

34th
Annual

SD STEM Ed Conference

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

**February 5, 6, & 7, 2026
Crossroads Hotel-Huron Event Center
Huron, SD**

Grounded in STEM

Table of Contents

Featured Speakers.....	Inside Cover
Conference Overview	1
Conference Planner	2
PROGRAM	3-35
Credit information	38
Sales Representatives & Exhibitors	38
2026 Conference Committee Special Thanks	35
Conference Evaluation Form . . . {or submit online}	40
Current Officers	42
Map of Conference Rooms	Back Cover

Graduate Credit is available through BHSU-Kim Webber or Nicole Uhre-Balk
Next year's conference will be **February 4, 5, & 6, 2027.**

Updated 1-14-2026



Banquet Speaker - RunningHorse Livingston is the founder and CEO of Mathematize Inc., an organization dedicated to expanding high-quality educational opportunities for STEM learning communities and organizations. A citizen of the Bad River Band of Lake Superior Chippewa, he is a nationally recognized educator and instructional coach with more than two decades of experience supporting schools across the country. RunningHorse's work focuses on promoting mathematics understanding, engineering design thinking, and place-based STEM learning that honors Indigenous knowledge systems and promotes student identity and agency. RunningHorse

specializes in experiential professional learning, guiding teachers and educators by demonstrating models of student-centered instruction. He partners with schools and organizations to co-design and facilitate local, place-based STEM learning experiences that empower teachers to lead classrooms where every student can thrive.

Other Featured Speakers

Linda Stegemann is passionate about helping educators establish systems in their classrooms that not only support student learning but also promote healthy work-life balances for teachers. After spending a decade in the classroom as a chemistry and physics teacher, she found her niche in supporting the science education community with EdTech solutions made by the community, for the community. She's now a member of the PhET Interactive Simulations team, supporting schools and organizations as they incorporate the sims into their education services. Linda has a BA in Chemistry from the University of West Florida and an MS in Chemistry from South Dakota State University. When she's not working, you can find her playing Magic: The Gathering with her three kids or looking for an awesome new restaurant to try!



John Golden Professor of Mathematics GVSU, was lucky to become a math teacher educator. He's spent almost 30 years working with future teachers, inservice teachers and K-12 learners. He spends way too much time thinking about math and games and math and art. He and his son Xavier, an art teacher, have a fantasy math graphic novel soon to be published.

Katy Dornbos believes that people thrive when great things are expected of them, and she loves to support both students and teachers as they grow. Katy teaches chemistry, STEM, dual-credit chemistry, and serves as science department chair at Norris High School just south of Lincoln, NE. She is a 2021 recipient of the PAEMST (Presidential Award for Excellence in Science and Math Teaching). Katy leads teachers with a highly interactive style, leveraging their experience, hopes, and questions. She enjoys leading professional development at the district, state, and national levels. She loves finding ways for her students to improve their communities through science, whether through designing (and raising \$11,000 for!) outdoor learning spaces on campus, testing private wells for contaminants, or hosting science days for elementary school students. Some of Katy's favorites in STEM education: POGIL, Johnstone's Triangle, and labs with many trials.



2026 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 5, 2026

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

Friday, February 6, 2026

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	Dakota C & D
	<i>(cost included in the registration fee - Taco Buffet)</i>	
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	Dakota A
	SDCTM Business Meeting	Dakota E
5:30 PM-6:30 PM	Social Hour	Pre-Function Area
	Featuring: Cash Bar	
6:30 PM	Friday Evening Banquet	Dakota C & D
	<i>(Cost is \$35 - Roast Beef {requires separate ticket})</i>	

Saturday, February 7, 2026

7:00 AM - 11:20 AM	Registration Open	Pre-Function Area
7:00 AM - 8:00 AM	Breakfast Meeting	Prairie C
	Presidential Awardees (Past & Present)	
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	Dakota C & D
	<i>(cost included in the registration fee - Baked Potato Bar)</i>	
12:40 PM - 4:00 PM	Afternoon Sessions	(See Program)
4:15 PM	Joint SDCTM & SDSTA Executive Board Meeting	Prairie A & B

SD STEM Ed Conference 2026 Planner

Thursday, Feb. 5, 2026		
	First Choice	Second Choice
7:00 PM	Science Showcase Prairie B	Math PotLuck Prairie C

Friday, Feb. 6, 2026		
Remember to visit the exhibits in the Lobby and Hallways of the Crossroads Hotel.		
	First Choice	Second Choice
8:00 AM	Location: <i>Prairie B & C</i> Title: <i>OPENING SESSION - Conference Welcome</i>	
8:30 AM	Location: Title:	Location: Title:
9:30 AM	Location: Title:	Location: Title:
10:30 AM	Location: Title:	Location: Title:
11:50-12:50	Friday Noon Luncheon in Crossroads Hotel – Dakota C & D	
12:50-1:10	Exhibitor Networking: Exhibitor	
1:10 PM	Location: Title:	Location: Title:
2:10 PM	Location: Title:	Location: Title:
3:00 PM	Exhibitor Networking: Exhibitor	
3:30 PM	Location: Title:	Location: Title:
4:30 PM	SDSTA <i>BUSINESS MEETING in Dakota A</i> SDCTM <i>BUSINESS MEETING in Dakota B</i>	
5:30	Social hour -or- Cash Bar	
6:30 PM	Friday Night Banquet in Dakota C & D (Banquet Tickets Required-Cost is \$35)	
	<i>Grounded in STEM</i> RunningHorse Livingston- speaker	

Saturday, Feb. 7, 2026		
	First Choice	Second Choice
8:00 AM	Location: Title:	Location: Title:
9:00 AM	Location: Title:	Location: Title:
10:00 AM	Location: Title:	Location: Title:
10:50 AM	Exhibitor Networking: Exhibitor Session	
11:30-12:30	Saturday Noon Luncheon in Crossroads Hotel – Dakota C & D	
12:40 PM	Location: Title:	Location: Title:
1:40 PM	Location: Title:	Location: Title:
2:40 PM	Location: Title:	Location: Title:
3:35-4:00	Wrap-up and Reflect – Science in Dakota A	Wrap-up and Reflect – Math in Dakota B
4:15 PM	SDCTM & SDSTA JOINT BOARD MEETING	

N
e
x
t

Y
e
a
r
,
s

C
o
n
f
e
r
e
n
c
e

F
e
b
r
u
a
r
y

4
,
5
&
6
,
2
0
2
7

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

Thursday, 7:00 PM

Science Showcase

Prairie B

SDSTA President Alison Bowers and other officers

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 Sharon Vestal and other officers

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 Overview -

Friday, 8:00 AM

Prairie A - B - C

SDCTM President Sharon Vestal and SDSTA President Alison Bowers

Opening Session - Conference Welcome for All

Pre-Service, Elementary, Middle School, High School, College

Math, Science, STEM

Featured Speakers & others will give you a Conference overview. Conference layout, credit options and many other items will be discussed. Any questions?

At 4:30, both SDSTA and SDCTM will have their annual business meetings. Every member is invited to attend. This is an election year for SDSTA. 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.

- Friday 8:30 AM -

Friday, 8:30 AM

Dakota A

Anne Lewis, Dr. Chris Anderson, Megan Howard, Kristie Maher South Dakota Discovery Center

Teaching Science through...Chameleon Tongues?

annelewis@sd-discovery.org christopher.V.Anders@usd.edu; megan.m.howard@northern.edu;

kristie.maher@k12.sd.us Middle School, High School Science

What happens when you pair a researcher with teachers? Find out in this session. USD professor Chris Anderson and teachers explored how research on, yes, chameleon tongues can be used to teach science. Learn a fun, hands-on activity and hear from a classroom teacher about how understanding how research works impacted her approach to teaching.

Friday, 8:30 AM

Dakota B

Kristine Heinen South Dakota Discovery Center

360° Big Screen Adventures!

kristineheinen@sd-discovery.org Elementary, Middle School, High School

Science, STEM

Gather round our planetarium, journey to the unknown! With limitless possibilities, this session gives you a taste of the SD Discovery Center's traveling dome. Ancient SD seas to the ends of the universe—start an unforgettable adventure and learn how to bring our Journey Beyond the Known Planetarium to your students.

Friday, 8:30 AM

Dakota C

Dr. Ryan Schrenk Montana Digital Academy

Scale, Support, Succeed: Mastering Math Transitions with EdReady Classroom

ryan@mtda.org Middle School, High School, College

Math

Get results! Master math transitions! Learn how we prepare students for middle/high school algebra and college math using Montana's proven EdReady Classroom model. With 12 years of experience and 25,000+ enrollments in 2024, our proficiency-based online program and expert support ensure students are ready for their next step.

Friday, 8:30 AM

Dakota D

Beverly DeVore-Wedding, Ph.D.

NSTA

From Typhoid Mary to COVID-19: Pursuing an Understanding of Disease Transmission and Tracking through Integrative STEM

bdevorewedding@gmail.com

All Grade Levels

STEM

In this presentation, we will investigate ways to incorporate STEM topics into the hunt for disease. Case studies to MICRO:BITs help engage students in tracking the transmission of disease. Takeaways include 1. Integrate discipline-specific literacy case studies and technology as strategies for engaging students in problem-solving around a current topic; 2. Construct opportunities to engage in the SEPs around content as they determine who is patient zero; and 3. Demonstrate how integrative STEM uses exploration and sensemaking to come together to help solve a world pandemic.

Friday, 8:30 AM

Dakota E

Betsy Schamber Dakota State University

Making Moon Craters: Inquiry into the Science and Engineering Practices

betsy.schamber@dsu.edu

Elementary, Middle School

Science

In this interactive session, participants will investigate moon craters through a hands-on inquiry project that embeds the Science and Engineering Practices from the Next Generation Science Standards. Using inquiry to explore each practice, participants will experience strategies that spark curiosity, encourage critical thinking, and deepen student-centered science learning.

Friday, 8:30 AM

Dakota F

Raegan Kleinpeter South Dakota Discovery Center

Robotics in the Classroom

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

Wondering how to bring robots into your classroom? No more! Explore multiple robots and different ways to include them in your existing cross-curricular lessons. From grab-and-go robots to more complex code engineering, you do not have to be an expert to spark your students' robotic curiosity!

Friday, 8:30 AM

Dakota G

Matt Miller South Dakota State University

Utilizing Green Chemistry to Illustrate Science Concepts

Matt.Miller@sdsu.edu

Middle School, High School

Science, STEM

Green chemistry is the concept that we should be careful about what we use so as not to cause additional contamination from the products of our chemical activities. Various examples of green chemistry activities will be used in a hands-on workshop to illustrate green chemical principles.

Friday, 8:30 AM

Dakota H

Louisa Otto, Benjamin Benson Sanford Research

Bringing Biomedical Research to the Classroom

louisa.otto@sanfordhealth.org benjamin.benson@sanfordhealth.org

Elementary, Middle School, High School, College

Science, STEM

Sanford PROMISE, the outreach arm of Sanford Research, connects educators with current biomedical science. This session highlights recent research advances and shares classroom-ready resources to engage students in authentic inquiry. Participants are encouraged to provide feedback on how Sanford PROMISE can further support science teaching and learning.

Friday, 8:30 AM

Salon

Kevin Smith Dakota State University

Math K-8

Chasing Einstein: Ideas & Opportunities to Add Fun Math Activities Into the Classroom

kevin.smith@dsu.edu

www.kevindsmith.org/chasing-einstein.html

In this session, you'll learn how to gamify your math lessons to engage students from K-12. Discover an innovative activity that encourages students to tackle math challenges and messages centered around the eight mathematical practice standards. You can participate in the full "Chasing Einstein" experience or simply gather ideas to incorporate into your own classroom to make math fun and meaningful.

- Friday 9:30 AM -

Friday, 9:30 AM

Prairie A

Katy Dornbos **Featured Speaker**

More Feedback, Less Grading

kldornbos@gmail.com Elementary, Middle School, High School, College Science, Math, STEM
Feedback is crucial to learning, and grading can be an obstacle to quick feedback. I will share small changes that increase feedback to students without requiring more time/energy from the teacher.

Friday, 9:30 AM

Prairie B

John Golden **Featured Speaker** Grand Valley State University

Listen

goldenj@gvsu.edu Elementary, Middle School, High School Math
Eliciting learner thinking is a core teaching practice. We'll consider how to improve our questioning and investigate other opportunities to hear how learners are thinking and what their ideas are about important concepts and processes.

Friday, 9:30 AM

Prairie C

RunningHorse Livingston **Featured Speaker** CEO of *Mathematize Inc.*

Bringing STEM Inquiry to Life in the Elementary Classroom

mathematize@outlook.com Math
This workshop introduces engaging, age-appropriate engineering challenges that support problem-solving skills and STEM confidence in students. Teachers will work in groups to plan, build, test, and refine simple designs using low-cost materials. We'll break down the engineering design cycle for early grades and discuss how to encourage productive struggle and reflection. We'll explore how to guide students to ask questions, test ideas, and communicate their reasoning. Participants will leave with classroom-ready challenge prompts and facilitation strategies to inspire young engineers of all abilities.

Friday, 9:30 AM

Dakota A

Branden Hoefert University of South Dakota

From Play to Programming: Computational Thinking with Robots in the Elementary Classroom

branden.hoefert@usd.edu Elementary STEM
Integrating robotics into elementary classrooms fosters computational thinking and problem-solving skills. In this interactive session, participants will explore hands-on activities with Sphero Indi robots to see how young learners can develop foundational coding and problem-solving abilities while integrating robotics across the curriculum. No prior coding experience is required!

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

Friday, 9:30 AM

Dakota B

Linda Stegemann

Featured Speaker

PhET Interactive Simulations

Meet PhET Studio: Interact Your Way

linda.stegemann@colorado.edu Elementary, Middle School, High School, College Science, Math, STEM
Be empowered with PhET Studio, PhET's first customization tool for teachers! Learn how to create unique sim experiences that fit your lessons and inspire students like never before. Join us to see Studio in action and start a free trial. Don't miss this exclusive opportunity!

Friday, 9:30 AM

Dakota C

Major Jonathan Becker

South Dakota Wing Civil Air Patrol

Free STEM Resources from the Civil Air Patrol

jon.becker@sdwg.cap.gov Elementary, Middle School, High School Science, Math, STEM
Civil Air Patrol (CAP) educates about the important role aviation, space, cyber, and STEM play in America's future. Learn about joining CAP as an Aerospace Education Member (AEM) to enjoy free aerospace/STEM educational resources and opportunities, including STEM Kits, standards-based K-12 curriculum materials, and teacher orientation flights.

Friday, 9:30 AM

Dakota D

Laura Bain

CPM Educational Program

When Math Gets Tough: Helping Students Thrive Through Productive Struggle

laurabain@cpm.org

Middle School, High School

Math

How can we help middle and high school students approach math challenges with confidence and curiosity? This session explores ways to make struggle productive by fostering understanding, agency, and positive math identities. Learn practical strategies for building community, planning purposeful challenges, and guiding students to embrace meaningful mathematical struggle.

Friday, 9:30 AM

Dakota F

Katrina Donovan

South Dakota Mines

Ceramic & Glass Industry Science Kits

katrina.donovan@sdsmt.edu Elementary, Middle School, High School, College Science, 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 walk out with their very own mini materials kit (\$49 value for free!)

Friday, 9:30 AM

Dakota G

Colin Marsh

SDCTM

Conversations on Building Thinking Classrooms: What's Working & What's Hard

marshcolin180@gmail.com Elementary, Middle School, High School, College Science, Math
Come discuss the challenges and benefits of using Building Thinking Classrooms practices in your math classroom. This is an opportunity for both experienced educators and educators interested in using BTC to have conversations. I will provide a platform to discuss common questions regarding BTC.



South Dakota

MANUFACTURING & TECHNOLOGY SOLUTIONS

Friday, 9:30 AM

Ben Benson, Louisa Otto

Sanford Research

Artificial Intelligence in the Biomedical Research Lab

Benjamin.benson@sanfordhealth.org Louisa.Otto@SanfordHealth.org

Middle School, High School, College

Science, Math, STEM

This session builds AI literacy by exploring how computer science intersects with biology and biomedical research. Participants will examine AI's strengths, pitfalls, and potential harms, practice strategies for responsible use, and engage with hands-on tools. Reflection activities highlight ethical impacts while fostering cross-disciplinary connections for teaching and research.



Friday, 9:30 AM

Mark Iverson & Brooks Jacobsen

Lake Area Technical College

Building South Dakota's STEM Teaching & Learning Community

mark.iverson@lakeareatech.edu Brooks.jacobsen@lakeareatech.edu Middle & High School, College STEM

Discover how Lake Area Technical College's NSF-ATE project is building a statewide Teaching & Learning Resource Community to connect and empower South Dakota's STEM and technical educators. Participants will gain access to classroom-ready resources, upcoming PD opportunities, and direct industry connections supporting hands-on, high-impact STEM teaching.

Symposium

Friday, 9:30 AM

Sandra Shipley

Bison School

Salon

Algae Academy - A Free Resource for Hands-on Science

Sandra.Shipley@k12.sd.us

Elementary & Middle School

Science, STEM

Algae Academy is a great free and scripted resource to learn about algae and the many applications in our world today. It is easy to teach and fun to grow algae in the classroom.

- Friday 10:30 AM -

Friday, 10:30 AM

Katy Dornbos

Featured Speaker

Prairie A

The Beauty & Fun of Graphs

kldornbos@gmail.com

High School, College

Science

Data, graphs, maps - they're wonderful, full of information, and fun to create. Participants will engage in two activities that get students thinking about data, wondering about how it's collected, and building a graph with real time data. Note: part of the session is chemistry specific.

Friday, 10:30 AM

Prairie B

John Golden

Featured Speaker

Grand Valley State University

Play

goldenj@gvsu.edu

Elementary

Math

Play is at the heart of what it means to do math. We'll look at opportunities for - and try! - playful mathematics with small shifts, focused activities and actual games.

Friday, 10:30 AM

Prairie C

RunningHorse Livingston

Featured Speaker

CEO of *Mathematize Inc.*

STEM Outdoors: Exploring Environmental Science and Engineering

mathematize@outlook.com

Math

Discover simple, hands-on ways to connect STEM learning to the natural world right outside your classroom. In this session, participants will model investigations that use environmental restoration practices infused with Tribal Ecological Knowledge to tackle STEM challenges. We'll identify opportunities to integrate observation, measurement, data collection, and environmental stewardship while supporting curiosity and joyful learning. Teachers will learn how to honor diverse ways of knowing, engage students' identities, and connect learning to their real lives.

Friday, 10:30 AM

Dakota A

Leanne Holdorf

Sioux Falls Lutheran School

This Session is Under Lock and Key!

lholdorf@sflutheranschool.com

Middle School, High School, College

Science, Math, STEM

See in real time how breakout boxes can create memorable learning experiences for students. Build your own template to fit your classroom resources, including using Google Forms for a digital version.

Friday, 10:30 AM

Dakota B

Linda Stegemann

Featured Speaker

Take "OAIM" and Fire!: Inquiry Procedure Writing for Science Classes

linda.stegemann@colorado.edu

Middle School, High School,

College Science

We all teach our students to write lab procedures, but how many of us teach these students how to truly "write" a procedure? In today's session, participants will be introduced to the OAIM {Object, Action, Instrument, Measurement} procedure heuristic and learn how to use this simple, four-part acronym to give specific feedback on what your procedures are missing.

Friday, 10:30 AM

Dakota E

Jeff Schneider

Estelline High School

AI for Every Classroom: Real-World Skills & Student Agency Through the Design Thinking {beginning AI users}

Jeff.Schneider@k12.sd.us

All Levels

Science, STEM

Every teacher—regardless of subject or AI experience—can use Design Thinking to bring practical AI into the classroom. Explore hands-on strategies, prompt-writing, and reflection techniques that help learners build agency, critical thinking, and “learning how to learn” skills essential for thriving in a fast-changing, technology-driven world.

Friday, 10:30 AM

Dakota F

Katrina Donovan, Matthew Whitehead

South Dakota Mines

Art + Engineering - Drawing with a STEAM Purpose

katrina.donovan@sdsmt.edu matthew.whitehead@sdsmt.edu

Elementary, Middle School, High School, College

Science, Math, STEM

Drawing is often thought of as an art—and while it certainly is, it's also a powerful tool for scientists, mathematicians, and engineers. From Leonardo da Vinci's notebooks to modern design labs, drawing helps us visualize ideas, sketch out inventions, and explore complex three-dimensional forms, like the structure of a crystal. Come learn how to draw in three dimensions with us.

Friday, 10:30 AM

Symposium

Neal Connors, Ph.D. Chief Scientific Officer/Kyle Larson

Dakota Bioworx, Brookings, SD

Biotech opportunities/ BCSI mini credentials

neal@dakotabioworx.org/kyle@dakotabioworx.org

High School, College

STEM

Presentation on Biotech-workforce development and presentation on use of BCSI mini credentials. Dakota BioWorx is made possible by the visionary support of the Bio Leadership Coalition: SDSU, SDS Mines, POET, SD Corn Growers, SD Soybean Checkoff, the Research Park of SDSU, and South Dakota Biotech.

Friday, 10:30 AM

Salon

Dr. Jessica Vogel

SDSBVI Superintendent & Sp Ed Director

STEM Without Limits: Engaging Students of All Abilities

Jessica.Vogel@sdsbvi.northern.edu

K-12

STEM

STEM learning should inspire curiosity, creativity, and confidence in every student, regardless of ability. This session explores practical strategies and innovative approaches to make Science, Technology, Engineering, and Mathematics accessible and meaningful for learners with diverse needs. Participants will discover how to adapt STEM lessons through multisensory instruction, assistive technology, tactile materials, and collaborative learning models.

- Friday 11:20 AM - 1:10 PM -

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.



UNIVERSITY OF
SOUTH DAKOTA
SCHOOL OF EDUCATION



CPM Educational Program is the student-centered solution for research-based math curriculum and professional learning that helps teachers create engaging classrooms where students truly understand mathematics.

Empowering Students. **Supporting Teachers.**

With thoughtful tech connections that help bring focus and intention into the classroom, CPM equips educators with the tools, strategies, and support to build confidence and foster lasting success in math.



Discover Resources and Samples at **CPM.org**

Friday 11:50 AM-12:50 PM

- LUNCH -

Dakota C & D

Come for a meal, awards, recognitions, and raffle with swag from exhibitors 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

Networking and Visit with the Exhibitors

Exhibitor Hallway

Conference attendees can network with Exhibitors & enter door prize drawings. Exhibitors have tickets that will be given out at the discretion of the exhibitors. Keep one half & place the other in the drawing buckets at the registration table. Increase your chances to win by visiting with more booths. Drawings are held during the social hour & you must be present to win before the Banquet.

- Friday 1:10 PM -

Friday, 1:10 PM

Prairie A

Nicole Mehlhaff

Yankton School District

Elementary Science Sit Down

Nicole.Mehlhaff@k12.sd.us

Elementary

Science, STEM

Have you ever been asked what you need? This is just the time and place. Come sit and visit with other Elementary Science Teachers and discuss what is needed to make your science classes successful. Be heard, share ideas, and come out with a plan!

Friday, 1:10 PM

Prairie B

Linda Stegemann

Featured Speaker

PhET Interactive Simulations

PhET Hacks for Student-Centered Science

linda.stegemann@colorado.edu Elementary, Middle School, High School, College Science, Math, STEM

Whether you're new to using PhET sims or you have been doing it for years, this session is sure to have something for you. Learn about our Teacher Tips docs, query parameters, translation features, and thousands of free activities!

Friday, 1:10 PM

Prairie C

Nicole Goerges

CPM Educational Program

Launching the Lesson with Data Science

nicolegoerges@cpm.org

Middle School, High

School Math

Participants experience data science launches through instructional routines. We explore benefits of data science launches and the instructional routines. Connections are made between data science and content standards. Participants explore resources to find data and infographics and develop a plan to implement data science launches in their own classrooms.

Friday, 1:10 PM

Dakota A

Megan Howard

JPL Solar System Ambassador

BLAST OFF into NASA Resources for Educators! (Elementary)

megan.m.howard@northern.edu

Elementary

Science, STEM

Explore education tools from NASA! Short classroom activities, multi-day engineering units, Pi-day worksheets, citizen science projects... NASA has it all and more! After you've explored the teacher tools, take a quick trip through the stars in the STARLAB portable planetarium!

Friday, 1:10 PM

Dakota B

Mark Kreie

Brookings High School

Becoming a Leader in STEM Education

Mark.Kreie@k12.sd.us

Elementary, Middle School, High School

Science, Math, STEM

Interested in developing your STEM Education leadership skills? The SD STEM Leadership program is accepting applications for cohort 2. Learn about the details and expectations of the program as well as steps you can take to move into STEM Education leadership roles at the local, state, and national levels.

Friday, 1:10 PM

Dakota E

Catherine Moulder & Hosog Yoon

South Dakota School of Mines and Technology

Teaching Chemistry Concepts via Pragmatic Applications

Catherine.Moulder@sdsmt.edu Hosog.Yoon@sdsmt.edu Middle & High School, College

Science, STEM

We make habanero jelly and explain the relevant chemistry concepts being used and observed along the way. When abstract concepts are demonstrated through pragmatic applications, the complex material becomes easier to understand.

Friday, 1:10 PM

Dakota F

Shalese Stroup

ExploreLearning

“Fact Fluency Fun with Reflex: Power Up Your Math Block!”

shalese.stroup@explorellearning.com

Elementary, Middle School

Math

Level up math fluency with Reflex! This fast-paced, game-based tool makes fact practice fun and effective. Discover easy ways to integrate Reflex, motivate students, and track progress—all while transforming your math block into an engaging, data-driven adventure.

Friday, 1:10 AM

Symposium

Neal Connors, Ph.D. Chief Scientific Officer/Kyle Larson

Dakota Bioworx, Brookings, SD

Biotech opportunities/ BCSI mini credentials

neal@dakotabioworx.org kyle@dakotabioworx.org

High School, College

STEM

Presentation on Biotech-workforce development and presentation on use of BCSI mini credentials. Dakota BioWorx is made possible by the visionary support of the Bio Leadership Coalition: SDSU, SDS Mines, POET, SD Corn Growers, SD Soybean Checkoff, the Research Park of SDSU, and South Dakota Biotech.

Friday, 1:10 PM

Salon

Sharon Vestal, SDCTM President, SDCTM Vice President, SDCTM Secretary

Discussion of Proposed SD K – 12 Math Standards

sharon.vestal@sdstate.edu

Elementary, Middle School, High School, College

Math

Come join SDCTM board members for a review and discussion of the recently proposed K – 12 Math Standards from the South Dakota Department of Education. Attendees will be split into grade band tables: K – 2, 3 – 5, 6 – 8, and 9 – 12 to review the standards and share feedback. Whether this is your first time reviewing the standards or you've already submitted feedback to the state, your perspective is valuable. Together, we will explore how SDCTM can support teachers if the proposed standards are adopted.



SANFORD PROMISE

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 newsletter to stay up to date on all our academic year and summer programming.



Lesson Plans

Visit our website to find resources for your classroom.



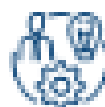
Community Lab

Request a visit to our Community Lab or bring educators to 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.



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

- Friday 2:10 PM -

Friday, 2:10 PM

Prairie A

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 H S, 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, 2:10 PM

Prairie B

John Golden **Featured Speaker** Grand Valley State University

The Best Elementary Math Games

goldenj@gvsu.edu

Elementary

Math

We will play several of the best elementary math games that are flexible, use simple materials, have high engagement, and are accessible.

Friday, 2:10 PM

Prairie C

RunningHorse Livingston **Featured Speaker** CEO of *Mathematize Inc.*

STEM With Meaning: Biomimicry Innovation in the Classroom

mathematize@outlook.com

Math

This hands-on session provide ideas for high school teachers to incorporate biomimicry into STEM learning. The practice of learning from natural systems, designs, and relationships to solve human challenges is becoming popular. This session will emphasize culturally rooted understandings of humans' relationship to the environment. Participants will engage in model activities where students analyze how plants, animals, and ecosystems solve problems such as water filtration, fish species revitalization, and structural innovation. We will also explore examples of Indigenous ecological knowledge and how many Tribal communities have long designed technologies based on reciprocal relationships with the land.

Friday, 2:10 PM

Dakota A

Megan Howard JPL Solar System Ambassador

BLAST OFF into NASA Resources for Educators! (Middle School/High School)

megan.m.howard@northern.edu

Middle School, High School

Science, STEM

Explore education tools from NASA! Short classroom activities, multi-day engineering units, Pi-day worksheets, citizen science projects... NASA has it all and more! After you've explored the teacher tools, take a quick trip through the stars in the STARLAB portable planetarium!

Friday, 2:10 PM

Dakota B

Mark Kreie Brookings High School

Target Based Grading in a High School Mathematics Classroom

mark.kreie@k12.sd.us

Middle School, High School

Math

Have you considered changing to a target-based (or standards-based) grading system? Come and learn about why I redesigned the way I assess students to a target-based system, how I implemented the system, and its effect on student learning.

Friday, 2:10 PM

Dakota C

Lisa Weier

South Dakota Education Association

"Hacking Questions" A Fresh Perspective on the Art of Questioning

Lisa.Weier@sdea.org

Elementary, Middle School, High School, College

STEM

Hacking Questions offers a fresh approach to inquiry and student engagement. Explore strategies like kicking the "IDK" bucket and discover new ways to keep curiosity alive. This session shares practical techniques to ask better questions that draw students in, spark discussion, and maintain active participation in your classroom.

Friday, 2:10 PM

Dakota D

Spencer Cody

Edmunds Central School District

SD Honey Production Education & Curriculum Development Program

Spencer.Cody@k12.sd.us

Elementary, Middle School, High School

Science, STEM

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 2026 in South Dakota, California, and Mississippi.

Friday, 2:10 PM

Dakota E

Stephanie Higdon, Ally Bowers & Mary Mitchell

CIRCLES Alliance/Black Hills State University

Teaching Culturally in Math and Science

stephanie.higdon@bhsu.edu alison.bowers@k12.sd.us mary.mitchell@ohitika.com

Elementary, Middle School, High School, College

Science, Math, STEM

Math and science become more meaningful when learning is rooted in place and community. Culturally respectful, place-based practices spark curiosity and help students recognize the value of their own knowledge and experiences. In this session, participants will learn about the CIRCLES Alliance and explore strategies for connecting STEM instruction to land, culture, and community. Together, we will reflect on practices that affirm identity, celebrate mistakes, encourage collaboration, and connect learning to real-world contexts. Join members of the CIRCLES Alliance to discover how honoring place and community transforms STEM classrooms into spaces of creativity and joy!



Friday, 2:10 PM

Dakota F

Bree Oatman PhD

Oglala Lakota College

Bacteria with a Fanny Pack

boatman@olc.edu

K-12

Life and Earth Science

Learn how to find and grow nitrogen fixing Cyanobacteria in your classroom. Take back supplies to do your own community science investigation. Create art based on images from a microscope.

Friday, 2:10 PM

Dakota G

Ricardo Palma Fraga

South Dakota Mines - Industrial Engineering

Industrial Engineering in Action through Classroom Activities

Ricardo.PalmaFraga@sdsmt.edu

Middle School, High School, College

STEM

Industrial engineers (IE) use math and science to determine the best, fastest, and safest way to achieve a goal. This session introduces engaging classroom activities, from managing supply chains to streamlining assembly lines, where students can apply math, science, and engineering design concepts to tackle problems – just like IEs do.

Friday, 2:10 PM

Dakota H

Liz Pettit

Jefferson High School, SFSD

The Math of SURF

pettitelizabetha@gmail.com

Middle School, High School

Math, STEM

Come explore math activities inspired by the Sanford Underground Research Facility. Multiple activities will be presented and are geared towards Middle and High School classrooms using: Pythagorean Theorem, Similar Triangles, Volume, Inequalities, Arc Length, and Secant Lines. Activities are available to be piloted through SURF E&O.

- Friday 3:00 PM - 3:30 PM -

Friday, 3:00 PM

Networking and Visit with the Exhibitors

Exhibitor Hallway

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.

- Friday 3:30 PM -

Friday, 3:30 PM

Prairie B

John Golden

Featured Speaker

Grand Valley State University

Create

goldenj@gvsu.edu

Elementary

Math

Why do we study mathematics? There are many answers, but one of them is that it enables us to solve the problems that allow us to make, build and design. We'll discuss opportunities to create in math class for some memorable moments.



Friday, 3:30 PM

Dakota A

Linda Stegemann

Featured Speaker

PhET Interactive Simulations

Using Challenge Questions to Explore Student Learning

linda.stegemann@colorado.edu Elementary, Middle School, High School, College Science, Math, STEM
Many PhET simulations include a list of challenge questions designed to spark rich discussions around key topics explored within the simulation. Explore this teaching method and learn how to incorporate these questions into your science or math class in this session.

Friday, 3:30 PM

Dakota B

Mark Kreie

Brookings High School

Desmos 201: Using Desmos to Make Connections

mark.kreie@k12.sd.us

Middle School, High School

Math

Desmos Graphing Calculator is the default calculator for the digital ACT exam. In this session, participants will learn best practices using Desmos to help students make connections between mathematical concepts, along with strategies students can use to help succeed on the digital ACT. All Desmos tools are free. Intended for grades 8-12; bring an iPad or laptop.

Friday, 3:30 PM

Dakota D

Steven Rokusek

SDPB

Science Demonstrations

steven.rokusek@state.sd.us na

Elementary, Middle School, High School

Science

During this session, participants will review classic science demonstrations for use in the classroom. The session will be educational and entertaining! You do not want to miss this!

Friday, 3:30 PM

Dakota E

Raegan Kleinpeter

South Dakota Discovery Center

Robotics Unplugged

raegankleinpeter@sd-discovery.org

Elementary

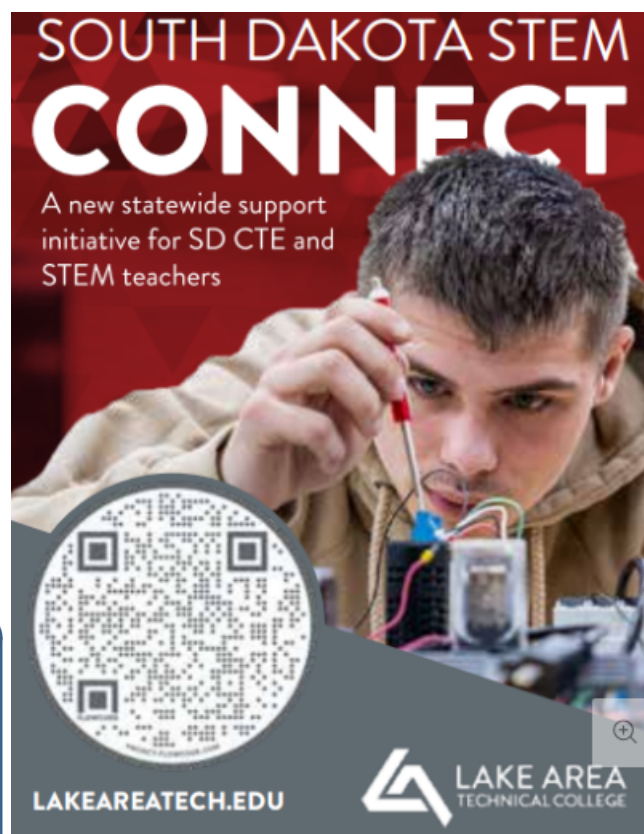
STEM

Be the first to play while learning about our newest traveling program at the SD Discovery Center: Robotics Unplugged! A perfect STEMventure for introducing younger students to the engineering design process through hands-on activities. Use grab-and-go robots to explore fundamental technology concepts such as coding and sequencing. No computers required!

Share the Classroom Treasures (free items)

Check the hall between the Salons and Prairie B & C

Available now till Saturday 2:40 PM



Friday, 3:30 PM

Dakota F

Shalese Stroup

ExploreLearning

Math That Moves! Dive Into Discovery with Gizmos

shalese.stroup@explorellearning.com

Middle School, High School

Math

Make math unforgettable with ExploreLearning Gizmos! This session shows how interactive simulations and visual models spark curiosity, deepen understanding, and personalize instruction. Walk away with ready-to-use tools that energize your classroom and turn math into a world of possibilities.

Friday, 3:30 PM

Dakota G

Matt Miller

South Dakota State University

An Easy-To-Assemble Three-Part Galvanic Cell

matt.miller@sdstate.edu

High School

Science, STEM

In an article in the Journal of Chemical Education, a red LED can be energized using a 3-part galvanic cell. Paper soaked in copper sulfate, paper soaked in sodium sulfate, and a piece of magnesium ribbon can be used to create a galvanic cell with enough potential to light the red LED.

Friday, 3:30 PM

Dakota H

Emily Siemonsma

Sanford Underground Research Facility / Wyoming Space Grant Consortium

Going With The Flow: Integrating Underground Data Science in MS/HS

Classrooms

siemonsmaemily@yahoo.com

Middle School, High School

Math, STEM

Join us to learn about real life math at the Sanford Underground Research Facility! We will delve into underground air flow data and discuss ways your students can explore this data. Please bring your computer to engage in a data exploration activity.

- 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 this is an election year – all members are eligible to vote.

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.

Friday 5:30-6:30 PM

Networking Social

Lobby

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



BLACK HILLS
**PARKS &
FORESTS**
ASSOCIATION

A nonprofit partner of the
National Park Service
& USDA Forest Service

PLACE-BASED LEARNING MADE EASY



EDUCATION RESOURCE HUB

Quickly find field trips, virtual learning, outreach programs, and curriculum kits for hands-on, place-based learning that aligns with state standards. Rooted in public lands across South Dakota.

- **Field Trips** — ideas + logistics in one place
- **Virtual Learning** — connect students to public lands from anywhere
- **Outreach Programs** — school visits with rangers and other experts
- **Curriculum Kits** — activities, tools, and lesson support

Questions?
bhpf@blackhillsparks.org



SCAN
TO SAVE
PLANNING
TIME!



www.bhpf.org
605-745-7020

Supporting **Wonder &
Exploration** for over
80 years!



Thank You to Black Hills Parks & Forests for supporting our Banquet by supplying dessert.



BIOZONE


To see **FULL PREVIEWS** of **ALL** titles visit:
biozone.com/us

BIOLOGY
FOR NIBBLS

ENVIRONMENT SCIENCE

CHEMISTRY
EXPLAINED

AP BIOLOGY



Gizmos

The largest library of STEM simulations!

Grade 3-12 science teachers have access via the South Dakota DOE.

Visit the booth to learn more

gizmos.explorelearning.com



SOUTH DAKOTA STATE UNIVERSITY
 Jerome J. Lohr
 College of Engineering

Finding your Future in Engineering

Learn • Build • Innovate
 Solving Tomorrow's Challenges Today

Agricultural and Biosystems Engineering	Civil and Environmental Engineering
Construction and Concrete Industry Management	Electrical Engineering and Computer Science
Mathematics and Statistics	Mechanical Engineering

- PAEMST Breakfast - Saturday 7:00-8:00 AM -

Saturday, 7:00 AM

Prairie C

Allen Hogie & Ann Anderson

SD PAEMST

Breakfast for SD PAEMST State Level Finalists and Past Awardees

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

Elementary, Middle School, High School

Science, Math

A breakfast honoring 2024 and 2025 State Level Finalists & all Past Awardees.

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

Saturday, 8:00 AM

Prairie A

Katy Dornbos **Featured Speaker**

More Feedback, Less Grading

kldornbos@gmail.com

Elementary, Middle School, High School, College

Science, Math, STEM

Feedback is crucial to learning, and grading can be an obstacle to quick feedback. I will share small changes that increase feedback to students without requiring more time/energy from the teacher.

Saturday, 8:00 AM

Prairie B

John Golden **Featured Speaker**

Grand Valley State University

Create

goldenj@gvsu.edu

Elementary

Math

Why do we study mathematics? There are many answers, but one of them is that it enables us to solve the problems that allow us to make, build, and design. We'll discuss opportunities to create some memorable moments in math class.

Saturday, 8:00 AM

Prairie C

Greg Schwebach

Southeast Technical College

Math that Builds: STEM Skills for Architecture, Engineering and Construction

gregory.schwebach@southeasttech.edu

Middle School, High School

Math, STEM

Learn activities that connect core math concepts – from percentages and fractions to algebra and geometry – to problem solving in Architecture, Engineering, and Construction (AEC). Also discover opportunities that enhance dual credit course offerings and open new STEM pathways for students.

Saturday, 8:00 AM

Dakota A

Linda Stegemann **Featured Speaker**

Take "OAIM" and Fire!: Inquiry Procedure Writing for Science Classes

linda.stegemann@colorado.edu

Middle School, High School, College

Science

We all teach our students to write lab procedures, but how many of us teach these students how to truly "write" a procedure? In today's session, participants will be introduced to the OAIM {Object, Action, Instrument, Measurement} heuristic and learn how to use this simple, four-part acronym to give specific feedback on what your procedures are missing.

Saturday, 8:00 AM

Dakota B

Liz Pettit

Math of SURF

Math activities inspired by the Sanford Underground Research

Saturday, 8:00 AM

Dakota C

Laura Shumaker Technology Teacher Howard School District

Micro:Bits and Robotics Workshop

Laura.shumaker@k12.sd.us

Elementary, Middle School, High School

STEM

Discover how to integrate micro:bits and Robotics Workshop activities into your classroom to inspire creativity, problem-solving, and collaboration. This session offers hands-on ideas and resources to help teachers bring coding, engineering, and STEM concepts to life for students of all ages and skill levels.

Saturday, 8:00 AM

Dakota D

Mark Kreie Brookings High School

Becoming a Leader in STEM Education

Mark.Kreie@k12.sd.us

Elementary, Middle School, High School

Math, Science, STEM

Interested in developing your STEM Education leadership skills? The SD STEM Leadership program is accepting applications for cohort 2. Learn about the details and expectations of the program as well as steps you can take to move into STEM Education leadership roles at the local, state, and national levels.

Saturday, 8:00 AM

Dakota E

Tina Belden, Hannah Caffee, Ben Benson & Nicole Uhre Balk Estelline School District & BHSU

Exploring SD K–8 Computer Science Standards: From Breakdown to Practice

tina.belden@k12.sd.us hannah.caffee@bhsu.edu benjamin.benson@sanfordhealth.org Nicole.urhebalk@bhsu.edu

Elementary, Middle School

STEM

In this interactive session, participants will explore the South Dakota K–8 standards with a focus on breaking down the language of the standards and turning them into meaningful classroom activities. We'll walk through a simple process for unpacking standards—identifying what students should know and be able to do—and then apply this process through hands-on activities designed for three grade bands: K–2, 3–5, and 6–8.

Saturday, 8:00 AM

Dakota F

John Williams University of South Dakota

Teaching Ecosystems through Birding with Merlin ID: Place-Based Science that Builds Engagement through Technology-Enhanced Observations.

john.williams@usd.edu

Middle School, High School

Science

Learn how to use the popular Merlin ID Birding app to teach ecosystems for middle and high school students. The session will include some synthetic practice with the app and demonstrate a place-based approach to learning ecosystems concepts.



<https://southdakota.csteachers.org>

Join CSTA-South Dakota to connect with a supportive community of educators, gain access to valuable professional development, and help shape the future of computer science education in our state.

Saturday, 8:00 AM

Dakota G

Madhav Nepal and Team , Mara Johnson, Barb Wielenga, Larry Browning, Matt Miller, Srivas Janaswamy, Jiyul Chang
South Dakota State University

iLEARN Project Outcomes and Classroom Innovations

madhav.nepal@sdstate.edu Mara.Johnson@k12.sd.us Barb.Wielenga@k12.sd.us Larry.Browning@sdstate.edu; Matt.Miller@sdstate.edu Elementary, Middle School, High School, College STEM

The iLEARN Team will share outcomes from the USDA-NIFA funded iLEARN Project, emphasizing strategies integrating science, agriculture, and local culture. iLEARN teachers will highlight classroom implementations of project modules, illustrating how the initiative fosters student engagement and advances culturally responsive STEM learning across diverse educational settings.

Saturday, 8:00 AM

Dakota H

Raghav Sriram Yogeewari & Daniel Cox South Dakota Game, Fish, and Parks

Bringing the Prairie to Your Classroom: SD's New Grasslands Education Curriculum

Raghav.SriramYogeewari@state.sd.us Daniel.Cox@state.sd.us Middle School Science, Math, STEM

South Dakota Game, Fish and Parks (SDGFP) is proud to introduce the pilot and preview of South Dakota's new Grasslands Education Curriculum for middle school students. This engaging and cross-curricular resource helps educators integrate South Dakota's prairies—the world's most endangered ecosystem—into their classrooms. Designed to inspire students with the natural and cultural importance of our grasslands, the curriculum provides hands-on activities and lesson plans to connect students with these vital landscapes.

Saturday, 8:00 AM

Dakota H

Shalese Stroup ExploreLearning

"Fraction Frenzy & Math Mayhem: Dive into Frax & Gizmos!"

shalese.stroup@explorellearning.com Elementary Math

Discover how Frax and Gizmos make fractions and math concepts fun and interactive! This session is perfect for 3rd–5th grade teachers looking to boost engagement, deepen understanding, and bring excitement to math with ready-to-use digital tools.



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

Saturday, 9:00 AM

Prairie A

Katy Dornbos **Featured Speaker**

The Beauty & Fun of Graphs

kldornbos@gmail.com

High School, College

Science

Data, graphs, maps - they're wonderful, full of information, and fun to create. Participants will engage in two activities that get students thinking about data, wondering about how it's collected, and building a graph with real-time data. Note: Part of the session is chemistry-specific.

Saturday, 9:00 AM

Prairie B

John Golden **Featured Speaker**

Grand Valley State University

Math and Art

goldenj@gvsu.edu

Elementary

Math

We will look at a few different math and art projects and give one a go. Be ready for big ideas, engaging activities, and an opportunity for learners to create.

Saturday, 9:00 AM

Prairie C

RunningHorse Livingston **Featured Speaker** CEO of *Mathematize Inc.*

STEM Outdoors: Exploring Environmental Science and Engineering

mathematize@outlook.com

Math

Discover simple, hands-on ways to connect STEM learning to the natural world right outside your classroom. In this session, participants will model investigations that use environmental restoration practices infused with Tribal Ecological Knowledge to tackle STEM challenges. We'll identify opportunities to integrate observation, measurement, data collection, and environmental stewardship while supporting curiosity and joyful learning. Teachers will learn how to honor diverse ways of knowing, engage students' identities, and connect learning to their real lives.

Saturday, 9:00 AM

Dakota A

Bree Oatman Oglala Lakota College

Litter Detectives: Engaging Students in Searching for Microplastics

boatman@olc.edu

STEM K-12

Build your own light box to view microplastics. Learn how to engage students in community science to identify and educate about littering and plastics in the environment.



Saturday, 9:00 AM

Dakota B

Nathaniel Raak

Mitchell Technical College

We Blew a Fuse

nathaniel.raak@mitchelltech.edu

High School

Science, Math

Have you ever lost power using too many kitchen appliances at once? This session will cover how Ohm's Law can be used with inexpensive hands-on simulations to visually see how expressions and real-life applications work together, predicting when the fuse is going to blow.

Saturday, 9:00 AM

Dakota C

Matt Miller

South Dakota State University

Bath Bombs and Chemical Kinetics

matt.miller@sdstate.edu

Elementary, Middle School, High School

Science, STEM

Chemical kinetics is an important concept for students to understand when studying chemical reactions. This workshop will use bath bombs to illustrate the impact of temperature on chemical reactions. Bath bombs will be created from common grocery store materials and then reacted over a series of temperatures.

Saturday, 9:00 AM

Dakota D

Karin Lang & Krista May

MATHCOUNTS

Making Math Count with MATHCOUNTS

karin.lang@bartwest.com KristaM@infrastructuredg.com

Middle School

Math, STEM

Learn about the engaging math program for middle schoolers that challenges students to solve complex problems and think critically. Test your skills in a fun practice showdown!

Saturday, 9:00 AM

Dakota E

Louisa Otto

Sanford PROMISE

Sanford Research

Bringing Biomedical Research to the Classroom

louisa.otto@sanfordhealth.org

Elementary, Middle School, High School, College

Science, STEM

Sanford PROMISE, the outreach arm of Sanford Research, connects educators with current biomedical science. This session highlights recent research advances and shares classroom-ready resources to engage students in authentic inquiry. Participants are encouraged to provide feedback on how Sanford PROMISE can further support science teaching and learning.



Saturday, 9:00 AM

Dakota F

John Williams

University of South Dakota

Retro Tools to Rock the Science Classroom: 3 Top-Rate Simulation Tools from Yesteryear and How to Use Them to Support Science Learning Today

john.williams@usd.edu

Middle School, High School

Science, STEM

In this session, we will explore several classic digital tools that are simple, yet effective, simulators of concepts in secondary science. Lesson plans that make use of each tool will be shared, and we will spend time exploring the functions and practical advantages of each tool.



**** Mini - Session ****

Saturday, 9:00 AM

Dakota G

Carrie Cox

Chamberlain High School

Science Literacy: Building Vocabulary and Reading Skills in the Science Classroom

carrie.cox@k12.sd.us Elementary, Middle School, High School

Science, STEM

Incorporating literacy into the science classroom can be challenging, but it's also a powerful way to build deeper understanding, critical thinking, and academic language skills. In this breakout session, let's discuss best practices, methods to increase vocabulary knowledge and reading skills, and come up with a plan to add a bit of literacy in your STEM classroom every day.

Saturday, 9:00 AM

Dakota G

Henry Red Cloud & Gloria Reyes-Red Cloud

Red Cloud Renewable

Solar Water Pumping and Lights in a Bucket

johnrc@redcloudrenewable.org

High School

STEM

Presents basic concepts of understanding photovoltaic cell conversion of sunlight to electrons and tabletop wiring of a simple circuit.

Saturday, 9:00 AM

Dakota G

Sandra Shipley

Bison School

Generation Genius Discussion

Sandra.Shipley@k12.sd.us

Elementary & Middle School

Science, STEM

We are using Generation Genius for our elementary curriculum. If you are interested in learning about it or if you want to discuss your own experiences - please stop by!

Saturday, 9:00 AM

Dakota H

Tyler Murphy

SD STEM Leadership

Conscientious Conversations: The Bridge Between Science & Misunderstanding

tyler.murphy@k12.sd.us

Elementary, Middle School, High School, College

Science, Math, STEM

This presentation explores the growing distrust of science in America through philosophical, emotional, and social lenses. It examines political polarization, misinformation, and identity-driven resistance to evidence, highlighting frameworks for understanding complex trust problems. Emphasizing empathy, curiosity, and community engagement, it proposes strategies to rebuild trust through connection, transparency, and shared purpose.

Saturday, 9:00 AM

Salon

Shalese Stroup

ExploreLearning

Spark Wonder: Bring K–5 Science to Life with Gizmos & Science4Us!

shalese.stroup@explorellearning.com

Elementary

Science

Turn your classroom into a science playground! Discover how Gizmos and Science4Us bring K–5 science to life with interactive simulations, ready-to-use lessons, and time-saving strategies. Whether you're new or experienced, leave energized and equipped to spark curiosity, critical thinking, and a lasting love of learning.



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

Saturday, 10:00 AM

Prairie A

Katy Dornbos

Featured Speaker

Feeling the Consequences of Accuracy & Precision

kldornbos@gmail.com

High School

Science, STEM

Teachers will experience the consequences of accuracy and precision, and go home with two activities that are full of iteration, debate, and collaborative comparison with a clear end in mind.

Saturday, 10:00 AM

Prairie B

Cindy Kroon

Montrose High School

Family Math: Greatest Hits

cindy.kroon@k12.sd.us

Elementary

Math

Take-home activities designed to uncover 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!

Saturday, 10:00 AM

Prairie C

Andrew Sathoff & Georgie Kolbeck

Dakota State University

Teaching Science with Physical Models from 3D Molecular Designs

andrew.sathoff@dsu.edu georgie.kolbeck@trojans.dsu.edu Middle & High School, College Science

Exploring scientifically accurate models can inspire wonder in students of all ages. Interactive models from 3D Molecular Designs give words meaning by focusing on core ideas and intersecting concepts in biology, chemistry, and physical science. We'll demonstrate a protein folding modelling activity and have a giveaway kit for one participant.

Saturday, 10:00 AM

Dakota A

Linda Stegemann

Featured Speaker

PhET Interactive Simulations

Using Challenge Questions to Explore Student Learning

linda.stegemann@colorado.edu Elementary, Middle School, High School, College Science, Math, STEM
Many PhET simulations include a list of challenge questions designed to spark rich discussions around key topics explored within the simulation. Explore this teaching method and learn how to incorporate these questions into your science or math class.

Saturday, 10:00 AM

Dakota B

Amy Schander

Gayville-Volin School District

Navigating the Challenges and Opportunities of AI in the Classroom

Amy.Schander@k12.sd.us

Middle School, High School, College

Math

AI is changing the way students learn. How do we, as educators, make sure that those changes are positive? Bring your computer and explore how students can use AI to facilitate their learning. We will also discuss strategies for holding students accountable for their learning.

Saturday, 10:00 AM

Dakota E

Mark Kreie

Brookings High School

Target Based Grading in a High School Mathematics Classroom

mark.kreie@k12.sd.us

Middle School, High School

Math

Have you considered changing to a target-based (or standards-based) grading system? Come and learn about why I redesigned the way I assess students to a target-based system, how I implemented the system, and its effect on student learning.

Saturday, 10:00 AM

Dakota F

John Williams

University of South Dakota

Scarcity in Engineering: Using the Concept of Scarcity to Increase Critical Thinking in Engineering STEM Activities

john.williams@usd.edu

Elementary, Middle School, High School

Science, Math, STEM

In this model lesson, participants will take on an engineering challenge to build a windproof house...on a tight budget. We will see how real-world concerns of cost and capability lead to innovations and critical thinking while engineering a house to survive the wind. (Lesson plans/digital materials will be provided)

Saturday, 10:00 AM

Symposium

Jill Netz-Fulkerson, Ph.D.

Biozone, Inc.

Ready, Set, Teach: All-in-One Science Resources from BIOZONE that Work!

jillfulkerson@comcast.net

www.biozone.com

High School

Science

Teachers face rising demands to deliver rigorous, engaging instruction while meeting diverse student needs. BIOZONE offers a cohesive suite of resources designed to simplify teaching and boost success across HS science courses and a range of levels. Our resources simplify lesson planning while engaging students in concept-driven learning.

Join us to learn how BIOZONE supports teachers with a comprehensive teacher toolkit that simplifies planning, delivery, and assessment. We invite you to discover how BIOZONE's cohesive, high-quality materials can elevate your teaching and transform your classroom.

Saturday, 10:00 AM

Salon

Shalese Stroup

ExploreLearning

Gizmos in Action: Let's Make Science Seriously Fun!

shalese.stroup@explorellearning.com

Middle School, High School

Science

Make science unforgettable with Gizmos! Dive into virtual labs and NGSS-aligned activities that spark curiosity, boost discourse, and energize your classroom. Whether it's life, earth, or physical science, Gizmos helps students explore, discover, and geek out—because science should be seriously fun.

- 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 11:30AM-12:30PM -

Saturday, 11:30 AM

Lunch

Dakota C & D

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.

Want to incorporate STEM activities in the classroom?

We can help!

- Activities
- Career Days
- STEM Resources



NSPE-SD SOUTH DAKOTA
ENGINEERING SOCIETY
Executive@nspe-sdes.com

DEPARTMENT OF
TRANSPORTATION
Jaynie.Spier@state.sd.us



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

Saturday, 12:40 PM

Prairie A

Linda Stegemann

Featured Speaker

PhET Interactive Simulations

PhET Hacks for Student-Centered Science

linda.stegemann@colorado.edu

Elementary, Middle School, High School, College

Science, Math, STEM

Whether you're new to using PhET sims or you have been doing it for years, this session is sure to have something for you. Learn about our Teacher Tips docs, query parameters, translation features, and thousands of free activities!

Saturday, 12:40 PM

Prairie B

Anne Lewis, Carrie Olson-Manning & Bree Oatman

South Dakota Discovery Center

Research to Classrooms Using Milkweed

annelewis@sd-discovery.org *carrie.olsonmanning@augie.edu*, *boatman@olc.edu* Middle-High School Science
Join Dr. Carrie Olson-Manning, Augustana professor researching milkweed hybridization in South Dakota, and a team of educators to learn how to extend Carrie's place based research to your classroom. When you connect students to research, research data, and researchers, learning becomes relevant and fun!

Saturday, 12:40 PM

Prairie C

Nicole Goerges

CPM Educational Program

Launching the Lesson with Data Science

nicolegoerges@cpm.org

Middle School, High School

Math

Participants experience data science launches through instructional routines. We explore the benefits of data science launches and the instructional routines. Connections are made between data science and content standards. Participants explore resources to find data and infographics and develop a plan to implement data science launches in their own classrooms.

Saturday, 12:40 PM

Dakota A

Liz Pettit

Jefferson High School, SFSD

Tracking, Let's Talk About It

pettitelizabetha@gmail.com

Elementary, Middle School, High School

Science, Math, STEM

Come join me for a discussion about tracking in math programs. We will examine research on ability grouping, share classroom experiences, and discuss mixed-ability learning supports. Come prepared to have an open-minded conversation!

Saturday, 12:40 PM

Dakota B

Dan Van Peursem, Matt Miller & Sharon Vestal USD

Meet Your Future Teachers

dan.vanpeursem@usd.edu

Elementary, Middle School, High School

Science, Math, STEM

Come meet the teacher ed candidates from our various colleges and universities to help explain what they can expect in their first year teaching.

Saturday, 12:40 PM

Dakota E

Christine Larson

South Dakota State University

Building Thinking Classrooms in Calculus

christine.larson@sdstate.edu

High School

Math

Have you heard about Building Thinking Classrooms and want to learn more? I have been using many of the practices in my Calculus classes for the past 3 years. See what I have been doing, how these changes have impacted my students, and what you can do on Monday.

Saturday, 12:40 PM

Dakota F

Joy Lundgren & Michelle Wysuph

Calvary Christian School, Rapid City

Computational Thinking with and without Computer Science

sm0keybearsd@gmail.com

Elementary, Middle School

Science, Math, STEM

A basic introduction to Computational Thinking (CT), examples of plugged and unplugged activities to teach CT, and a hands-on entry-level Computer Science (CS) activity that utilizes CT pillars and at least one example to help students create CS models using CT skills using Code.org and Scratch.

Saturday, 12:40 PM

Salon

Jeff Schneider

Estelline High School

AI for Every Classroom: Real-World Skills & Student Agency Through the Design Thinking {previous AI users}

Jeff.Schneider@k12.sd.us

Elem, Middle School, High School, College

Science, STEM

Every teacher—regardless of subject or AI experience—can use Design Thinking to bring practical AI into the classroom. Explore hands-on strategies, prompt-writing, and reflection techniques that help learners build agency, critical thinking, and “learning how to learn” skills essential for thriving in a fast-changing, technology-driven world.

Dakota BioWorx is a fee-to-use pilot scale-up and bioprocessing hub that connects innovators and researchers with access to laboratory space, downstream processing, and engineering support, helping to transform their ideas into world-changing plant-based biotechnology solutions. DBX is committed to workforce training utilizing internships, micro-credential evaluations, and externship opportunities.

DAKOTABIOWORX.ORG



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

Saturday, 1:40 PM

Prairie A

Linda Stegemann

Featured Speaker

PhET Interactive Simulations

Meet PhET Studio: Interact Your Way

linda.stegemann@colorado.edu

Elementary, Middle School, High School, College

Science, Math, STEM

Be empowered with PhET Studio, PhET's first customization tool for teachers! Learn how to create unique sim experiences that fit your lessons and inspire students like never before. Join us to see Studio in action and start a free trial. Don't miss this exclusive opportunity!

Saturday, 1:40 PM

Prairie C

RunningHorse Livingston

Featured Speaker

STEM With Meaning: Biomimicry Innovation in the Classroom

mathematize@outlook.com

Math

This hands-on session provides ideas for high school teachers to incorporate biomimicry into STEM learning. The practice of learning from natural systems, designs, and relationships to solve human challenges is becoming popular. This session will emphasize culturally rooted understandings of humans' relationship to the environment. Participants will engage in model activities where students analyze how plants, animals, and ecosystems solve problems such as water filtration, fish species revitalization, and structural innovation. We will also explore examples of Indigenous ecological knowledge and how many Tribal communities have long designed technologies based on reciprocal relationships with the land.

Saturday, 1:40 PM

Dakota B

Kristine Heinen

South Dakota Discovery Center

360° Big Screen Adventures!

kristineheinen@sd-discovery.org

Elementary, Middle School, High School

Science, STEM

Gather round our planetarium, journey to the unknown! With limitless possibilities, this session gives you a taste of the SD Discovery Center's traveling dome. Ancient SD seas to the ends of the universe—start an unforgettable adventure and learn how to bring our Journey Beyond the Known Planetarium to your students.

Saturday, 1:40 PM

Dakota E

Ben Benson & Louisa Otto

Sanford Research

Artificial Intelligence in the Biomedical Research Lab

Benjamin.benson@sanfordhealth.org *Louisa.Otto@SanfordHealth.org*

Middle School, High School, College

Science, Math, STEM

This session builds AI literacy by exploring how computer science intersects with biology and biomedical research. Participants will examine AI's strengths, pitfalls, and potential harms, practice strategies for responsible use, and engage with hands-on tools. Reflection activities highlight ethical impacts while fostering cross-disciplinary connections for teaching and research.

Saturday, 1:40 PM

Dakota F

John Williams

University of South Dakota

Radiation Shielding: A Hands-On Middle School Engineering Activity for Those Who Like to Build

john.williams@usd.edu

Elementary, Middle School, High School

Science, STEM

In this model lesson, first written by SURF and expanded by USD preservice teachers, students tackle the problem of protecting a sensitive instrument from radiation. While the real-life scenario concerns many types of radiation, the student version focuses on eliminating all visible light. (Lesson plans / digital materials will be provided)

Saturday, 1:40 PM

Dakota G

Laura Shumaker

Technology Teacher Howard School District

Edison Robots

Laura.shumaker@k12.sd.us

Elementary, Middle School, High School

STEM

Explore how Edison robots can transform STEM learning in your classroom! This session introduces hands-on activities, coding challenges, and real-world problem-solving using Edison robots. Learn how to engage middle and high school students in robotics, programming, and engineering through accessible, affordable, and curriculum-aligned technology.

Saturday, 1:40 PM

Dakota H

Nicole Mehlhaff

Yankton School District

Elementary Science Sit Down

Nicole.Mehlhaff@k12.sd.us

Elementary

Science, STEM

Have you ever been asked what you need? This is just the time and place. Come sit and visit with other Elementary Science Teachers and discuss what is needed to make your science classes successful. Be heard, share ideas and come out with a plan!

Saturday, 1:40 PM

Salon

Mark Kreie

Brookings High School

Desmos 201: Using Desmos to Make Connections

mark.kreie@k12.sd.us

Middle School, High School

Math

Desmos Graphing Calculator is the default calculator for the digital ACT exam. In this session, participants will learn best practices using Desmos to help students make connections between mathematical concepts, along with strategies students can use to help succeed on the digital ACT. All Desmos tools are free. Intended for grades 8-12; bring an iPad or laptop.



College of Arts and Sciences

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

Saturday, 2:40 PM

Dakota A

Sharon Vestal, Susan Gilkerson, Amy Schander, & other SDCTM Board members SDCTM President

Discussion of Proposed SD K – 12 Math Standards

sharon.vestal@sdstate.edu susan.gilkerson@k12.sd.us; amy.schander@k12.sd.us

Elementary, Middle School, High School, College

Math

Come join SDCTM board members for a review and discussion of the recently proposed K – 12 Math Standards from the South Dakota Department of Education. Attendees will be split into grade band tables: K – 2, 3 – 5, 6 – 8, and 9 – 12 to review the standards and share feedback. Whether this is your first time reviewing the standards or you've already submitted feedback to the state, your perspective is valuable. Together, we will explore how SDCTM can support teachers if the proposed standards are adopted.

Saturday, 2:40 PM

Dakota C

Matt Miller & Larry Browning

South Dakota State University

More Demonstrations

matt.miller@sdstate.edu larry.browning@sdstate.edu

Elementary, Middle School, High School

Science, STEM

There is an outside chance that Larry Browning will be back in February. If not, we will have fun doing chemistry demonstrations!!!!!! New science demonstrations which connect to typical science content will be presented.

Wrap-Up & Reflection Discussions - Saturday 3:35-4:00 PM

Saturday, 3:35 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 2027 SD STEM Ed Conference.

Saturday 3:35 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 2027 SD STEM Ed Conference.

Saturday 4:15 - 6:30 PM

Prairie A

SDCTM & SDSTA Officers and Conference Leadership Joint Board Meeting

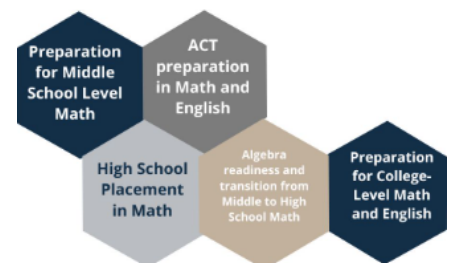
SD STEM Ed Board Chair & JPDC Board - SDCTM & SDSTA Officers and Conference Leadership meet to reflect & discuss current conference outcomes and strategize for upcoming event(s). If you are interested in helping to manage the conference and be part of the Joint Board, please contact SD STEM Ed Board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

Next Year's Conference will be February 4, 5, & 6, 2027

EdReady
CLASSROOM

THE EDREADY
TEAM
PROVIDES

- 1 Training
- 2 Support
- 3 Hosted Services



EdReadyClassroom.org



UNIVERSITY OF
SOUTH DAKOTA
SCHOOL OF EDUCATION






BIOZONE



To see **FULL PREVIEWS** of **ALL** titles visit:
biozone.com/us






CPM

CPM Educational Program is the student-centered solution for research-based math curriculum and professional learning that helps teachers create engaging classrooms where students truly understand mathematics.

**Empowering Students.
Supporting Teachers.**

With thoughtful tech connections that help bring focus and intention into the classroom, CPM equips educators with the tools, strategies, and support to build confidence and foster lasting success in math.



Discover Resources and Samples at CPM.org



**PROMISE
SANFORD
RESEARCH**

**SANFORD
PROMISE**

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 newsletter to stay up to date on all our academic year and summer programming.

 <p>Lesson Plans</p> <p>Visit our website to find resources for your classroom.</p>	 <p>Community Lab</p> <p>Request a visit to our Community Lab or bring educators to your classroom.</p>
 <p>Equipment Lending Library</p> <p>Put real-world science equipment in the hands of your students.</p> 	 <p>Professional Development</p> <p>Learn cutting-edge science techniques and concepts to share with your students.</p>

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



**GOVERNORS
CYBER ACADEMY**
DAKOTA STATE UNIVERSITY

**Every degree at DSU
is tech-infused OR
powered by cyber**

For more information
dsu.edu/cyberacademy
cyberacademy@dsu.edu





**SOUTH DAKOTA
STATE UNIVERSITY**

College of Arts and Sciences



Gizmos

**The largest library of
STEM simulations!**

Grade 3-12 science teachers have access via the South Dakota DOE.

Visit the booth to learn more



gizmos.explorelearning.com

Lisa Weier
Teaching & Learning
Coordinator
Lisa.Weier@sdea.org
605-222-1920

Bringing Resources, Innovation,
Development & Guidance to Educators

**SDEA
PROFESSIONAL
DEVELOPMENT**

Learning Management System

Want to incorporate STEM activities in the classroom?

We can help!

- Activities
- Career Days
- STEM Resources

**South Dakota
Discovery
Center**

Contact Us!
(605) 224-8295
info@sd-discovery.org
805 W. Sioux Ave., Pierre

**STEM EXPERIENCES IN YOUR CLASSROOM AND
PROFESSIONAL DEVELOPMENT THAT CREATES
CURIOSITY. EXCITEMENT. EXPLORATION.**

RESOURCES FOR TEACHERS, SCHOOLS, & STUDENTS

SD-DISCOVERY.ORG

SD **NSPE-SD** SOUTH DAKOTA
ENGINEERING SOCIETY
Executive@nspe-sdes.com

**DEPARTMENT OF
TRANSPORTATION**
Jaynie.Spier@state.sd.us

STEM
SCIENCE • TECHNOLOGY • ENGINEERING • MATHEMATICS

**South Dakota GF&P
Grassland Curriculum**

Come learn about one of the quickest disappearing resources on
our planet and what we can do to prevent it through fun,
engaging activities for your students.

**Dakota BioWorx is a fee-to-use pilot scale-up
and bioprocessing hub that connects
innovators and researchers with access to
laboratory space, downstream processing,
and engineering support, helping to
transform their ideas into world-changing
plant-based biotechnology solutions. DBX is
committed to workforce training utilizing
internships, micro-credential evaluations, and externship opportunities.**

DAKOTABIOWORX.ORG

**DAKOTA
BioWorx**

**SOUTH DAKOTA
STATE UNIVERSITY**
Jerome J. Lohr
College of Engineering

Finding your Future in Engineering

Learn • Build • Innovate
Solving Tomorrow's Challenges Today

Agricultural and Biosystems Engineering	Civil and Environmental Engineering
Construction and Concrete Industry Management	Electrical Engineering and Computer Science
Mathematics and Statistics	Mechanical Engineering

**BLACK HILLS
PARKS &
FORESTS
ASSOCIATION**

A nonprofit partner
of the National Park Service
& USDA Forest Service

EDUCATION RESOURCE HUB
PLACE-BASED LEARNING MADE EASY

Quickly find field trips,
virtual learning, outreach
programs, and curriculum
kits for hands-on, place-
based learning that aligns
with state standards.
Rooted in public lands
across South Dakota.

- **Field Trips** — ideas + logistics in
one place
- **Virtual Learning** — connect
students to public lands from
anywhere
- **Outreach Programs** — school
visits with rangers and other
experts
- **Curriculum Kits** — activities,
tools, and lesson support

**SCAN TO SAVE
PLANNING TIME!**

Questions?
bhpf@blackhillsparks.org

www.bhpf.org | 605-745-7020 Supporting **Wonder & Exploration**
for over 80 years!

**SOUTH DAKOTA STEM
CONNECT**

A new statewide support
initiative for SD CTE and
STEM teachers

LAKEAREATECH.EDU **LAKE AREA
TECHNICAL COLLEGE**

Representatives will be exhibiting on Friday from 8:00 AM until 5:30 PM.

(Most will be available through Saturday afternoon.) These include:

<u>- Company Name -</u>	<u>Representative(s)</u>
Biozone, Inc.	Jill Netz-Fulkerson, Ph.D.
CPM Educational Program	Laura Bain, Nicole Goerges
CSTA - SD	Charnelle Wooledge
Dakota Bioworx	Kyle Larson, Neal Connors
EdReady Classroom	Ryan Schrenk
ExploreLearning	Shalese Stroup, Daniel Silvers
Governors Cyber Academy	Jennifer Johnson
Lake Area Technical College	Mark Iverson, Brooks Jacobsen
Lake Area Technical College	April Simon
Sanford PROMISE	Louisa Otto, Tamara Ledeboer
Sanford Underground Research Facility	Kristen Riley
South Dakota Department of Transportation	Jaynie Spier, Krista May
South Dakota Discovery Center	Anne Lewis, Raegan Kleinpeter
South Dakota Education Association	Lisa Weier
South Dakota Engineering Society	Krista May
South Dakota Game Fish & Parks	Raghav Sriram Yogeeswari, Daniel Cox
SD Manufacturing & Technology Solutions	Angela Allen, Michelle Kakacek
SD School of Mines & Technology	Ashli Maddox, Katrina Donovan, Matthew Whitehead
SDSU College of Engineering	Jennifer Bickett, Suzette Burhckard
SDSU College of Natural Sciences	Omar Rodriguez
Southeast Technical College	Kristin Larsen, Greg Schwebach
University of South Dakota	Dan Mourlam, Branden Hoefert

Graduate Credit will be offered through Black Hills State University. You may register for one-hour of credit at the 692. 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://sites.google.com/view/ed-694-sdstemed-credit2026/home> 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 info, contact kim.webber@bhsu.edu or Nicole.UhreBalk@bhsu.edu at 651.485.1747

Order & pay for Conference swag (shirts, bags, cups &/or cap) by December 31 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-2026/>

– Next year's conference will be **February 4, 5, & 6, 2027** –

The 2026 Conference Committee would like to offer a Special Thanks to . . .
Black Hills State University and Kim Webber & Nicole Uhre-Balk 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 Black Hills Parks & Forests Association for sponsoring
the dessert at the Friday Banquet. www.bhpf.org



Next year's SD STEM Ed conference will be February 5, 6, & 7, 2027.

The 2026 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 conference. 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. 15th. Anything thereafter will be considered On-Site Registration. On-Site Registration rates are: ONE-day \$225, Students \$70 includes the Noon Luncheon for that day. TWO-days \$250, 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. 15th 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.

2026 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; 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/xz8tskW8ygR7cEzh8>

Name

Address

City, State, Zip Code



In South Dakota, the "Law of Conservation of Momentum" only applies
when you're trying to walk against a 50 mph wind in January.

How can you tell if a chemist is from South Dakota?

They think "P" on the periodic table stands for "Pheasant."

Which number is the most curious?

4—always asking "for?"

How do decimals start a conversation?

"Point taken."





SDSTA

President:

Alison Bowers
Alison.Bowers@k12.sd.us

President-Elect:

Leslie Sauder
Leslie.Sauder@northern.edu

Past President:

Ashley Armstrong
Ashley.Armstrong@bhsu.edu

Treasurer:

Spencer Cody
Spencer.Cody@k12.sd.us

Secretary:

Tiffany Kroeger
Tiffany.Kroeger@k12.sd.us

Science Liaisons:

Larry Browning
Larry.Browning@sdstate.edu

Bree Oatman

Bree.Oatman@lowerbruleschools.org

Curtis Peterson

Curtis.Petersen@ohitika.com

Kristen Gonsoir

Kristen.Gonsoir@k12.sd.us

Jeff Peterson

Jeff.Peterson@k12.sd.us

NSTA District IX Director:

Angela Osuji
Washburn High School, MN

PAEMST Coordinators

Allen Hogie - **Mathematics**

Allen.Hogie@k12.sd.us

Ann Anderson - **Science**

Ann.M.Anderson@k12.sd.us



SDCTM

President:

Sharon Vestal
South.Dakota.ctm@gmail.com

President-Elect:

Elizabeth Pettit
Elizabeth.Pettit@k12.sd.us

Past-President:

Dan VanPeurse
Dan.Vanpeurse@usd.edu

Vice-President:

Susan Gilkerson
Susan.Gilkerson@k12.sd.us

Secretary:

Amy Schander
Amy.Schander@k12.sd.us

Treasurer:

Jay Berglund
Jay.Berglund@k12.sd.us

Elementary Liaison:

Jodi Neuharth
Jodi.Neuharth@k12.sd.us

MS Liaison:

Allison Schmitz
Allison.Schmitz@k12.sd.us

Secondary Liaison:

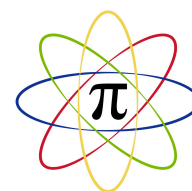
Michelle DeYoung
Michelle.DeYoungr@k2.sd.us

Post-Secondary Liaison--Math:

Chris Larson
Christine.Larson@sdstate.edu

NCTM Liaison:

Kevin Smith
Kevin.Smith@dsu.edu



SD STEM Ed

CONFERENCE

Conference Coordinator:

Cindy Kroon
Cindy.Kroon@k12.sd.us

Program Coordinator

James Stearns
James.Stearns@k12.sd.us

Exhibitor Coordinator

Michelle Bartels
Michelle.Bartels@k12.sd.us

Hospitality Coordinator:

Alison Bowers
Alison.Bowers@k12.sd.us

Finance Coordinator

Sheila McQuade
SMcQuade@OGKnights.org

COMMUNICATIONS

**SDSTA Newsletter Editor
& Assistant to the Editor**

Michelle Bartels
Michelle.Bartels@k12.sd.us

Justine Garber
Justine.Garber@k12.sd.us

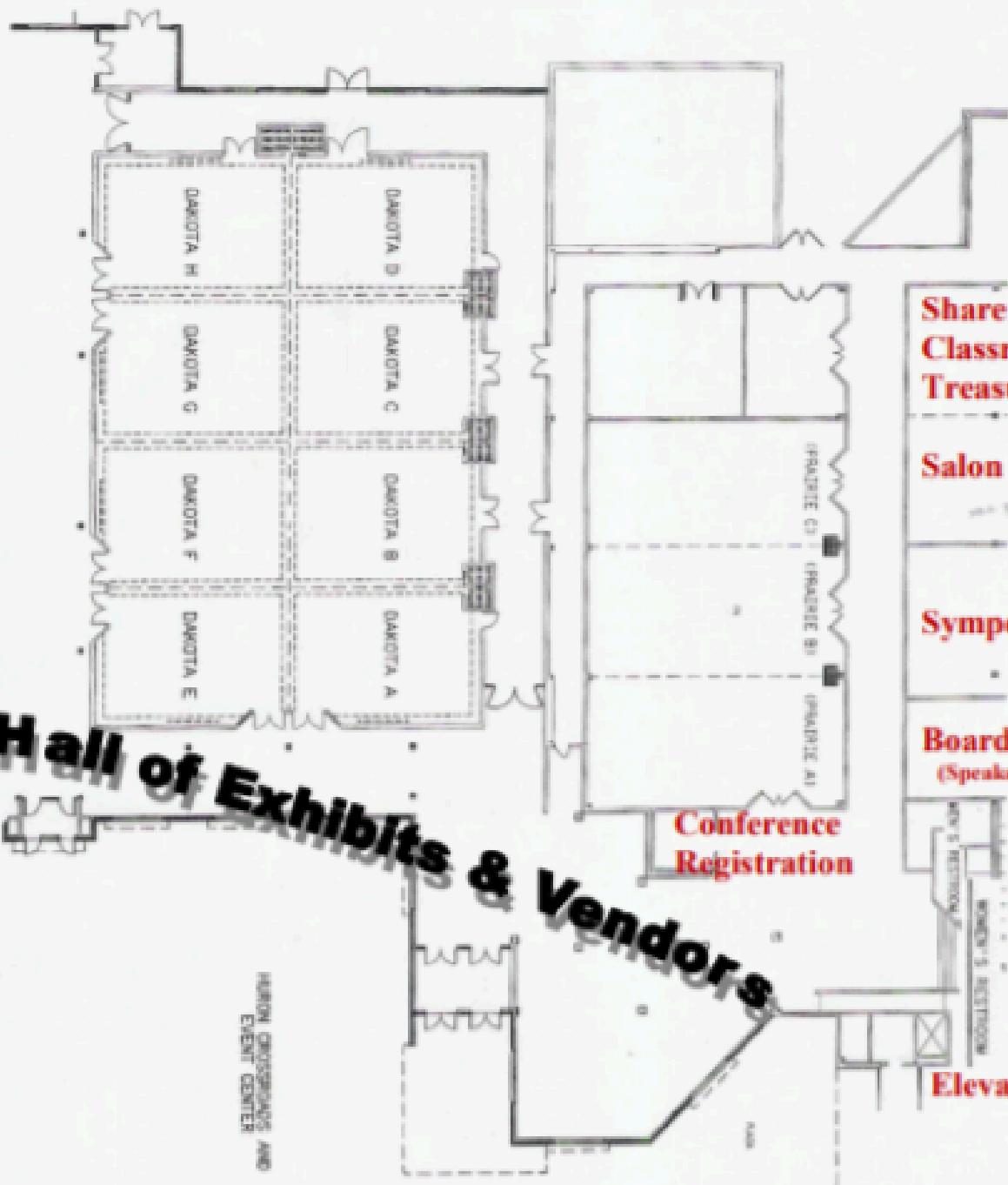
SDCTM Newsletter Editor:

Amy Schander
ASchander@k12.sd.us

SDCTM Webmaster:

Cindy Kroon
Cindy.Kroon@k12.sd.us

Hall of Exhibits & Vendors



Share the Classroom Treasures

Salon

Symposium

Board Room (Speakers)

Conference Registration

Elevator

MEN'S RESTROOM WOMEN'S RESTROOM

HUBBARD CROSSINGS AND EVENT CENTER

HUBBARD