40 PM **Dakota C**

Kelly Coates Douglas School District

Making Tests Meaningful

Kelly.Coates@k12.sd.us Middle School, High School Math

The session presents an idea for the day after test day to make test information meaningful for students, get them to take ownership of their learning, and provide differentiated, individualized activities to engage students.

Saturday, 12:40 PM **Dakota E**

Dr. Sanjeev Kumar, Dean, Dr. Suzette Burckhard, Asst Dean of Academics SDSU

Jerome J Lohr College of Engineering Student Opportunities

Jennifer.Bickett@sdstate.edu; Suzette.Burckhard@sdstate.edu MS, HS, College Science, Math, STEM

Come learn about available options related to STEM at the College of Engineering as well as see demonstrations from current students. The presentation will be approximately 30 minutes with additional time for demonstrations.

Saturday, 12:40 PM **Dakota F**

Julie Bruckner Kimball Elementary

Hands-on Learning with Hot Wheels

Julie.R.Bruckner@k12.sd.us Elementary Science, Math

In this session, we will use the free Hot Wheels Speedometry lessons with cars and tracks to improve both our math and science skills. Hot Wheels® Speedometry™ encourages inquiry and real-world, problem-based learning through play, hands-on activities, and in-depth lesson plans that support both Common Core skills and Next Generation Science Standards. This certified education curriculum, co-created with researchers at the University of Southern California Rossier School of Education, combines Hot Wheels® fun, imagination, and action, as well as toys and track to accelerate learning.

Saturday, 12:40 PM **Dakota G**

Andrew Sathoff Dakota State University

Facilitating Visualization and 3D Printing of Biomolecule Models with Free Online Resources

Andrew.Sathoff@dsu.edu Middle School, High School, College Science, STEM, CTE

Incorporating 3D printing into your bioscience classroom isn't as difficult as it sounds. In this session, you will learn the fundamentals of 3D printing and how to use the free visualization programs from 3D Molecular Designs to generate files of biomolecules, which can be 3D printed to create physical models.

Saturday, 12:40 PM **Symposium**

Spencer Cody Edmunds Central School District

SD Honey Production Education & Curriculum Development Program

Spencer.Cody@k12.sd.us Elementary, MS, HS Science, STEM, Interdisciplinary, CTE

Interested in learning more about the impact South Dakota's commercialized bees have on agriculture? Join us to learn about the exciting site-based learning opportunities available to all South Dakota Prek-12 educators. Educator opportunities span three institutes in 2025 and 2026 in South Dakota, California, and Mississippi.

Share the Classroom Treasures
You have until 3:00PM today to gather what you can use in your classroom. All items are free.

Please fill out your Evaluation of the Conference.
We want next year's to be even better!

Saturday, 12:40 PM **Salon 1 & 2**

Tasha Pravecek Todd County High School

Energizing Classrooms: Hands-on Models for Teaching Wind and Solar Power

Tasha.Pravecek@k12.sd.us Elementary, MS, HS Science, Math, STEM, CTE

This workshop will introduce teachers to www.KidWind.org wind and solar energy curriculum, materials and instruments to teach wind/solar to 4th-12th grade students. KidWind will be providing FREE kits to those who attend the workshop ($79 value). Learn about teaching wind and solar energy and/or participating in the 2nd annual SD State Wind Competition, 7 March.

- Breakout Sessions - Saturday 1:40-2:30 PM -

Saturday, 1:40 PM **Prairie B**

Tiffany Kroeger, Rebecca Dorr SDSTA

Bringing the Science Story to Elementary

Tiffany.Kroeger@k12.sd.us Elementary Science, STEM

Are you tired of your elementary science curriculum? Do you wish for more engagement and to see students have lightbulb moments on a regular basis during your science time? Come join us as we discuss our adventures in bringing OpenSciEd Elementary curriculum to our 5th graders. Find out why we made the switch, what benefits and downfalls we have seen, and find out how we plan to proceed in the future and hopefully get inspired to take science from the textbook and put it back in the students hands.

Saturday, 1:40 PM **Prairie C**

Howie Hua Featured Speaker Fresno State

Building Mathematical Confidence

howie820@mail.fresnostate.edu Middle School, High School, College, Pre-Service Math

As math teachers, a big part of our role is to help students see that they CAN do math. In this talk, I will share how I have helped build mathematical confidence in students in one course.

Saturday, 1:40 PM **Dakota A**

John Williams University of South Dakota

"Is This Real? I Saw It On…": Tackling Science Media Literacy with the Nature of Science in Society (NOSIS) Framework

John.Williams@usd.edu Elementary, MS, HS, College, Pre-Service Science, STEM, Interdisciplinary

In today's media environment, our students often struggle to discern reliable scientific sources from information of lower quality. We will discuss science media literacy among students, and see how the Nature of Science in Society framework can form the basis of powerful embedded scientific literacy training in your science instruction.

Saturday, 1:40 PM **Dakota B**

Benjamin Benson, Joe Salvati, Carrie Olson Sanford Research Outdoor Campus, Augustana University

Exploring Life's Continuum: From Molecules to Organisms

Benjamin.Benson@sanfordhealth.org; Joseph.Salvati@state.sd.us; Carrie.Olsonmanning@augie.edu

Middle School, High School, College, Pre-Service Science, STEM, Interdisciplinary

Biology from molecules to organisms to ecosystems covers a lot of ground. Find out about resources to help fill in some of the holes in your understanding and how your students can engage in fun hands-on experiences with either Joe at the Outdoor Campus or with Ben at Sanford Research.

Saturday, 1:40 PM **Dakota C**

Brady Licht Black Hills Special Services Cooperative

Level Up Learning: Empowering Students as AI-Enhanced Game-Based Learning Designers

BLicht@bhssc.org Middle School, High School STEM, Interdisciplinary

Transform students from game consumers to creators! Learn how to guide students in designing educational games using AI tools and no-code platforms. Discover practical frameworks for game-based learning design, explore AI-assisted development techniques, and leave with a ready-to-implement project blueprint for your classroom.

~~**Saturday, 1:40 PM** **Dakota E**~~

~~Anne Lewis SD Discovery Center~~

~~Project WET: What's New!~~ ***C A N C E L E D***

AnneLewis@sd-discovery.org Elementary, Middle School Science, STEM

~~**Project WET may be an OG water education resource, but it has been updated! Come find out what's new and get fresh curriculum guides as one of the first 15 participants.**~~

Saturday, 1:40 PM **Dakota F**

Steven Rokusek SDPB

Dissection 101: Sheep Brain

Steven.Rokusek@state.sd.us Middle School, High School, College Science, STEM

During this session, participants will learn about our Dissection 101 series, including our newest dissection - the sheep brain. Each resource includes educational videos, lesson plans, quizzes, and other materials for dissections like crayfish, clams, earthworms & more!

Saturday, 1:40 PM **Dakota G**

Ally Bowers Lyman High School

Belonging in the Classroom

Alison.Bowers@k12.sd.us Elementary, Middle School, High School, Pre-Service Science

We all want our students to be safe in our classrooms, but do they feel like they belong? It matters that students feel belonging at school because belonging intertwines deeply with students' science identity. This session will explore those relationships and include example activities that can strengthen science identity and their sense of belonging in your classroom.

********** Mini Session **********

Saturday, 1:40 PM **Symposium**

Nicole Mehlhaff Yankton Middle School

Coaching Science Olympiad

Nicole.Mehlhaff@k12.sd.us Middle School, High School Science, STEM

What is Science Olympiad, how to get a team started, what practice looks like, and any questions you might have. This is all from a coach's perspective.

Saturday, 1:40 PM **Symposium**

Sandra Shipley Bison School

March Madness Science & Summer Science

Sandra.Shipley@k12.sd.us Elementary, Middle School Science

Sharing our excitement for science after school and in the summer. It doesn't have to be complicated. March is a great month to sneak a few days of afterschool science for interested students. We hosted 3 weeks of 3 days afterschool reaching 50 of our 134 students. We worked with students from 2nd grade through 8th grade. Each group of learners had an opportunity to meet and learn from a "scientist". Summer it was open to the similar set of students. 20 attended a 3-morning Rube Goldberg Challenge using cardboard, string, and duct tape. We would love to share our agenda and ideas.

Saturday, 1:40 PM **Symposium**

Sheila McQuade Bishop O'Gorman High School

Pear Deck

Elementary, Middle School, High School, College, Pre-Service, This is truly applicable to all ages.

Using Pear Deck (free) you can make your slide presentations more engaging. You can get/give immediate feedback and hold kids accountable using this free addon.

Saturday, 1:40 PM **Salon 1 & 2**

Tasha Pravecek — Todd County High School

South Dakota Wind and Solar Competition!

Tasha.Pravecek@k12.sd.us — Elementary, MS, HS — Science, Math, STEM, CTE

This workshop will introduce teachers to www.KidWind.org wind and solar energy curriculum, materials/instruments to teach wind/solar to 4th-12th grade students. I don't work for KidWind; but, KidWind will be providing FREE kits to those who attend the workshop ($79 value). Preparation for 2nd annual SD State Wind Competition, 7 March.

- Breakout Sessions - Saturday 2:40-3:30 PM -

~~**Saturday, 2:40 PM**~~ **Prairie A**

~~Alyssa Weisenstein~~ ~~Featured Speaker~~ CANCELED ~~Teacher on a Trip~~

~~Writing 3-Dimensional Assessments That Are Easy to Grade~~

teacheronatrip@gmail.com — Middle School, High School — Science

~~**With new teaching and learning approaches come new assessment strategies. Learn how to create 3-dimensional assessments that align with DCIs, SEPs, and CCCs, while remaining practical to grade. In this interactive workshop, you'll gain strategies for writing questions that assess student understanding across all three dimensions.**~~

Saturday, 2:40 PM **Prairie C**

Howie Hua Featured Speaker — Fresno State

My Favorite Math Tricks

howie820@mail.fresnostate.edu — Middle School, High School — Math

Math tricks are fun, but they should also be understandable. Here are my favorite math tricks and why they work. These will surely impress your students!

Saturday, 2:40 PM **Dakota B**

Larry Browning, Matt Miller — South Dakota State University

One Last (?) Time

Larry.Browning@sdstate.edu; Matt.Miller@sdstate.edu — Middle School, High School — Science

Larry is retiring this summer and is not sure about his future. Matt is looking forward to Larry's retirement and less stress, but after 25 years they have some stories to tell and demonstrations to share.

Saturday, 2:40 PM **Dakota E**

Allison Esparza South Dakota State University

Clearing the Fog: Addressing Alternative Science Conceptions in the K-12 Classroom

Allison.Esparza@sdstate.edu Elementary, Middle School, High School, College, Pre-Service Science

Educators will explore common alternative conceptions that students hold about scientific phenomena.They will gain insight into how alternative conceptions form and learn how to design lessons that facilitate conceptual change, helping students replace incorrect ideas with more accurate scientific knowledge.

Wrap-Up & Reflection Discussions - Saturday 3:30-4:10 PM

Saturday 3:30 PM **Science Wrap-up and Reflect** **Dakota A**

Join SDSTA Leadership and offer your feedback from the conference and recommendations for future events. Turn in your survey for a chance to win a free conference registration to the 2026 SD STEM Ed Conference.

Saturday 3:30 PM **Math Wrap-up and Reflect** **Dakota B**

Join SDCTM Leadership and offer your feedback from the conference and recommendations for future events. Turn in your survey for a chance to win a free conference registration to the 2026 SD STEM Ed Conference.

Saturday 4:30 - 6:30 PM Prairie A

SDCTM & SDSTA Officers and Conference Leadership Joint Board Meeting

SD STEM ED Board Chair & JPDC Board - SDCTM & SDSTA Officers and Conference Leadership meet to reflect & discuss current conference outcomes and strategize for upcoming event(s). If you are interested in helping to manage the conference and be part of the Joint Board, please contact SD STEM Ed Board Chair Cindy.Kroon@k12.sd.us. Next Year's Conference will be February 5, 6, & 7, 2026

Representatives will be exhibiting on Friday from 8:00 AM until 5:30 PM.
(*Most will be available through Saturday afternoon.*) These include:

Company Name	Representative(s)
Amplify	Mary Ann Mathus, Deanna Oldenburg
College of Natural Sciences (SDSU)	Omar Rodriguez, Jordan Neises
CSTA SD	Sadia Risse, Rise Jongeling
ExploreLearning	Dawn Rowley, Emily Duganne
DSU's Governors Cyber Academy	Fenecia Homan, Jennifer Johnson
hand2mind	Matt Kattman
Imagine Learning	Chet Riddle, Tonya Dodson
JAR Systems	Perry Wiseman, Colin Helton
Midland University	Meghan Christensen
NE SD Area Health Education Center	Mikayla Titus, Sheilas Monnier
Northern State University	Leslie Sauder, Brandy Netty
Sanford PROMISE	Louisa Otto, Benjamin Benson
Sanford Underground Research Facility	Nicol Reiner, Julie Dahl
SD Discovery Center	Christopher Anders, Saikat Basu
South Dakota Education Association	Lisa Weier, LouAnn Jensen
South Dakota GFP - Outdoor Campus	Joseph Salvati
South Dakota Mines	Ashli Maddox, Katrina Donovan
South Dakota State University	Suzette Burckhard, Sanjeev Kumar
Southeast Technical College	Kristin Larsen, Jennifer Byall
WorldStrides	conferences@worldstrides.com

Graduate Credit will be offered through Black Hills State University. You may register for one-hour of credit at the 599 level. Attendance at 15 hours worth of sessions, lunches, and/or the banquet are required to earn graduate credit from BHSU along with assignments listed in the syllabus. Credit registration information is online at the following link: https://drive.google.com/drive/folders/16csjY-7RVmJo93aqbQHZoSX00jJH573k Registration for credit will close at 5 pm on Friday, February 7. Make sure to register for the SD STEM Ed Conference! Please remember that you must submit all assignments by the due date listed in the syllabus in order to receive credit for the course. Please also note that there is no withdrawal date for courses running for 21 days or fewer, therefore once you register you will not be able to withdraw from this course. For more information, contact Dr. DEANN KERTZMAN at (605) 642.6571 or at Deann.Kertzman@bhsu.edu

Order & pay for Conference swag (shirts, bags, cups &/or cap) by January 26 for no shipping charge when you pick-up your order at the conference.
Available with SD STEM Ed, SDCTM or SDSTA logo.
Check SDCTM.org or SDSTA.org -or-
https://https-sungoldsports-com.printavo.com/merch/sd-stem-2025/

– Next year's conference will be February 5, 6, & 7, 2026 –

The 2025 Conference Committee would like to offer a Special Thanks to . . .

Black Hills State University and Dr. **DEANN KERTZMAN** for handling the credit.

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.

THANKS Sanford Health and PROMISE for the donation & sponsorship of our conference.

THANKS to Sanford for providing lanyards.

***THANKS* to Imagine Learning for sponsoring the pre-Banquet Friday Social**

(This year's ℳℰ Conference is April 28-29, 2025 in Rapid City.)

Next year's SD STEM Ed conference will be February 6, 7, & 8, 2026.

The 2025 February STEM Ed Conference is a joint venture of the South Dakota Science Teaching 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. The best discount on the registration rate is Early Registration by Dec. 1st. There is still a discount for paid Pre-Registration between Dec. 2nd – Jan. 10th. Anything thereafter will be considered On-Site Registration. On-Site Registration rates are: ONE-day (SDCTM or SDSTA members) $200, Non-members $250, Students $70 includes the Noon Luncheon for that day TWO-day (SDCTM or SDSTA members) $225, Non-members $275, Students $80 includes the Noon Luncheon for both days The Friday Night Banquet is NOT included in the registration fee. A ticket for the banquet may be obtained at an additional cost of $35. {Registration & payment after Jan. 10th will be considered as on-site registration.}
Because of a limited printing budget, the program was available in advance at the SDCTM website [www.sdctm.org] or SDSTA website [www.sdsta.org].
The printed Schedule-at-a-Glance will be distributed on site with the registration materials.

2025 SD STEM Ed Conference

Sponsored by 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:

Your Content Area: Math Science Both STEM Other_____

Your Grade Band: Elementary Middle School High School College Other

Circle which no cost-to-you items you enjoyed; or X those we could do without:
Morning: donut holes & coffee; All day: pop; Other _____

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

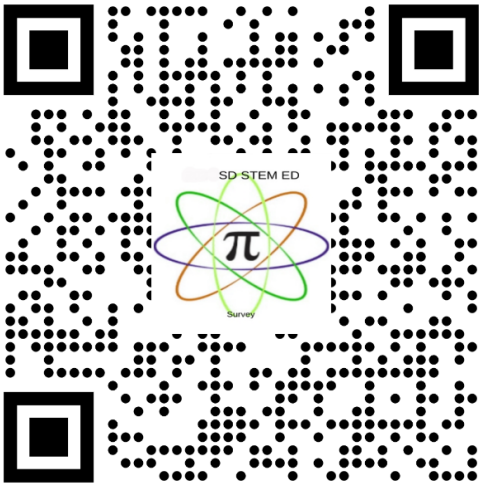
What made it (or them) good?

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 (**or submit online**) .
https://**forms.gle/JH8v6GsZ5JHvd8tk9**



_____
Name

_____
Address

_____
City, State, Zip Code

Student: That's a really long fox!
Teacher: If you notice that fox on the left, it has front legs and the fox on the right has hind legs. So with eight legs that's a spider not a fox.

How do you tell if someone is a chemist or a plumber?

For every complex mathematical problem, there is a simple and elegant solution that is completely wrong.

Statistically, six of seven dwarfs are not Happy.

Ninety-nine percent of politicians give the rest of them a bad name.

Do you like Orion's belt?

See how they pronounce unionized. I'd give it three stars ! ! ! .

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DAKOTA C
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PRAIRIE C
PRAIRIE B
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