

NOVEMBER

2025



National Girls
Collaborative
Project



Missouri Girls Collaborative Project Launch – Missouri is now home to a new initiative connecting girls across the state with mentors in STEM careers. The program will feature workshops, coding challenges, and innovation showcases, aiming to close gender gaps in tech and engineering fields.

Quick Insights:

NATIONAL STEM DAY - Nov 8th

Our Mission

To **CONNECT**, **CREATE**, and **COLLABORATE** to transform the STEM experience for all youth and advance gender equity in the field.

Overview

The National Girls Collaborative Project (NGCP) is a network of organizations committed to informing and encouraging girls to pursue careers in science, technology, engineering, and mathematics (STEM).

Founded in 2002 and partially funded by the National Science Foundation (NSF), the NGCP uses a "NETWORK of NETWORKS" model to bring together thousands of organizations across the United States. The goal is to reduce duplication of effort, share resources and best practices, and maximize the impact of programs dedicated to girls in STEM. The NGCP facilitates collaboration among more than 42,500 organizations, which collectively reach over 20 million girls and 10 million boys.

NGCP'S THREE PRIORITY GOALS

1	2	3
Build and sustain a network of advocates to provide equitable and inclusive STEM opportunities.	Catalyze equity in STEM from research to practice by providing actionable knowledge that transforms the STEM experience.	Increase our collective impact by strengthening organizational effectiveness and enhancing our fiscal sustainability.

The U.S. Senate unanimously passed a bipartisan resolution, introduced by Senators Jacky Rosen (D-NV) and Shelley Moore Capito (R-WV), designating November 8, 2025, as National STEM Day to celebrate the vital role of science, technology, engineering, and mathematics in education and the American workforce.

From the Ozarks to St. Louis, Missouri embraced National STEM Day with exciting events across the state. **WonderWorks Branson** hosted their "Full STEAM Ahead" celebration with interactive labs like the "Mirage Maker," while **Missouri S&T** welcomed nearly 1,000 students for on-campus engineering workshops. The **Saint Louis Science Center** rounded out the month with explosive chemistry demos at their Energy Stage, proving that science is alive and well in the Show-Me State.

In Focus: Robotics Season Ramps Up!

The winter months are critical for Missouri's student competitors. December and January are packed with local qualifying events for FIRST LEGO League across the state, with major tournaments taking place in the Kansas City area. The most anticipated event is the FIRST Robotics Kickoff on January 10th, where high school teams will learn the new game challenge and officially begin the build season for their massive robots.



[Learn More](#)

FIRST LEGO LEAGUE JR.	FIRST LEGO LEAGUE	FIRST TECH CHALLENGE	FIRST ROBOTICS COMPETITION
Give your child the opportunity to feed their curiosity about science, develop teamwork skills, and have fun building with LEGO® elements.	Introduce your child to the concept of teamwork to research an engineering challenge, develop a solution, build and program a LEGO® robot, and acquire important life skills.	Give your teen the opportunity to play a "Sport for the Mind™" where they will design, build, and program game-playing robots.	High-schoolers have the opportunity to play a variety "Sport for the Mind™" where they design, build, and program game-playing robots.
GRADES K-4	GRADES 4-8	GRADES 7-12	GRADES 9-12
Learn More	Learn More	Learn More	Learn More

How to Get Involved?

Whether you're a student, parent, Professional educator, or STEM professional, there are plenty of ways to join the movement. Sign up for local workshops, mentor young innovators, nominate a STEM STL HERo, or share your story with our community. Together, we can expand opportunities, inspire future leaders, and build a stronger STEM network across Missouri.

Rapid Recap: Latest STEM Trends

AI competitions for girls are growing fast — creating exciting opportunities for middle and high school students to explore AI, build confidence, and showcase their creativity. One standout is **Math & AI 4 Girls**, a free competition for U.S. female middle schoolers (grades 5-8) that encourages young girls to dive into math and AI through problem-sets and essays.

MO Girls STEM Snapshot of the Month



Nominate a STEM
HERoes
at
Medusasrobotics@gmail.com

Tracy Henke



STEM Connect



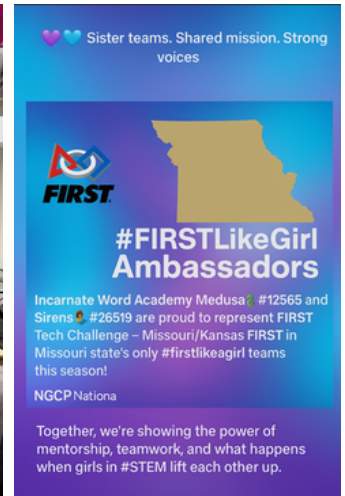


5 Directions, 1 Mission

FIRST Tech Challenge

Kicks Off Across Missouri!

The excitement is building as FIRST Tech Challenge teams across Missouri launch into another season of innovation and competition! Female members from Team Medusa and Team Shear Force were spotted sharing a celebratory high-five, showing the spirit, teamwork, and energy that drives STEM forward. Moments like these highlight how girls in NGCP-MOgirlsLEAD are leading, collaborating, and making an impact in technology and engineering.



Perry Outreach Program

Currently, women make up less than 8% of practicing orthopaedic surgeons and approximately 15% of practicing engineers. To encourage interest in these fields, **KC STEM Alliance** hosted its 13th Perry Outreach Program (POP) event on Nov 1st. Over 30 students, across 15 different KC area high schools, came together to explore **Orthopaedic Surgery and Engineering**. During this day-long event, working alongside Perry facilitators and local female orthopaedic surgeons and residents, the students experienced 6 hands-on modules including suturing, casting and complex fractures. Learn more at <https://perryinitiative.org/>.

Science Olympiad

Invitationals

Science Olympiad is the nation's premier team STEM competition, often described as an academic track meet for science and engineering. Teams of students compete in 23 events that span every major scientific discipline, from hands-on building challenges to complex written exams. In Missouri, over 160 middle and high school teams participate across eight regional tournaments each year. The top teams advance through the annual State Tournament to earn a coveted bid to the National competition.

Girls in Tech Night

In celebration of 10 years of Girls in Tech in Kansas City, **KC STEM Alliance** is hosting its first Girls in Tech Night on Friday Dec 12th. Held during National Computer Science Week, Girls in Tech is designed to encourage middle school girls to explore computer science, coding, and emerging technology fields with industry partners and female STEM professionals. Registration is now open for Girls in Tech Night where students will enjoy a hands-on activity, panel of women in Tech, and interact with other local organizations. [Registration](#)

National Computer Science Week Dec 8th - 14th

This week we wish a Happy Birthday to two giants of code: Grace Hopper (Dec 9), who taught computers to understand English, and Ada Lovelace (Dec 10), the world's first programmer. Their legacy proves that coding has always been a GIRL thing!



5 Directions, 1 Mission

MONorth, MOSouth, MOeast, MOwest, MOcentral

MONTH	UPCOMING EVENTS
December	
4th	Missouri Manufacturing Academy - Ozarks Tech College
7th	International Civil Aviation Day
12th	Girls in Tech Night - KC STEM Alliance
22nd	National Mathematics Day
January	
All Month	National Mentoring Month
6th	National Technology Day
9th	Southeast Regional Science Educators Collaboration - SEMO
17th	Community STEM Showcase - St. Louis Science Center
28th	Data Privacy Day
29th	National Puzzle Day

Did You Know?

**Stop Grading Answers:
Start Grading Thinking
with Snorkl**



Snorkl is an innovative, AI-powered learning platform designed to fundamentally change how students demonstrate and master critical thinking, particularly in STEM fields. Operating as a multimodal tool, Snorkl moves beyond simple grading by focusing on the process of learning: students use a digital whiteboard to sketch, write, and simultaneously record their voice, allowing them to verbally explain their reasoning for a problem. This unique approach requires students to engage in higher-order thinking, deepening their conceptual understanding. Snorkl's AI acts as an instant teaching assistant, providing immediate, personalized feedback on the quality of a student's explanation and reasoning, celebrating strong thinking while gently flagging misconceptions. This instant, targeted support allows students to revise and improve their work immediately, significantly accelerating the learning loop.

Snorkl is an AI-powered educational platform that has partnered with the Mark Cuban Foundation's AI Bootcamps to support tech-ed.

For educators, Snorkl is a powerful tool for instructional adjustment and efficiency. By analyzing the massive amounts of student thinking captured through the multimodal responses, the platform provides teachers with clear, actionable data on common class-wide misconceptions. This allows educators to quickly adjust lesson plans and dedicate class time to addressing specific areas of weakness, rather than spending hours manually grading every step of every student's work. By making student thinking visible, immediate, and measurable, Snorkl ensures that teachers have the insights needed to foster true conceptual mastery.

[Learn More](#)



K-3rd Grade

Ada Twist, Scientist (Andrea Beaty) – inquiry, persistence

4th-6th Grade

A Wrinkle in Time (Madeleine L'Engle) – classic sci-fi & courage

Teens (High School)

Girls Who Code: Lightfall Series (Melissa de la Cruz) – fantasy & coding themes

Adults

Lessons in Chemistry (Bonnie Garmus) – women in STEM