

News, Events, and Opportunities

Letter from the Executive Director

The close of the 2023 Minnesota legislative session brings big developments in STEM education to the state. I don't want to bury the lede here so – computer science!

The K12 education funding bill that, as I write, is on its way to the Governors desk includes, for the first time, \$500,00 annually supporting computer science education. It means that the Minnesota Department of Education will for the first time ever have a full-time computer science supervisor and will have funding for grants to school districts to support expanding computer science opportunities. The bill creates a 21-member working group to develop a state strategic plan in computer science. That group draws from educators statewide, industries, state agencies, and nonprofits for its membership. Their report needs to be published by February 29, 2024, and will be presented to the legislature for their further action in March of next year.

This is a significant development in STEM education in Minnesota. It's our opportunity to move Minnesota out of its longstanding last-place ranking nationally in computer science. It provides the potential to expand opportunities for students by supporting teachers. And it is structured to have a thoughtful, inclusive, and deliberative process to develop Minnesota's shared vision for computer science.

SciMathMN has been part of a leadership coalition including the [Minnesota Technology Association](#), [Code.org](#), [Computer Science for All-Minnesota](#), and [Code Savvy](#). We're grateful to our partners for all the collaboration and look forward to further partnership in the future. We also want to thank our chief bill authors, Representative Liz Lee and Senator Heather Gustafson. Successes such as this do not happen without leadership.

The education bill has other impacts on STEM education in Minnesota. That includes expanding the CTE consortium statewide and increasing its funding. It identifies science graduation requirements to include earth and space science, life science, and physical science in line with the recently developed state science standards. In the math area, it deletes references to Algebra II in law but requires the state math standards to include Algebra II standards and frameworks. Lastly, it makes a number of changes to high school graduation requirements in math, science, and social studies. Additionally, Minnesota now requires a credit-bearing class in personal finance.

So, a lot is going on that may impact STEM education at the legislature this year. We encourage SciMathMN readers to be engaged with their legislators regarding these developments and to engage your local school district on their plans for computer science.

Jim Davnie
Executive Director



SAVE THE DATE



#YouBelongInSTEM at STEM Day at the Fair | Thursday, August 24

STEM Day is always the best day of the summer! On the opening day of the Minnesota State Fair, August 24th, SciMathMN invites Minnesotans to celebrate and explore the wonders of STEM (Science, Technology, Engineering, and Mathematics) through hands-on learning, interactive STEM experiences, and interaction with nonprofit STEM education providers, student groups and local businesses.

Visit Dan Patch Park for a celebration of STEM, including a performance stage and more than 30 exhibitors providing hands-on and interactive opportunities to explore, discover, create, and be inspired. See how everyday objects, systems, and buildings are driven by science, technology, engineering, and mathematics.

EVENT DETAILS

WHEN: Thursday, August 24th, 2023

WHERE: Dan Patch Park at the Minnesota State Fair

COST: Free with fair admission!

This year's event theme **#YouBelongInSTEM** is centered around the importance within Minnesota's STEM ecosystem to:

ACTIVITIES

- Drive robots
- Computer coding
- Build mini-wind turbines
- Explore artificial intelligence
- Practice pipette skills
- Build model State Fair buildings

- **INCLUDE** | Invite all students and educators to participate in world-class STEM education to prep them and our country for the future.
- **ENFOLD** | Embrace all students in STEM so that they don't just have access to STEM but experience equitable impact in STEM.
- **ENGAGE** | Listen to students and educators in STEM. Learn from their perspectives and interests. Help them to develop a deep sense of belonging in STEM.
- **INSPIRE** | Empower students to not only feel a part but move beyond to developing an identity in STEM. Help them to become captivated by the promise and power of STEM. Support them in the journey from being a part of the group to being a champion of STEM.
- **CELEBRATE** | Enjoy and showcase the work, dreams, failures, and process of STEM in the lives of students, educators, and communities to foster a sense of belonging in STEM.

- And SO much more!

Follow #mnstemday2023 on social media or learn more on the [Minnesota State Fair](#) website.

Special thanks to this year's current sponsors:



Partner With Us | Support Equity and Inclusion in STEM

Share your commitment to STEM education and give Minnesota State Fairgoers an event that truly celebrates our STEM community. Sponsorship includes the opportunity to engage your employee volunteers and Fairgoers through fun, hands-on activities, and demonstrations while receiving visibility on STEM Day at the Fair communications and social media as a supporter of equity and inclusion in STEM.

[Learn more](#) about sponsorship opportunities with a range of packages for individuals and groups from \$100.

FEATURED PARTNER

Physics Force at STEM Day at the Fair!



A crowd favorite every year at STEM Day at the Fair is the [University of Minnesota Physics Force](#). Physics Force is an outreach program first created in 1984, targeted at generating an interest in science in K-12 students. The goal of Physics Force is to both educate and entertain. Its performances are on a grand scale, big, loud, and physical, bringing excitement and wonder to the thousands of students who attend their shows every year. They provide performances exploring waves and sound, air pressure, the Bernoulli effect, mechanics – projectile motion, and inertia.

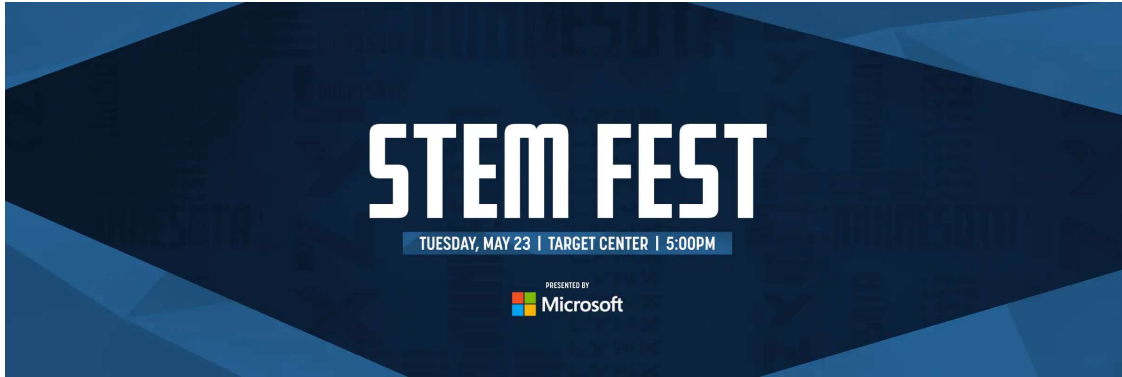
Physics Force entertains thousands of students and adults each year, has performed at Disney's Epcot Center, appeared on TV shows Newtons Apple and Hands-on Science, and traveled to Germany three times to appear on television programs there.

The Physics Force is supported by the School of Physics and Astronomy, the Dean of the College of Science and Engineering, the University of Minnesota's Materials Research Science and Engineering Center (MRSEC), and the 3M Company.



[Learn More](#)

SPOTLIGHT



STEM Fest - Minnesota Lynx

The Minnesota Lynx are hosting **STEM Fest** Tuesday, May 23, at Target Center with their game against the Atlanta Dream. The Lynx are offering discounted tickets and waiving the processing fees for people in the STEM community. The offer can be accessed [through this link](#) using Code: 2023STEM. STEM Fest doors open at 4:45, followed by a discussion of the intersection of STEM and sports led by Darrell Booker, a nonprofit tech acceleration executive with Microsoft and Madison Schiller, a Lynx Basketball operations data scientist. From 5:30 p.m. – halftime there will be STEM-based organizations, individuals, and fellow fans to interact with. The Lynx are .500 in pre-season play and have a number of exciting new players this year.

[Read More](#)

Engineering Machine Design Champions Announced!



Southland Public School students Aubrie Schneider and Sean Humphrey, with teacher Paula Mortenson, Southeast Service Cooperative STEM Forward staff Sarah Ness, and SciMathMN executive director Jim Davnie at the EMDC Championship. (Pictured above)

SciMathMN Board Members volunteered at the 2023 **Engineering Machine Design** (EMDC) Championship at Anoka Technical College (Anoka, Minnesota) on April 21st. Approximately 40 5th-12th grade teams from Minnesota, Wisconsin, and Iowa competed for the title of Champion! This program is organized by the **Minnesota State Engineering Center of Excellence** and results of the event are available on their [website](#).

The EMDC is an opportunity for teams of 3-12 students to design and build a chain-reaction machine using everyday objects with the guidance of a coach. The completed machine will use multiple steps to complete a simple task. Teams showcase and exhibit their machine at a regional contest with the opportunity to advance to the championship. The 2024 championship event will be hosted at Rochester Community and Technical College.

[Read More](#)



150 Students Received STEM Awards

STEM Forward partners presented certificates and celebrated 150 students Albert Lea, Grand Meadow, and Kasson-Mantorville entering STEM careers or training programs after high school. Over the next 10 years, the Bureau of Labor Statistics expects there to be more than 800,000 new openings for STEM jobs, according to recent estimates. One local nonprofit is encouraging students to pursue careers in STEM. Thursday, several dozen students at Kasson-Mantorville were recognized for their commitments.

[Read More](#)

STEM Opportunities



Minnesota Council of Teachers of Mathematics - Events

The MCTM has a number of summer professional development opportunities. They include working with English Language Learners, utilizing the Minnesota math progressions, and introduction to the Minnesota math standards, and teaching students to “do the griddy”.

[Read More](#)



Feeding and Fueling the World: A workshop for Minnesota teachers

June 27, 2023, St. Paul, Minnesota | FREE Workshop for middle and high school science teachers!

How can we feed an ever-growing population and establish food security? Every student deserves inquiry-driven learning that engages with real-world challenges. The unique Feeding and Fueling the World workshop will help teachers gain a deeper understanding of the impact of food production on environmental issues and nutrition around the world. [Workshop Flyer](#)

[Read More](#)

Empower{MN:CS}

Teachers looking for PD opportunities in computer science? July 24-26 in Duluth join Empower{MN:CS} for a week of workshops presented by CSTA-MN, CS4ALLMN, @CodeSavvyOrg and the National Computer Science Education @StScholastica.

[Read More](#)



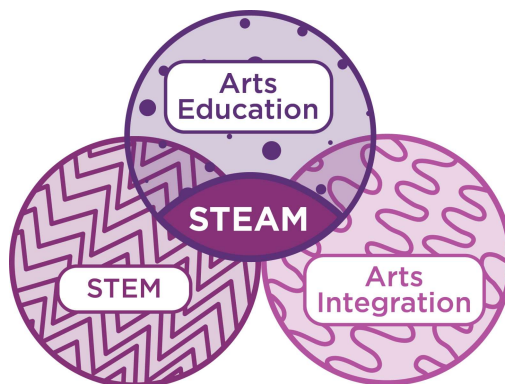
FREE Lean Curriculum Training | July 30th @ Anoka, MN

Learn about this exciting continuous improvement methodology. Originating at the Toyota Motor Corporation in Japan, this approach eliminates wasteful processes to deliver more value with fewer

resources. Using interactive technologies, learn how we can bring these real-world skills to students in the classroom and/or new employees wanting to make an impact.

CEUs Provided.

[Read More](#)



STEAM Resource Guide - Arts Education Partnership

What is STEAM Education? In their resource guide, the AEP defines STEAM education as an approach to teaching and learning in which students demonstrate critical thinking and creative problem-solving at the intersection of science, technology, engineering, arts and math.

[Read More](#)



[ONLINE] - Leveraging Federal Resources for Career-Connected Learning to Advance Youth Apprenticeship

The Partnership to Advance Youth Apprenticeship (PAYA) invites you to join us for a conversation with Luke Rhine, Deputy Assistant Secretary of the Office of Career, Technical and Adult Education at the U.S. Department of Education on Tuesday, May 23rd at 2:00 PM ET.

[Read More](#)

SUMMER INSTITUTE

FOR CLIMATE CHANGE EDUCATION

July 17-21, 2023



climategen.org/summer-institute/

Summer Institute for Climate Change Education Registration - Climate Generation

Register for the Summer Institute for Climate Change Education, coming to you virtually July 17-18, 2023, plus on a regional day on July 19th, 20th, or 21st.

[Read More](#)

MINNESOTA MANUFACTURED™

Technical Education Conference / 2023

Moorhead, MN | August 8-9, 2023

The goal of this conference is to upskill technical educators, link manufacturing, manufacturing stakeholders, and education, to share best practices, learn about the latest technologies, and establish lasting relationships and partnerships. Educators will be better equipped to prepare students, who may pursue careers in advanced manufacturing.

[Read More](#)



Career Highways: An AI Approach to Student Career Mapping

The Minnesota State IT Center of Excellence, with STEM Fuse, launched [Career Highways](#) throughout the state in fall 2022. This service allows students to attach work products, learnings, and credentials. These are mapped through AI to current job openings and career "highways" they can explore. The service also allows hiring managers to see students/participants who fit their career description and reach out to those who have a Career Highway profile.

[Read More](#)

SciMathMN | 2038 Ford Parkway, #299, Saint Paul, MN 55116

[Unsubscribe execdir@scimathmn.org](mailto:execdir@scimathmn.org)

[Update Profile](#) | [Constant Contact Data Notice](#)

Sent by execdir@scimathmn.org powered by



Try email marketing for free today!