

# 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**

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

Updated 1-27-2026



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

### 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 <i>(cost included in the registration fee - Baked Potato Bar)</i>	Dakota C & D
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

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

<b>Friday, Feb. 6, 2026</b>			
Remember to visit the exhibits in the Lobby and Hallways of the Crossroads Hotel.			
8:00 AM	First Choice		Second Choice
8:00 AM	Location: <i>Prairie B &amp; C</i>		
	Title: <i>OPENING SESSION - Conference Welcome</i>		
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	<b>Friday Noon Luncheon in Crossroads Hotel – Dakota C &amp; D</b>		
12:50-1:10	<b>Exhibitor Networking: Exhibitor</b>		
1:10 PM	Location:		Location:
	Title:		Title:
2:10 PM	Location:		Location:
	Title:		Title:
3:00 PM	<b>Exhibitor Networking: Exhibitor</b>		
3:30 PM	Location:		Location:
	Title:		Title:
4:30 PM	<i>SDSTA BUSINESS MEETING in Dakota A</i> <i>SDCTM 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> <b>RunningHorse Livingston</b> - speaker

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<b>Saturday, Feb. 7, 2026</b>			
	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	<b>Exhibitor Networking: Exhibitor Session</b>		
11:30-12:30	<b>Saturday Noon Luncheon in Crossroads Hotel – Dakota C &amp; D</b>		
12:40 PM	Location:		Location:
	Title:		Title:
1:40 PM	Location:		Location:
	Title:		Title:
2:40 PM	Location:		Location:
	Title:		Title:
3:35-4:00	Wrap-up and Reflect – Math in Dakota A		Wrap-up and Reflect – Science in Dakota B
4:15 PM	<b>SDCTM &amp; SDSTA JOINT BOARD MEETING</b>		

## 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**

Betsy Schamber

Dakota State University

**Dakota E**

*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**

Raegan Kleinpeter

South Dakota Discovery Center

**Dakota F**

## **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**

Matt Miller

South Dakota State University

**Dakota G**

## **Utilizing Green Chemistry to Illustrate Science Concepts**

*Matt.Miller@sdstate.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**

Louisa Otto, Benjamin Benson

Sanford Research

**Dakota H**

## **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**

Kevin Smith

Dakota State University

**Salon**

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](http://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 the skills to complete a grant to get their own materials kits.

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

Dakota H

### Artificial Intelligence in the Biomedical Research Lab

[Benjamin.benson@sanfordhealth.org](mailto:Benjamin.benson@sanfordhealth.org) [Louisa.Otto@SanfordHealth.org](mailto: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.



PROMISE  
SANFORD  
RESEARCH

Friday, 9:30 AM

Symposium

Mark Iverson & Brooks Jacobsen

Lake Area Technical College

### Building South Dakota's STEM Teaching & Learning Community

[mark.iverson@lakeareatech.edu](mailto:mark.iverson@lakeareatech.edu) [Brooks.jacobsen@lakeareatech.edu](mailto: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.

Friday, 9:30 AM

Salon

Sandra Shipley

Bison School

### Algae Academy - A Free Resource for Hands-on Science

[Sandra.Shipley@k12.sd.us](mailto: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

Prairie A

Katy Dornbos

**Featured Speaker**

### The Beauty & Fun of Graphs

[kldornbos@gmail.com](mailto: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**

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**

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**

Leanne Holdorf

Sioux Falls Lutheran School

**Dakota A**

## **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**

Linda Stegemann

**Featured Speaker**

**Dakota B**

## **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**

Jeff Schneider

Estelline High School

**Dakota E**

## **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**

Katrina Donovan, Matthew Whitehead

South Dakota Mines

**Dakota F**

## **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, SDSMines, 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](http://CPM.org)

# HELP STUDENTS MAKE SENSE OF MATH OPTIONS

Math Pathways Advising Tools on [OurDakotaDreams.com](http://OurDakotaDreams.com) help teachers guide students to the middle and high school math courses required for their future college and career goals.

## WHAT THE TOOLS DO

- Link career interests to college math requirements
- Show how course sequences affect placement and readiness
- Support advising with clear, student-friendly guidance

## WHY TEACHERS USE THEM

- Align current math courses with future college math
- Clarify the purpose behind math requirements
- Encourage early, intentional course planning

[VIEW THE PATHWAYS](#)



Start placement conversations early to keep students on track.

**Right courses. Right preparation. Right pathway!**  
[OURDAKOTADREAMS.COM/MATH-PATHWAYS](http://OURDAKOTADREAMS.COM/MATH-PATHWAYS)



Thank You to SD Board of Regents for supporting us with dessert at Friday lunch.

**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@explorelearning.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, SDSMines, 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.



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Website: [promise.sanfordhealth.org](http://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

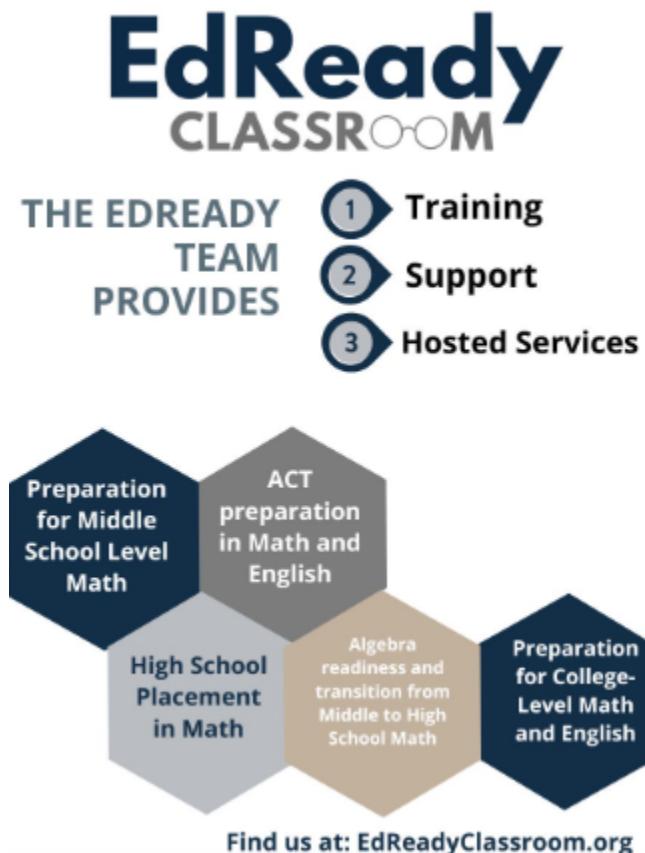
## Teaching Culturally in Math and Science

*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**

Bree Oatman PhD

Oglala Lakota College

**Dakota F**

## **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.



**SOUTHEAST**  
Technical College

**Friday, 3:30 PM**

Linda Stegemann

**Featured Speaker**

PhET Interactive Simulations

**Dakota A**

## 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**

Mark Kreie

Brookings High School

**Dakota B**

## 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**

Steven Rokusek

SDPB

**Dakota D**

## 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

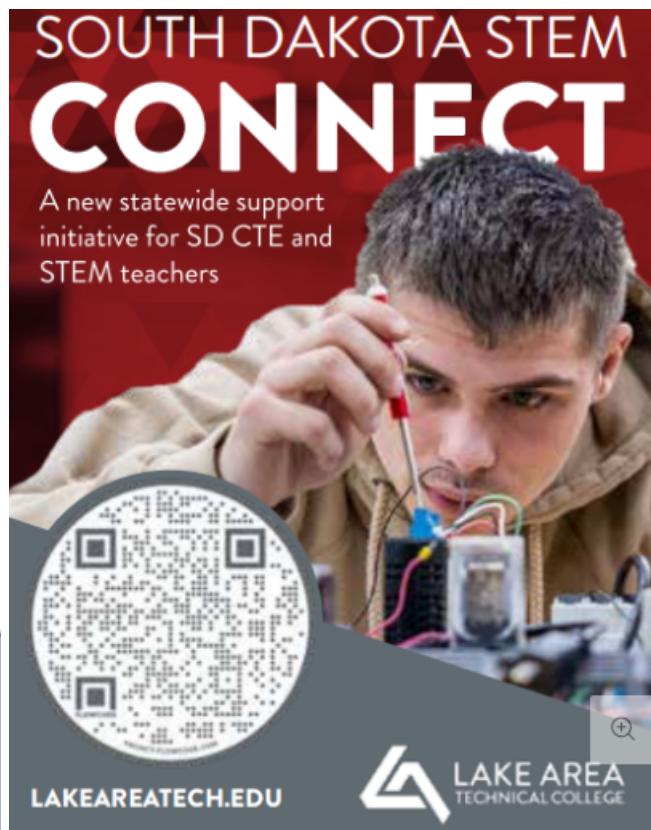
STEM

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**

Shalese Stroup

ExploreLearning

**Dakota F**

## **Math That Moves! Dive Into Discovery with Gizmos**

*shalese.stroup@explorelearning.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**

Matt Miller

South Dakota State University

**Dakota G**

## **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**

Emily Siemonsma

Sanford Underground Research Facility / Wyoming Space Grant Consortium

**Dakota H**

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

**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**

SDSTA

**Dakota A**

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**

SDCTM

**Dakota B**

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.

Friday, 6:30 PM

Featured Speaker :

## SD STEM Ed Awards Banquet

RunningHorse Livingston

Dakota C & D

STEM into the Classroom



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Electrical  
Engineering and  
Computer Science

Mechanical  
Engineering

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

Saturday, 7:00 AM

Prairie C

Allen Hoggie & Ann Anderson

SD PAEMST

## Breakfast for SD PAEMST State Level Finalists and Past Awardees

[Ann.M.Anderson@k12.sd.us](mailto:Ann.M.Anderson@k12.sd.us); [Allen.Hoggie@k12.sd.us](mailto:Allen.Hoggie@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

*kdornbos@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

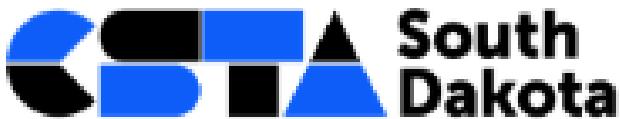
## **Teaching Ecosystems through Birding with Merlin ID: Place-Based Science that Builds Engagement through Technology-Enhanced Observations.**

*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>

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**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@explorelearning.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.



## **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.

## - 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.



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**Saturday, 9:00 AM**

Nathaniel Raak

Mitchell Technical College

**Dakota B**

## 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**

Matt Miller

South Dakota State University

**Dakota C**

## 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

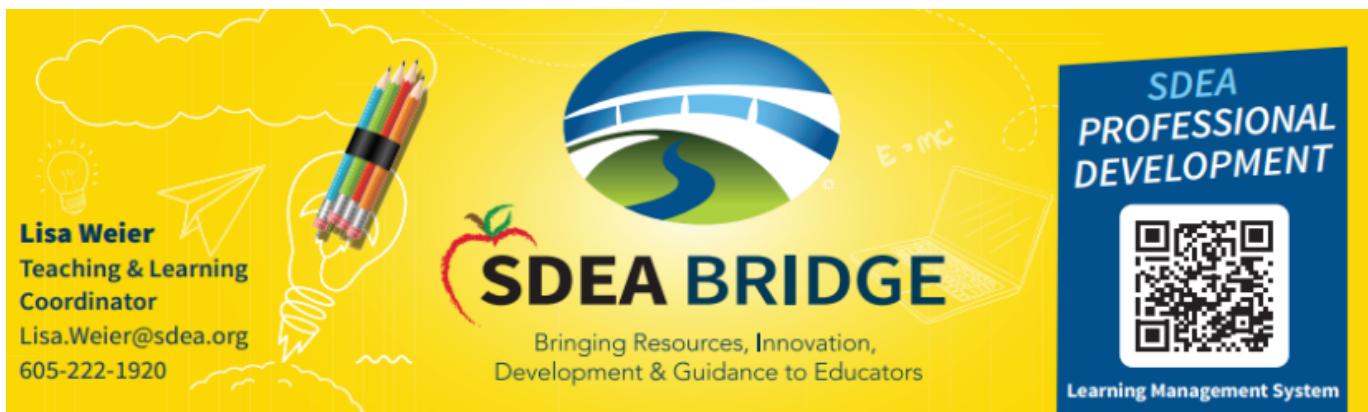
## Retro Tools to Rock the Science Classroom: 3 Top-Rate Simulation Tools from Yesteryear and How to Use Them to Support Science Learning Today

*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

Shalese Stroup

ExploreLearning

Salon

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

[shalese.stroup@explorelearning.com](mailto:shalese.stroup@explorelearning.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](mailto: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](mailto: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](mailto:andrew.sathoff@dsu.edu) [georgie.kolbeck@trojans.dsu.edu](mailto: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**

Linda Stegemann

**Featured Speaker**

PhET Interactive Simulations

**Dakota A**

## 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**

Amy Schander

Gayville-Volin School District

**Dakota B**

## 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**

Mark Kreie

Brookings High School

**Dakota E**

## 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**

John Williams

University of South Dakota

**Dakota F**

## 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**

Jill Netz-Fulkerson, Ph.D.

Biozone, Inc.

**Symposium**

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

*jillfulkerson@comcast.net*

[www.biozone.com](http://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**

Shalese Stroup

ExploreLearning

Salon

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

*shalese.stroup@explorelearning.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?

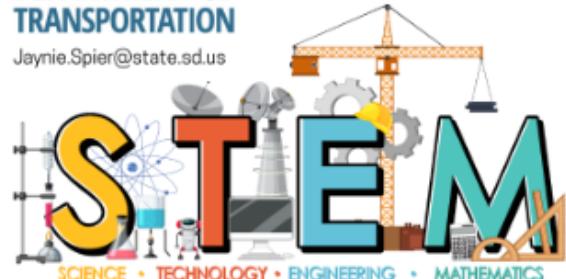
We can help!

- Activities
- Career Days
- STEM Resources



## DEPARTMENT OF TRANSPORTATION

*Jayne.Spier@state.sd.us*



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

**Saturday, 12:40 PM**

Linda Stegemann

**Featured Speaker**

Prairie A

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](http://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

RunningHorse Livingston

**Featured Speaker**

Prairie C

## 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

Kristine Heinen

South Dakota Discovery Center

Dakota B

## 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

Ben Benson & Louisa Otto

Sanford Research

Dakota E

## 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

John Williams

University of South Dakota

Dakota F

## 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**

Laura Shumaker

Technology Teacher Howard School District

**Dakota G**

## **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**

Nicole Mehlhaff

Yankton School District

**Dakota H**

## **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**

Mark Kreie

Brookings High School

**Salon**

## **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.



**SOUTH DAKOTA  
STATE UNIVERSITY**

**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

Matt Miller & Larry Browning

## More Demonstrations

Elementary, Middle School, High School

Dakota C

South Dakota State University

[matt.miller@sdstate.edu](mailto:matt.miller@sdstate.edu) [larry.browning@sdstate.edu](mailto:larry.browning@sdstate.edu)

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

### Math Wrap-up and Reflect

Dakota A

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, 3:35 PM

### Science Wrap-up and Reflect

Dakota B

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 4:15 - 6:30 PM

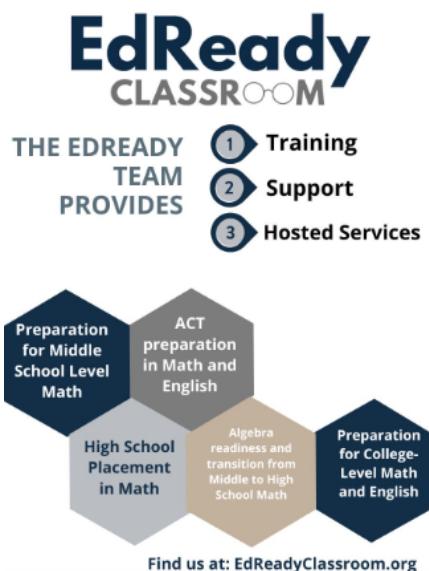
Prairie A

## 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



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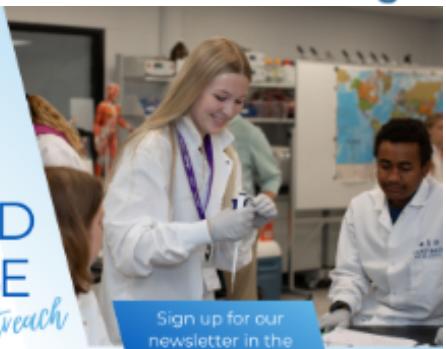
With thoughtful tech connections that help bring focus and intention into the classroom, CPM equips educators with the tools, strategies, and support to build confidence and foster lasting success in math.



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PROMISE**  
*Education and Outreach*



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### 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.

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STATE UNIVERSITY**

College of Arts and Sciences



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Visit the booth to learn more



[gizmos.explorelearning.com](http://gizmos.explorelearning.com)










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

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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? bhpfa@blackhillsforests.org

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Want to incorporate STEM activities in the classroom?

We can help!

- Activities
- Career Days
- STEM Resources







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




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	Jayne 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 Yogeeshwari, 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-sdstemmed-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](mailto:kim.webber@bhsu.edu) or [Nicole.UhreBalk@bhsu.edu](mailto: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.bhpfa.org](http://www.bhpfa.org)



**VIEW THE PATHWAYS**



**THANKS to SD Board of Regents for sponsoring the dessert at the  
Friday noon meal.** [ourdakotadreams.com/math-pathways/](http://ourdakotadreams.com/math-pathways/)

**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](http://www.sdctm.org)] or SDSTA website [[www.sdsta.org](http://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>

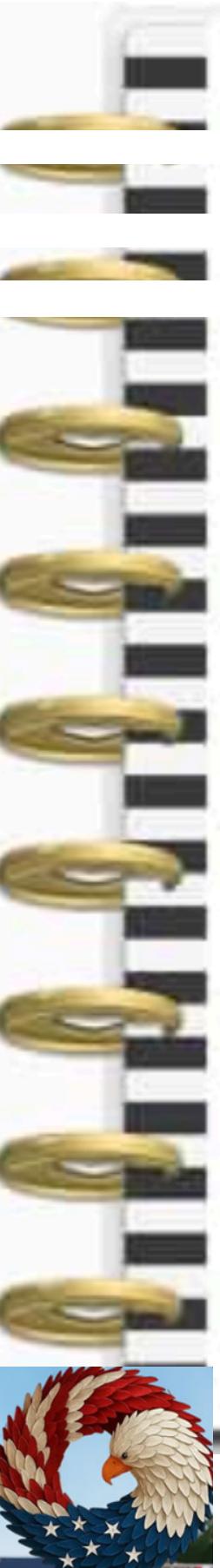
Name \_\_\_\_\_

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## 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?

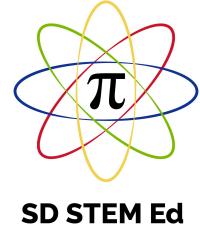
How do decimals start a conversation?

4—always asking "for?"

"Point taken."

## Why Huron?

Every year, someone asks the question, "Why is the SD STEM Ed Conference always in Huron?" There are several reasons including: it is easier; it is cheaper; and Huron is so accommodating. For the past 30+ years, the Huron Chamber of Commerce, the Crossroads Hotel, and now the Huron Events Center have gone out of their way to accommodate the needs of an ever-changing conference.



In previous years, when our attendance went from 200 to over 700 in one year, the HCC/Crossroads found us 14 extra meeting rooms within walking distance of the Crossroads at no extra cost to the Conference Committee. This included a longstanding agreement with the Presbyterian Church that ended only when the new Events Center was completed. They also helped us scale back when the NSF money dried up and we struggled to make ends meet and still keep a quality conference. Our liaisons with the Crossroads, especially Brenda and Maria, have helped us do what it takes to meet the needs of our organizations.

Another reason we stay in Huron is that it is just plain easier. SDSTA and SDCTM are organizations that are run by volunteers. We all know that doing something the second time is easier than figuring out how to do it the first time. Imagine trying to allocate space for sessions in a strange facility, or coordinating meals with someone you don't know, or straightening out the room situation when you discover that a featured speaker doesn't have a room with the third desk clerk you have talked to in two days. These are all things that the Joint Conference Committee does not have to deal with. One phone call or email usually takes care of any "crisis."

Finally, the bottom line usually ends up being money, and this is no exception. About every three years, representatives from Sioux Falls, Aberdeen, Pierre and Rapid City contact us trying to lure us away from Huron. What I do is send them a list of the things that Huron provides and ask them what incentive they can offer to make us consider changing our venue. Sometimes they don't even respond. Most of the time, they send me a polite note, suggesting that I am exaggerating what we get from the Crossroads/Huron Events Center. Trust me I am not. We pay nothing for meeting rooms, get reasonable rates on our meals, provide all available sleeping rooms at the Crossroads to our participants at the same rate, and we get complimentary suites to use as office space.

Until the last several years when we had so many requests for LCD projectors, they also provided all AV equipment, screens and microphones free. Even now, thanks to the HEC we still do not pay for AV equipment. Many national conferences now pass that cost on to presenters at anywhere from \$25-50/hour for the use of an LCD projector. These things add up to big dollars in the overall budget. Since we need this conference to be self-supporting, money MUST be a factor in our decision-making process.

That is why we stay in Huron. I realize that this may be more information than you really need or want, but I feel that it is important to address a question that doesn't seem to go away. I think you also need to go out of your way to thank any SDCTM or SDSTA Board member that you see for the time and energy that they put into making the SD STEM Ed Conference such a great event. We, in South Dakota, are unique in having an annual Joint Conference, especially one that is coordinated by volunteers. What is even more important is the quality of that conference.

*Cindy Kroon*, Conference Chair



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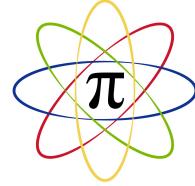
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