

SDSTA

South Dakota Science Teaching Association

Spring Issue | Date: April 14, 2022

Members,

It was wonderful seeing everyone in-person at the SD STEM Ed Conference in February. The theme was perfect as we were finally “Together Again!”

SDSTA elections were held this year and I’m happy to announce that Allison Bowers will serve as the new president-elect. Allison is the high school science teacher at Hanson High School and has been highly involved in our organization for years. Spencer Cody, 7-12 science teacher at Edmunds Central School, is our newly elected treasurer. He adds expertise and an enthusiasm for science that we appreciate. Tiffany Kroeger, high school science teacher at Montrose High School, was appointed to remain our secretary. With many years of experience, she helps guide our organization. We look forward to serving the teachers in South Dakota over the next two years.

I would like to thank our outgoing president, Michelle Bartels for her commitment to our organization over the past two years. She guided us through the most uncharted times in our careers. We appreciate her commitment to our organization and her push to continue with collaboration and professional development,

despite the challenges we faced in our classroom throughout the pandemic.

Having served as your president-elect for the past two years, I am excited to now move into the position of president. I have five years teaching experience in both middle school and high school with an additional ten years of experience teaching post-secondary students. I now work as a Science Education Specialist at the Sanford Underground Research Facility in Lead.

We look forward to serving you as you finish this school year, throughout the summer, and well into the future. Look through the professional development offerings in this newsletter. There are several opportunities to collaborate with colleagues from across the state and to grow your content area and pedagogical knowledge. Reach out with questions and let us know how we can best serve you!

Ashley Armstrong



SDSTA Distinguished Service Award

Mark Iverson was awarded with the **2022 Distinguished Service Award**.

This award recognizes the efforts and contributions from a member of SDSTA. Mark was the SDSTA president from 2018 to 2020 and is now the SD STEM Ed Conference Tech Specialist. In the past Mark has been the exhibitor coordinator and a master presenter. He may hold the record for the most sessions held at Joint Science and Math Conference. His all time high is six sessions!

Thank you Mark for giving so much of your time to SDSTA and the SD STEM Ed Conference. We could not succeed without you!



Patty Ressler, BHPFA Director, and Andrea Fountain, BHPFA Education Coordinator

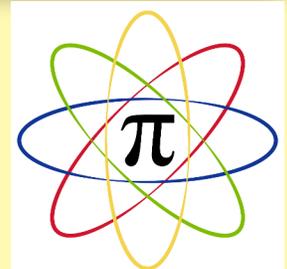


SDSTA Friend of Science Award

SDSTA awarded **Black Hills Parks & Forests Association** with the 2022 Friend of Science Award. This award is presented annually to an individual, group, or organization that works with SDSTA to enhance science literacy, supports SD science teachers, and provides partnership and experiences for SD teachers and students in science.

If you have participated in educational programs offered by the National Park Service, US Forest Service, or SD Game Fish & Parks in Western SD over the past 75 years, you have likely been influenced by the efforts of Black Hills Parks & Forests Association. They manage the stores of their agency partners and a percentage of the profits are returned to fund educational programming. Currently, their capacity is growing at high rates with an expanding volunteer program and supporting the SD Master Naturalist Program. The future is bright with their vision and endless efforts to enhance science education for the public... especially for our students!

SD STEM Ed Conference 2023
February 2nd, 3rd, & 4th



Presidential Awards for Excellence in Mathematics and Science Teaching



The Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) is the highest recognition that a kindergarten through 12th grade mathematics or science teacher may receive for outstanding teaching in the United States. Since 1983, more than 4,000 teachers have been recognized for their contributions to mathematics and science education. Awardees serve as models for their colleagues, inspiration to their communities, and leaders in the improvement of mathematics and science education.

Presidential awardees receive a citation signed by the President of the United States, a trip to Washington DC to attend a series of recognition events and professional development opportunities, and a \$10,000 award from the National Science Foundation.

2022 Science Finalist Brianna Schmidt

Brianna Schmidt, a science teacher from Spearfish, SD, has been teaching for 8 years. She is a 2nd grade teacher at West Elementary in Spearfish. Brianna received her degree in Elementary and Special Education from Black Hills State University in 2014. In her building she is a leader in standards innovation, instructional design, is on the science curriculum team, and is a STEAM Club Educator. She is a member of the South Dakota Science Alliance and received a Master Teacher Policy Fellowship with the American Association of Physics Teachers and American Institute of Physics.

2022 Science Finalist Tiffany Wolla

Tiffany Wolla, a science teacher from Rapid City, SD, has been teaching for 9 years. She is a 6th grade science teacher at East Middle School in Rapid City. Tiffany graduated from Black Hills State University in 2013 with a degree in Elementary Education and a Middle School minor. She is an active member of the East Middle School Building Leadership Team and had a leadership role in developing the district's 6th grade science pacing guide. At the state level Tiffany worked on the SD state science test review in 2017.

SD Space Grant Consortium Awards



Alan Grinsteiner of Bison High School receives a \$4,340 award for his project that uses electronics and digital data collection tools to better address and teach cross cutting

concepts and engineering practices in fields spanning life science to physics in alignment with the new generation science standards. Alan's funds will specifically be used in a new course being developed at his school. His project will annually reach about 65 high school students in his science classes including 10 high school students in a science course that is integrated with 12 third grade students.



Steve Gabriel of Spearfish High School receives a \$5,000 award for his project dealing with Underground Environmental Monitoring at the SURF. This grant will

be used to expand Steve's project that has been ongoing for the past 10 years, such that the monitoring program keeps up with the growth of physics experiments at SURF. The project reaches 240 students per year.

Officer Submissions

Chemistry Shorts: Carbon Capture Video and Lesson - Julie Olson, SDSTA Newsletter

Chemistry Shorts spotlights the connection between Chemistry and everyday life. The carbon Capture video and lesson is timely with the carbon dioxide pipeline being planned that would run through SD. Global climate change is one of the most important challenges of our time, and chemists and chemical engineers are at the forefront of this effort. One especially promising technology is through Direct Air Capture.

Direct Air Capture makes use of amines, which capture carbon dioxide out of the air through specific chemical bonding. The carbon dioxide is then sequestered by storing it underground so that the amount of carbon dioxide in the air is reduced every year. Though re-purposing is helpful, it is not a solution. Reducing the amount of carbon dioxide every year through sequestration is the only real remedy.

Chemists and chemical engineers are working to scale up this technology to remove 10s of gigatons of carbon dioxide. Key challenges that lay ahead are to find ways to both reduce the cost of this procedure and make it more efficient.

In this film, experts from academia and industry discuss the science of Direct Air Capture and the opportunities it provides. A video worksheet, activity, and lesson plan are provided.



STOICHIOMETRY TIPS AND TRICKS - Alison Bowers, SDSTA Liaison

You know that when stoichiometry comes up as the butt of a parenting joke on your Instagram, students (and parents) have strong reactions toward the concept. However, I think stoichiometry is fun, and I gathered a few of my favorite things that help make teaching (and learning) the topic less painful.

First, I introduce the mole early on in the school year. We talk about stoichiometry as the bridge between the particle level, where we think about what individual atoms or molecules are doing, and the macro level, where we can actually measure the amounts of substances that we are talking about in grams or milliliters.

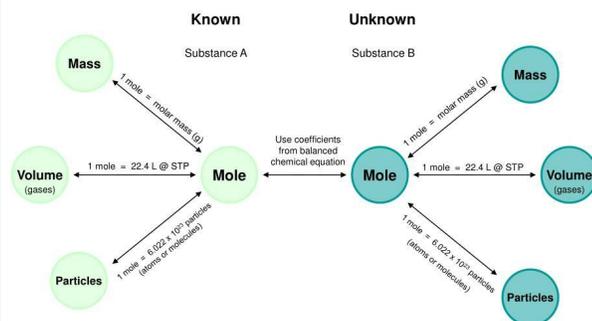
Most of my students have good math reasoning skills and can do dimensional analysis without much headache. However, it seems like when we start stoichiometry problems, they forget all of their skills. This [Nuts & Bolts activity](#) allows students to practice dimensional analysis, moving from number of "particles" to grams and using ratios to understand the relationship between reactants and products. I altered my version of this so that the masses matched up with the masses of the actual nuts and bolts that I bought, but you sure don't have to. Then my key addition is that I let them check their work with ONLY the answers and ask them to explain how they calculated their answers. Then I set up my calculations, showing each ratio needed for the problem. This way, we are able to discuss what they did through mathematical reasoning and identify where that step occurs in MY work. This helps them understand that we are doing the exact same math, but the problem set up is simply more structured and we can ensure our success by canceling units until we get to where we want to be.

The other amazing resource that I've found is called Mole Island. There are hundreds of images of this that you can Google. These maps help students identify the known variable in the problem and create a map to determine their unknown. Each "bridge" represents a conversion that will need to happen and how they can find that conversion. Some teachers print off a completed mole island for each students, and some use a blank version as guided notes. I've had success both ways and it really gives students a resource to turn back to as often when they get stuck. This helps boost their confidence and prevents them from giving up as often. That way, stoichiometry seems a lot less mystifying for all of us!

"There are hundreds of images of this that you can Google, including this one."

Stoichiometry Mole Island Diagram

When in doubt...convert to moles!



Officer Submissions

Law of Reflection - Larry Browning, SDSTA Liaison, SDSU Physics Dept.

Optics is often taught in the spring – at least for me. It is one thing to say, for reflection, that the angle of incidence equals the angle of reflection as measured from the normal, but students often understand a concept at a deeper level if they have an activity where they recreate what you are trying to teach.

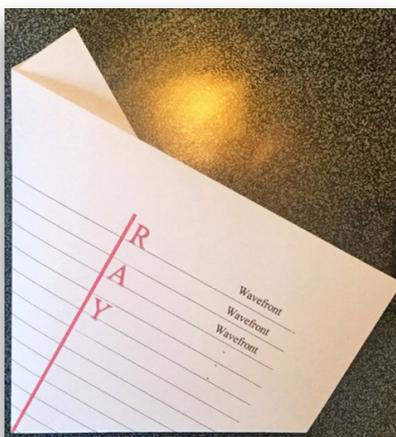
Goals: To understand

- Fronts
- Rays
- Normal
- Plane surface
- Law of reflection applies to any angle (between 0 and 90 degrees)

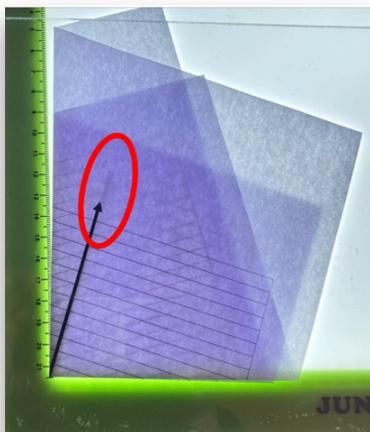
To illustrate the Law of Reflection from a plane mirror students are provided a lined sheet of paper with an arrow running down the middle. The lines represent wave fronts and the arrow represent the reflected ray. The student is then asked to fold this paper along a straight line at an angle which “reflects” the bold arrow. The fold will be the mirror, the arrow represents a “ray” of light, and the parallel lines represents “wave fronts.” With another fold perpendicular to the “mirror” you should be able to see that the angle of incidence and angle of reflection are the same. It is important to make the corner of the last fold – which is perpendicular to the mirror (identified as the “normal” in books) – at the exact location where the “ray” contacts the mirror fold. To see the reflected ray through the sheets of paper it will need a back light, which you can do by simply holding the folded paper up against a window during the day. Also have the students pick the mirror fold (the first) randomly to show that it doesn’t matter, but try to avoid folding on the lines or the ray. It works there too, but is not as interesting. Also you can unfold the paper to show that the arrow/ray is straight and continuous before reflection.

Tip: You can use a page from a stenographer’s notebook or “Steno notebook.” They already have a line down the middle often in a different color that makes a great “ray.”

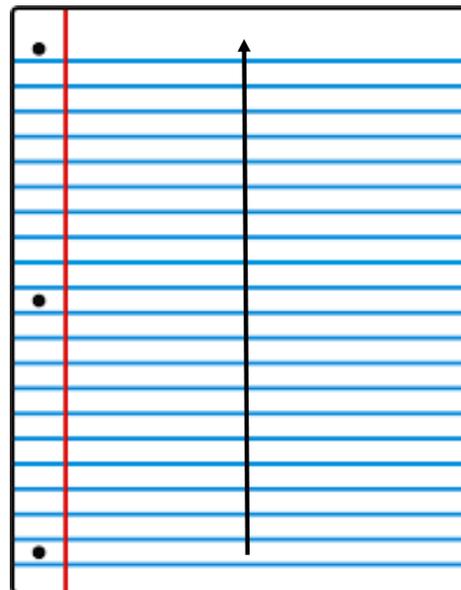
Note that with this method you do not need a protractor to show the angles are equal. Of course you could always use one to measure the angle and compare with other student’s folds. Caution: One of the hardest things is to get students to make the fold for the normal at the right place (intersection of ray and mirror) and perpendicular to the first fold. They want to fold it perpendicular to the fronts. They also tend to make the first, mirror fold along a front instead of at an angle to the front.



Shows the paper after the two folds. The bottom represents the mirror and the left side represents the normal. You cannot see the reflected ray in this picture.



Shows the reflected ray and directly behind it but fainter and at the same angle, is the incident ray highlighted by the oval. This picture was back lit by a light table.



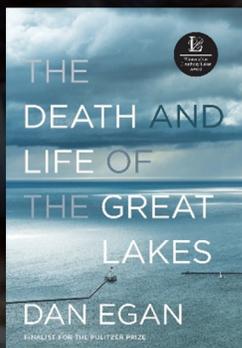
Provide students a lined sheet of paper with an arrow running down the middle.

Register by April 18th Register by April 18th Register by April 18th

Aquatic Invasive Education Book Study

Teachers in grades PreK-12 in any content area are encouraged to apply to learn about the impact aquatic invasive species are making on our freshwater ecosystems.

- Learn about the threats aquatic invasive species pose to South Dakota's waters and about ways to prevent and control the spread of aquatic invasive species.
- Learn about how these aquatic invasive species made it to North America through our reading of the *Death and Life of the Great Lakes* (must purchase your own copy.)
- Five flexible meeting dates during the course held virtually via Zoom.
- The 10-week (April 18-June 30) book study is worth one graduate credit through USF for \$45.
- Email Spencer.Cody@k12.sd.us to register for this class; USF registration for credit is on the USF website and is due June 30.
- Registrations are due April 18.



Professional Development

SDMath/SDSci Leadership

Apply by May 24

SDMath/SDSci Leadership is a program to create and support a dynamic network of South Dakota math and science educators. The program selects, challenges, develops and educates South Dakota math and science educators who have demonstrated an interest in leadership skills related to math and science education.

Applications are due **May 24**.

SDMath/SDSci Leadership is designed around the following goals:

- Build capacity by focusing on problem solving, innovation, leadership, systems thinking, change, identity and efficacy.
- Create a common knowledge base for advocacy and leadership, including effective instruction, clarity about STEM and research-based practices.
- Explore challenges and opportunities in our classrooms, schools, districts, state and nation.
- See social justice in the work of math and science teaching and learning.
- Understand that the purpose of all of the above is to impact experiences in math and science for all students.

Application Process

Ideal candidates for the SDMath/SDSci Leadership Program aspire to grow professionally, challenge their thinking and practice, and be leaders/advocates for effective math and/or science education. Applicants must teach or co-teach in a math or science classroom for at least one course during their participation year.

The application process is designed to ensure a class that consists of members from diverse backgrounds, experiences and geographical locations. Approximately 20 participants are chosen annually.

A completed application requires submission of three components (all due May 24 by 5 p.m. CDT):

- **Application:** <https://www.surveymonkey.com/r/X2YBWQ9>
- **Letter of Recommendation:** <https://www.surveymonkey.com/r/XRQHY22>
- **Administrator Support Letter:** <https://www.surveymonkey.com/r/XQHZNTR>

Program Meeting Dates

Upon selection, participants will be expected to attend all of the following meetings:

- Virtual Orientation: Sept. 5, 4:30 - 5:30 CDT
- Alpha Retreat: Oct. 5-6, Pierre
- Beta Retreat: Feb. 8-9, 2020, Huron (optional attendance at SDCTM/SDSTA Conference Feb. 7)
- Gamma Retreat: April 18-19, 2020, Pierre
- Delta Retreat: June 8-9, 2020, Pierre

Cost

Registration for SDMath/SDSci Leadership is free. The South Dakota Department of Education is able to cover hotel, mileage and meals for each of the four retreats.

Questions? Email [Nicol Reiner](mailto:Nicol.Reiner@sdstate.edu) or [Stephanie Higdon](mailto:Stephanie.Higdon@sdstate.edu) or call 605-773-2490.

Professional Development

Field Based Science For Educators

Join us for this field based professional development in Badlands National Park June 20-23, 2022. In this hybrid course (online and in person) we will learn how to use citizen science programs like GLOBE and iNaturalist to engage students in the classroom and create data sets for them to explore through our own field studies. We will contribute to an on-going iNaturalist project and along the way, we will learn about the Park's fabulous geology and fascinating fossil record.

This is an immersive experience. We will camp in Sage Creek Campground, a primitive campground without electricity or running water, for three nights. (Vault toilets are available). Meals from Monday evening to Thursday breakfast are provided.

This is a hybrid course requiring online work and one Zoom session prior to the session. The course will be a total of 30 hours or 2 graduate workshop credits (pending). Credit fees are extra. Teams of teachers from the same district or school are encouraged to attend together. Grades 4-12.

- 3 PM Mon June 20 to 12 PM Thur June 23. Includes overnight camping.
- Badlands National Park
- Educators Grades 4-12
- \$50 South Dakota educators
- \$75 out of state educators
- Limit 12 participants.
- \$100 stipend upon submission of portfolio



IgniteSTEM Kits: Integrating the Oceti Sakowin Essential Understandings and SD Science K-12

The Ignite Kits are a new resource being developed by the Discovery Center for teachers to access through our lending library. These kits are interdisciplinary and adaptable providing a place-based context for learning about STEM in South Dakota. The kits integrate the Oceti Sakowin Essential Understandings and the South Dakota Science Standards. The kits also connect to math, ELA, social studies, art and health as well as providing students opportunities to explore careers and college opportunities in South Dakota.

Teachers will be provided with a kit of their own based on the grade level they selected to pilot during the school year as well as a \$300 stipend. Continuing education credits are also available

This is a hybrid course requiring independent work and a zoom session following the two-day workshop. The course will be a total of 30 hours or 2 graduate workshop credits (pending). Credit fees are extra. Teams of teachers from the same district or school are encouraged to attend together.

- Grades K-12.
- 9:00 am-4:00 pm July 12-13, additional remote hours apply
- Pierre
- Educators Grades K-12
- \$300 stipend for up to 20 educators as well as lodging for 1 night.
- 2 graduate credits available



Register at sd-discovery.org/educators.php



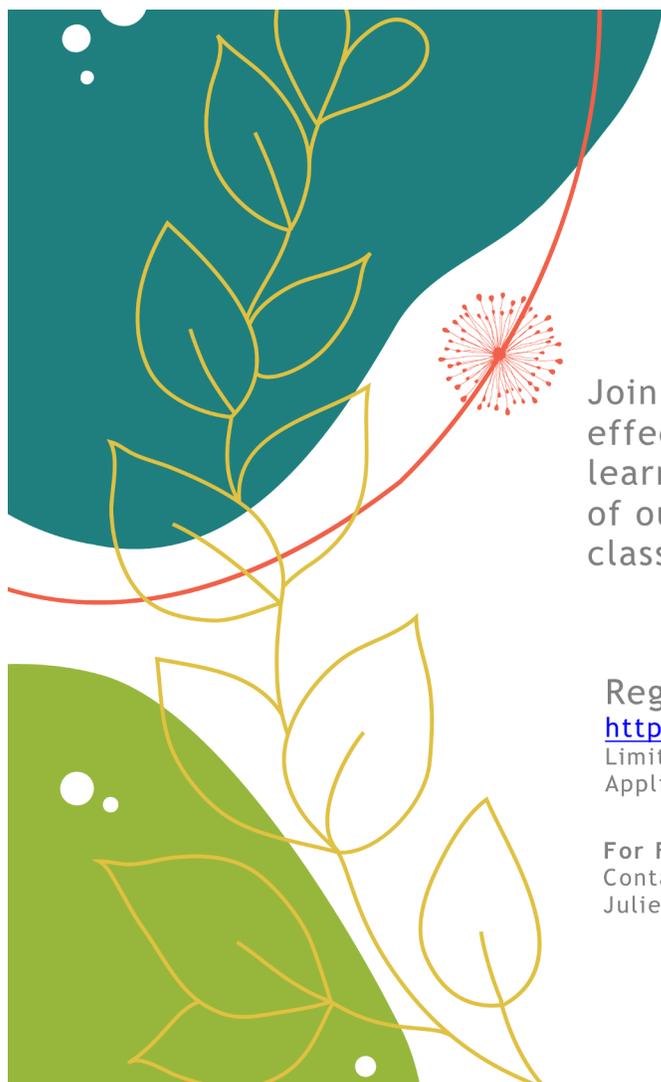
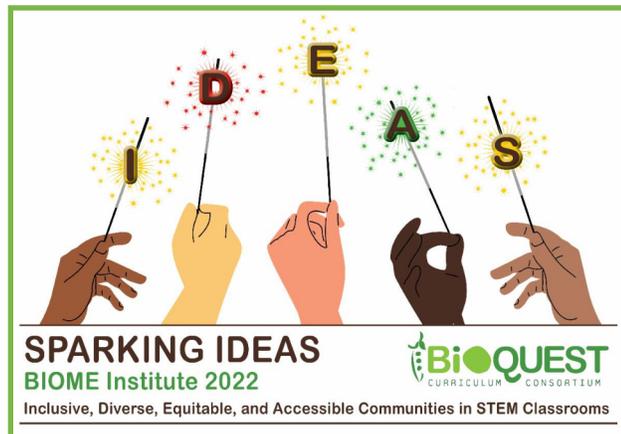
Professional Development

[BioQUEST](#) is thrilled to announce the details for the [2022 BIOME Institute](#), a fantastic virtual professional development opportunity for biology and mathematics educators to engage with a community of peers to address an educational challenge - with the goal of improving student outcomes. This year's theme is "[Sparking IDEAS: Inclusive, Diverse, Equitable, and Accessible Communities in STEM Classrooms.](#)"

Keynotes, discussion groups, and workshops will aim to support faculty in building a sense of community and belonging within their classrooms and groups, with the goal of creating networks and partnerships founded on mutual trust, respect, and open collaboration between students and educational leaders.

The Institute begins with a virtual slate of programming over the summer (July 18 - 29, 2022) and continues into the fall with small working groups. It's a unique opportunity to connect deeply with a community of educators and to develop and implement practical, innovative, and impactful teaching resources and strategies. You will leave the institute with a community, ideas, materials, and, truly, a whole lot of inspiration!

[Find more details here.](#) The early bird deadline was Sunday, April 10th with a final deadline of May 10, 2022.



The Power of Place-Based Learning

June 13-17, 2022
Black Hills State University
Spearfish, SD

Join us face-to-face this summer as we explore effective approaches to engage students in learning that maximizes the interconnectedness of our environment, the topics we learn in class, and ourselves.

Registration opens March 21st
<https://www.sanfordlab.org/event/pd22>
Limited number of seats available.
Applications due by April 15th.

For Further Information or Questions
Contact Julie Dahl at 605.722.6021 or
Julie.Dahl@bhsu.edu





TEACHER ACADEMY

RAPID CITY · PIERRE · SIOUX FALLS

LOOKING FOR A WAY TO MAKE YOUR CLASSROOM MORE EXPERIENTIAL?

South Dakota Game, Fish and Parks will be offering three different locations for you to gain experience, credit, and resources for your classroom. Check out the options below to add a whole new level of excitement to your classroom!

RAPID CITY – JUNE 15, 16, 17

- » HuntSAFE/NASP for Continuing Education Credits, 1 Undergraduate Level Credit, or 1 Graduate Level Credit
- » FishSD/Project Wild for Continuing Education Credits, 1 Undergraduate Level Credit, or 1 Graduate Level Credit

SIOUX FALLS – JUNE 22, 23, 24

- » HuntSAFE/NASP for Continuing Education Credits, 1 Undergraduate Level Credit, or 1 Graduate Level Credit
- » FishSD/Project Wild for Continuing Education Credits, 1 Undergraduate Level Credit, or 1 Graduate Level Credit

PIERRE – JUNE 28, 29

- » FishSD/Project Wild for Continuing Education Credits, 1 Undergraduate Level Credit, or 1 Graduate Level Credit

REGISTRATION:

- » Program details and registration will be available April 1, 2022. Classes and Continuing Education Credits will be free of charge, undergraduate or graduate level credit will have a nominal fee associated with it.
- » To register on or after April 1, 2022 go to: southdakota.storefront.kalkomey.com
- » Questions? Email: TOC@state.sd.us



Summer 2022 Professional Development

**June
8-10**

Fundamentals of Three-Dimensional Instruction & Biofilms (virtual)

Participants will strengthen their understanding of three-dimensional science teaching and receive support in meeting South Dakota's K-12 Science Standards. Participants will also learn about science and engineering research underway at universities across our state and become familiar with one (or more) K-12 curriculum modules that relate to the research.

**July
6-8**
(Aberdeen)

Making Student Thinking Visible (F2F)

Topics covered this summer include: Leveraging the Power of Science Notebooking, Constructing Explanations, and Modeling to Engage Science Learners. New participants will receive the book *Ambitious Science Teaching* as part of the workshop.

**July
12-14**
(Rapid City)

Making Student Thinking Visible (F2F)

Topics covered this summer include: Leveraging the Power of Science Notebooking, Constructing Explanations, and Modeling to Engage Science Learners. New participants will receive the book *Ambitious Science Teaching* as part of the workshop.

**July
18-20**
(Sioux Falls)

Making Student Thinking Visible (F2F)

Topics covered this summer include: Leveraging the Power of Science Notebooking, Constructing Explanations, and Modeling to Engage Science Learners. New participants will receive the book *Ambitious Science Teaching* as part of the workshop.

**July
20-22**

Making Student Thinking Visible (virtual)

Topics covered this summer include: Leveraging the Power of Science Notebooking, Constructing Explanations, and Modeling to Engage Science Learners. New participants will receive the book *Ambitious Science Teaching* as part of the workshop.

**July
25-28**

Curriculum Implementation Workshop (virtual)

Participants will come together to do a deep dive into a curriculum unit (6 options - 2 at each grade band) and make plans for implementation in their own classrooms.

- Workshops will be virtual and will be two day blocks of time during the week of July 25 - 28th.
- Follow up meetings will be scheduled throughout the school year as optional support. Those who take advantage of the follow-up meetings will be eligible for reduced rate graduate credit from BHSU.

Implementing Three Dimensional Science Instruction

July 11 - 15, 2022
Via Zoom

This 5-day VIRTUAL workshop will build your capacity to develop and facilitate three dimensional science learning opportunities.

- ✓ *Integrating DCIs, SEPs and CCCs*
- ✓ *Three Dimensional Assessment*
- ✓ *Productive Classroom Discourse*
- ✓ *Equitable Instruction*
- ✓ *Anchoring Events*
- ✓ *Something for every K-12 teacher*
- ✓ *Stipends for successful completion*

Explaining
Phenomena

Registration opens March 21st
<https://www.sanfordlab.org/event/vpd22>
Limited number of seats available.
Applications due by April 15th.

For Further Information or Questions
Contact Julie Dahl at 605.722.6021 or
Julie.Dahl@bhsu.edu

Designing
Solutions

Engaging
Students



BLACK HILLS
STATE UNIVERSITY



PROMISE SUMMER CAMPS

Sanford PROMISE provides education and outreach for Sanford Research. It aims to increase community understanding of health sciences, raise awareness of the benefits of research and emphasize the role of each in our society.

Sanford PROMISE is hosting scholarship-based camps for students. Each camp provides hands-on immersive STEM experiences. Students from all backgrounds are encouraged to apply. The application deadline for the Sioux Falls camps is April 1st. For North Dakota and Minnesota camps, the deadline is May 6th.

Leading Edge Science Camp @Sanford Research~ Sioux Falls, SD.

June 2nd or June 14th | 8a.m.-4p.m.

For students in grades 6-8 in the 2021/2022 school year

Leading Edge Science Camp @Sanford Research ~ Sioux Falls, SD

July 15th | 8a.m.-4p.m.

For students in grades 9-12 in the 2021/2022 school year

Finding Your Roots Camp @Sanford Research ~ Sioux Falls, SD

July 26th through July 29th | 8a.m.-4p.m.

For students in grades 6-8 in the 2021/2022 school year

Leading Edge Science Camp ~ Bismarck, North Dakota

June 28th | 8a.m.-4p.m.

For students in grades 6-8 in the 2021/2022 school year

Leading Edge Science Camp ~ Fargo, North Dakota

June 30th | 8a.m.-4p.m.

For students in grades 6-8 in the 2021/2022 school year

Leading Edge Science Camp ~ Luverne, Minnesota

July 12th | 8a.m.-4p.m.

For students in grades 6-8 in the 2021/2022 school year



Leading Edge Science camp is one full day of exploration into bioengineering. We will explore the cross-over between biomedical research and engineering and try out our own innovations.



Finding Your Roots camp lasts for four days and is an exploration into your own DNA. You will submit a DNA sample in the spring. When you join us for the camp, you will get a report that will reveal some interesting traits as well as your recent ancestry.

Register Here



Snacks and lunch provided at all camps

promise.sanfordhealth.org

Professional Development

2022 AGI and Exxonmobile K-8 Earth Science and STEM Teacher Leadership Academy

July 11th - 19th

The American Geosciences Institute (AGI) and ExxonMobil Exploration are currently recruiting public school teachers for the 14th annual national Geoscience and STEM Teacher Leadership Academy for K-8 teachers. The 2022 academy will begin with an introductory 1-hour webinar (**tentatively scheduled for July 6, repeated on July 9**), with the main academy experience taking place **July 11, 12, 13, 18, & 19**. The academy will be held virtually and will include public school teachers from across the country.

Each participant will receive a \$500 stipend, plus up to \$200 for equipment and supplies upon completion of the academy. While individual applicants will be considered, we encourage two to four teachers from a school or school system to apply as a team. Teams can span across grade levels or science subject matter areas.

The focus of the academy is to prepare teachers to serve as Earth Science and STEM education mentors and/or teacher leaders. Therefore, we are looking for teachers who have the interest and potential to become Earth Science leaders in their school systems. The academy will provide teachers with Earth science content, experience with hands-on and data-focused activities, and resources to develop professional development workshops.

Up to 30 participants will be selected for the academy. The applicant review process **will start April 1, 2022** and continue until the academy is full. Applying early is highly recommended.

Teachers can apply for the AGI/ExxonMobil Geoscience and STEM Teacher Leadership Academy by completing the form at (<https://bit.ly/2022-TLA-survey>) and having an administrator submit a letter of recommendation.



Officers

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UPCOMING EVENTS

April 22

Earth Day

April 25

DNA Day

June 12

Newsletter Submissions due

Any member may submit lessons, ideas, links...

February 2-4, 2023

SD STEM Ed Conference

Huron, SD

The SDSTA Newsletter is published four times a year and is e-mailed to 67 paid members. The membership year in SDSTA starts with the February conference and ends the thirty-first of January. Dues are due at each conference for member discount rates. SDSTA members may give a one year free membership to their student teachers by submitting the student teacher's name & address. One paid conference registration may be given to the SDSTA member that has made a submission to the newsletter (or given a presentation at the conference) and has referred at least three new members. Members may also earn a 10% finder's fee for any science related ads placed in the newsletter. Our rates are \$50 per page (or 3 to 4 quarter pages).



Become a Member!

\$5 Student, K-6, Retired **\$20** All Others

Name _____ Home Phone _____

Home Address _____ E-mail _____

City _____ State _____ Zip _____

Your School _____ School Phone _____

School Address _____

Your area (circle one) K-6 7-8 9-12 College Other _____

Referred by _____

Mail to:

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Groton, SD 57445-2024